THE McGILL INTERNATIONAL ENTREPRENEURSHIP SERIES

Emerging Paradigms in International Entrepreneurship

EDITED BY

Marian V. Jones
Pavlos Dimitratos

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THE MCGILL INTERNATIONAL ENTREPRENEURSHIP SERIES

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The two fields of International Business and Entrepreneurship have traditionally covered seemingly unrelated and practically different disciplines. One covered larger-scale, multi-point business operations by mainly large Multinational Enterprises (MNEs) in international markets; and the other addressed entrepreneurial initiatives primarily in the context of smaller-scale and domestic operations.

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Emerging Paradigms in International Entrepreneurship

Edited by
Marian V. Jones

Senior Lecturer in Business and Management, Department of Business and Management, University of Glasgow, UK

and

Pavlos Dimitratos

Lecturer, Department of Management and Technology, Athens University of Economics and Business, Greece and Visiting Research Fellow, Strathclyde International Business Unit, University of Strathclyde, UK

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Contributors

Jim Bell is Professor of International Business Entrepreneurship at the University of Ulster, Magee College. He lectures in international marketing and has research interests in the internationalization of knowledge-based SMEs, and international marketing and business education. He has published widely in this area.

Maureen Berry is Founder and Managing Director of The Strategy Business Ltd. During the writing of this chapter she was a Senior Lecturer at the University of Strathclyde. Her research interests are focused on globalization of smaller firms, entrepreneurship and strategic management in smaller firms, and strategic management of technology. She has published in *Long-Range Planning*, *Research Policy* and *Technovation*, among others.

Dev K. Boojihawon is Lecturer at the Open University. His research interests include international entrepreneurship, international strategy and management in service industries. He recently completed his PhD on international strategy in professional service industries.

Gabrielle A. Brenner is Associate Professor of Economics at the École des Hautes Études Commerciales (Business School of the University of Montreal). She has published widely, has participated in numerous conferences and participated in programmes to develop entrepreneurship in West Africa. She has served as consultant to numerous organizations including UNIDO, the World Bank and CIDA.

Wendy Brown is Researcher in Entrepreneurship Education at the University of Strathclyde. Her research interests include entrepreneurship education, and women in business. She has published in the *International Journal of Entrepreneurship and Innovation*, and *Education and Training*, among others. She is a co-author of the Scottish Global Entrepreneurship Monitor Report 2002.

Sara Carter is Professor of Small Business and Entrepreneurship at the Hunter Centre for Entrepreneurship, University of Strathclyde. She has undertaken a number of research studies into the small firms sector, focusing on business growth and portfolio entrepreneurship, rural entrepreneurship and women's business ownership.

Dave Crick is Professor of Marketing and International Entrepreneurship at the Business School, University of Central England. He has published widely in the area of international business involving numerous conference papers, and in journals such as *Entrepreneurship and Regional Development*, *International Business Review*, *Journal of Business Venturing*, *Journal of International Marketing*, *Journal of Small Business Management* and *Small Business Economics*.

Léo-Paul Dana is Senior Advisor to the World Association for Small and Medium Enterprises, and currently based at the University of Canterbury. He formerly served as Deputy Director of the Nanyang Business School International Business MBA Programme in Singapore, and Visiting Professor of Entrepreneurship at INSEAD. He is Founder of the *Journal of International Entrepreneurship* and the author of 100 articles. His reference volume *Entrepreneurship in Pacific Asia: Past Present and Future* has been on the best-seller list for over two years.

Pavlos Dimitratos is Lecturer at the Athens University of Economics and Business, and Visiting Research Fellow at the University of Strathclyde. His research interests include international entrepreneurship, and international business strategy and management. He has published in *European Management Journal*, *International Business Review* and *Journal of International Entrepreneurship*, among others.

Hamid Etemad is Associate Professor of International Business and Marketing at the Faculty of Management, McGill University. His current research spans a wide range from economic development, electronic marketing, industrial strategy, globalization of small firms, management of intellectual property, knowledge and technology, network of strategic alliances to multinational enterprise-host country relations. He has published widely and has edited, or guest-edited, numerous books and scholarly journals. He is the Co-founder and Convener of the McGill International Entrepreneurship Conference Series and the Series Editor of the McGill International Entrepreneurship Series of books published by Edward Elgar Publishing.

Louis Jacques Filion is Rogers-J.-A.-Bombardier Professor of Entrepreneurship at HEC, the University of Montreal Business School. His research is concerned with the activity systems of entrepreneurs and the self-employed, small business strategy, epistemology, administrative science research methodologies and entrepreneurial vision. He has more than 100 publications to his credit.

Richard Fletcher is Professor and Chair of the School of Marketing and International Business at the University of Western Sydney. He had over 25 years public-policy experience with the Australian government prior to becoming an academic. He teaches international marketing and e-marketing and has published in the areas of countertrade and government export promotion.

Laura Galloway lectures in various areas of entrepreneurship for the Scottish Institute for Enterprise at Heriot-Watt University. Her research interests include entrepreneurship education, rural enterprise and the emergence and application of Internet technologies for business. She has published in the *Journal of Small Business and Enterprise Development*, and the *International Journal of Entrepreneurship and Innovation*, among others. She is a co-author of the *Scottish Global Entrepreneurship Monitor Report 2000–2002*.

Ioannis Georganas is Doctoral Researcher at the University of Glasgow. His research interests include export marketing, e-commerce and export performance.

Leila Hurmerinta-Peltomäki is Assistant Professor in marketing at Turku School of Economics and Business Administration. Her research interests include international entrepreneurship, time and experience in internationalization and methodological issues. She has published in *Academy of Entrepreneurship Journal*, *International Small Business Journal* and *Journal of International Entrepreneurship*, among others.

Marian V. Jones is Senior Lecturer in Business and Management and the Programme Director for the MSc in Management Research at the University of Glasgow. Her main research interests include the internationalization of small firms, the international competitiveness of small high-technology firms, export performance and information use, and growth and development of new technology-based firms. She has published in the *Journal of International Marketing*, *Journal of International Management* and *International Marketing Review*, among others.

Jonathan Levie is Director of the Hunter Centre for Entrepreneurship at the University of Strathclyde. His main research interests are comparative entrepreneurial strategies, the evolution of young firms, the environment for entrepreneurship, and the nature of interaction between entrepreneurs and resource providers.

Sharon Loane is Lecturer in Business Economics at the University of Ulster. She is currently investigating internet-enabled small enterprise internationalization. She has almost 20 years experience with small and large international firms.

Ivan M. Manev is Associate Professor of Management at the University of Maine. His research interests include networks in the multinational enterprise, organizations in the transforming economies of the former communist bloc, and international entrepreneurship. He has published in the *Journal of International Business Studies*, *Journal of International Management*, and *Journal of Business Communication*, among others. He is the author of *The Managerial Network in a Multinational Enterprise*, published in 2001 by Edwin Mellen Press.

Tatiana S. Manolova is Assistant Professor of Management at Suffolk University. Her current research interests include international entrepreneurship, competitive strategies for small multinationals, and organizational formation and transformation in transitional economies. Recent articles were published in the *International Small Business Journal* and the *Journal of Small Business Strategy*.

Teresa V. Menzies is Associate Professor in the Faculty of Business, Brock University, St Catharine's, Ontario, and teaches entrepreneurship and family business. Her research interests include entrepreneurship education, ethnic and minority entrepreneurship, and the process of new firm creation. She has published in academic journals on entrepreneurship, work commitment and burnout, and her research has also appeared as chapters in edited books.

Rasha Mostafa is Lecturer in the Business Administration Department in the Faculty of Commerce, Ain Shams University, Cairo, Egypt. Her research deals with the impact of the Internet on the internationalization of small firms and international entrepreneurship.

Niina Nummela is Assistant Professor in International Business at the Turku School of Economics and Business Administration. Her research interests include international entrepreneurship, and small business management and interfirm cooperation. She has published in the *Journal of Informational Marketing*, *Market Research*, *International Small Business Journal*, *Interna-*

tional Journal of Entrepreneurship and Innovation, and *Journal of High Technology Management Research*, among others.

Thandiwe Phiri is Doctoral Researcher at the University of Strathclyde. Her research interests include small business internationalization, exporting, networking, export market information use, small high-technology firms and entrepreneurship, among others.

Shameen Prashantham is Doctoral Researcher at the University of Strathclyde. His research deals with the impact of the Internet on the internationalization of small knowledge-intensive firms in a developing economy context. He has served as an Internet Editor of *International Marketing Review*.

Monder Ram is Professor of Small Business at De Montfort University, and coordinator of the Small Business and Enterprise Research Group. He is author of *Managing to Survive – Working Lives in Small Firms* and *Ethnic Minorities in Business* (with T. Jones).

Charles Ramangalahy is Assistant Professor at the Montreal University School of Library and Information Science where he teaches entrepreneurship and research method. He has special interest on absorptive capacity, competitiveness and performance. He has been involved in research projects focused on small and medium-sized business owners-managers' roles, among others.

Fred Scharf is Senior Lecturer lecturing in International Marketing and International Business at the University of Ulster. His main research is in the areas of international marketing education, international entrepreneurship and public policy in support of exporting.

Tiia Vissak is Senior Researcher at the University of Tartu, where she also teaches International Economics. Her research interests include international entrepreneurship, internationalization, business networks, strategic alliances, foreign direct investments and transition economies. She has published in *Transformations in Business and Economics*, chapters in edited texts on foreign direct investments in the Estonian economy and papers in conference proceedings.

Colin Wheeler is Senior Lecturer at the University of Strathclyde. His research interests include international marketing strategy and regulation in the food and drink industries, and export marketing strategy and performance. He has a wide range of publications and has recently co-edited a book entitled *Internationalization: Firm Strategies and Management* published by Palgrave (2003).

Richard W. Wright holds the E. Claiborne Robins Distinguished University Chair in the Robins School of Business, University of Richmond. He has authored or edited twelve books, including *Globalization and Emerging Businesses: Strategies for the 21st Century* (1999) and *Internationalization of Small Businesses* (2003). He has contributed further to the emerging field of international entrepreneurship as co-organizer of the McGill conferences, integrating international business and small business/entrepreneurship, and as guest editor of several special journal issues on the subject.

Foreword

This edited volume consisting of 16 chapters related to international entrepreneurship stems from the 4th McGill Conference hosted by the Strathclyde International Business Unit, University of Strathclyde, Glasgow, September 2001. The McGill Conference on International Entrepreneurship was founded by Hamid Etemad and Richard Wright at McGill University, Montreal in 1998. This conference takes the form of a research workshop where colleagues present and share their research and conceptual ideas. The aim is to encourage high-quality studies in the emerging international entrepreneurship area, focusing particularly on the development of theoretical models, analytical frameworks and robust empirical evidence. A major achievement of the McGill Conferences has been that the best papers are published in volumes and special editions of academic journals. Following this tradition the current edited volume is part of the McGill International Entrepreneurship Series by Edward Elgar Publishing Ltd (Hamid Etemad, Series Editor). In this text, we draw attention to themes that are likely to form areas of interesting research in international entrepreneurship in the years to come. Towards this objective, we selected some of the best papers from the Strathclyde conference and worked with authors and reviewers for a period of more than a year to develop them. We identify six emerging paradigms in the field around which the text is structured.

We would like to take the opportunity to thank the founding members of the McGill Conference, and especially Léo-Paul Dana, Hamid Etemad and Richard Wright for their ongoing efforts in these workshops. In relation to the Strathclyde conference, we are grateful to Strathclyde International Business Unit's staff and PhD researchers, to our sponsors Scottish Equity Partners Ltd and the Hunter Centre for Entrepreneurship at Strathclyde. Our warmest acknowledgements go to Pervez Ghauri, Neil Hood and Stephen Young as well as Irene Hood and Sylvia Kerrigan for their significant support and assistance in the organization of the Strathclyde conference. Sincere thanks also to the authors of the chapters in this text who worked hard with the reviewers and ourselves in order to produce quality contributions. Last but not least we gratefully acknowledge the support of the reviewers for this edited volume. They are: Pia Arenius, Chris Baughn, Phil Beaumont, Jim Bell, Luis Bernardino, Carol Boyd, Jürgen Brock, Candida Brush, Sara Carter, Shiv Chaudhry, Jeremy Clegg, Nicole Coviello, David Crick, Tiit Elenurm, Hamid Etemad, Louis Jacques Filion, Simon Harris, Michael Mayer, Teresa Menzies, Andrew McAuley, Michael McDermott, Frank McDonald, Donald McLean, Kent Neupert, Ben Oviatt, Emmanuella Plakoyiannaki, Pannikos Poutziouris, James Tiessen, Heinz Tüselmann, Lawrence Welch, Paul Westhead, Fiona Wilson, Stephen Young. We hope that the thoughts and ideas contained in this volume will contribute to the advancement of study in international entrepreneurship.

Marian V. Jones, University of Glasgow
Pavlos Dimitratos, University of Strathclyde

PART I

International entrepreneurship, development of the field and the effects of a new economy

Emerging paradigms in international entrepreneurship: a synopsis

Marian V. Jones and Pavlos Dimitratos

INTERNATIONAL ENTREPRENEURSHIP, DEVELOPMENT OF THE FIELD AND THE EFFECTS OF A NEW ECONOMY

International entrepreneurship as a field of study is not necessarily confined to the internationalization phenomenon, and several authors have advanced definitions that suggest a field of study with significant scope for development and the establishment of parameters that are as yet undetermined. Wright and Ricks (1994) suggested that international entrepreneurship represents a new thrust for international business research concerned with the ability of small firms to become internationally competitive, a process derived from the relationship between the firm and the environment in which it operates. More recently McDougall and Oviatt (2000, p. 903) defined international entrepreneurship as 'a combination of innovative, proactive and risk-seeking behavior that crosses national borders and in so doing is intended to create value in organizations'. Emphasis here is on firm-level behaviour that creates value, crosses national borders, and in so doing extends internationalization research towards theories of entrepreneurship and the role and characteristics of the entrepreneur. Zahra and George (2002) see international entrepreneurship as 'the process of creatively discovering and exploiting opportunities that lie outside a firm's domestic markets in pursuit of competitive advantage', which suggests an outward process from a domestic base encompassing creativity, innovation and opportunity recognition. Each of these definitions identifies cross-border or international entrepreneurial activity as its central focus and thus implicitly positions international entrepreneurship as an extension or development of internationalization as its main antecedent body of research. Chapters 1 to 12 of this volume follow the perspective suggested by the above definitions and examine aspects of international entrepreneurship concerned with the cross-border and internationalization activities of firms. Another interpretation of the term 'international entrepreneurship' is to view it as an area of research concerned with cross-national or cross-cultural comparisons of domestic entrepreneurship, or with the migration of entrepreneurs themselves to create ventures in countries that are new and foreign to them. Chapters 13 to 16 implicitly follow this latter interpretation, and bring important concepts and evidence from the field of entrepreneurship, as its antecedent discipline, into the realm of international business.

In the current climate of increasing globalization of economic activity, it can be very difficult for small firms to survive against the forces of global competition unless they are prepared to internationalize, and to do so relatively quickly and at early stages in their development. The most successful firms are likely to be those that are prepared for action, are able to recognize potential opportunities and are able to respond quickly. The rapid internationalization of some small firms would seem to be a relatively new phenomenon reported first in empirical studies appearing in the late 1990s (for example OECD, 1997). It has been suggested that the timing and speed of international market entry are the key factors that distinguish between international new ventures (INVs) and firms that follow a slower, more gradual or incremental internationalization process (Antoncic and Hisrich, 2000). Speed of market entry has long been associated with market success. For the small, resource-constrained firm, a sizeable unsolicited order from abroad, arriving at a time when the firm is trying to push up its sales to cover start-up costs and generally increase the size of its operations, may appear like manna from heaven. Conventionally, however, the fulfilment of unsolicited orders has not been associated with a successful start to internationalization (Young et al., 1989). However, in an era of rapidly developing technology, and changing consumer tastes, speed of entry is important if the firm is to benefit from short-lived windows of opportunity. Observations of rapid internationalization have raised a number of issues discussed in recent articles. For example, the question as to whether firms are responding unconsciously to serendipitous opportunity or acting intuitively from a state of semi-preparedness (Spence, 2003) is one worthy of exploration in relation to the internationalization process. Another issue relates to the velocity or speed of internationalization, and recognition that events or processes take place in relation to time (Hurmerinta-Peltomäki, 2003). A temporal perspective might alter extant internationalization theories, but empirical research on the effects of time-related differences between the aspects of the internationalization behaviour of firms remains relatively scarce (McNaughton, 1999; Westhead et al., 2001).

Networks are often seen as providing opportunities for internationalization, as a source of orders and as a vehicle for the development of the process (Coviello and Munro, 1997). Networks also provide access to resources, in particular, knowledge (Bell, 1995), and in that respect go some way to making firms ready to act opportunistically in response to serendipitous events (Spence, 2003). The network concept is less often associated with strategy, as it is with evolutionary development, yet the frequent call for more detailed examination of networks in the internationalization and entrepreneurship literatures suggests that networking may be an important strategic element in the growth and international development of small and young firms (Johanson and Vahlne, 2003).

The circumstances and environmental conditions prevalent in domestic markets are of some importance to the start-up, growth and development of new ventures. Recent emphasis on the resource-based view of the firm in the internationalization and international entrepreneurship literatures suggests that attention has been drawn to resources at the firm's disposal (Westhead et al., 2001), especially in those sectors where the market itself is still emerging (Mangematin et al., 2003). The effects of hostile versus benign environments in relation to internationalization have been noted (Jones and Coviello, 2002). Differences in economic circumstances have been found to partially account for the differences in entrepreneurial start-up rates between countries (Reynolds et al., 2000). Intuitively, differences in culture may also influence the predisposition of people to start up their own businesses (Baughn and Neupert, 2003).

This volume draws on the changing circumstances and conditions of the global marketplace, and through its various chapters discusses ways in which firms are responding to current challenges. The chapters, and the issues that the contributors to this volume have explored, are organized into six themes relevant to the study of international entrepreneurship as an emerging field of study. These themes are: 'International entrepreneurship, development of the field and the effects of a new economy' which includes this editorial introduction and the inaugural chapter by Dana, Etemad and Wright, 'Conceptual and paradigmatic developments', 'The experiential emphasis in entrepreneurial internationalization', 'International entrepreneurship and the Internet: a developing research agenda', 'Contacts, links and networks: process-driven internationalization', and 'Cross-sectoral, cross-national and cross-cultural comparisons'.

In Chapter 1 of this volume, Léo-Paul Dana, Hamid Etemad and Richard Wright view international entrepreneurship as part of an emerging network-type economy which they refer to as a 'new economy'. This new economy bears characteristics they describe as reminiscent of the bazaar economy of ancient times, and which persists in some areas of the world. They suggest that a solution for small-scale entrepreneurs, facing global competition from large multi MNEs, is to join multi-polar networks within which symbiotic management creates added value through interdependence and the development of relationships. Symbiotic management, while not a new concept in itself, is indicative of a potential new paradigmatic approach to internationalization wherein the emphasis is on the mutual benefit of enlarging the collective market size rather than individual firm profitability and market share. A paradigm shift of this magnitude, from the firm-type economy of individual, impersonal and apparently impartial organizations, to one of collective action, shared goals and flexible, negotiable pricing, is not so much a shift to a new paradigm, but a shift back to an ancient system involving interpersonal relationships and transactional forms based on bargaining, in a modern form of the bazaar economy, supported by the Internet. It is the Internet that Dana et al. see as driving the emergence of the new economy and that makes possible the emergence of multi-polar business systems, in new market structures that share many of the characteristics of the ancient bazaar, and of some long-established network-type business systems that operate in countries of the Middle and Far East. Typical characteristics of both modern and ancient systems include an emphasis on interpersonal relationships, flexible negotiated pricing, collaboration amongst competitors, brand loyalty based on preferential treatment and decentralized, network-based systems of power and control.

CONCEPTUAL AND PARADIGMATIC DEVELOPMENTS

Chapter 2 of this volume consists of an extensive literature review of empirical research relating to internationalization and the performance of the small firm. It systematically identifies and reviews articles published in 11 journals between 1996 and 2001. The authors, Tatiana Manolova and Ivan Manev, fill a void in the literature as they examine existing knowledge on how internationalization affects the performance of these firms. Their contention is that the growing body of literature pertaining to small firm internationalization has tended to place more emphasis on the antecedents of internationalization rather than the outcomes. Where outcomes have been examined, they found that emphasis tended to be placed on international performance rather than the overall performance of the firms themselves. The point they explicate is that little is currently known about the effects of internationalization on the performance and long-term survival of small firms. From their review, Manolova and Manev conclude that in future research, more attention should be paid to the outcomes and multiple implications of internationalization for small firms. Specifically, they propose that consistent operationalization of constructs related to international small firm behaviour and performance, greater emphasis on the antecedents of internationalization, and more complex and comprehensive research designs would move the field forward.

To suggest that a new paradigm has emerged is to suggest that the paradigm can be described and defined. Concentrating on rapid internationalizers as the central focus of her study, Leila Hurmerinta-Peltomäki, in Chapter 3, examines some of the most pertinent definitions of the term, and through synthesis is able to identify three main definitional dimensions. These dimensions have implications for the theoretical underpinnings of the field of study and methodological issues relating to research design. These dimensions are: the time between a firm's birth and first steps in internationalization, its international outlook, and its size. These dimensions, she argues, also encompass some definitional ambiguity that needs to be resolved by researchers, for example, the exact time of a firm's birth may be unclear and its history may extend back into a time before its formal foundation, time boundaries may be difficult to establish and therefore the starting point of internationalization can be difficult to establish. It may be argued that empirical recognition of the emergence of immediately or rapidly internationalizing firms, variously referred to as Born Globals, new international ventures, global start-ups and rapid internationalizers (McDougall, 1989; Rennie, 1993; McDougall et al., 1994; Knight and Cavusgil, 1996; Madsen and Servais, 1997) has been central to the development of international entrepreneurship as a field of study, distinct from antecedent schools of thought such as internationalization, entrepreneurship, innovation and firm growth. Such studies have been key to the identification of time as the key distinguishing dimension between such firms and more conventional internationalizers. As Hurmerinta-Peltomäki notes in her chapter, much still needs to be done to fully understand the dimension of time and how it should be accommodated in future research (Chapter 3, this volume and also Hurmerinta-Peltomäki, 2003). She also suggests that a clearer elaboration of the various foundation processes of the firms under study, and an appreciation of the boundaries of the firm, may impact upon our understanding of the internationalization process, particularly at the early stages of a firm's existence.

In the following chapter (Chapter 4) Sara Carter, Monder Ram and Pavlos Dimitratos explore the notion of portfolio entrepreneurship and its link to international entrepreneurship, and in doing so open the boundaries of entrepreneurial activity to encompass not one but several businesses, opened simultaneously or in succession. They posit that portfolio entrepreneurship refers to the simultaneous ownership of a number of businesses and can be viewed as a product development or a diversification strategy. International entrepreneurship by implication may therefore be associated with a market development or a diversification strategy in or across several countries. The authors claim that portfolio and international entrepreneurship are different facets of the entrepreneurial behaviour of the firm that aims at rent generation through the exploitation of market opportunities in domestic and foreign markets. They plea for more comprehensive studies incorporating innovative, risk-taking and proactive behaviour (McDougall and Oviatt, 2000) irrespective of the marketplace in which it takes place, suggesting that this would advance research in the entrepreneurship field. Certainly, portfolio entrepreneurship is indicated in the necessary and sufficient elements for the sustained existence of INVs noted by Oviatt and McDougall (1994) as: organizational formation through internalization of some transactions, strong reliance on alternative governance structures to access resources, establishment of foreign location advantages and control over unique resources. The boundaries of the firm, in relation to entrepreneurial activity that extends across borders, remain unclear and this is an issue worthy of further investigation and further development of cross-disciplinary paradigmatic perspectives between the entrepreneurship and internationalization schools of thought.

THE EXPERIENTIAL EMPHASIS IN ENTREPRENEURIAL INTERNATIONALIZATION

A criticism that can reasonably be levelled at much traditional research on small firm internationalization is that in pursuing a positivist, scientific approach, the human element of the process is missed or receives less attention than it merits. The characteristics, attitudes, decisions and orientations of the managers and owners of small firms is generally well researched and documented in extant literature on exporting and internationalization, but often in a way which reduces them to contributing factors or groups of variables that have varying influence on internationalization processes and performance. ‘International entrepreneurship’ is a term which tends to draw attention to the human element of entrepreneurship, the beings responsible individually or collectively for the firm’s actions and behaviour, and who experience and respond to and influence the events and circumstances that comprise internationalization. In Chapter 5, the first chapter in this section emphasizing the experiential element of entrepreneurial internationalization, Fred Scharf, Jim Bell, Sharon Loane and Richard Fletcher present a reflection on the methodology related to research on export problems and barriers encountered by small firms. They adopt a critical stance towards the positivist methodologies that seem to prevail in this field and implement a case study approach using a ‘critical incident’ technique involving the key decision-makers in a sample of Irish firms. Focusing on critical incidents as experienced by respondents in exporting firms, respondents are asked to describe and to ‘tell the story’ of what they saw as their ‘worst nightmare’ in an exporting situation. The authors suggest that through this technique, information richness and a deeper understanding of the export process of small firms can be acquired in the international entrepreneurship area. Their study recounts the problems respondents faced, in the way that they were experienced, and provides an interesting, detailed and accurate picture of their respondents’ responses and solutions. While this chapter in itself makes a contribution to knowledge on the export problems faced by small firms, extension of the study across a number of country markets offers significant potential for development in the understanding of entrepreneurship as a human process, and in identifying similarities and differences in human responses to challenging situations in international business, as experienced by small firms in a number of different country settings.

The intriguing question posed in the title of Niina Nummela's chapter (Chapter 6), 'Is the globe becoming small, or is the small becoming global?' is the lens through which she explores the literature on small firm internationalization. Her ensuing discussion addresses the potential impact of the process of increasing world globalization on SME (small and medium-sized enterprise) internationalization, and suggests future strategies for SMEs in a global world. While national barriers to international business have been decreasing, geographical distances are reducing and physical location has become less important, it is clear that organizations, and particularly SMEs, are active participants in the globalization process. While the speed and opportunity to internationalize has increased, Nummela suggests that increased competition has constrained SMEs' ability to control their development paths, and novel approaches will be required for them to succeed. Amongst potential approaches, is the development through international networks of contacts and links, to accelerate the internationalization process and provide access to externally held resources. Despite common agreement in the literature that networks play an important role in internationalization, this chapter notes that international networks are still under-researched and more needs to be known on how SMEs use their network contacts to gain information, support and assistance, how they make contact with partners and how they exploit their network links. Whatever the internationalization process, however, globalization is likely to impact on business activities of SMEs. Realization of its consequences may take time and may be obscured due to the selection of niche strategies amongst SMEs. Also, as globalization is context-specific, Nummela notes that its impact and importance is likely to vary across industries. The key research question she suggests will be how SMEs react to their new and constantly changing environmental context. Research on small business internationalization will need to evolve a new paradigm, drawing on several research traditions, to counter current fragmentation in the field and offer new perspectives. Echoing Carter et al. (Chapter 4), she indicates that this might involve a broadened view of the firm, and accommodation of its networks, a perspective that raises questions concerning the boundaries of the firm, and also the boundaries of enquiry into SME internationalization.

INTERNATIONAL ENTREPRENEURSHIP AND THE INTERNET: A DEVELOPING RESEARCH AGENDA

Developments in information technology are recognized as making a significant contribution to globalization, to a general increase in the level of international business, and to the speed of internationalization. There has been some debate as to whether the Internet represents a new form of internationalization, thus calling for new theories and paradigmatic approaches to internationalization research, or whether it is a facilitator or accelerator of conventionally recognized modes of foreign market entry. The three chapters of this section are complementary in their focus on the role of the Internet in internationalization research, but each presents its own conceptual model illustrating the relationships between the concepts and variables identified by each group of authors as central to their research focus. Together, the chapters by Rasha Mostafa, Colin Wheeler and Pavlos Dimitratos; Ioannis Georganas; and by Shameen Prashantham and Maureen Berry represent the scope of extant literature on the role of the Internet in internationalization, and present complementary models for future research.

In their chapter on Internet-enabled international entrepreneurship (Chapter 7), Mostafa, Wheeler and Dimitratos draw on the literature from entrepreneurship, exporting, information technology and the Internet and propose a conceptual model that could induce further research on pursuing international entrepreneurial activities through the use of the Internet. In an area in which few robust conceptual frameworks appear to exist, the authors propose that the more entrepreneurial the firm, the more likely the firm can use the Internet in exporting and the more successful it may be. The authors acknowledge that their conceptual model applies to small firms and presumes that particular organizational, strategic and environmental conditions should be viewed as constant. The key elements of their conceptualization are: entrepreneurship, commitment to the Internet, facilitators and barriers to Internet commitment, and export performance. The antecedent variables within the ‘entrepreneurship’ construct are drawn from the trait, social-psychological and behavioural approaches to entrepreneurship and include: need for achievement, locus of control, risk-taking propensity, tolerance of ambiguity, work experience, educational level, age, innovativeness and proactiveness. The ‘Internet commitment’ construct is presented as having two groups of variables: ‘Internet use’, as a communication tool and as an information source, and ‘Web function’ in sales, distribution and promotion of the firm and its products. The authors contend that adoption of the Internet in exporting is compatible with the view of the entrepreneur as a proactive, risk-seeking innovator in relation to their internationalization (McDougall and Oviatt, 2000), and with Sarasvathy (2001), which posits that the entrepreneur chooses between the effects of particular decisions in complex environments. Mostafa et al. suggest that the entrepreneur is likely to be better able to identify and exploit international opportunities through adoption of the Internet.

The main purpose of Chapter 8 by Ioannis Georganas is, as its title suggests, to present a conceptual model of internet-enabled internationalization. Concentrating on the exporting phase of a firm's internationalization process, Georganas's focus is on the three main functions of the export channel, which he identifies as communication, transaction and distribution. The growth of the Internet is transforming current business practice through the development of electronic market-places. This process facilitates direct producer–consumer interaction, a process predicted by some researchers to become the dominant structure in electronic commerce (for example Sarkar et al., 1998; Narasimhan and Chatterjee, 1997). More recently, others have noted some restructuring of the embryonic electronic marketplaces with the emergence of new intermediaries or 'cybermediaries' which serve as brokers between producers and consumers (Katz et al., 2003; Fortune and Aldrich, 2003). The role of the customer in this electronic transformation process is less well understood, and while predictions abound, research on the effects of the Internet on export performance is still relatively scarce. Building on classic export performance literature (for example Katsikeas et al., 2000; Zou and Stan, 1998; Aaby and Slater, 1988), Georganas proposes a conceptual model incorporating two background dimensions, namely firm factors and managerial factors, and three sets of intervening variables consisting respectively of information, market variables and strategy variables. The chapter consists of a comprehensive review of the literature from which the variables emerge, and advances propositions that determine the relationships and interaction between the 'use of the Internet', export performance and export strategy.

The intention of Shameen Prashantham and Maureen Berry in the third chapter in this section (Chapter 9) on the developing research agenda relating to international entrepreneurship and the Internet, is to develop a conceptual approach to the study of what is a relatively new phenomenon. Prashantham and Berry draw on two main bodies of literature, that pertaining to the internationalization of small knowledge-intensive firms, and that pertaining to the Internet with respect to network relationships. They identify three broad applications of the Internet as relevant to their proposed study on small internationalizing software firms in India, and which are contributory factors in the development of network relationships. These are: Internet marketing, Internet-supported supply chain management, and Internet-supported customer relationship management. Their major premise is that the Internet is likely to play a significant role in the internationalization of small knowledge-intensive firms by raising their visibility within the 'marketspace' of cyber-communications, to improve operational efficiency and performance through Internet-supported customer relationship management, and to facilitate greater intimacy in customer relationships. The key concepts in their model linking Internet-enabled network relationships with internationalization are visibility, efficiency and intimacy. In common with Nummela (Chapter 6), and with Carter et al. (Chapter 4) what Prashantham and Berry propose is a broadened view of the firm, and a deeper understanding of its networks whether real or virtual, and its boundaries.

CONTACTS, LINKS AND NETWORKS: PROCESS-DRIVEN INTERNATIONALIZATION

In Chapter 10, the first of three chapters on process-driven internationalization, Dev K. Boojihawon adopts a behavioural perspective in his study of professional service firms. He notes that research which explicitly investigates the internationalization process from the perspective of entrepreneurial behaviour, is scarce, although such studies are beginning to emerge in the international entrepreneurship literature (Jones and Coviello, 2002). The objective of his study is to contribute to an understanding of how network relationships impact upon service firms' ability to implement entrepreneurial initiatives and strategy towards their internationalization. He adopts Beamish's (1990, p. 77) definition of internationalization: 'the process by which firms both increase their awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with other countries', because of its emphasis on a process of increasing awareness and action, due to the influence of international transactions on a firm's future development. Boojihawon posits that professional service firms, by the nature of their business, operate in networks of connected relationships, and from this assertion, he builds a conceptual framework which represents the internationalization process of independent small service firms through network relationships. His conceptualization integrates organizational learning with the firm's pattern of entrepreneurial activities and postulates that international entrepreneurship is a multilateral concept that emerges as a result of informal, unstructured interaction between the firm and its network actors, and through relationships developed through international transactions.

Thandiwe Phiri, Marian Jones and Colin Wheeler, in Chapter 11, examine the early internationalization processes of six small firms in the advanced medical products industry in Scotland. In search of explanations of early internationalization beyond those offered by extant internationalization theory, the authors 'return to the coalface' and ask firm founders to describe their firms, their foundation processes and the nature of their cross-border contacts, links and business activities. Through cross-case analysis of the results, the authors found that the nature of the firms' technology, and the extent to which the innovation was radical or incremental, was a major determinant of the types of cross-border links firms formed with partners and ultimately the forms of cross-border business modes established. Apparent from their study is the importance of factors that pre-date the foundation of the firm but which drive and shape its subsequent pattern of internationalization. Such factors include the human and social capital brought to the firm by the founders, the stage of development of the technology, and the relative radicalness of their technological innovation. The foundation location decision of the new firms appeared to be determined by the regulatory context of the environment, the international transferability of intellectual property rights, and the source of venture capital. Of particular interest is the apparent international mobility of such firms, their mutability and potential transience as tangible entities in any particular national arena. Internationalization amongst the case firms was found to be strongly associated with their main value chain activities, that is, R&D, production, and marketing and distribution. Questions raised by the authors concern the survival rates and performance of firms that are early internationalizers or Born Globals, and the relatively transient nature of the existence of some such firms in their chosen country of foundation.

Incorporating a number of theoretical approaches, Tiia Vissak, in Chapter 12, explores the impact of foreign direct investment on the international growth of six affiliates in Estonia. Employing a case study methodology, she finds that the Uppsala model, the innovation-related internationalization models, the network approach, and studies on the interface between foreign direct investment (FDI) and exports are appropriate in explaining the internationalization of these six affiliates. However, the author also concludes that studies of multinational enterprises (MNEs) as organizational networks, and an international entrepreneurship perspective, could provide insights into why some case firms were able to gain more foreign direct involvement from their parent companies than others. A major reason why Vissak's study is interesting is that it explores entrepreneurial aspects of foreign subsidiaries, thus moving the focus of international entrepreneurship research closer to the study of headquarters–subsidiary relations, which is a neglected area. Also, research examining the perspective of firms acquired by MNEs is particularly interesting since the dominant perspective is of the MNE and its cross-border acquisition of local firms as a means of market entry. Less emphasis has been placed on the way small local firms draw on the networks and resources of their MNE parents to help extend their own operations overseas. For smaller firms in markets which were previously state-controlled, and for a long time cut off from the immediate effects of globalization, the process of simultaneously developing a marketing and international orientation, and effecting these through the international networks of their MNE parents, is likely to require considerable creativity and entrepreneurial drive. It is therefore hoped that Vissak's study signals the commencement of a long and fruitful line of enquiry into the internationalization of entrepreneurial firms from the new market economies.

CROSS-SECTORAL, CROSS-NATIONAL AND CROSS-CULTURAL COMPARISONS

The final section of this volume is concerned with comparison of entrepreneurship across countries and cultures, and with the contribution of university alumni to the entrepreneurial community of a country. In Chapter 13, the first chapter in this section, Louis Jacques Filion, Charles Ramangalahy, Gabrielle Brenner and Teresa Menzies empirically examine differences between the entrepreneurial businesses of three ethnic groups in Canada, namely, Sikh, Chinese and Italian-owned firms. The purpose of Filion et al.'s study is to explore similarities and differences among ethnic groups in Canada in relation to entrepreneurship and business, and to determine implications for research training and government policy. Significantly, they suggest that there is no reason to develop assistance programmes specifically targeted to ethnic business, but found that while the problems faced by ethnic businesses are no different to those faced by any small business, there were ethnic-based differences among the problems faced by different groups. An interesting point made by the authors suggested that the government and business community could promote the internationalization of local economies 'by making better use of the entrepreneurs' trips to their countries of origin to increase exports, something they themselves do not do'. They conclude by calling for more research on ethnic business start-up toward the development of a solid theoretical model.

Continuing the theme of migrant entrepreneurship, Dave Crick and Léo-Paul Dana in Chapter 14 explore the perceptions of entrepreneurs from sub-cultures in the UK and in Singapore, who have internationalized their operations. Focusing on entrepreneurs' perceptions of their international competitiveness, their motives for engaging in international activities, the barriers they face, and assistance for internationalization, they conclude that there are differences between the groups in each of the aforementioned issues. While the previous chapter concentrated on ethnic groups within one country, Crick and Dana examine similar ethnic groups in each of two countries, the UK and Singapore. The authors discuss the problems associated with equivalence in cross-national comparative research and stress the impossibility of taking a matched-sample approach. They describe their process of firm selection in some detail and caution against generalization from the results. While this research is clearly exploratory, the prevalence of ethnic businesses in many countries of the world, that clearly contribute to local economies, indicates that despite the challenges associated with research design, there is a need for further study of migrant and ethnic entrepreneurial business.

Enterprises established by immigrants have been recognized as making an important contribution to the economy of the country in which they have settled. Kilby (2003) observed patterns across much of the developing world wherein minority ethnic groups supply the bulk of entrepreneurial services. Migrant, and particularly ethnic entrepreneurship is likely to become an important topic for international business research as we move into an era marked by international terrorism, war and economic instability, all of which have contributed to an increase in flows of economic and political refugees across borders, in addition to an increase in background migration made possible by economic and political union in regions such as the EU. While there is a rich history of research on ethnic and migrant entrepreneurship, particularly in the fields of labour economics and social anthropology, as Filion et al. note, research and theory on the subject of ethnic businesses and ethnic managerial practices is less well developed. This paucity is especially marked in the field of international business, which has tended to focus on the international transfer of investment, goods, services and resources, and technology, but has paid much less attention to the international transfer, or migration of the entrepreneur – the initiator of new enterprise.

In Chapter 15 Jonathan Levie, Wendy Brown and Laura Galloway further contribute to the emerging body of work which compares entrepreneurs, or aspects of entrepreneurship, between or across different nations. While Filion et al. (Chapter 13) and Crick and Dana (Chapter 14) focused on ethnic entrepreneurs within one country, and across two countries respectively, Levie et al. compare new-venture activity amongst university alumni with the new business activity of national adult populations. Starting from the premise that starting and running one's own business is recognized as a desirable career choice for graduates, the extent to which such young people actually become entrepreneurs emerges as an important question as regards the economic development of any specific country. Their study draws on data produced and published in the *Global Entrepreneurship Monitor*, which distinguishes between entrepreneurial activity (the creation of new business) and self-employment on a continuing basis. The *Global Entrepreneurship Monitor* now extends to over 29 countries and significantly extends the possibilities for international comparison of entrepreneurship data and trends. Focussing on the alumni of the University of Strathclyde in Scotland, Levie et al. found, *inter alia*, that graduate entrepreneurship rates were not significantly higher than background entrepreneurship rates, and that the gender imbalance of most background populations was maintained amongst graduates. The importance of this study is its contribution towards the start of an international programme of research that measures and compares the entrepreneurial activity of university alumni in different nations, and potentially, their contribution to entrepreneurial activity in different economies. The *Global Entrepreneurship Monitor* represents a welcome advance in a field where sampling procedures are compromised by a dearth of suitable sampling frames, and compounded by equivalence issues in cross-national comparative studies.

EMERGING PARADIGMS

According to the *Chambers Dictionary*, the word ‘paradigm’ suggests a basic theory, or a conceptual framework within which scientific theories are constructed. This volume contains a number of such conceptual frameworks, but as yet, new theories are still to merge. An alternative definition of the word ‘paradigm’ is provided by Patton (2002, p. 69) in his text on qualitative research and evaluative methods, in which he describes a paradigm as: ‘a worldview – a way of thinking about, and making sense of the complexities of the real world’. International entrepreneurship as an emergent field of study represents a particular set of challenges for researchers who are intent on explaining its nature, its scope, its content and its process. International entrepreneurship is a new way of thinking about cross-border business activity which builds on the extant theories of international business, through integration with theories from the fields of strategic management, entrepreneurship and innovation, *inter alia*, to explain the complexities of enterprise in an international and sometimes global environment. While international entrepreneurship is one way of thinking about such phenomena, it could certainly not be described, in its current level of development as having one world-view. The various chapters in this text suggest a number of paradigmatic developments. These extend to the geographical and ownership boundaries of the firm, the extent and strategic use of international networks, and cyber-networks, the boundaries of the market within a globalizing economy and the nature of competition within those markets. Conceptual challenges emerge from a need to better understand the effects of the speed of internationalization and to view the process through a temporal lens. Finally, comparison of entrepreneurship across different nations, and research into the foreign direct investment of human capital through migrant entrepreneurship, will contribute to the richness and depth of understanding in the emergent field of international entrepreneurship.

REFERENCES

Aaby, N.E. and S.F. Slater (1988), 'Management influences on export performance: a review of the empirical literature 1978–1988', *International Marketing Review*, **6** (4), 7–26.

Antoncic, B. and R.D. Hisrich (2000), 'An integrative conceptual model', *Journal of Euromarketing*, **9** (2), 17–35.

Baughn, C.C. and K.E. Neupert (2003), 'Culture and National Conditions Facilitating Entrepreneurial Start-Ups', *Journal of International Entrepreneurship*, **1** (3), 313–30.

Beamish, P.W. (1990), 'The Internationalisation process for smaller Ontario firms: a research agenda', in A.M. Rugman (ed.), *Research in Global Strategic Management – International Business Research for the Twenty-First Century: Canada's New Research Agenda*, Greenwich, CT: JAI Press, 77–92.

Bell, J. (1995), 'The internationalization of small computer software firms', *European Journal of Marketing*, **29** (8), 60–75.

Coviello, N.E. and H.J. Munro (1997), 'Network relationships and the internationalization process of small software firms', *International Business Review*, **6** (4), 361–86.

Fortune, A. and H.E. Aldrich (2003), 'Acquiring competence at a distance: application service providers as a hybrid organizational form', *Journal of International Entrepreneurship*, **1** (1), 103–19.

Hurmerinta-Peltomäki, L. (2003), 'Time and internationalisation: theoretical challenges set by rapid internationalisation', *Journal of International Entrepreneurship*, **1** (2), 217–36.

Johanson, J. and J-E. Vahlne (2003), 'Business relationship learning and commitment in the internationalisation process', *Journal of International Entrepreneurship*, **1** (1), 83–101.

Jones, M.V. and N.E. Coviello (2002), 'A time-based contingency model of entrepreneurial internationalisation behaviour', Working Paper 2002-12, Haskayne School of Business, University of Calgary.

Katsikeas, C.S., L.C. Leonidou and N.A. Morgan (2000), 'Firm level export performance. Assessment: review, evaluation, and development', *Journal of the Academy of Marketing Science*, **28** (4), 493–511.

Katz, J.A., R. Scott and O.K. Safranski (2003), 'Virtual instant global entrepreneurship', *Journal of International Entrepreneurship*, **1** (1), 31–42.

Kilby, P. (2003), '*The Heffalump revisited*', *Journal of International Entrepreneurship*, **1** (1), 13–29.

Knight, G. and S.T. Cavusgil (1996), 'The born global firm: a challenge to traditional internationalization theory', in C.R. Taylor (ed.), *Advances of International Marketing*, New York: JAI Press, pp. 11–26.

Madsen, T.K. and P. Servais (1997), 'The internationalization of Born Globals: an evolutionary process?', *International Business Review*, **6** (6), 561–83.

Mangematin, V., S. Lemarie, J-P. Boissin, D. Catherine, F. Corolleur, R. Coronini and M. Trommetter (2003), 'Development of SMEs and heterogeneity of trajectories: the case of biotechnology in France', *Research Policy*, **32**, 621–38.

McDougall, P.P. (1989), 'International vs domestic entrepreneurship: new venture strategic behavior and industry structure', *Journal of Business Venturing*, **4**, 387–400.

McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43** (5), 902–6.

McDougall, P.P., S. Shane and B.M. Oviatt (1994), 'Explaining the formation of international new ventures: the limits of theories from international business research', *Journal of Business Venturing*, **9**, 469–87.

McNaughton, R. (1999), 'Time-span from start-up to foreign market entry among micro-exporters', in L-P. Dana (ed.), *International Entrepreneurship: An Anthology*, Singapore: ENDEC, pp. 259–70.

Narasimhan, A. and P. Chatterjee (1997), 'The Web as a distribution channel', http://ecommerce.vanderbilt.edu/ .

OECD (1997), *Globalisation and Small and Medium Enterprises*, Paris: OECD.

Oviatt, B.M. and P.P. McDougall (1994), 'Toward a theory of international new ventures', *Journal of International Business Studies*, **25** (1), 45–64.

Patton, M.Q. (2002), *Qualitative Research and Evaluation Methods*, 3rd edn, London: Sage.

Rennie, M.W. (1993), 'Born global', *McKinsey Quarterly*, **4**, 45–52.

Reynolds, P.D., M. Hay, W.D. Bygrave, S.M. Camp and E. Autio (2000), *Global Entrepreneurship Monitor 2000 Executive Report*, Babson College, Kauffman Center for Entrepreneurial Leadership, and London Business School.

Sarasvathy, S.D. (2001), 'Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency', *Academy of Management Review*, **26**, 243–63.

Sarkar, M., B. Butler and C. Steinfield (1998), 'Cybermediaries in electronic marketplace: toward theory building', *Journal of Business Research*, **41**, 215–21.

Spence, M. (2003), 'International strategy formation in small Canadian high technology companies: a case study approach', *Journal of International Entrepreneurship*, **1** (3), 277–96.

Westhead, P., M. Wright and D. Ucbasaran (2001), 'The internationalisation of new and small firms: a resource-based view', *Journal of Business Venturing*, **16**, 333–58.

Wright, R.W. and D.A. Ricks (1994), 'Trends in international business research: twenty-five years later', *Journal of International Business Studies*, **25** (4), 687–701.

Young, S., J. Hamill, C. Wheeler and J.R. Davies (1989), *International Market Entry and Development: Strategies and Management*, Hemel Hempstead: Harvester Wheatsheaf.

Zahra, S.A. and G. George (2002), 'International entrepreneurship: the current status of the field and future research agenda', in M. Hitt, R. Ireland, M. Camp and D. Sexton (eds.), *Strategic Leadership: Creating A New Mindset*, London: Blackwell, pp. 255–88.

Zou, S. and S. Stan (1998), 'The determinants of export performance: a review of the empirical literature between 1987 and 1997', *International Marketing Review*, **15** (5), 333–56.

1. Back to the future: international entrepreneurship in the new economy

Léo-Paul Dana, Hamid Etemad and Richard W. Wright

INTRODUCTION

Understanding internationalization is no longer an option for business success; it is a prerequisite. Indeed, the success of entrepreneurs today depends largely on their ability to become globally competitive, even if they refrain from competing globally. The question then arises: How can small-scale entrepreneurs – lacking economies of scale – compete against large multinationals?

One solution is for small firms to develop relationships with other firms within multi-polar networks. In this scenario, formerly independent enterprises share power and control, and cooperate voluntarily to maximize efficiency and profits. We see this trend developing; entrepreneurs are shedding their traditional focus on independence as they discover interdependence and relationships to be more profitable. The result is symbiotic management, which we define as, 'a collaborative effort by multiple parties, each of which benefits from the joint effort, such that added value is created'. In contrast to competition by the individual firm, aimed at increasing its market share and profitability at the expense of competitors in a zero-sum game, symbiotic management focuses instead on enlarging the collective market size, with each involved firm benefiting.

Symbiotic management – facilitated by the rise of the Internet – is leading to a new emphasis on multi-polarity in the world of business. Economic activity is moving away from a focus on the individual firm, toward relationships within multi-polar networks. While this may appear to be a radical departure from the usual nature and conduct of business, the concept and practice of multi-polar networks of interdependent players is, in fact, as old as economic activity itself. Indeed, we believe that understanding the structure and processes of the traditional bazaar can enhance our ability to manage the emerging relationships and multi-polarity that underlie the new network economy.

During most of the nineteenth and twentieth centuries, entrepreneurship took place within the firm-type economy, in which industry and trade primarily evolved within a set of impersonally defined institutions, grouping people according to organization and specialization. In this context, firms purport to treat clients impartially. It is assumed that profit-maximizing transactions are based on rational decision-making, rather than on the nature of personal relationships between entrepreneurs and their consumers; thus, the focus is on impersonal transactions. Decision space is occupied by product attributes and by the services attached to them, often backed by formal warranties. Consequently, the relationship between the buyer and the individual salesperson is largely irrelevant to the transaction decision. The interaction between the buyer and the product (or service) is more important than that between the buyer and the seller. Competition takes place among sellers. Geographic location – a large shopping mall, for example – is often a competitive advantage. Prices are set by the producers or sellers, and are generally not subject to negotiation. The entire economic space is assumed to be rational and largely devoid of subjective personal considerations.

In the emerging scenario, we observe a significantly different set of norms. No longer are ‘all people created equal’. Relationships play a more important role in business decisions, and transactions have become less standard. A frequent traveller on Air Canada can earn ‘Super Elite’ status, entitling this individual to differential treatment, preferential seating, special promotions, discounts and personal concierge service. Even more striking, this customer can benefit as well from preferential treatment on United Airlines, on Lufthansa, and on the other members of the Star Alliance – a global alliance of 14 firms, which were formerly competitors. This relationship leads to increased brand awareness and loyalty, even though differentiation in the product or service is less evident than ever before. Airline seats are sold as a commodity, yet brand loyalty prevails. The transaction decision is concerned not just with product attributes, but also with relationships and preferential treatment. There is less competition among individual sellers, as formerly rival firms collaborate in global alliances. The unit of competition is no longer the individual firm, enveloping product attributes, but rather its position within a multi-polar network of relationships.

Flexible pricing – which (as we will discuss later) typified the bazaar – is re-emerging in certain sectors of the economy. As in the bazaar, a flexible pricing system creates a range of possible outcomes, with the price varying greatly, depending on the relationship between buyer and seller. The vendor may sell for less when investing in a relationship (creating brand loyalty to increase market share); and conversely, the buyer may be willing to pay more when the other considerations (such as frequent flyer status) gained from the relationship are more valued than the transaction’s differential costs.

The purpose of this introductory chapter is to provoke both academic colleagues and entrepreneurs to think about the nature of entrepreneurship as it was conducted by the entrepreneurs of the past, in the bazaar economy, and as it is re-emerging. There are fascinating parallels, in terms of information dissemination, pricing, brand loyalty, intermediation and, most significantly, relationships, which our discussion highlights. Our central thesis is that economic activity is going full circle, with Internet technology propelling us towards multi-polar business systems with some characteristics remarkably akin to those of the bazaar. The Internet is an exchange vehicle that generates

Table 1.1 Comparing economies

Bazaar economy	**Firm-type economy**	**Multi-polar network economy**
Focus on personal relations	Focus on impersonal transactions	Focus on relationship marketing
Prices are negotiated	Prices are set by the vendor	Prices are negotiated
Would-be competitors cooperate, reinforcing relationship networks	Competition takes place between sellers	Former competitors cooperate for mutual gain, thus reinforcing relationship networks
Decision-making influenced by relationship with members of network	Decision-making influenced by strategic considerations	Decision-making influenced by relationship with members of network
Brand loyalty is influenced by preferential treatment; brand loyalty – based on relationships – exists even for commodities	Brand loyalty is a function of product differentiation; therefore, not applicable to commodities	Brand loyalty is influenced by preferential treatment; brand loyalty – based on relationships – exists even for commodities
Power and control decentralized in multi-polar networks	Power and control centralized in uni-polar fashion, with Head Office central to strategic decision-making	Power and control decentralized in multi-polar networks

gains from trade, as was the traditional bazaar. We believe that insights into the processes and relationships of the bazaar can help us understand and operate effectively in the new, network economy. Contrasting features of the bazaar economy, the firm-type economy and the network economy are summarized in Table 1.1.

INTERNATIONALIZATION AND NETWORKS

Hierarchical Models

Traditional approaches to internationalization have focused on a uni-polar and hierarchical distribution of power and control in the firm. Internalization Theory (Buckley and Casson, 1976; Morck and Yeung, 1991, 1992; Rugman, 1979, 1981; Teece, 1985) taught us that by investing in its own foreign subsidiaries, a firm could expand its operations abroad while maintaining control at its headquarters. As well, the so-called ‘Eclectic Paradigm’ (Dunning, 1973, 1977, 1980, 1988) focused on the combination of ownership- and location-specific advantages that could be internalized within a company’s subsidiary system, while maintaining centralized control. This uni-polar scenario is implicit also in the incremental or stages models of internationalization (Bartlett and Ghoshal, 1989; Bilkey, 1978; Bilkey and Tesar, 1977; Buckley et al., 1988; Cavusgil, 1980, 1984; Cavusgil and Nevin, 1981; Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975; Leonidou and Katsikeas, 1996; Newbould et al., 1978), in which internationalization is achieved in progressive stages over time, without the parent firm ceding power or control. Central to all of these schools is the tenet that the internationalizing firm maintains its centralized, uni-polar locus of power and control. (Other approaches view the firm and subsidiary development from a resource-based perspective; see, for example, Birkinshaw et al., 1998 and Peng, 2001).

Networking Models

An alternative approach to internationalization assumes a multi-polar distribution of power and control. Rather than focusing on the internationalization of an individual firm with a single, central locus of power and control, we can focus on internationalization through a multi-polar network of firms, where resources, power and control are shared among independent firms cooperating voluntarily to maximize efficiency and profit. Literature pertaining to this networking perspective includes: Acs and Dana (2001), Bodur and Madsen (1993), Coviello and Munro (1997), Dana (2001), Doz and Hamel (1997), Etemad et al. (2001), Fontes and Coombs (1997), Gomes-Casseres (1994), Johanson and Mattsson (1988, 1992), Johanson and Vahlne (1992), Kanter (1994), Sharma (1992), Sharma and Johanson (1987), Welch (1992), Welch and Luostarinen (1988, 1993), Welch and Welch (1996) and Wilkinson et al. (2000). Here, the focus is not on the individual firm internationalizing independently, but on entire multi-polar networks of independent firms operating in a global marketplace. For an overview of the extensive range of industries and geographic settings in which collaborative arrangements are employed, see Gomes-Casseres (1994), Kanter (1994) and the three-volume series edited by Beamish and Killing (1998).

Multi-polar internationalization is a relatively new phenomenon in the West. Yet, the concept is not new. We can read about it in accounts of the Assyrians, Babylonians and Phoenicians who dominated commerce more than 3000 years ago. Much later, industrialists of the West developed joint ventures – more structured and formalized forms of cooperation, but with similar goals. Joint ventures became a popular mode of internationalization in the late twentieth century, especially among the US-based multinationals.

While entrepreneurs in the West traditionally seek to maintain independence, entrepreneurs of bazaar economies have thrived in long-established networks spanning Indonesia (Geertz, 1963), Indochina (Dana, 1995, 1999b), China (Dana 1998a, 1999a), Central Asia (Dana, 1997, 2000a), and the countries of Islam, including the lands of the former Ottoman Empire and the Mediterranean rim (Dana, 2000b; Sayigh, 1952). Chinese networks have long been important instruments of international trade (Haley et al., 1998; Shenker, 1994). In Japan and Korea, symbiotic inter-firm cooperation marketing is reflected in the *keiretsu* and *chaibol* networks of firms (Dana, 1998b; Steers et al., 1989; Wright 1989). It appears that members of networks can benefit from their involvement in symbiotic, interdependent relationships. Acs and Yeung (1999) applied the term ‘co-dependence’ in this respect.

Networks Between Large and Small Firms

While sociologists have focused on networks among entrepreneurs, we also see increasing collaboration between small and large firms. Small firm–large firm networks allow the product of smaller firms to reach global markets more quickly than through independent expansion (Harrison, 1997). Bonaccorsi (1992) and Dana and Etemad (1994, 1995) have shown how small businesses can rely on large firms for parts of their internationalization activities, fusing elements of international business with small business and entrepreneurship. This ‘scaling up’ process enables smaller firms to leverage their network resources, thus shortening the time span and reducing the cost and risk of their internationalization. Similarly, performing specialized functions in collaboration with large firms to increase their operating scale, allows small firms to hasten their own learning curve and to internalize sufficient expertise to become competitive at the global level (Etemad et al., 2001).

Thus, internationalization increasingly involves symbiotic relationships involving both large and small firms. Reynolds (1997) noted that the recent globalization of markets has not been associated with an expanded role for larger firms; instead, smaller companies are filling niche roles (Buckley, 1997). Networks of small and large firms can enhance the competitiveness of both types of organizations. By supplying a portion of the high-volume needs of bigger organizations, small firms can specialize, achieving their own economies of scale. As these smaller firms become more competitive, by capturing scale economies not possible without large-firm link-ups, the large businesses in turn gain a competitive advantage by integrating those economies into their own value chains. Larger firms also gain flexibility and economies of scope by accessing a number of highly specialized small firms, each producing a small range of components at very substantial scale economies. A further benefit to large firms linking up with smaller ones is their enhanced ability to tailor products or processes to fit local demand or content requirements.

THE BAZAAR REVISITED

The bazaar is a social and cultural system, a way of life and a general mode of commercial activity, which has been in existence for millennia (Dana, 2002). The earliest marketplaces were often seasonal and regional. From this occasional existence arose the structured market – a stable and permanent structure for buyers and sellers to engage in trading. With the structured bazaar, entrepreneurs could travel from one country to another, and conduct trade at these established trading posts.

Bazaars evolved and thrived in transport hub cities, many of which were located on ancient trade routes connecting Europe to the Chinese Empire, through the Persian Empire and the Indian subcontinent. The southern Silk Road started from Xian, the capital of the Middle Kingdom. With loads of silk and other exotic Chinese products – including gunpowder, the compass, ink, paper and writing instruments – caravans of entrepreneurs headed out to conduct international trade. Indian spices, as well as Chinese commodities, were traded along the journey.

'Grand bazaars' were vital to the functioning of trading routes, including the Silk Road. The grand bazaars formed an infrastructure resembling the hub-and-spoke system of today's air transportation industry. In some ways, the ancient trading caravans were similar to modern airlines: their working capital was relatively large and they were pressed for time. Grand bazaars served as hubs connected to each other and were supplied by caravans travelling the trade routes. Smaller regional bazaars, in neighbouring towns, absorbed some of the imports brought in by caravans, and supplied some of the goods sold to them. Grand bazaars thus functioned as inventory depots for the supply chain of other regional bazaars.

In many ways, caravans resembled trade missions of modern times. A critical aspect of the ancient caravans was time. The long and arduous voyage between Xian and Rome stretched endurance to its limits. Although the travellers stopped for supplies along the routes, and rested in organized and strategic locations, the traders could not allow disorganized, inefficient or poor markets to delay their schedule. Ideal bazaars – with a large functional capacity along trade routes – included the following features:

- Knowledge dissemination: up-to-date supply-related information could be disseminated quickly, due to arbitrage aspects of bazaars.
- Absorptive capacity: the potential buyers and/or their agents (the intermediaries) collectively had sufficient absorptive capacity to make mutually beneficial spot market transactions with a newly arrived caravan.
- Supply: local entrepreneurs were collectively able to supply international entrepreneurs with food, drink, inventory and even camels and horses for transport.
- Efficiency: the ideal bazaar allowed for the efficient performance of market functions, both in terms of time and in barter supplies or gold coins which were available in sufficient quantities only in grand bazaars.

The structured bazaar allowed physical concentration and therefore functioned efficiently, largely thanks to the geographical concentration and clustering of vendors in like occupations. This enabled potential buyers and suppliers to meet at a predetermined location, reducing search costs and minimizing disparity caused by geographic dispersion. Thus, the bazaar reduced overall transaction costs as all concerned parties converged on a central location. A potential buyer could easily locate the designated part of the bazaar for the goods or services under consideration. Once at that location, it was possible to compare the goods of several dealers, in close proximity and within a short span of time. This allowed the shopper to develop a feel for the prevailing market conditions, including the range of supply and price.

The structured bazaar provided vital market functions, including:

- Information search: entrepreneurs disseminated their proprietary information regarding new products and emerging trends in supply or demand. At the bazaar, consumers acquired information at an unprecedented speed, allowing for efficient comparative shopping. Also, entrepreneurs could learn about the needs of consumers.
- Updating: potential suppliers and buyers quickly updated and upgraded their information and incorporated their new knowledge to assume new positions.
- Intermediation: some potential suppliers and buyers behaved as intermediaries, profiting from arbitrage.
- Opportunity for cooperation: entrepreneurs of the bazaar engaged in cooperative bargaining and negotiations, forming alliances.

While the bazaar may appear on the surface to be little more than a geographic clustering of individually competitive vendors, a high degree of collaboration existed (Geertz, 1978; McMillan and Woodruff, 1999). In discussing the bazaar, Geertz (1963) explains that the 'relatively high percentage of wholesale transactions (i.e., transactions in which goods are bought with the express intention to resell them) means that in most cases both buyer and seller are professional traders' (p. 33). He elaborates that the bazaar holds a complex web of carefully managed relationships. Once a mutually satisfactory transaction has taken place, the establishment of a long-term relationship makes future purchases more pleasurable, and profitable. Rather than exhibit the behaviours of competitors, wholesalers bond with one another and cooperate for selfish reasons. The same is true of retailers. If an entrepreneur does not have in stock a widget that is in demand by a potential client, the entrepreneur is likely to source it from another entrepreneur, with whom he would be otherwise competing. Christian (1943) gave an account of his personal experience: 'News spreads rapidly in a Shan States bazaar. Within the hour I was offered half a dozen old pistols' (1943, p. 504). Axelrod (1984) explains how cooperation is more effective than predation, even in an environment of self-seeking egoists. As noted by Webster (1992), building long-term relationships can be viewed as a social and an economic process.

With little variation, the style and procedures of trade in the bazaar reflected a consistent pattern. A potential buyer inquired about supplies and prices from several suppliers, in a concentrated area. This allowed the buyer to form a reasonably informed opinion about the state of the market at the time. Ongoing arbitrage accorded the structured bazaar functional efficiency.

Unlike Western relationship marketing which is customer-centred, whereby a seller seeks long-term business relationships with clients (Evans and Laskin, 1994; Zineldin, 1998), the focus in the bazaar is on the relationship itself. In the bazaar, both the buyer and the seller seek a personal relationship.

THE BAZAAR AND THE INTERNET

The degree to which the structured bazaar resembles the World Wide Web is striking. As is the case with industrial clusters, the Internet functions much like the traditional bazaar: both facilitate exchanges between buyers and sellers whom in other situations might not have had an opportunity to conduct transactions. The difference is that the Internet provides a vehicle through which trade can be conducted without the need for physical proximity. Key features of the emerging digital economy include:

- Knowledge dissemination: up-to-date information is disseminated at unprecedented speed.
- Absorptive capacity: the potential buyers collectively have sufficient absorptive capacity to make mutually beneficial spot-market transactions (hence, the success of auctions on the Web).
- Supply: the Web provides small-scale entrepreneurs with an opportunity to enter international transactions, which was less likely to happen before.
- Efficiency: the Web allows for the efficient performance of market functions.

Like the structured bazaar which allowed the physical concentration of vendors and therefore functioned efficiently, the Web also provides the concentration and clustering of vendors. Potential buyers and suppliers meet on-line, reducing search costs and minimizing any disparity caused by geographic dispersion. Therefore the Web reduces overall transaction costs, as all parties concerned converge on a limited number of key cyber locations – just as they converged once on the grand bazaars. As with the bazaar, the Web provides key functions:

- Information search: international entrepreneurs disseminate their proprietary information regarding new products and emerging trends, and consumers download details with unprecedented speed, facilitating comparative shopping.
- Updating: potential suppliers and buyers quickly update and upgrade their information and incorporate that knowledge to assume new positions.
- Intermediation: some potential suppliers and buyers behave as intermediaries, profiting from arbitrage.
- Opportunity for cooperation: again, firms are engaging in cooperative bargaining and negotiations, and in forming alliances.

With little variation, the style and procedures of Internet searches reflect a consistent pattern. A potential buyer easily finds several web pages (through search engines), thus learning about supplies and prices from several suppliers. This process allows the individual to form a reasonably informed opinion about the state of the market at that time. The search, as in the bazaar, is limited only by the buyer's time and effort.

The bazaar was critical to the continued functioning of international entrepreneurship in former times, in much the same manner as the Internet is becoming today. Markets of the bazaar enhanced the efficiency of caravans by acting as clearing houses. As precursors of modern trade missions and exporters and export agents, the caravans manifested many features of modern alliances. In the absence of international law (and its enforcement), a system of mutual trust and interdependence developed among entrepreneurs. So, too, in the absence of web-wide law and enforcement, trust is required, as clients rely on the supplier's reputation and reveal sensitive information to suppliers. In the bazaar, collective sanctions against the violators imposed heavy punishments. Interestingly, readily available information on the World Wide Web on misdeeds and misbehaviours is approaching the bazaar sanction systems.

The bazaar agents resembled modern day importers and import agents, accumulating supplies for normal day-to-day trade, as well as bartering with the caravans. They evidently performed both functions efficiently and reliably, with mutual respect, to the long-term benefit of all parties. There was little if any differentiation among clustered sellers in the bazaar. Retailers cooperated with each other, as did wholesalers. Multi-polar networks were essential for survival, as profitability was a function of personal relationships.

In time, the firm-type economy evolved, shifting the focus from personal relations to impersonal transactions. At least two major variables explain this shift in emphasis toward the firm. One is the development of new technology that yielded economies of scale – provided that standardized products were mass produced. Simultaneously, as Weber (1904–5) and others emphasized concepts of rationalization and the efficient pursuit of profit, assembly lines became the means of applying the new technology to achieve efficiency. This new focus on efficiency and mass production left little room for customization or personal relations. Everybody received equal treatment. Rather than haggle over prices, sellers simply posted their firm, non-negotiable, asking prices. Today, as we move beyond the firm-type economy, we see a renewed focus on relationships, price negotiations and multi-polar networks.

Return to Clustering

In the bazaar, one found the geographical clustering of producers, according to the specialization of suppliers, as documented by Passantino (1946), Long

(1952), Geertz (1963), Dana (2002) and McMillan (2002). Clustering facilitated the efficient clearing of products, for transactions ranging from small retail sales to very large and complicated wholesale activities. Typically, a bazaar had one area designated for clothing and others for produce, gold and jewellery, carpets, and yet others for such goods as spices and fish. This arrangement facilitated matters for potential buyers and suppliers of a given good or service.

Consumers found convenience in the clustering of producers. It allowed for comparative shopping with minimal travel. The medieval towns borrowed from structural bazaars – streets were often named for the entrepreneurs clustered on them, such as Bakers Street, Changers' Alley, Fishermen's Wharf, Potato Market and *rue des Bouchers.*

High concentration in a given market is critical to efficiency, as it allows for highly efficient information-processing. This includes an information search, a comparative evaluation, and decision-making. In the bazaar, sellers in each industry were physically clustered. In the firm-based economy, clustering is largely complementary. Exclusivity clauses in the contracts of shopping malls generally preclude like firms from competing in geographic proximity; this deprives the customer of the ability to do comparative shopping. In the new economy, on-line commerce facilitates information search, comparative evaluation of the information, and the eventual buying or selling decision at all levels – a return to clustering, much as was the case in the bazaar.

Return to Flexible Pricing

In the bazaar, the customer first tested price levels informally, and only later began to bargain. Often it was the buyer who proposed a price, which was eventually raised. Once a mutually satisfactory transaction took place, it was desirable to establish a long-term relationship, thus making further purchases even more pleasurable and efficient. Effective communication was essential, allowing a sale to be equated to building a social relationship, rather than to work.

In the firm-type economy, sellers compete with each other, usually on the basis of price. One firm asks a lower price than does another, in the hope of obtaining larger market share. The customer generally accepts or rejects the asking price, without bargaining. As was the case in the bazaar, the new economy invites the customer to initiate the bidding – for example, in the sale of airline seats, or in the more general auctioning of e-Bay and other on-line services. Also similar is the fact that not everyone pays the same. The final price may vary according to timing and circumstances.

IMPLICATIONS

We seem, indeed, to have come full circle: from the bazaar economy, with its emphasis on relationships and multi-polar networking, to the firm-type economy, focused on the individual firm and impersonal relationships, and now toward the new, network economy in which customization and relationships are again becoming important and multi-polar networking is re-emerging as the basis of competition. The essence of the emerging paradigm is that preferential treatment, when reciprocated, reduces transaction costs and provides the key to survival and long-term profitability.

Entrepreneurs and small-business managers will need dramatically different mindsets and new skills to compete successfully in this new, network economy. Above all, they must reorient themselves and their firms from their traditional models of competition of the firm-type economy, based on centralized control and stand-alone competition, toward competing by collaborating. New skills will be needed to manage relationships and networks – with suppliers, with customers and with other firms. Entrepreneurs will have to develop ways to identify network-based opportunities to develop the capabilities and acquire the specialized resources essential to compete in today's global marketplace. They will also have to understand their own strategic value in the context of networks as an interdependent, as opposed to an independent entity. Future research should, as well, reflect the context of networks rather than focusing solely on the firm or the individual entrepreneur.

The 'old and the proven' methods may no longer work. Unfortunately, the conventional economics of competition, mainly based on the models of the firm-type economy, are largely incapable of capturing the newly emerging paradigm of global competition based on relationships, customization and collaborative alliances. Entrepreneurs and managers in the new digital age may indeed benefit from understanding and emulating the processes and policies of the bazaar economy.

REFERENCES

Acs, Zoltan J. and Léo Paul Dana (2001), 'Contrasting two models of wealth redistribution', *Small Business Economics*, **16** (2), 63–74.

Acs, Zoltan J. and Bernard Yeung (1999), 'Entrepreneurial discovery and the global economy', *Global Focus*, **11** (3), 63–71.

Axelrod, Robert M. (1984), *The Evolution of Cooperation*, New York: Basic Books.

Bartlett, Christopher A. and Sumatra Ghoshal (1989), *Managing Across Borders: The Transnational Solution*, Boston, MA: Harvard Business School Press.

Beamish, Paul W. and Peter Killing (1998), *Cooperative Strategies*, New York: Lexington Books.

Bilkey, Warren J. (1978), 'An attempted integration of the literature on the export behavior of firms', *Journal of International Business Studies*, **9** (1), 33–46.
Bilkey, Warren J. and George Tesar (1977), 'The export behavior of smaller sized Wisconsin manufacturing firms', *Journal of International Business Studies*, **8** (1), 93–8.
Birkinshaw, Julian, N. Hood and S. Jonsson (1998), 'Building firm-specific advantages in multinational corporations: the role of subsidiary initiative', *Strategic Management Journal*, **19** (3), 221–41.
Bodur, Muzaffer and Tage Koed Madsen (1993), 'Danish foreign direct investments in Turkey', *European Business Review*, **93** (5), 28–43.
Bonaccorsi, Andrea (1992), 'On the relationship between firm size and export intensity', *Journal of International Business Studies*, **4** (4), 605–35.
Buckley, Peter J. (1997), 'International technology transfer by small and medium-sized enterprises', *Small Business Economics*, **9**, 67–78.
Buckley, Peter J. and Mark Casson (1976), *The Future of the Multinational Enterprise*, London: Macmillan.
Buckley, Peter J., Gerald D. Newbould and Jane C. Thurwell (1988), *Foreign Direct Investment by Smaller UK Firms*, London: Macmillan.
Cavusgil, S. Tamer (1980), 'On the internationalisation process of firms', *European Research*, **8**, 273–81.
Cavusgil, S. Tamer (1984), 'Differences among exporting firms based on their degree of internationalisation', *Journal of Business Research*, **12** (2), 195–208.
Cavusgil, S. Tamer and J.R. Nevin (1981), 'International determinants of export marketing behavior', *Journal of Marketing Research*, **28**, 114–19.
Christian, John LeRoy (1943), 'Burma: where India and China meet', *National Geographic*, **84** (4), 489–512.
Coviello, Nicole E. and H.J. Munro (1997), 'Network relationships and the internationalisation process of small software firms', *International Business Review*, **6** (2), 1–26.
Dana, Léo-Paul (1995), 'Small business in a non-entrepreneurial society: The case of the Lao People's Democratic Republic (Laos)', *Journal of Small Business Management*, **33** (3), 95–102.
Dana, Léo-Paul (1997), 'Change, entrepreneurship and innovation in the Republic of Kazakhstan', *Entrepreneurship, Innovation, and Change*, **6** (2), 167–74.
Dana, Léo-Paul (1998a), 'Small business in Xinjiang', *Asian Journal of Business and Information Systems*, **3** (1), 123–36.
Dana, Léo-Paul (1998b), 'Small but not independent: SMEs in Japan', *Journal of Small Business Management*, **36** (4), 73–6.
Dana, Léo-Paul (1999a), 'Entrepreneurship as a supplement in the People's Republic of China', *Journal of Small Business Management*, **37** (3), 76–80.
Dana, Léo-Paul (1999b), *Entrepreneurship in Pacific Asia: Past Present and Future*, Singapore, London and Hong Kong: World Scientific.
Dana, Léo-Paul (2000a), 'Change and circumstance in Kyrgyz markets', *Qualitative Market Research*, **3** (2), 62–73.
Dana, Léo-Paul (2000b), *Economies of the Eastern Mediterranean Region: Economic Miracles in the Making*, Singapore, London and Hong Kong: World Scientific.
Dana, Léo-Paul (2001), 'Networks, internationalization and policy', *Small Business Economics*, **16** (2), 57–62.
Dana, Léo-Paul (2002), *When Economies Change Paths: Models of Transition in*

China, the Central Asian Republics, Myanmar, and the Nations of Former Indochine Française, Singapore, London and Hong Kong: World Scientific.

Dana, Léo-Paul and Hamid Etemad (1994), 'A strategic response model for the internationalisation of small or medium-sized Australian enterprises', *Bond Management Review*, **4** (1), 31–42.

Dana, Léo-Paul and Hamid Etemad (1995), 'SMEs – adapting strategy for NAFTA: a model for small and medium-sized enterprises', *Journal of Small Business and Entrepreneurship*, **12** (3), 4–17.

Doz, Yves and Gary Hamel (1996), 'The use of alliances in implementing technology strategies', in M.L. Tushman and P.C. Anderson (eds), *Managing Strategic Innovation and Change: A Collection of Readings*, USA: Oxford University Press, pp. 556–80.

Dunning, John H. (1973), 'The determinants of international production', *Oxford Economic Papers*, 289–336.

Dunning, John H. (1977), 'Trade, location of economic activity and MNE: a search for an eclectic approach', in *The International Allocation of Economic Activity: Proceedings of A Nobel Symposium Held at Stockholm*, London: Macmillan, pp. 395–418.

Dunning, John H. (1980), 'Toward an eclectic theory of international production: empirical tests', *Journal of International Business Studies*, **11** (1), 9–31.

Dunning, John H. (1988), 'The eclectic paradigm of international production: a restatement and some possible extensions', *Journal of International Business Studies*, **19**, 1–31.

Etemad, Hamid, Richard W. Wright and Léo Paul Dana (2001), 'Symbiotic international business networks: collaboration between small and large firms', *Thunderbird International Business Review*, **43** (4), 481–99.

Evans, Joel R. and Richard L. Laskin (1994), 'The relationship marketing process: a conceptualisation and application', *Industrial Marketing Management*, **23** (5), 432–52.

Fontes, Margarita and Rod Coombs (1997), 'The coincidence of technology and market objectives in the internationalisation of new technology-based firms', *International Small Business Journal*, **15** (4), 14–35.

Geertz, Clifford (1963), *Peddlers and Princes: Social Development and Economic Change in Two Indonesian Towns*, Chicago, IL: University of Chicago Press.

Geertz, Clifford (1978), 'The bazaar economy: information and search in peasant markets', *American Economic Review*, **68**, 28–32.

Gomes-Casseres, Benjamin (1994), 'Group versus group: how alliance networks compete', *Harvard Business Review*, **72**, 62–74.

Haley, George T., Chin Tiong Tan and Usha C.V. Haley (1998), *New Asian Emperors: The Overseas Chinese, their Strategies and Competitive Advantages*, New York: Butterworth-Heinemann.

Harrison, Bennett (1997), *Lean and Mean*, New York: Gilford.

Johanson, Jan and Lars-Gunnar Mattsson (1988), 'Internationalisation in industrial systems – a network approach', in N. Hood and Jan-Erik Vahlne (eds), *Strategies in Global Competition*, London: Croom Helm, pp. 287–314.

Johanson, Jan and Lars-Gunnar Mattsson (1992), 'Network positions and strategic action – an analytical framework', in Bjorn Axelsson and Geoff Easton (eds), *Industrial Networks: a New View of Reality*, London: Routledge, pp. 205–17.

Johanson, Jan and Jan-Erik Vahlne (1977), 'The internationalization process of the firm – a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies*, **8** (1), 23–32.

Johanson, Jan and Jan-Erik Vahlne (1990), 'The mechanism of internationalisation', *International Marketing Review*, **7** (4), 11–24.
Johanson, Jan and Jan-Erik Vahlne (1992), 'Management of foreign market entry', *Scandinavian International Business Review*, (1) **3**, 9–27.
Johanson, Jan and Finn Wiedersheim-Paul (1975), 'The internationalisation of the firm: four Swedish cases', *Journal of International Management Studies*, **12** (3), 305–22.
Kanter, Rosabeth Moss (1994), 'Collaborative advantage', *Harvard Business Review*, **74**, 96–108.
Leonidou, Leonidas C. and Constantine S. Katsikeas (1996), 'The export development process', *Journal of International Business Studies*, **27** (3), 517–51.
Long, George W. (1952), 'Indochina faces the dragon', *National Geographic*, **102** (3), September, 287–328.
McMillan, John (2002), *Reinventing the Bazaar: A Natural History of Markets*, New York and London: W.W. Norton & Company.
McMillan, John and Christopher Woodruff (1999), 'Informal relationships and interfirm credit in Vietnam', *Quarterly Journal of Economics*, **114**, 1285–320.
Morck, Randal and Bernard Yeung (1991), 'Why investors value multinationality', *Journal of Business*, **64** (2), 165–87.
Morck, Randal and Bernard Yeung (1992), 'Internalization: an event study test', *Journal of International Economics*, **33**, 41–56.
Newbould, Gerald D., Peter J. Buckley and Jane C. Thurwell (1978), *Going International – The Enterprise of Smaller Companies Overseas*, New York: John Wiley & Sons.
Passantino, Joseph E. (1946), 'Kunming, southwestern gateway to China', *National Geographic*, **90** (2), August, 137–68.
Peng, Mike W. (2001), 'The resource-based view and international business', *Journal of Management*, **7**, 253–76.
Reynolds, Paul D. (1997), 'New and small firms in expanding markets', *Small Business Economics*, **9** (1), 79–84.
Rugman, Alan M. (1979), *International Diversification and the Multinational Enterprise*, Lexington, MA: Lexington Books.
Rugman, Alan M. (1981), *Inside the Multinationals: The Economics of Internal Market*, New York: Columbia University Press.
Sayigh, Yusif A. (1952), *Entrepreneurs of Lebanon*, Cambridge, MA: Harvard University Press.
Sharma, D.D. (1992), 'International business research: issues and trends', *Scandinavian International Business Review*, **1** (3), 3–8.
Sharma, D.D. and Jan Johanson (1987), 'Technical consultancy in internationalisation', *International Marketing Review*, Winter, 20–29.
Shenker, Oded (1994), 'The People's Republic of China: raising the bamboo screen through international management research', *International Studies of Management and Organization*, **24** (1–2), 9–34.
Steers, Richard M., Gerardo R. Ungson and Yoo Keuh Shin (1989), *The Chaibol: Korea's New Industrial Might*, New York: Harper & Row.
Teece, David J. (1985), 'Multinational enterprise, internal governance and economic organization', *American Economic Review*, **75**, 233–8.
Weber, Max (1904–05), 'Die protestantische ethik und der geist des kapitlaismus', *Archiv fur Sozialwissenschaft und Sozialpolitik* (20–21); translated (1930) by Talcott

Parsons, *The Protestant Ethic and the Spirit of Capitalism*, New York: George Allen & Unwin.
Webster, Frederick E. (1992), 'The changing role of marketing in the corporation', *Journal of Marketing*, **53** (October), 1–17.
Welch, Denice and Lawrence S. Welch (1996), 'Internationalization process and networks: a strategic management perspective', *Journal of International Marketing*, **4** (3), 11–28.
Welch, Lawrence S. (1992), 'The use of alliances by small firms in achieving internationalisation', *Scandinavian International Business Review*, **1** (2), 21–37.
Welch, Lawrence S. and Reijo K. Luostarinen (1988), 'Internationalisation: evolution of a concept', *Journal of General Management*, **14** (2), 34–55.
Welch, Lawrence S. and Reijo K. Luostarinen (1993), 'Inward–outward connections in internationalization', *Journal of International Marketing*, **1** (1), 44–56.
Wilkinson, Ian F., Lars-Gunnar Mattsson and Geoff Easton (2000), 'International competitiveness and trade promotion policy from a network perspective', *Journal of World Business*, **35** (3), 275–99.
Wright, Richard W. (1989), 'Networking: Japanese Style', *Business Quarterly*, **52** (2), 20–24.
Zineldin, Mosad Amin (1998), 'Towards an ecological collaborative relationship management', *European Journal of Marketing*, **32** (11–12), 1138–64.

PART II

Conceptual and paradigmatic developments

2. Internationalization and the performance of the small firm: a review of the empirical literature between 1996 and 2001

Tatiana S. Manolova and Ivan M. Manev

INTRODUCTION

The volume of literature on the internationalization of new and small companies has been burgeoning recently, but most of it has focused on its antecedents and relatively little on the outcomes of internationalization. And, in examining performance outcomes, previous research has studied most often the international performance rather than the overall performance outcomes. As a result, less is known about the effects of internationalization on the performance and long-term survival of the small company. This paucity of research is surprising, given the debate in the international marketing and international entrepreneurship literatures on the appropriateness of internationalization strategies for the small company. While some researchers argue that internationalization is an important avenue for growth through geographic expansion (Autio et al., 2000) which promotes the development of skills and competencies through organizational learning (Barkema and Vermeulen, 1998; Zahra et al., 2000), thus positively influencing profitability and survival (Oviatt and McDougall, 1997); others maintain international involvement may spread the constrained resources of the small company too thinly (Bradley and Mitchell, 1986) and eventually jeopardize organizational survival (Vermeulen and Barkema, 2000; Benito and Welch, 1997; Mitchell et al., 1992; Newbould et al., 1978).

Empirical support on the impact of internationalization on the performance of the small company is mixed (Mitchell et al., 1992; McDougall and Oviatt, 1996). Research from both international entrepreneurship and international marketing has examined the effect of internationalization on small firm performance. On the one hand, empirical studies in the area of international entrepreneurship have focused on technology-based new ventures (McDougall and Oviatt, 1996; Bloodgood et al., 1996; Coombs, 1999; Zahra et al., 2000), predominantly those that have undergone an initial public offering (Bloodgood et al., 1996; Coombs, 1999; Shrader et al., 2000). These sampling frames carry a substantial success bias, as noted by Shrader et al. (2000) and limit the generalizability of the findings because of the narrow range of industrial contexts studied.

Empirical studies from the international marketing perspective, on the other hand, focus on the drivers of international performance and measure it most often by the foreign sales/total sales ratio (Stopford and Dunning, 1983; Axinn, 1988). This ratio has an important limitation: it establishes 'what goes on overseas' (Vernon, 1971) and is a valid measure of the degree of internationalization of the exporting company (Sullivan, 1994), but it does not capture the implications of internationalization for the performance and long-term survival prospects of the firm. To summarize, international marketing emphasizes the antecedents rather than the consequences of internationalization and focuses on exporting, whereas international entrepreneurship focuses on internationalization outcomes in limited industrial contexts. In the concluding comments of their comprehensive literature review on management influences on export performance, Aaby and Slater (1989, p. 23) remarked, '[G]iven the quantity of published research on export practice, it is surprising that so few solid conclusions are available'. More than a dozen years later, it appears this conclusion still applies to the state of empirical literature on small firm internationalization.

In this study, we assess whether contemporary empirical research has revealed any systematic relationships between internationalization and the overall performance of the internationalized small company. To address this question, we undertake a systematic review of the empirical literature with a threefold purpose. First, to evaluate current empirical research on the determinants of internationalization of the small company. Second, to differentiate the influences on the international performance of the small company from the influences on its overall performance. Finally, to discuss directions for future research aimed at developing better theories and advancing knowledge in international marketing and international entrepreneurship.

This study builds on two earlier comprehensive literature reviews on the determinants of international performance (Chetty and Hamilton, 1993; Zou and Stan, 1998). To assure consistency between the research findings, we follow their methodology, in particular the method of meta-analysis by vote counting as well as their variable grouping and coding procedures. At the same time, given the research questions guiding our study, we seek to extend their research in three important ways. First, we focus only on the population of small companies, rather than all internationalized companies. We believe this more focused approach is well justified, given the debate in the international entrepreneurship and international marketing literatures on the advantages and disadvantages of internationalization and its impact on the performance of resource-constrained small companies. Second, we adopt a finer-grained approach to the outcomes of internationalization, differentiating between international performance and the overall performance of the small company. Third, we extend the time period covered by our literature review to 2001, to capture the most recent developments in the area of international entrepreneurship and international marketing.

Our study is organized into three sections: (1) description of the review methods; (2) presentation and discussion of the review results; and (3) discussion of future research directions in light of the review findings.

METHODOLOGY

Scope of the Review

Following Zou and Stan (1998), we started by focusing on the empirical literature on the determinants of international performance. We examined the 50 articles they reviewed, selecting those that studied small companies and were published after 1995. We then updated this list with research published after their review and added articles published in the *Journal of Small Business Management*, *Entrepreneurship Theory and Practice*, *Journal of Business Venturing*, *Entrepreneurship and Regional Development* and the *International Small Business Journal*. These are important outlets for research on the internationalization of the small firm but they were under-represented in the two cited reviews. Finally, we reviewed special issues of management journals that were dedicated to internationalization and small firms. In this period, the *Academy of Management Journal*, the *Journal of International Management* and *Strategic Management Journal* had such special issues. Table 2.1 presents a list of the reviewed journals.

Identification of the Studies

We conducted a manual search, sorting through the articles published in the 11 publication outlets between 1996 and 2001, and looked for key words such as export, exporting, internationalization, international performance, export performance and performance. To ensure consistency and comparability, we complied with Zou and Stan's (1998) three criteria for inclusion in the review: (1) the articles had to be empirical and quantitative in nature, reporting data analysis and statistical tests; (2) the articles had to use some kind of international performance measures as dependent variables; and (3) the articles had to be cross-sectional in nature, that is, case studies were not included.

Table 2.1 Scope of the review

Academy of Management Journal
Entrepreneurship and Regional Development
Entrepreneurship Theory and Practice
International Small Business Journal
Journal of Business Venturing
Journal of Global Marketing
Journal of International Business Studies
Journal of International Marketing
Journal of Marketing
Journal of Small Business Management
Management International Review
Special issues:
Academy of Management Journal, Special Issue on International Entrepreneurship, **43** (5)
Journal of International Management, Special Issue on SMEs and the Global Economy, **7** (3)
Strategic Management Journal, Special Issue on Entrepreneurship and Value Creation, **22** (6/7)

Given the research question guiding our study we included a fourth criterion, concerning the size of the companies that were research subjects. Where the authors defined their sample as small companies, we accepted their definition. Where no specific mention of company size was made, we looked for guidance in the sample descriptive statistics, establishing a cut-off point of 500 employees as a measure of size.[1] Based on the four criteria, the search identified 25 articles, summarized in Table 2.2.

Variable Grouping Procedure

To ensure consistency, we started from Zou and Stan's (1998) classification scheme that grouped the hundreds of variables into 33 factors for the independent variables and seven for the dependent variables. From these criteria, we eliminated those that did not appear in research on small companies, and added several new ones that were investigated in the studies incorporated in our literature review. In determining the correct classification of a variable we followed a procedure similar to content analysis, based on theoretical frameworks from the international marketing and international entrepreneurship literature. We resolved inconsistent coding by consensus.

Table 2.2 Characteristics of the reviewed articles

Authors	Country of study	Sample size	Industry	Firm size	Data collection	Analysis	Unit analysis	Use Hypos	Theoretical basis	Export performance	Independent factors
Chen & Martin, 2001	USA	49	electronic components	SMEs	secondary	logit	firm	yes	IB	SAL	FA, IS, DM, SZ, FCH
Crick et al., 2000	UK	101	agriculture	SMEs	survey	MANCOVA	firm	yes	export management	SAL	GES, SZ, IC, MEC
Francis & Collins-Dodd, 2000	Canada	88	multi high-tech	SMEs	survey	regression	firm	yes	export management	SAL, PRF, GRW	IO, MEC
Hart & Tzokas, 1999	UK	50	cross-sectional	SMEs	survey	correlation	firm	no	export management	SAL, PRF	***EMI***
Knight, 2000	USA	268	multi manuf	SMEs	survey	t-test, corr, regression	firm	yes	export management	COM	GES, ***EO, FT, GR***
Knight, 2001	USA	268	multi manuf	SMEs	survey	SEM	firm	yes	strategy, export management	COM	IO, FCC, GES, FT
Lee & Jang, 1998	Australia	60	cross-sectional	SMEs	survey	SEM	firm	yes	export management	COM	***CD, TSA†, RE†***
Lu & Beamish, 2001	Japan	164	cross-sectional	SME	secondary	regression	firm	yes	IB	PRF (ROA, ROI)	***DOI,*** SZ, FCH, IS
Mascarenhas, 1997	multi	1118*	offshore drilling	not clear	secondary	regression	market entry	yes	IB, FMA paradigm	MS, SURV	***TE, SE***

Table 2.2 continued

Authors	Country of study	Sample size	Industry	Firm size	Data collection	Analysis	Unit analysis	Use Hypos	Theoretical basis	Export performance	Independent factors
McDougall & Oviatt, 1996	USA	62**	computer and comm equipment	small and new	survey	regression	firm	yes	IB, export management	PRF (ROI), MS	FCC, ***DOI***†
Moen, 2000	Norway	335	cross-sectional	SMEs	survey	SEM	firm	no	theory of INV	COM	SZ†, GES
Moini, 1996	USA	296	multi manuf	SMEs	survey	MDA	firm	no	export management	SAL (export – not export)	EMB, ***F***
Nakos et al., 1998	Greece	126	cross-sectional	SMEs	survey	regression	firm	yes	export management	PRF	MEE, MIE, MEC, SZ, FA, IC, FCC, PDA, DM
Philp, 1996	Australia	124	food and beverage	very small	survey	logit	firm	no	export management	SAL (export – not export)	PCC, FCH, MEE, MIE, EM, EMB, IC, MEC, GES
Preece et al., 1999	Canada	75	multi high-tech	small and new	survey	regression	firm	yes	IB, RBV	SAL (FSTS)	MEC, SZ, FA, FCH, ***SA, GA***
Reuber & Fisher, 1997	Canada	49	software	SMEs	survey	regression	firm	yes	export management	COM	MIE, ***FP, DE***
Shrader, 2001	USA	176*	cross-sectional	new and small	secondary	regression	market entry	yes	TCE	PRF, GRW	FCC, FT, FA, SZ

Shrader et al., 2000	USA	212*	cross-sectional	new and small	secondary	regression	market entry	yes	theory of INV	SAL (FSTS)	
Westhead et al., 2001a	UK	116**	cross-sectional	small and new	survey	regression	firm	yes	RBV	SAL, PRF, GRW	MEE, FA, IS, GA, ***DOI***†
Westhead et al., 2001b	UK	150**	cross-sectional	SMEs	survey	cross tab	firm	yes	IB	SURV	***DOI***†
Wolff & Pett, 2000	USA	157	cross-sectional	SMEs	survey	ANOVA	firm	yes	export management	SAL (FSTS)	SZ†, GES
Yeoh, 2000	USA	180	multi manuf	small and new	survey	regression	firm	yes	export management	GRW, SAL (FSTS)	GES, SZ, EMI, IS, ***UA***
Yip et al., 2000	USA	68	cross-sectional	small and new	survey	SEM	firm	yes	export management	SUC	MEC
Zahra et al., 1997	USA	121	telecomm	small and new	survey	regression	firm	yes	export management	SAL	FA, SZ, EP, FT, IS†, FCH
Zahra et al., 2000	USA	321	12 high-tech industries	small and new	survey	regression	firm	yes	IB, management of technology	GRW, PRF	DOI, FT, ME, SZ, FA

Note:
* entries
** survivors
† indirect effect

Our amended classification scheme produced 33 independent variables and seven dependent variables. Following Zou and Stan (1998), the independent variables were grouped in four categories: internal controllable (pertaining to export marketing strategy and to management attitudes and perceptions); internal uncontrollable (pertaining to management and firm characteristics and competencies); external controllable (no variables fell into that category); and external uncontrollable (related to industry, host market and home market characteristics). The dependent variables were grouped in turn into three categories: financial, or objective measures of performance; non-financial measures of performance; and composite measures of performance. The classification scheme is presented in Figure 2.1. Variables that were not included in the review by Zou and Stan (1998) are italicized.

	Determinants of export performance: Internal	Determinants of export performance: External	Measures of export performance
Controllable	**Export marketing strategy** General export strategy GES *Strategic alliances SA* *Order of entry OE* *Mode of entry ME* *Size of entry SE* *Delay of entry DE* Export planning EP *Export marketing information EMI* Product adaptation PDA Price competitiveness PCC **Management attitudes and perceptions** Export commitment and support MEC International orientation IO *Entrepreneurial orientation EO* *Uncertainty avoidance UA* Proactive export motivation EM		**Financial (objective) measures** Sales measures SAL Profit measures PRF Growth measures GRW *Market share MS* *Survival SURV*
Uncontrollable	**Management characteristics** Mgmt's international experience MIE Mgmt's education/experience MEE **Firm's characteristics and competencies** Firm size SZ Firm's international competence IC Firm's age FA Firm's technology FT *Relational exchange RE* *Degree of internationalization DOI* *Transaction specific assets TSA* Firm's characteristics FCH Firm's capabilities/competencies FCC	**Industry characteristics** Industry's level of instability IS *Government assistance GA* *Available financing F* **Foreign market characteristics** Export market barriers EMB *Foreign partners FP* *Cultural distance CD* **Domestic market characteristics** *Domestic market DM*	**Non-financial measures** Perceived success SUC **Composite COM**

Figure 2.1 Classification of the dependent and independent factors

Analytical Procedure

The analytical procedure we employed is vote counting, a weak form of meta-analysis (Chetty and Hamilton, 1993; Hedges and Olkin, 1980). More rigorous methods of meta-analysis were precluded by the diversity of analytical techniques in published research on the outcomes of small firm internationalization as well as the frequent lack of reported size effects. Vote counting represents a tally of significant positive, significant negative and non-significant effects for any combination of independent and dependent factors. The null hypothesis that the independent factor has no effect on the dependent factor is rejected if a sizable proportion of studies in the sample show a certain significant effect. For size effects of $p < .01$ reported in the reviewed articles, the critical values for rejecting the null hypothesis at $p < .05$ are 4 for 10–15 studies, 5 for 20, and 6 for 30 or more (Hedges and Olkin, 1980).

The studies reporting a significant negative, significant positive and non-significant findings are summarized in Table 2.3 for each factor affecting performance, allowing readers to draw their own conclusions based on the vote-counting technique's guidelines for rejecting the null hypothesis, and considering the vote-counting method's limitations.[2]

In addition, following Zou and Stan (1998), we supplement the vote-counting technique by a narrative approach, providing our own interpretation of the patterns of influence of each group of factors on small company performance.

RESULTS OF THE REVIEW

General Assessment of the Reviewed Studies

Table 2.2 summarizes the 25 articles reviewed in this chapter, providing information about each study's country of investigation, sample size, industry, firm size, data collection method, analytical approach, unit of analysis, use of hypotheses, theoretical basis, dimensions of performance, as well as independent factors investigated. To facilitate reference and comparison, the information provided in the table is formatted in a fashion consistent with Zou and Stan's (1998) approach. In the discussion of each attribute that follows we also refer back to Zou and Stan's findings so that the critical similarities and differences are more easily delineated.

Country of study

While the majority of the research covered by the review did focus on US small companies, more than half of the studies investigated other national

Table 2.3 Summary of the findings of the influence of independent factors on small company performance

		Dependent variables: small company performance																							
		Sales			**Profit**			**Growth**			**Market share**			**Survival**			**Success**			**Composite**			**Total**		
Independent variables	**No. studies**	+	–	0	+	–	0	+	–	0	+	–	0	+	–	0	+	–	0	+	–	0	+	–	0
Export marketing strategy																									
General export strategy	7	4		1				1												2		1	7	0	2
Strategic alliances	1			1																			0	0	1
Order of entry	1										1			1									2	0	0
Size of entry	1												1			1							0	0	2
Mode of entry	1	1			1																		2	0	0
Delay of entry	1																				1		0	1	0
Export planning	1	1			1																		2	0	0
Export marketing information	2	1			1																		2	0	0
Product adaptation	1				1																		1	0	0
Price competitiveness	1	1																					1	0	0
Total export marketing strategy		**8**	**0**	**2**	**4**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**1**	**17**	**1**	**5**
Management attitudes and perceptions																									
Export commitment and support	6	4			2			1									1						8	0	0
International orientation	2	1			1			1												2			5	0	0
Entrepreneurial orientation	1																					1	0	0	1
Uncertainty avoidance	1			1						1													0	0	2
Proactive export motivation	1			1																			0	0	1
Total managerial attitudes and perceptions		**5**	**0**	**2**	**3**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**1**	**13**	**0**	**4**
Management characteristics																									
Management international experience	4	2		1	1			1												1			5	0	1
Management education/experience	5	3		1	1																		4	0	1
Total managerial characteristics		**5**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**9**	**0**	**2**

Firm's characteristics and competencies																									
Firm size	11	3		4	1	2	2		1	2										1			5	3	8
Firm's international competence	3	2					1																2	0	1
Firm's age	7	2		2	3	2		1		1													6	2	3
Firm's technology	5	2			3			2														1	7	0	1
Relational exchange	1																			1			1	0	0
Degree of internationalization	4				3	1	1	1		1	1					1							5	1	3
Transaction specific assets	1																			1			1	0	0
Firm's characteristics	6	3		2	2																		5	0	2
Firm's capabilities/competencies	5	1		1	3			1			1												6	0	1
Total firm characteristics/competencies		**13**	**0**	**9**	**15**	**5**	**4**	**5**	**1**	**4**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**1**	**38**	**6**	**19**
Industry characteristics																									
Industry's level of instability	5	2	2	1		2		1	1														3	5	1
Government assistance	3	1				1			1														1	2	0
Available financing	1			1																			0	0	1
Total industry characteristics		**3**	**2**	**2**	**0**	**3**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**7**	**2**
Foreign market characteristics																									
Export market barriers	2		1	1																			0	1	1
Foreign partners	1																			1			1	0	0
Cultural distance	1																			1			1	0	0
Total foreign market characteristics		**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**	**1**
Domestic market characteristics																									
Domestic market	2		1		1																		1	1	0
Total domestic market characteristics		**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**

contexts, as diverse as Greece or Norway, and one was a multinational study (Mascarenhas, 1997). The diversity of national contexts studies is characteristic of the recognized importance of small business internationalization worldwide. It informs our understanding of the general and idiosyncratic drivers of the performance of the internationalized small company. Still, it is worth noting that the majority of the research assessed in the present review refers to English-speaking countries (22 out of the 25 studies).

Sample size

The average number of companies investigated was 146, with a low of 49, and a high of 335 small companies.[3] This sample size compares favourably with the trend in the international marketing literature and the literature on international performance, in particular, in which the typical sample size was assessed to be 'over 100' (Zou and Stan, 1998, p. 337).

Industry context

The studies investigated a broad range of industry and technology contexts, including primary (agriculture and oil drilling), secondary (multiple areas of manufacturing) and tertiary (services, software). Both high- and low-tech industries were explored, and there were studies in both single and multiple industries. Notably, articles in the international entrepreneurship lineage were concerned predominantly with high-tech ventures (for example McDougall and Oviatt, 1996; Zahra et al., 1997, 2000), whereas research in the international marketing tradition explored multiple industrial contexts.

Types of firms targeted

The type of firms included in our literature review is constrained by its specific focus on the internationalization and performance of the small firm. Traditionally, however, scholarly interest in international performance has been directed to small and medium-sized companies, on the assumption that these companies do not possess the tangible and intangible resources required for more committed modes of foreign market entry such as joint ventures or foreign direct investment. For example, in a recent meta-analysis on the relationship between marketing strategy and performance, Leonidou et al. (2002) reported that 34 of the 36 studies included in their review sampled small firms. About half of the papers reviewed by Zou and Stan (1998) also studied small and medium-sized companies, providing a broader context for assessing consistent findings across multiple studies. It is important to differentiate between research on the internationalization of small companies, on the one hand, and research on the internationalization of new companies that are also small, on the other hand. Both of these types of companies are included in the present review, with about a third of the studies focusing on new companies, or companies that are international at inception (McDougall and Oviatt, 1996).

Data collection methods

The majority of the studies reviewed here employ a mail survey as a data collection method. The predominance of the mail survey as a data collection method is consistent with Zou and Stan's (1998) finding. The conformity in data collection, as these authors pointed out, makes comparisons across studies easier. At the same time, several studies of foreign direct investment by smaller companies remained outside of the scope of the present review because they employed an in-depth case study methodology. Examples include, among others, Coviello's (1997) work on the internationalization of New Zealand software firms, Prasad's (1999) exploration of international acquisitions by smaller firms, Apfelthaler's (2000) study of small Austrian investors in California, Crick and Jones's (2000) study of the internationalization of small high-tech firms, and Tsang's (2001, 2002) work on foreign direct investment by Chinese family businesses. Future researchers should be aware, therefore, that if the case study method is the method of choice for investigating the causes and consequences of foreign direct investment by smaller companies, then meta-analytical procedures are likely to consistently underestimate these effects and, as a result, may produce biased estimates and evaluations.

Theoretical bases adopted and use of research hypotheses

While the majority of the studies used international marketing perspectives as their basis for hypothesis building, more recent research also utilized models from the strategy literature, based for the most part on the resource-based view of the firm (for example Preece et al., 1999; Westhead at al., 2001b). It appears that the resource-based view of the firm is an appropriate theoretical lens for analysing the internationalization of the small firm, as many small firms successfully internationalize in order to exploit unique assets on a global scale. It is interesting to point out that almost all of the studies focusing on small firm internationalization, for example, assessed in the present review, brought forward formal testable hypotheses, while more than half of the studies exploring international performance, evaluated by Zou and Stan, did not include explicit testing of research hypotheses.

Unit of analysis and analytical approach

Similar to the studies assessed by Zou and Stan, almost all of the studies included in the present review tested relationships at the level of the firm. Almost two-thirds of the studies employed regression analysis as a statistical tool. At the same time, four of the studies used structural equation modelling, which allowed them to assess the structure of relationships between the independent and dependent variable(s) and test for both direct and indirect effects.

Measures of performance

The best way to measure firm performance, and international performance in particular, is still subject to scholarly debate (see Venkatraman and Ramanujam (1986) for a discussion on measurement of business performance in strategic research, and Shoham (1998) on the conceptualization and empirical assessment of international performance). We followed Zou and Stan's (1998) classification of performance measures into financial (for example, export sales, or foreign sales to total sales ratio, absolute or relative export profitability, export growth), non-financial (perceived success or satisfaction of the company's internationalization) and composite scales, based on overall scores of a variety of performance measures. In the course of the review we discovered that objective measures such as market share and survival of the small companies were also used to gauge performance, and so we included them as performance measures. At the same time, since no study used the perceived satisfaction from internationalization as a performance measure, we excluded it as a dimension of performance, which brought the number of performance dimensions assessed in our review to seven. The reviewed studies used on average 1.46 performance measures. The maximum number of performance measures used in a study was three. This finding is consistent with Zou and Stan (1998) who reported 1.56 international performance measures in the 50 studies they reviewed, and with Leonidou et al. (2002) who reported an average of 1.5 international performance measures in the 36 studies they reviewed.

Independent factors

Similarly to Zou and Stan (1998, p. 342), we found ourselves facing 'a multiplicity of factors/variables proposed by researchers to influence international performance, [a] large number of ways in which the factors are measured, and [a] lack of a consistent theoretical framework or logic to guide the choice of independent factors'. We started from the 33 factors they identified, excluding those that were not investigated by the studies we evaluated, and including new factors that were investigated by the studies we evaluated. We ended up with 33 independent factors, a scope of factors identical to theirs, but spread over less than half the number of studies they assessed. This suggests that most of the studies we reviewed were using unique variables, that is, there was much less overlap and replication in the scholarly effort. Another important point is that a whole group of independent variables capturing the export marketing mix of the firm were lacking from the studies we evaluated. This suggests that export marketing (promotion and distribution in particular) is either less relevant for the internationalization of the smaller firm, or is under-represented in empirical tests. Similarly, Leonidou et al. (2002) who specifically considered studies on the relationship between marketing strategy and international performance, were able to identify 36 studies published since 1960, or less than one study a year. On the other hand, we noted a much more focused attention on the moderating effect of the industry environment, including the impact of industry uncertainty, hostility and heterogeneity, among others. We interpreted this shift of emphasis from the controllable to the uncontrollable factors as a reflection of the vulnerable strategic posture and relatively constrained strategic choices of the small internationalizing firm.

The Effects of the Independent Factors on Performance

The results of the vote-counting procedure in the present literature review are summarized in Table 2.3. Because of the small number of studies investigating any given independent factor, these results should be interpreted with caution. To provide some general guidance as to the likely direction of effects, we calculated aggregates of the significant positive, significant negative and non-significant effects by category of factor. These are provided as totals under each factor category.

Effects of factor categories

Based on the number of tests investigating each group of factors, the tallies suggest that the most widely researched category is that of firm's characteristics and competencies (63 tests),[4] followed by the factors related to the export marketing strategy of the firm (23 tests). The emphasis on the firm's characteristics and competencies can be partially accounted for by the inclusion of age and size effects as controls in about half of the reviewed studies. Another explanation can be the recent focus on the resource base of the firm as a driver of internationalization. Overall, more tests (93) investigated the effect of uncontrollable factors (management characteristics, firm's characteristics and competencies, industry characteristics, home and host market characteristics), than the effect of controllable factors (export market strategy and management attitudes and perceptions – a total of 40 tests). This finding, as well as the inclusion of additional categories of uncontrollable factors (especially the effect of the industry environment) suggests greater emphasis on the contingencies a smaller company faces in the process of its internationalization.

Based on the total number of significant positive, significant negative and non-significant results, however (the three totals columns in Table 2.3), the internal controllable factors are most likely to positively affect the performance of the small company (a total of 30 significant positive effects versus nine non-significant effects, or a ratio of 3.33:1), compared with the aggregated effects of the uncontrollable factors (a total of 54 significant positive effects versus 24 non-significant effects, or a ratio of 2.25:1). Although our finding is based on a relatively small number of studies, it is in line with Zou and Stan's (1998, p. 344) conclusion that 'the single most important set of determinants of international performance falls in the cell of internal-controllable factors', and consistent with previous literature review results (for example Aaby and Slater, 1989; Chetty and Hamilton, 1993).

Individual factor effects

The most widely investigated factors were firm size (in 11 studies), the general export strategy of the firm (seven studies), firm age (seven studies), as well as the export commitment and general firm characteristics (six studies each). These factors represent three different categories and indicate the research interest in multiple sources of influence on the performance of the internationalized company.

Zou and Stan (1998) reported that the three most widely investigated factors in their review were firm size (22 studies), export planning (16 studies), product strengths (15 studies) and the general export strategy (13 studies). Comparing the findings from the two reviews, we observe, on the one hand, considerable scholarly attention on firm demographics and overall strategic orientation. This consistency may reflect the influence of stage models of internationalization where age and size are often used as proxy measures for the 'experiential learning' and overall international experience of the firm (Leonidou and Katsikeas, 1996). On the other hand, we observe an emphasis on managerial commitment in small firm research versus an emphasis on planning in larger firm research. This divergence provides further illustration of two trends in small business internationalization research: (1) the focus on the personal characteristics of the decision-maker, who is conceptualized as central to the internationalization process (Miesenböck, 1988; Reid, 1981); and (2) the conceptualization of internationalization as a serendipitous response to 'coincidence and opportunity' (Aharoni, 1966; Brush 1992), with little or no advance planning involved (Brouthers et al., 1998).

Direct versus indirect effects

One of the limitations of prior work in the area of international marketing has been the assumption of direct effects of the determinants of international performance (Lages, 2000). Recent research has shown, however, that in many cases of non-significant direct effects, there are significant indirect relationships (Cavusgil and Zou, 1994). For example, Chen and Martin (2001) found no direct effect of domestic market size decline, but a significant interaction effect of domestic market size decline and prior foreign business involvement on the foreign expansion of small technology-based ventures. They interpreted this result to suggest that 'organizational characteristics mediate the relationship between competitive threats and foreign expansion activities' (Chen and Martin, 2001, p. 16). In a recent study on the internationalization of 86 US publicly traded pure Internet firms, Kotha et al. (2001) found significant interaction effects between the firms' asset base and strategic actions on their degree of internationalization. Similarly, four of the more recent studies included in the present review (Lee and Jang, 1998; Moen, 2000; Yip et al., 2000; Knight, 2001) employed structural equation modelling and tested simultaneously for direct and indirect relationship effects. Thus, in addressing the effect of size on the international performance of the small firm, one of the classical debates in the export marketing literature, Moen (2000) found a significant effect of the size of the company on the type of export strategy chosen, and hence, indirectly, on the composite performance of the small company. Similarly, Knight (2001) established both direct and mediated effects of the firm's international entrepreneurial orientation, internationalization preparation and technology acquisition on international performance. It appears that advanced statistical techniques may be appropriate to test more elaborate models brought forward by recent theoretical developments.

Effects on International Performance versus Effects on Overall Performance

One of our initial interests in this study was to draw a parallel between the effects on international performance and the effects on the overall performance of the small internationalized firm. The systematic assessment of the current empirical literature, however, revealed a lot of studies on international performance and few studies on the overall performance or long-term survival prospects of the small firm. International performance was variously operationalized as foreign sales/total sales ratio, sales intensity (that is, number or percentage of products exported or number of markets served), export profitability, or export growth. Sixteen out of the 25 studies (64 per cent) included in the present review chose a single measure of performance as a dependent variable, and seven (or 28 per cent of all studies reviewed) examined only the effects on the export sales intensity of the company. A look at Table 2.3 quickly reveals the relatively dense matrix under the 'sales', 'profit', and 'growth' categories, compared to the sparse matrix under 'market share', 'survival', and 'success' categories. The scarce and unbalanced information provides little room for conclusive findings, except for the relative emphasis on research on the international performance of the small company and relative less attention to multiple dimensions of performance.

A comparison with Zou and Stan's (1998) review reveals a similar, if not so apparent imbalance (perhaps due to the greater absolute number of studies assessed) between the study of the effects on international performance versus the effects on the overall performance of the company. Therefore, more conceptual work is needed on the relevant dimensions of performance as well as a greater effort to include multiple dimensions of performance in empirical tests.

The Impact of Internationalization on the Performance of the Small Company

The major research question guiding this study was to unravel any systematic relationships between the internationalization and the performance and long-term survival prospects of the small company. While recent empirical literature has emphasized the antecedents, rather than the outcomes of internationalization, four longitudinal studies (Lu and Beamish, 2001; Westhead et al., 2001a, 2001b; McDougall and Oviatt, 1996) have looked at the consequences of internationalization, albeit with diverging results. McDougall and Oviatt, in their follow-up study of 62 international technology new ventures, found significant positive effects of the degree of internationalization on the profitability and market share of these companies. In contrast, Westhead et al. (2001a, 2001b) did not find significant effects of internationalization on the survival prospects of the 355 British small companies across multiple manufacturing and service sectors they followed over a seven-year period. These divergent findings can be explained by the different companies studied (that is, small versus new and small), the specific industrial (and national) context, and/or the time periods covered (two years in the study by McDougall and Oviatt versus seven years in the study by Westhead et al.).

A recent study by Lu and Beamish (2001) further illustrates the non-linear effects of the degree and mode of internationalization on firm performance. These authors studied the impact of internationalization on the performance of 164 smaller publicly held Japanese companies over a 13-year period. They found that when smaller firms first began their foreign direct investment activity, their profitability declined, but greater levels of foreign direct investment were associated with higher performance up to a point, after which performance declined again, fitting a sideways 'S' relationship. Lu and Beamish (2001) found also that exporting moderated the relationship of foreign direct investment with performance, as pursuing a strategy of high exporting concurrent with high foreign direct investment was less profitable than one that involved lower levels of exports when foreign direct investment levels were high. Apparently more longitudinal empirical designs are needed in order to study the short-term and the long-term effects of internationalization on the strategy and performance of the small company.

SUMMARY OF FINDINGS AND SOME DIRECTIONS FOR FUTURE RESEARCH

Our literature review suggests that the internationalization of the small firm can be conceptualized as a process (Figure 2.2). The internationalization takes place when the small firm engages in foreign trade of goods and services or e-commerce or undertakes foreign direct investment. Antecedent factors of the internationalization of the small firm have a significant impact on its pattern (speed and scope) and ultimately the firm's performance. Further, we discuss the implications of our study for key elements in this process.

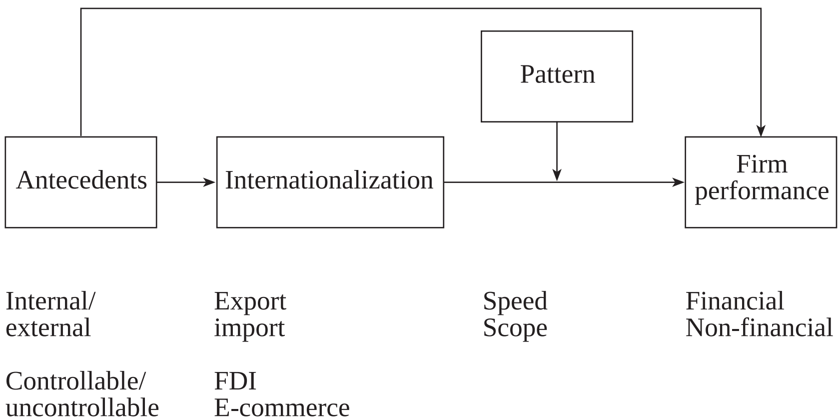


Figure 2.2 Internationalization and the performance of the small company: determinants, patterns and outcomes

Antecedents

The burgeoning volume of recent research on the internationalization of the small firm has resulted in discovering and consolidating important knowledge about the role of internationalization for improved performance. Thus, scholars now know a lot about the antecedents of the internationalization of the small firm. At the same time, gaps remain which invite further research. As researchers have often come from divergent traditions and used constructs and variables that are not well aligned, more work is needed to harmonize these constructs and variables. This conclusion echoes the conclusions reached by two other recent reviews of the empirical literature on exporting. Thus, Leonidou et al. (1998, p. 85), in their review of 44 studies on managerial influences on exporting, noted that ‘most studies were not conducted on the basis of a common conceptual framework, but rather were ad hoc efforts marked by arbitrary selection of managerial parameters of investigation’. Similarly, Leonidou et al. (2002, p. 57), in their study of 36 empirical studies on marketing strategy and international performance, observed ‘a relatively weak operationalization of the marketing strategy construct’. Consistent operationalization in future research will make it possible to build on extant knowledge more fully. Dichtl et al.’s (1990) and Knight and Cavusgil’s (1997) work on the measurement of the international orientation construct are two examples of important progress in scale development and validation which can contribute to more consistent construct operationalizations.

Internationalization

Recent research has provided strong evidence about the link between the antecedents of internationalization and international performance. At the same time, relatively less is known about other dimensions of internationalization. Our review revealed that most studies investigated the effects on a single aspect of internationalization, most often measured by the export sales intensity ratio. In the preceding section we noted that there seem to be ‘too many’ independent variables in recent research on small firm internationalization. Here we make a contrasting observation, in that contemporary research appears to investigate ‘too few’ dependent variables. Apparently, more research is needed to close this gap. Two directions for future research appear especially promising: the first in the area of conceptual development, the second in the area of empirical testing.

On the conceptual side, internationalization has traditionally been equated with export activities. Internationalization strategies, however, involve bundles of complex strategic choices (Dimitratos, 2001). Internationalization can take the form of any number of cross-border activities, both outward and inward (Welch and Luostarinen, 1988). It can encompass internationalization of various stages of the value chain (Bloodgood et al., 1996) both upstream (research and development, manufacturing) and downstream (distribution and sales). It can also span multiple modes of foreign market entry (Shrader et al., 2000), including export, licensing, franchising or foreign direct investment. Apparently more theoretical development is needed to capture the salient dimensions of the internationalization construct.

Jones’s (2001) work on the value chain activities involved in the first steps of internationalization and the recent case base research on e-commerce use

(Tiessen et al., 2001) and foreign direct investment (Coviello, 1997; Tsang, 2001, 2002) are examples of promising areas of future conceptual development. In addition, research on more committed modes of foreign market entry such as strategic alliances or foreign direct investment appears to be mostly case-based. While studies in this vein have provided rich descriptions of successful small internationalized firms, future research is needed to incorporate this knowledge in building theories with empirically testable hypotheses that can produce generalizable results.

In terms of empirical testing, multiple dimensions of internationalization need to be systematically studied. For example, previous research has documented divergent effects of firm marketing strategies on different dimensions of internationalization: whereas market concentration strategies tend to influence positively foreign sales intensity, the association with export market share appears to be weak (Leonidou et al., 2002). Future research, therefore, needs to incorporate multiple measures of internationalization in order to systematically unravel the differential impact of various antecedents on respective dimensions of internationalization.

Patterns of Internationalization

Recent research has established important differences between early and late internationalizers, in terms of motivations (Brush, 1992), speed (Autio et al., 2000; Bell et al., 2001) and performance implications (McDougall and Oviatt, 1996). Other process dimensions, however, such as pace and/or scope of internationalization, seem to be less systematically investigated. It is worth noting that whenever these variables are included in the analysis, they tend to have a significant effect on the internationalization–performance relationship. Thus, in their study of the path dependencies in benefiting from internationalization Vermeulen and Barkema (2000) found that both speed (time between consecutive market entries) and scope (geographical diversification) of internationalization negatively moderated the effect of internationalization on performance. Similarly, in their study of the internationalization process of small and medium-sized European enterprises, Gankema et al. (2000) established a periodic shift from low-commitment to higher-commitment foreign market entry modes that occurred every two years. This evidence suggests that more advanced analytical techniques need to be utilized in future research to model complex relationships, including direct, moderated and/or mediated effects. In addition, the temporal dimension needs to be more carefully incorporated in research designs. Hurmerinta-Peltomäki's (2001) discussion of the theoretical challenges set by rapid internationalization is an example of recent promising conceptual development in this area.

Performance

As noted in the preceding analysis, contemporary research tends to focus on export performance (especially sales intensity) and de-emphasizes the effects of internationalization on the profitability, growth and long-term survival of the smaller firm. Evidence on the effect of internationalization on small companies' long-term performance and survival is particularly fragmentary and contradictory. In addition, the temporal dynamics of the relationship can produce biased estimates, depending on the time scale chosen by researchers. As Lu and Beamish (2001) pointed out, the impact of internationalization on performance tends to follow a non-linear pattern. Thus, in the initial stages of internationalization, performance declines as the firm deals with the liability of foreignness. Performance improves as new knowledge and capabilities are developed, as competitiveness is enhanced and as market opportunities are captured. Eventually performance declines as the costs associated with the complexity of managing subsidiaries in dissimilar markets increases beyond the intrinsic benefits of internationalization. These complex dynamics can account for the particularly tenuous link established by extant research. A major future scholarly effort in this area is therefore well warranted. Longitudinal designs, including lagging, moderation, pooling, event histories and event studies appear especially appropriate to incorporate these time effects (Bergh, 1993).

Conclusion

This systematic review of the empirical research assessed current knowledge on the link between internationalization and the performance of the small firm. The review revealed that current empirical literature is centred on the antecedents of internationalization, while the effect of internationalization on the performance of the small company is relatively de-emphasized. And, in the analysis of antecedents to internationalization, most of the research focus has been placed on firm-level characteristics as drivers of internationalization.

On the basis of our analysis, we offer three suggestions for future research in this area of scientific inquiry. First, we recommend that future research should include multidimensional operationalization of performance in order to capture multiple implications of internationalization. Next, more complex research designs would allow tighter integration and empirical testing of contemporary theoretical developments in this area. Last but not least, longitudinal studies would provide a clearer focus on the impact of internationalization on the long-term performance and survival of the small company.

Research in the area of small firm internationalization has proliferated in recent years. Numerous studies have collectively offered a rich portrait of the causes and consequences of internationalization for the small company. We offer our analysis and discussion in the hope that it will help accelerate scholarly progress in this area of management research in order to generate insights for both theory and management practice.

NOTES

1. The limit of 500 employees is the United States Small Business Administration's cut-off point for a small company and the Organization for Economic Cooperation and Development's cut-off point for a small and medium-sized enterprise.
2. The vote-counting method assumes constant effect sizes across studies and disregards sample size differences as well as the use of multivariate versus bivariate techniques (Chetty and Hamilton, 1993; Zou and Stan, 1998).
3. This calculation excludes Mascarenhas's (1997) and Shrader et al.'s (2001) study where the unit of analysis is the unique market entry.
4. Here and hereafter in the presentation of results, the number of tests is greater than the number of studies included in the review when studies incorporate multiple factors and/or tests.

REFERENCES

Aaby, N.E. and S.F. Slater (1989), 'Management influences on export performance: a review of the empirical literature 1978–1988', *International Marketing Review*, **6** (4), 7–23.

Aharoni, Y. (1966), *'The Foreign Investment Decision Process'*, Boston, MA: Division of Research, Harvard University.

Apfelthaler, G. (2000), 'Why small enterprises invest abroad: the case of four Austrian firms with US operations', *Journal of Small Business Management*, **38** (3), 92–8.

Autio, E., H.J. Sapienza and J.G. Almeida (2000), 'Effects of age at entry, knowledge intensity, and imitability on international growth', *Academy of Management Journal*, **43** (5), 909–24.

Axinn, C.N. (1988), 'Export performance: do managerial perceptions make a difference?', *International Marketing Review*, **5** (Summer), 61–71.

Barkema, H.G. and F. Vermeulen (1998), 'International expansion through start-up or acquisition: a learning perspective', *Academy of Management Journal*, **41** (1), 7–26.

Bell, J., R. McNaughton, S. Young and D. Crick (2001), 'Towards an eclectic model of small firm internationalization', *Proceedings of the Fourth McGill Conference on International Entrepreneurship 'Researching New Frontiers'*, **1**, 95–110.

Benito, G.R.G. and L.S. Welch (1997), 'De-internationalization', *Management International Review*, **37** (2), 7–25.

Bergh, D.D. (1993), 'Watch the time carefully: the use and misuse of time effects in management research', *Journal of Management*, **19** (3), 683–705.

Bloodgood, J.M., H.J. Sapienza and J.G. Almeida (1996), 'The internationalization of new high-potential US ventures: antecedents and outcomes', *Entrepreneurship Theory and Practice*, **19** (Summer), 61–76.

Bradley, F. and O. Mitchell (1986), ‘Export commitment in the firm: strategic or opportunistic behavior’, *Irish Business and Administration Research (IBAR)*, **8**, 12–19.

Brouthers, K.D., F. Andriessen and I. Nicolaes (1998), ‘Driving blind: strategic decision making in small companies’, *Long Range Planning*, **31** (1), 130–38.

Brush, C.G. (1992), *‘Factors motivating small firms to internationalize: the effect of firm age’*, unpublished doctoral dissertation, Boston University.

Cavusgil, S.T. and S. Zou (1994), ‘Marketing strategy-performance relationship: an investigation of the empirical work in export market ventures’, *Journal of Marketing*, **58** (January), 1–21.

Chen, R. and M.J. Martin (2001), ‘Foreign expansion of small firms: the impact of domestic alternatives and prior foreign business involvement’, *Journal of Business Venturing*, **16**, 557–74.

Chetty, S.K. and R.T. Hamilton (1993), ‘Firm-level determinants of export performance: a meta-analysis’, *International Marketing Review*, **10** (3), 26–34.

Coombs, J.E. (1999), *‘International Strategy and Market Performance in New Biotechnology Firms’*, New York: Garland Publishing.

Crick, D. and M.V. Jones (2000), ‘Small high-technology firms and international high-technology markets’, *Journal of International Marketing*, **8** (2), 63–85.

Coviello, N. (1997), ‘Foreign market entry and internationalization: the case of Datacom Software Research’, *Entrepreneurship Theory and Practice*, **20** (4), 95–109.

Dichtl, E., H.-G. Koeglmayer and S. Mueller (1990), ‘International orientation as a precondition for export success’, *Journal of International Business Studies*, **21** (3), 23–39.

Dimitratos, P. (2001), ‘A classification of business internationalization strategies’, *Proceedings of the Fourth McGill Conference on International Entrepreneurship ‘Researching New Frontiers’*, **1**, 331–53.

Francis, J. and C. Collins-Dodd (2000), ‘The impact of firms’ expert orientation on the export performance of high-tech small and medium-sized enterprises’, *Journal of International Marketing*, **8** (3), 84–103.

Gankema, H.G.J., H.R. Snuif and P.S. Zwart (2000), ‘The internationalization process of small and medium-sized enterprises: an evaluation of stage theory’, *Journal of Small Business Management*, **38** (4), 15–27.

Hart, S. and N. Tzokas (1999), ‘The impact of marketing research activity on SME export performance: evidence from the UK’, *Journal of Small Business Management*, **37** (2), 63–75.

Hedges, L.V. and I. Olkin (1980), ‘Vote-counting methods in research synthesis’, *Psychological Bulletin*, **88**, 359–69.

Hurmerinta-Peltomäki, L. (2001), ‘Time and internationalization: theoretical challenges set by rapid internationalization’, *Proceedings of the Fourth McGill Conference on International Entrepreneurship ‘Researching New Frontiers’*, **1**, 494–518.

Jones, M.V. (2001), ‘First steps in internationalization: concepts and evidence from a sample of small high technology firms’, *Journal of International Management*, **7** (3), 191–210.

Knight, G. (2000), ‘Entrepreneurship and marketing strategy: the SME under globalization’, *Journal of International Marketing*, **8** (2), 12–32.

Knight, G. (2001), ‘Entrepreneurship and strategy in the international SME’, *Journal of International Management*, **7** (3), 155–71.

Knight, G. and S.T. Cavusgil (1997), 'Early internationalization and the born-global firm: emergent paradigm for international marketing', working paper, Michigan State University.

Kotha, S., V.P. Rindova and F.T. Rothaermel (2001), 'Assets and actions: firm-specific factors in the internationalization of US Internet firms', *Journal of International Business Studies*, **32** (4), 769–92.

Lages, L.F. (2000), 'A conceptual framework of the determinants of export performance: reorganizing key variables and shifting contingencies in export marketing', *Journal of Global Marketing*, **13** (3), 29–51.

Lee, D.-J. and J.-I. Jang (1998), 'The role of relational exchange between exporters and importers: evidence from small and medium-sized Australian exporters', *Journal of Small Business Management*, **36** (4), 12–23.

Leonidou, L.C. and C.S. Katsikeas (1996), 'The export development process: an integrative review of empirical studies', *Journal of International Business Studies*, **27** (3), 517–51.

Leonidou, L.C., C.S. Katsikeas and N.F. Peircy (1998), 'Identifying managerial influences on exporting: past research and future directions', *Journal of International Marketing*, **6** (2), 74–102.

Leonidou, L.C., C.S. Katsikeas and S. Samiee (2002), 'Marketing strategy determinants of export performance: a meta analysis', *Journal of Business Research*, **55** (1), 51–67.

Lu, J.W. and P.W. Beamish (2001), 'The internationalization and performance of SMEs', *Strategic Management Journal*, **22** (6/7), 565–86.

Mascarenhas, B. (1997), 'The order and size of entry into international markets', *Journal of Business Venturing*, **12** (4), 287–300.

McDougall, P.P. and B.M. Oviatt (1996), 'New venture internationalization, strategic change, and performance: a follow-up study', *Journal of Business Venturing*, **11**, 23–40.

Miesenböck, K.J. (1988), 'Small business and exporting: a literature review', *International Small Business Journal*, **6** (2), 42–61.

Mitchell, W., J.M. Shaver and B. Yeung (1992), 'Getting there in a global industry: impacts on performance of changing international presence', *Strategic Management Journal*, **13**, 419–32.

Moen, Ø. (2000), 'SMEs and international marketing: investigating the differences in export strategy between firms of different size', *Journal of Global Marketing*, **13** (4), 7–28.

Moini, A.H. (1996), 'Barriers inhibiting export performance of small and medium-sized manufacturing firms', *Journal of Global Marketing*, **10** (4), 67–93.

Nakos, G., K.D. Brouthers and L.E. Brouthers (1998), 'The impact of firm and managerial characteristics on small and medium-sized Greek firms' export performance', *Journal of Global Marketing*, **11** (4), 23–47.

Newbould, G.D., P.J. Buckley and J.C. Thurwell (1978), *Going International – The Experience of Smaller Companies Overseas*, New York: Wiley.

Oviatt, B.M. and P.P. McDougall (1997), 'Challenges for internationalization process theory: the case of international new ventures', *Management International Review*, **37** (2), 85–99.

Philp, N.E. (1996), 'The export propensity of the very small enterprise', *International Small Business Journal*, **16** (4), 79–93.

Prasad, S.B. (1999), 'Globalization of smaller firms: field notes on processes', *Small Business Economics*, **13**, 1–7.

Preece, S.B., G. Miles and M.C. Baetz (1999), 'Explaining the international intensity and global diversity of early-stage technology based firms', *Journal of Business Venturing*, **14** (3), 259–81.

Reid, S.D. (1981), 'The decision maker and export entry and expansion', *Journal of International Business Studies*, **12** (2), 101–12.

Reuber, A.R. and E. Fischer (1997), 'The influence of the management team's international experience on the internationalization behaviors of SMEs', *Journal of International Business Studies*, **28**, 807–25.

Shoham, A. (1998), 'Export performance: a conceptualization and empirical assessment', *Journal of International Marketing*, **6** (3), 59–81.

Shrader, R. (2001), 'Collaboration and performance in foreign markets: the case of young high technology manufacturing firms', *Academy of Management Journal*, **44** (1), 45–60.

Shrader, R.C., B.M. Oviatt and P.P. McDougall (2000), 'How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century', *Academy of Management Journal*, **43** (6), 1227–47.

Stopford, J.M. and J.H. Dunning (1983), *The World Directory of Multinational Enterprises 1982–1983*, Detroit, MI: Gale Research Company.

Sullivan, D. (1994), 'Measuring the degree of internationalization of the firm', *Journal of International Business Studies*, **25** (2), 325–42.

Tiessen, J.H., R.W. Wright and I. Turner (2001), 'A model of e-commerce use by internationalizing SMEs', *Journal of International Management*, **7** (3), 211–33.

Tsang, E.W.K. (2001), 'Internationalizing the family firm: a case study of a Chinese family business', *Journal of Small Business Management*, **39** (1), 88–94.

Tsang, E.W.K. (2002), 'Learning from overseas venturing experience: the case of Chinese family businesses', *Journal of Business Venturing*, **17** (1), 21–40.

Venkatraman, N. and V. Ramanujam (1986), 'Measurement of business performance in strategy research: a comparison of approaches', *Academy of Management Review*, **11** (4), 801–14.

Vermeulen, F. and H.G. Barkema (2000), 'Pace, rhythm, and scope: path dependencies in benefiting from internationalization', *Academy of Management Best Paper Proceedings*, IM, B1.

Vernon, R.M. (1971), *'Sovereignty at Bay: The Multinational Spread of US Enterprises'*, New York: Basic Books.

Welch, L.S. and R.K. Luostarinen (1988), 'Internationalization: evolution of a concept', *Journal of General Management*, **14** (2), 34–55.

Westhead, P., M. Wright and D. Ucbasaran (2001a), 'The internationalization of new and small firms: a resource-based view', *Journal of Business Venturing*, **16** (4), 333–58.

Westhead, P., M. Wright, D. Ucbasaran and F. Martin (2001b), 'International market selection strategies of manufacturing and services firms', *Entrepreneurship and Regional Development*, **13** (1), 17–46.

Wolff, J.A. and T.L. Pett (2000), 'Internationalization of small firms: an examination of export competitive patterns, firm size, and export performance', *Journal of Small Business Management*, **38** (2), 34–47.

Yeoh, P.-L. (2000), 'Information acquisition activities: a study of global start-up exporting companies', *Journal of International Marketing*, **8** (3), 36–60.

Yip, G.S., J.G. Biscarri and J.A. Monti (2000), 'The role of the internationalization process in the performance of newly internationalizing firms', *Journal of International Marketing*, **8** (3), 10–35.

Zahra, S.A., R.D. Ireland and M.A. Hitt (2000), 'International expansion by new venture firms: international diversity, mode of market entry, technological learning, and performance', *Academy of Management Journal*, **43** (5), 925–51.

Zahra, S.A., D.O. Neubaum and M. Huse (1997), 'The effect of the environment on export performance among telecommunications new ventures', *Entrepreneurship Theory and Practice*, **22** (1), 25–46.

Zou, S. and S. Stan (1998), 'The determinants of export performance: a review of the empirical literature between 1987 and 1997', *International Marketing Review*, **15** (5), 333–56.

3. Conceptual and methodological underpinnings in the study of rapid internationalizers

Leila Hurmerinta-Peltomäki

INTRODUCTION

Existing Research on Rapid Internationalizers

'Accelerated internationalization' refers to the phenomenon of firms engaging in international business activities earlier in their organizational life cycles than they have done historically (Shrader et al., 2000). The very first research on the rapidity of internationalization was based on implicit observations that formed part of larger studies (for instance, Luostarinen, 1979; Christensen, 1988). The unusual behaviour of young firms in their internationalization was also registered in a couple of press articles in the late 1980s, when the term 'global start-up' was introduced by Mamis (1989). These 'oddities' were reported as exceptional cases in the form of historical description and analysis. During the early 1990s, academics also discovered the subject; the early start of exporting was referred to, but not really emphasized, in a few studies (for example Lehtimäki, 1992). The phenomena of 'a shortened time lag in export' and 'deviations from mainstream behaviour' were referred to. It was only during the 1990s that researchers' interest was truly awakened to the study of these issues (for example Lindqvist, 1991; Bell, 1995; Brush, 1995; Oesterle, 1997; Jones, 1999), following their realization that the number of young firms experiencing rapid internationalization appeared to be increasing, and that the traditional internationalization theories and models did not fully explain this kind of behaviour. These observations soon led to studies aiming at identifying and characterizing the firms behind the phenomenon: what are they, and why do they act in the way they do?

The Purpose of the Chapter

The growing need to find explanations has led to a situation in which the basic nature of the phenomenon has been overlooked to a large extent. A variety of names and definitions have been used to describe rapid internationalizers (Table 3.1). Given this heterogeneity, I decided to use ‘rapid internationalizer’ as a broad umbrella term that encompasses the different concepts ‘instant exporter’, ‘international new venture’, ‘instant international’, ‘Born Global’ and ‘global start-up’ used in the literature so far. Individual concepts are compared and analysed under this term.

The main concern is with how to determine the phenomenon we are actually trying to explain. Variations in definitions appear to influence the results of each study. Producing a valid framework for analysing the antecedents or consequences of rapid internationalization initially demands a general understanding of it, and thus we have to start from the definitional criteria, which in turn challenges research methodology.

The reason why the ‘rapid internationalizers’ are methodologically the most interesting is to be found in the definition. Time has a significant role as a definitional factor, and as such it and the research purpose also influence the methodological decisions. This is why time is given special emphasis in this chapter, although not to the exclusion of other definitional criteria.

The purpose of the chapter is to analyse studies on rapid internationalizers, to give some clarification to the definitional multiplicity surrounding the phenomenon of rapid internationalization, and to raise some methodological questions of which one should be aware in studies related to time. The empirical material is based on existing studies on rapid internationalizers, the concepts of which are described and analysed. Thus, it is the firm (micro level) that takes precedence over the phenomenon (macro level), and the empirical studies over the discussion papers. The chapter first addresses the conceptual issues, and the methodological discussion follows. The next section analyses the factual concepts defined and used so far.

A CONCEPTUALIZATION OF RAPID INTERNATIONALIZERS

The possibility of establishing a cumulatively developing theory largely depends on the premise that the consistency and clarity of the concepts increases over time. The core of theory of rapid internationalizers is not clear enough to act as a steady foundation for theory development. Discussion on the phenomenon is often related to ‘driving forces’ which, in this chapter, refer to forces outside of the firm, while ‘characteristics’ refer to features related to

Table 3.1 Conceptualization of rapid internationalizers

Author	Concept	Definition	1	2	3	4	5	6	7
Oviatt et al., 1991; Oviatt & McDougall, 1997	Global start-up International new ventures, Global at start-ups	'a new venture that, from its inception, derives resources from multiple countries and is geographically unlimited in its creator's vision and its potential'. Continuing in McDougall & Oviatt (1991): 'The word resources is used in its broadest sense to include sales revenues, financing, people, raw materials, supplies, and ideas.'	x				x	x	
Oviatt & McDougall, 1994	International new venture	'a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries.'	x				x		
Madsen & Servais, 1997	The Born Global	'firms that seek to derive significant advantages from the use of resources or from the sale of outputs to multiple countries/continents right from their legal birth.'	x				x		
Knight, 1997	The Born Global (BG)	'a company which, from or near its founding, seeks to derive a substantial proportion of its revenue from the sale of its products in international markets … the key distinguishing feature of the BG is that its origins and fundamental orientation are strongly international. Management at these firms typically views the world as a single, borderless marketplace.'		x	x		x	x	

			1	2	3	4	5	6	7
Menguzzato et al., 2000	International new venture (INV referring to Oviatt & McDougall, 1994)	'First the companies were of recent creation, meaning that this period can last for a duration of three years (three years from establishment). Second the companies had an international orientation, and it was estimated that those businesses whose level of exportation was more than 25% of their annual sales could be considered as having a consolidated international presence. Third, they could not be a subsidiary company.'	x	x			x	x	
Saarenketo & Äijö, 2000	Born Globals, 'truly Born Globals', 'the most likely Born Globals'	'The initial foreign operations started within two years since founding, business activities conducted in two or more countries and export ratio 20 percent or more of total turnover.'	x	x	x				
McAuley, 1999	Entrepreneurial instant exporters	'those, that have begun international activities (exports 1 or more per cent of turnover) within the first year of being in business and are microbusinesses.'	x	x				x	
Preece et al., 1999	Instant international	'a firm engaging in the internationalization process in the formative stages of its business development.'	x						
Bloodgood & Sapienza, 1996	Internationalization of new high-potential ventures	'new entrepreneurial ventures with high aspirations and potential for growth … planning on operating on an international basis at start-up.'	x						

Notes:
1 = exact timing or no time;
2 = process view or within time;
3 = focus on international revenues or export – %;
4 = number of countries;
5 = geographical diversity of resources;
6 = international outlook;
7 = size of the firm.

the firm itself. However, characteristics offer more flexibility in the form of 'typical characteristics' or 'the majority of the firms have these features' (see for example Knight and Cavusgil, 1996), but the definition is, as the word implies, definite – more or less. Using typical characteristics as approximate criteria for a 'rapid internationalizer' makes it too broad a concept, resulting in far 'too' many and far 'too' different kinds of firms falling into this group. The focus here is on definitions of rapid internationalizers.

A concept is defined as an agent by which an abstract phenomenon is made concrete. Thus the idea of a rapid internationalizer is given a mental image by means of a definition formed by generalizing from the characteristics of a class of things (Concept, http://www.library.wwu.edu/cbl/ray/literacy/concept.htm 19 June 2001, p. 1). In this research area, however, the conceptual definitions are still lacking definitional clarity and consistency, which becomes evident in the following (Figure 3.1). This problem is even more pronounced in the operationalization phase.

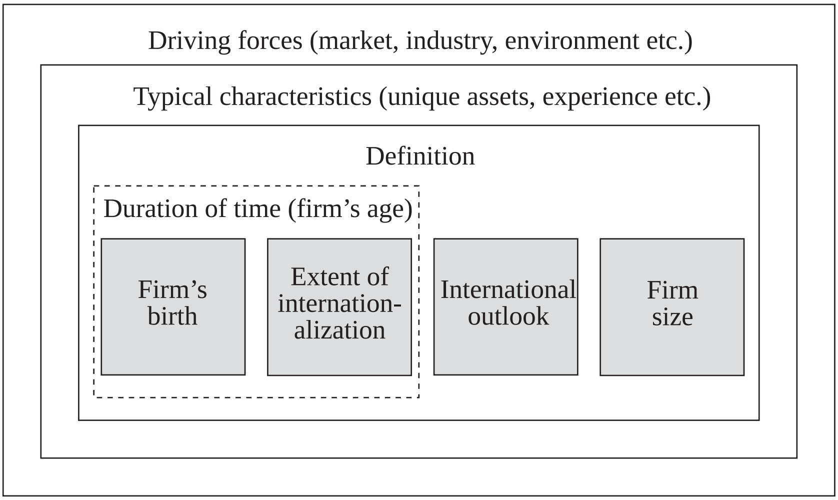


Figure 3.1 The main dimensions in definitions of the rapid internationalizer

The conceptualization of 'rapid internationalizers' might be said to have three main definitional dimensions (see Table 3.1): the duration of time between the firm's birth and its internationalization, the international outlook of the managers or the company, and size. These dimensions and the questions that arise from them are examined in the following.

Duration of Time

Studying time means studying the duration of time, from one point to another. Studies on rapid internationalizers have fixed these points at the firm's birth and when it achieves a state of foreign extensiveness, that is, the duration reflects the firm's age at the time of foreign presence measured by its extensiveness (see Table 3.1). However, it is not only the duration that matters, it is also essential to define the poles of the temporal line, that is, the time boundaries.

The birth of a firm

Some researchers agree that the date of a firm's birth is the starting point for analysing its internationalization process; others write about formative stages, or creation. Some agree on exact time limits, while others more freely imagine what 'near its founding' might mean. The most dramatic dimension of the 'Born Global' concept was suggested by Madsen and Servais (1997). They proposed that the analysis of Born Globals includes a time perspective, which goes beyond their legal birth. Thus they extended the time perspective from the traditional starting point of the internationalization process back to the history of the firm.

Oviatt and McDougall agree in their early study of 1994 (p. 49) that empirical studies of international new ventures must resolve a definitional ambiguity. Thus, according to them, there exists no exact time point for a firm's birth. This indicates that, in fact, the firm might be perceived to have different processes, of which one is a founding process followed by an internationalization process with its initiation and development stages.

Only one of the studies referred to here, that by Madsen and Servais (1997), considers the conceptual underpinnings of the phenomenon, and whether the appearance of Born Globals, as an example of the rapid internationalizer, is only a matter of change in the existence of the firm. Thus a new firm, from a juridical point of view, is only continuing its previous operations. Madsen and Servais (1997) have even cast doubt over whether a Born Global should be considered a new company at all. Mustaniemi (1996) found in her study that only 63 per cent of all industrial firms founded in Finland in 1990 were really new, others having some kind of history.

There are three different paths to a firm's establishment on which an owner-manager takes charge of a business venture: creating or starting the venture, purchasing an existing venture and inheriting a family business (Chaganti and Schneer, 1994). The first form could be seen as the most traditional type of establishment, that is, an entrepreneurial firm. Stearns and Hills (1996) summarized the characteristics that are typical of entrepreneurship: one of these is that an entrepreneur perceives an opportunity and creates an organization through which to pursue it. There is, however, wide variation in the criteria used to determine when a new firm is born.

One way to determine the firm's birth is to look at its official registration date. According to Reynolds and Miller (1992), however, a firm can be considered fully established when the following events have occurred: personal commitment, financial support, first sales and first hiring. Thus it is a question of functional rather than juridical birth. The most suitable indicator of a firm's birth (Reynolds and Miller, 1992), or the last step in the physical creation of a venture (Bhave, 1994), has been suggested to be the date of the first sale if only one event is to be considered. Other indicators include any transactions or relationships outside the firm (Reynolds and Miller, 1992), and one key indicator could be that a new business organization is taking an active role in the economy. In their study of international new ventures, however, Oviatt and McDougall (1994) suggest that researchers should rely on observable resource commitments to establish the point of venture inception. This is understandable, for instance, in the case of the French-based company Technomed, a global start-up that went international even before it had a product, and after three years it was doing business in 28 countries (Mamis, 1989). Thus there may be a lag between the first resource commitment and the first sales, and that may lead to confusion in determining the firm's functional birth.

Many young firms may not, in fact, be young at all: their formation may have something to do with the phenomenon known as phoenixism, whereby a company apparently goes out of business, owing money to the taxman or other creditors, and then rises from the ashes as a different company, often even operating from the same premises and with the same staff (Bull et al., 1991). One way to establish the birth of a new firm is to determine the time and cause of death of an old firm: merger, bankruptcy, discontinuance of operations, deregistration from the trade register by the authorities or a change of company form (Koski and Immonen, 1990). These different histories determine the functional birth date of the 'new' firm even if, in a juridical sense, there is no previous life. This is partly supported by Penrose (1980), who noted how difficult it is to determine the boundaries of a particular firm at any given time; there may be problems in determining when a succession of legally different entities should be treated as events in the history of a single firm. According to her, the identity of the firm can be maintained through many kinds of changes.[1]

History is also made when large companies are decentralized and small units are subsequently founded (Loveman and Sengenberger, 1991). This means that some of the firm's operations, as well as the assets and liabilities committed to them, are diffused to a shareholder who continues the business in her/his 'new' firm (equity spin-off). Alternatively, part of the firm is bought by its management or employee(s) (buy-out), or part is sold to an external party (sell-off) (see Ahlström Söderling, 1999 on different forms of spin-offs). In any case, the main point is the functional continuity, which should be considered alongside the juridical birth.

The extent of internationalization

The definitions of the concepts of rapid internationalizers refer to three main factors measuring the extent of internationalization: exports as a percentage of total sales, the number of foreign countries served, and resource diversity (see Table 3.1). A common indicator in all of the concepts is the assumption of sales being derived from outside a firm's country of origin. Basically, it is a question of how internationalization is measured.

Up until the 1990s, the interrelationship between businesses of various nations was defined as 'internationalization' because the term 'globalization' did not exist (Sera, 1992). Predictions of an emerging Born Global theory differ, however, depending on which aspect of internationalization is being addressed – global reach or foreign presence (Preece et al., 1999).

The internationalization of business connotes an action in which nationality is strongly in people's consciousness (Sera, 1992). The international firm could be defined as one engaged in business activities that cross national boundaries; it has headquarters in one country, and partial or complete operations in one or more other countries (Hordes et al., 1995; Parker, 1998). Export activity is most often recognized as being the first real step in the internationalization process (Jones, 2001). International enterprises are viewed as those drawing resources primarily from a domestic base to operate beyond national borders (Parker, 1998). The characteristics of the international organization might include a culture and an organizational structure similar to that of the home country: standardized technologies and business processes, similar policies – especially regarding human resources – and transplanted senior management (Hordes et al., 1995).

By way of contrast, the truly global enterprise operates very differently from the international firm. Globalization implies that the whole world is nationless and borderless (Sera, 1992). The global enterprise views the world as its base, and although it typically operates from one or more geographic location, it could just as readily be a virtual organization operating from no fixed place (Parker, 1998). A global firm maintains a significant dispersion of foreign activity and taps into multiple international markets simultaneously (Preece et al., 1999). While it may have roots in one culture, it has created an organizational culture that values diversity. A few core values are its major unifying force. Although it has 'headquarters', it is often run by a team of managers in diverse locations. Its business processes, policies and technologies are often diverse, with the exception of a few rigidly standardized policies that are often centred around communications technologies and the training of the workforce (Hordes et al., 1995). The global enterprise is less place-bound and less tied to the traditions of a single nation (Parker, 1998); it operates from more than its domestic base, readily drawing on resources of people and knowledge throughout the world. Drawing on global resources and viewing the entire world as its home are two of its central characteristics (Parker, 1998).

There is no absolute point on the scale at which firms are or are not internationalized or globalized (see *Globalisation*, 1997). The OECD has devised a 'globalization scale' from the domestic firm through mainly domestic, internationalized and globalized firms, up to the fully globalized organization. Three dimensions could be used to measure the extent of SME globalization. To be global on the scale, more than 40 per cent of the inputs have to be sourced internationally, and more than 40 per cent of the output revenue has to be traded across borders, across all major international regions (traded inputs and outputs). In addition, establishments or close affiliates should exist in at least one country in all three major international regions (establishments and affiliations), and barriers to entry into international markets should not be a significant impediment for the firm or its competitors, comprising less than 5 per cent of the cost disadvantage (market opportunities and competition). According to the OECD, less than 1 per cent of SMEs, that is 30 000 to 40 000, seem to be fully globalized, while there are 150 000 to 300 000 globalized SMEs (*Globalisation*, 1997). This idea of a 'globalization scale' illustrates the processual nature of rapid internationalization in terms of increasing global involvement.

A processual view

Thus, a processual view of the concept of 'rapid internationalizers' exists, indicating that they are divisible into three conceptually different categories: the rapidity indicates that (1) the firm has started its export operations within a short time from establishment, that is, it is an instant exporter; or (2) it has achieved a higher international level within a short time from establishment, that is, it is an international new venture; or (3) it has globalized its activities within a short time from its establishment, that is, it is Born Global. The concepts partly overlap each other, as becomes clear in the following discussion (see Figure 3.2).

The definitions of rapid internationalizers refer to the terms of time concept, and thereby reflect the processual nature of time. The essential words here are 'during', 'duration' and 'temporal interval' (for more on these terms, see Denbigh, 1981; Pettigrew, 1997). The two latter ones include exact time boundaries (for example, it took two years, or from 1998 to 2000), while 'during' gives more flexibility (for example, within two years).

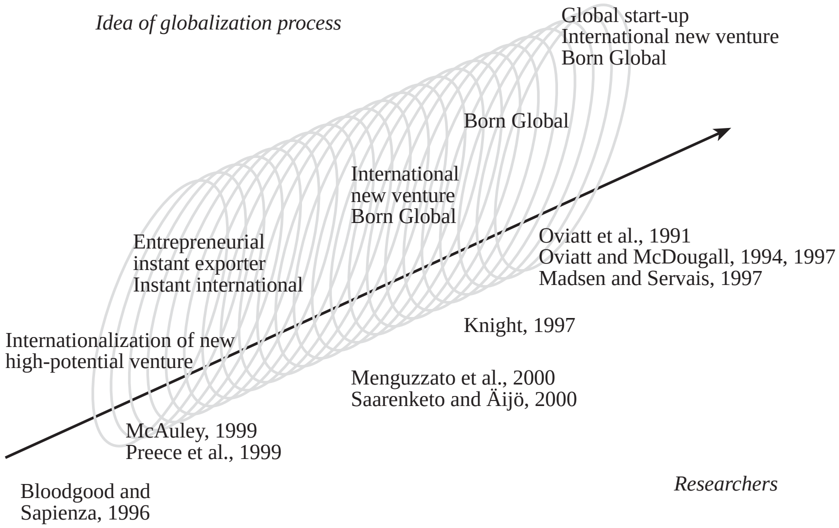


Figure 3.2 The hypothetical placement of different concepts on the scale of the globalization process

Researchers on rapid internationalizers give rather approximate values when they operationalize the length of time. It also seems that the time consumed varies, regardless of the extensiveness of internationalization. Oviatt et al. (1991) define 'from inception' as during its first two years of operation, and this same definition has been used by Saarenketo and Äijö (2000). Coviello and Munro (1997) describe the time to export start as from one to three years from a firm's establishment, while Menguzzato et al. (2000) describe it as three years at most. McAuley (1999) is more demanding, giving only one year's time to begin international activities. Hordes et al. (1995) mention an example of a truly global firm, Syncordia, which 'faced global challenges from day one'. Sometimes, time has not been given the importance it may deserve: new or start-up (Bloodgood et al., 1996), from or near its founding (Knight, 1997), or in the formative stages of business development (Preece et al., 1999) seem to be enough. Accordingly, the globalized firm is given less time than a firm in its initial stage of globalization or internationalization. Nevertheless, time has a very important role in evaluating what can be achieved in the extent of internationalization. On the other hand, how much time is needed for the process to be recognized? Madsen and Servais (1997) referred to this problem: is it a question of the internationalization process, or of the characteristics of the firm?

Time as signified by the age of the firm affects its strategy and its ability to change. Older firms already have a dominant strategy, which they are not likely to change (Gauzente, 2001). This refers to organizational routine, the traditional pattern of behaviour, which may inhibit the absorbtion of new patterns (Bettis and Prahalad, 1995). However, whether or not the routine is a reflection of international experience and practice, it may accelerate the process of internationalization insofar as new routines are required (Hurmerinta-Peltomäki, 2001). Routines exist on both an organizational as well as an individual level.

According to Autio et al. (2000), research has not thus far sufficiently distinguished between two closely-related but distinct issues: first, the time lag between the founding of a firm and its initiation of international operations (time lag = t [1st international sales] – t [founding]) and, second, the speed of a firm's subsequent international growth (how rapidly it increases international sales once the initial commitment has been made). Hence the firm may rapidly start its export operations, and after that the internationalization process will gradually stagnate; or the firm may be rather old before its first foreign operation, after which it will be on the fast track to globalization (see Prasad, 1999). So far, the concepts of 'rapid internationalizers' mainly refer to young, rapid internationalizers, and this is reflected in this chapter. Thus the research interest lies more in the extensiveness of internationalization reached by a young firm.

An Individual or Organizational Outlook

Definitions of instant exporters indicate that rapid exporters do not necessarily have to have a broad international outlook. This refers to the fact that the early start of initial foreign operations as such is not bound to an international orientation, but the ability to quickly expand and deepen international presence and diversity in the same time period, is. There is, however, empirical evidence that having a broad international outlook furthers the early export start (for example Hurmerinta-Peltomäki, 2001).

The definition of the Born Global includes a 'global mindset'. Thus, in addition to developing a worldwide presence, the global enterprise crosses traditional boundaries, breaking through nationalistic thinking (Parker, 1998). Oviatt and McDougall (1995) suggest that the founder of a global start-up does not bind his/her business thinking to a single country or culture. However, it may be difficult for an established firm to break out of its nationalistic thinking, to reconceptualize its activities and thereby promote its ability to gain a global foothold (Parker, 1998).

The concept of an international outlook incorporates an evaluative dimension. It is a measure of the perceived difference between foreign markets and the home market (Reid, 1981), or even between foreign markets and the local environment (Wiedersheim-Paul et al., 1978). It also relates to a property of the individual. Managers with a broad international outlook are not likely to see foreign markets as being greatly removed from the home market (Reid, 1981). Thus, it is an attitudinal factor, but when it is influenced by previous international experience, it also gives the manager better tools to operate in international markets.

Previous international experience may thus decrease the effect of culture shock, it may increase knowledge of business practices, and it may help in establishing business contacts abroad (supported by Brush, 1995; see also Leonidou and Katsikeas, 1996) thereby influencing the actual degree of change at the export start. Fletcher (2000) recently wrote about a 'global mind set', referring to entrepreneurs' world-views. We could call it a more global term for the concept of an international outlook – a global outlook.

Size

Most Born Globals or international new ventures are small, and it is a general characteristic of such firms (Knight and Cavusgil, 1996; Moen, 2000). Size also emerges as a dimension in some definitions of the 'rapid internationalizer', but not when it comes to a Born Global. This raises the question of whether larger firms also come into the equation. Leaving the size of 'rapid internationalizers' open provides a loophole for firms with a history or organizational links to other firms. Or is it possible that a 'baby-firm', which has just been born, fulfils the qualifications of a large firm? Knight and Cavusgil (1996) have characterized the typical size of Born Globals as having less than 500 employees with annual sales of under $100 million. Since 1996, the EU member states have defined an SME as a company that employs less than 250 persons,[2] whereas a small firm employs less than 50 persons (*Official Journal*, 1996, pp. 4–9). Thus, size in the context of Born Globals probably does not represent today's EU conception of what is small.

The exclusion of size in these definitions makes the Born Global less exceptional, because smallness normally relates to having few resources, which in turn affects export strategy and success. According to Moen (2000), it is negative for export performance to be small in international markets. On the whole, size is currently losing its validity in the globalized world. Today's organizational networks, which have been said to act as catapults for rapid internationalization, may make it very difficult to distinguish clearly between two organizations (Nummela and Hurmerinta-Peltomäki, 2001). Cooperation between firms and networks of information (Knight and Cavusgil, 1996) expand a small firm's resource base, decreasing the influence of the size of a single firm. The virtual presence of global start-ups, or their commitment to establish a worldwide presence in a product line, removes obstacles related to small size (Parker, 1998), and thus smallness (as an indication of few resources) is not an obstacle to global operations. The global boundaries to be crossed are not only national, but they also involve crossing time, space and other similar external boundaries (Parker, 1998).

As far as instant exporters (McAuley, 1999) or new international ventures (Menguzzato et al., 2000) are concerned, size also has definitional importance. By emphasizing smallness we probably reduce the possibility of structural explanations for rapid internationalization involving the firm's past history and organizational coalition. Smallness as a conceptual dimension in instant exporters and new international ventures may also indicate that a rapid export start is also within reach for a small firm with limited resources.

The Born Global concept does not include any mention of size, thereby allowing variations in organizational form as well as in the company history. Structural explanations of rapid and extensive internationalization are followed by functional explanations (virtual and cooperational) that aim at minimizing the effects of size.

METHODOLOGICAL DECISIONS

A research subject related to time sets great challenges for researchers to come up with a research design emphasizing the role of time. Thus many of the potential risks and benefits in terms of validity are also related to time. The methodological discussion could thus be divided into two sections: identification of the research object, and how time should be considered in methodological terms. In this sense, the analysis covers methodological issues related to the research questions 'what' and 'why'.

The Identification of Rapid Internationalizers

The selection of cases of rapid internationalizers focuses on the theoretically useful cases, that is, the cases that fit the conceptual categories (see Eisenhardt, 1989). The purpose is to ensure the relevance of the data to the research problem. Therefore the case selection may be refined to focus more on the units that seem most relevant (for more about theoretical sampling, also known as purposeful sampling, see Lincoln and Guba, 1985).

Thus, the first problem researchers face is not only a conceptual one, but also involves where to find firms meeting the definition of Born Global or international new venture (INV), for example. There are no registers or directories listing the conceptual dimensions. This has forced researchers to search for available and theoretically suitable cases in the business press and academic journals, and at meetings and seminars (McDougall et al., 1994). The alternative is to embark on a two-step research process, which involves first identifying a large sample, from which a few cases are then selected (for example McAuley, 1999; Saarenketo and Äijö, 2000). If the aim is only to characterize rapid internationalizers against more traditional internationalizers, the large survey serves that purpose (for example Rennie, 1993).

Using relevant databases does not guarantee an unproblematic research process. One problem is that there may exist a significant target error in the sample: some firms may no longer be in business (Hurmerinta-Peltomäki, 1995), or they may not actually be exporting (for example, Hurmerinta-Peltomäki, 1995; McNaughton, 2000). This problem is especially relevant in the case of young and small firms. Further, including size in the concepts of instant exporter and new international venture, may also, at least in theory, exclude some rapid internationalizers that have experienced extreme growth in size (see Hurmerinta-Peltomäki, 1995, p. 92). Size as a selection criterion is somehow risky because of the small firm's susceptibility to change.

Another aspect is the need to choose a definition of 'Born Global' which can be kept throughout the whole study. Sometimes the cases may have been selected on a basis other than the definition chosen, or some Born Globals may be inadvertently excluded from that category, and included among more traditional firms, which in turn may lead to a mistaken idea of similarities between these two groups.

The study of Born Globals, or rapid internationalizers in general, is strongly bound to the period of data gathering, thereby running the risk of distorted information. In this latter case, it is a question of a cohort problem, that the definition used influences the time of the data gathering and vice versa. This is a limitation that is a particular feature of one-shot cross-sectional data gathering, and is briefly reviewed in Figure 3.3.

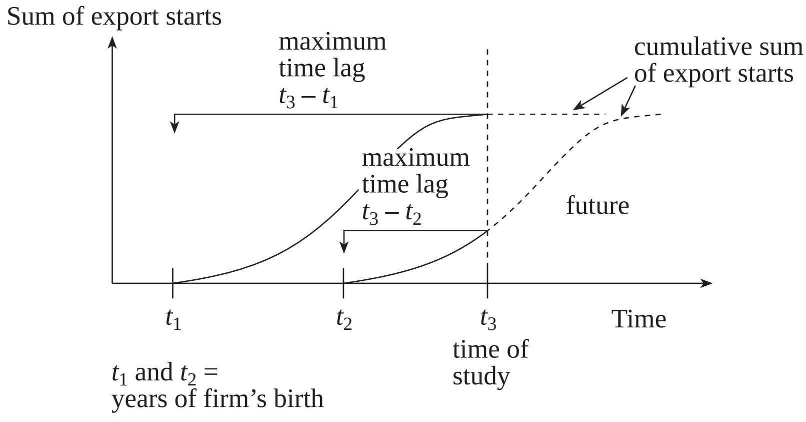


Figure 3.3 The effect of the time of the study on the validity of the information

As an example, I will use the definition of a Born Global put forward by Saarenketo and Äijö (2000) as a firm whose 'initial foreign operations started within two years of its foundation'. If the data was gathered in December 1999 (this is a hypothetical example), all the firms which had been established in the previous two years (December 1997 – December 1999), and which had international operations until December 1999, could be classified as Born Globals. However, there is still the risk of ignoring some Born Globals who fall outside the scope of the study. There may have been firms which were established in 1999 and started their international operations only after the data gathering took place, but within two years. According to the above definition, these would definitely be Born Globals, but we cannot know that at the time of study. The problem becomes acute when the research aims at identifying the different characteristics of the firms – Born Globals versus more traditional firms. There is a risk of missing some essential dissimilarities.

It would be possible to avoid this problem by selecting firms based on the year of export start – those which started on their internationalization path before the end of the fixed year – and not on the year of establishment. In this case it would mean that 1999, the year of the study (time of data gathering, *t*3), minus 2 years would be the last acceptable year of establishment – in other words 1997 (*t*1) – and no firms established after this date should be included. This same problem is also inherent in larger samples (Figure 3.3).

The traditional innovation-adoption curve might be fairly closely followed among firms founded before *t*1 (the 1980s, for example). However, because exporting has traditionally been adopted gradually, the exporters founded in *t*2 and later (in the 1980s and later) might not have considered exporting yet. Export adopters of recent decades have had only a few time-lag options so far because they have been in existence for less time. This emphasizes the short time lag in export, and explains why the start of foreign operations, together with the time of the study, and not the year of establishment is the main determining factor for a Born Global.

So far, it could be said that the restriction of the number of cases has not been a problem, but the identification of firms that fill all the criteria for the Born Global or INV is. The more developed the firm is on the globalization scale, the more challenging the task. At first, studies on Born Globals were based on inductive research, and on a few examples. Attempts to draw definitional boundaries were then made, leading gradually to studies that, by increasing the number of firms, aim at characterizing and explaining the phenomenon of rapid internationalization. The literature recommending the use of case studies rarely specifies how many cases should be analysed (see Romano, 1989). Eisenhardt (1989) suggested that a number between four and ten usually works well when the aim is to build a theory, and Pettigrew (1997) supported this.

This research phenomenon is still quite new, and only acquired respectability during the 1990s. Research on rapid internationalizers has used very specific cases from the beginning. There have been only a few studies, and they have concentrated on certain industries, although the phenomenon as such is known as 'industry-free' (for example Rennie, 1993; Hurmerinta-Peltomäki, 1995; Madsen and Servais, 1997; McAuley, 1999). Since the emphasis has been more on generating theoretical understanding, statistical generalization of the findings has not yet been required (see Calder et al., 1981). The aim is to develop models rather than to test them. Important questions for the near future concern the extent to which the theoretical findings can be generalized, and how the variation in the definitions of rapid internationalizers are taken into account.

Time in Research on Rapid Internationalizers

Too many reports fail to mention timing of the study, and to define the phenomenon under scrutiny precisely enough. Time is an essential aspect of rapid internationalization, and a definitional dimension. Since the phenomenon under study is so strongly related to time, time is also a necessary methodological consideration. As far as the methodology is concerned, it is a question of relational time in two senses related to the 'individual–organization–environment' dimension (vertical time), and to the 'past–present–future' dimension (horizontal time) (see Miettilä and Törnroos, 1993).

Vertical time and the availability of information

According to Golden (1992), recalling past events and reporting them are conceptually different issues. There is always the question of whether the relevant respondents are available for interview (Yin, 1981) or respond to the questionnaire, and whether the current viewpoint coincides with the actual facts of the situation in the past (Smith et al., 1989; Golden, 1992). The behaviour of an individual is based on his/her cognitive plan. It incorporates his/her idea of the existence of subjects and phenomena, their mutual location and distance, and their temporal distance. Even if the question is not one of past behaviour, the cognitive plan does not coincide with the actual facts. It never matches the reality, which results in imperfect knowledge (Huuskonen, 1992).

In a small firm, the entrepreneur or manager is the one making the decisions. Thus, the decision-making is extremely concentrated, and is carried out by individuals rather than in groups. The system is thus very informal. There may well be discussions with employees, as well as with other partners, but documents recording exact decisions are seldom available. In the words of Penrose (1980), the decisions are more concentrated on the entrepreneur or owner-manager her/himself, while the implementation is in the hands of the operative personnel. It is also a fact that only individuals can understand the cause-and-effect relationships, but this understanding of 'why' is sensitive to sudden distortion and decay. The 'why' in a decision will also distort and decay as it is passed on over time from one person to another as a part of an organization's culture. As such, the culture may offer an interpretation of why a decision was made, but this received wisdom from the past may or may not be accurate (Walsh and Ungson, 1991). Thus, it is extremely important that the entrepreneur as an informant has been with the firm in question from the very beginning. If this is not the case, the idea of studying the phenomenon or the underlying factors influencing and explaining rapid internationalization is impossible to realize, or may give inaccurate information. Changes in ownership and management are considered problematic, which indicates that the cases chosen are either older family firms or firms established only recently. According to the definition of the Born Global, only recently established firms can be considered.

The firm does not, however, operate in a vacuum and that is why the methodological discussion should also be extended to include its environment. The selection of firms that have initiated international operations during a specific time period is supported by the observation that the innovativeness, that is, deviation from traditional patterns of behaviour, is related to the changes in the firm's environment, and thereby to the specific time (see Hyvärinen, 1990). Thus, studies that aim at explaining the phenomenon should take into account the external conditions at the time of the export start. Born Globals may have different external driving forces at different times, and their mutual significance for the export start may also differ.

Horizontal time and the quality of information

The time from the first foreign operations to the time of the study is significant because of the existence of the relevant informant. However, the quality of information, its accuracy and validity, is also bound to the time of the study. Hence the first priority is to understand that we can only measure past behaviour, in other words, there is no such thing as 'Born Global potential' (see for example Saarenketo and Äijö, 2000): the intentions do not necessarily have to be analogous to the actions. Because the intention to adopt exporting and the factual behaviour may differ totally, the recalling of past behaviour is assumed to give more reliable information than predicting future behaviour, in spite of the defective human capability to remember things accurately. This leads to the notion that the investigator can only measure time through a respondent's recall, although this may be a rather weak method on which to base the measurement of such an important variable.

The second issue is to do with remembering things clearly. Retrospective accounts of past facts or behaviours are likely to be more accurate than accounts of past beliefs and intentions, which are more subjective (Golden, 1992). Furthermore, the decision-making process is a mental process, and mental registration of different points in it does not occur. There is no point in asking about decision moments or the nature of these decisions, and it is rather a question of the actions or achievements that are related to them. Hence, many studies have relied on exporters' recall of past behaviour; more accurate answers are to be expected when studies on rapid internationalizers use past behavioural data.

Although retrospective errors are common, no assessments of the effects of the length of time between an event and the recollection of that event on the content of the research issue have been made (Golden, 1992). Retrospective error can be minimized by selecting cases that have started to export recently. What constitutes 'recent' has not been determined. The possibility of retrospective error exists, for how can an entrepreneur remember the issues that were relevant at the time, even though they were related to experiences, that is, behaviour? A recent start ensures that information about the internationalization process and the critical determinants thereof is still available. Evidently there are always some events and effects that escape the researcher's and research object's notice, and this again suggests the possibility of retrospective error.

There is another side of the coin, however. It is evident that, in the research process, a certain distance between events and the reporting of them is preferred before it is possible to separate what is/was really significant and what is/was not (Halinen, 1998; Langley, 1999). Thus, it is important for those studying the driving forces, the facilitating and influencing factors behind rapid internationalizers, not to be temporally too close to the subject. If we wish to be more careful in our analysis of influencing factors, a longitudinal research process in real time would be preferable. Cross-sectional analysis, often used as a basis for studies on internationalization, does not reflect the impact of time-dependent variables such as stimulating factors and impediments, nor does it explain the firm's progression along the internationalization path. It also has its effect on the cohort problem discussed above.

DISCUSSION

Conceptual Discussion

This brief analysis of the concepts of rapid internationalizers offers a few conclusions. It is obvious that a firm's birth and the extent of its internationalization, the time boundaries, are at the core of the concept of 'rapid internationalizers'. They comprise the primary conceptual dimensions and describe the phenomenon. The shorter the time from birth to international presence, and the higher the degree of internationalization at the time of this presence, the more exceptional and challenging the case is. This makes globalization a fascinating phenomenon in that it happens 'in no time'.

With the increase in internationalization, however, comes an increase in the relativity of the concept. The temporal poles of the line, that is birth and extent of internationalization, are not clear. The latter pole has attracted some research attention, but the former has been taken more as a 'given', what it is not. It could be said that the real age of the firm determines its ability to change or behave in an innovative manner.

It is difficult to say at what point a firm fulfils the necessary qualifications to be classified as international or global, and it is easier to determine the time for the first export delivery (Hurmerinta-Peltomäki, 2001). This is why it is suggested that the acceleration of internationalization should be divided into different processes: the time until the first export delivery (export time lag) and the time after it (accelerating internationalization) (Autio et al., 2000). Further, reference was made earlier in this chapter to the founding or creation process of the firm, which takes months, if not years. In this context, the notion of the 'rapid internationalizer' is more flexible in concept and time horizon.

The variation in establishment mode allows for the possibility that a 'new' firm has a history (see Wiedersheim-Paul et al., 1978), which would essentially influence the interpretation of rapid internationalizers. This leads to the idea that a shortened time lag might be an indication of changing modes in a firm's establishment. Thus, rapid internationalizers, and especially Born Globals, partly reflect structural and not only functional changes. This possibility has not been emphasized in studies of rapid internationalizers so far. Preece et al. (1999) noted that, conceptually at least, global diversity occurs over a longer time period than international intensity. Globally diverse firms are older, larger and have greater access to resources for international expansion. There appears to be a necessary critical mass in terms of international experience and business development that must occur prior to global diversification. This notion is supported by Madsen and Servais (1997), who suggest that routines and corporate governance structures as organization-related factors influence the propensity and development of Born Globals. When routines develop only over time, the possibility of past organizational or individual history always exists.

Size and international or global outlook could be called secondary, conceptual dimensions. Research suggests that an international outlook and experience help to explain rapid internationalization. In fact, these are factors that emerge from the basic description of 'rapid internationalizers'. Thus it could be said that there is a mixture of descriptive and explanatory factors. This indicates only the initial step in defining the phenomenon, and also suggests that researchers are aware of the need to pay more attention to the past of the firm, as well as to the individual running it. In other words, an organizational past or individual, pre-entrepreneurial experience might have existed before the founding of the new firm. This would be supported by a general demand for some 'internationalization' at home before venturing abroad (see Wiedersheim-Paul et al., 1978; Cavusgil and Nason, 1990; Andersen, 1991; Wright, 1993). Extra-regional expansion on the domestic market might be seen as a significant factor in preparing firms for exporting (Nordström, 1991; Brush, 1995). The past/experience dimension, on both an organizational as well as an individual level, should be taken into account in descriptions of current 'exceptionality' in a firm's internationalization.

Methodological Discussion

The research subject in this study, rapid internationalization, relates to time. This is why time also has an important role in research design. First, the definition of 'rapid internationalization' determines the timing of the study, and vice versa. There must be the right time distance from a firm's birth, and the extensiveness of internationalization must have reached the level of definition, before the phenomenon can be evaluated. There is no such thing as an intended or potential Born Global, and evaluation is based on past, actualized behaviour. This emphasis on behavioural data further increases the probability of more accurate responses. Further, it is not the date of a firm's birth, but rather the extensiveness (Born Globals and international new ventures) or time of export start (instant exporters), that determines the research timing.

Secondly, the research problem determines the timing of the study, and vice versa. Depending on the time of the evaluation, we either study (or have the opportunity to study) the driving forces behind rapid internationalizers, their characteristics, or the process of internationalization. The latter research theme also includes the implicit idea of success (for example Rennie, 1993). When the time from the event to the time of the study increases, the risk of losing validity also increases. This especially applies to the relevance of the respondent, accurate recall, and the coincidence of his or her current viewpoint and the actual situation in the past. The quality of the information, its accuracy and validity, are bound to the time of the study. If the aim is to look at the driving forces behind rapid internationalization, it is good to remember that innovative behaviour is related to changes in the firm's environment, and therefore to the specific time. Hence, a firm established in 1959 probably had a different set of driving forces than its younger counterpart set up in 1999.

Further, the closeness to the time when the firm fulfils the particular requirements of the rapid internationalizer must be taken into account. For instance, a recent export start ensures that information about the start of internationalization and the critical determinants thereof are still available. However, there should be a certain distance between the events and the reporting of them before what is/was really significant can be separated from what is/was not. The main point, then, is that, in order to maximize relevance, the interviewed entrepreneur should have been with the firm in question from the very beginning. When the research focus is on the process, longitudinal research methodology is preferred.

To conclude, it could be said that what is the innovative behaviour of today is the convention of tomorrow. Therefore, over the course of time, Born Globals and other rapid internationalizers will represent the dominant way of operating internationally – or globally.

NOTES

1. 'In practice the name of a firm may change, its managing personnel and its owners may change, the products it produces may change, its geographical location may change, its legal form may change, and still in the ordinary course of events we would consider it to be the same firm and could write the story of its "life".' (Penrose, 1980, p. 22)
2. From the beginning of 1996, the EU countries have used the following definitions for SMEs: the company employs less than 250 persons and the annual turnover is Euro 40 million at most, or the sum of the balance sheet is less than Euro 27 million. Further, the company is an independent unit, that is, other companies' ownership does not exceed 25 per cent (*Official Journal*, 1996, pp. 4–9). Firms which exceed these requirements are defined as large firms.

REFERENCES

Ahlström Söderling, R. (1999), 'Entrepreneurial spin-offs: do we understand them?', *44th ICSB World Conference*, 20–23 June, Naples, Italy. ICSB 152-1/152-19.

Andersen, O. (1991), 'Internasjonalisering i mindre bedrifter. Hva betyr bedriftenes beliggenhet?' (Internationalisation in Smaller Firms. What is the Importance of Firms' Location?), *NordREFO*, **1**, 39–53.

Autio, E., H.J. Sapienza and J.G. Almeida (2000), 'Effects of age at entry, knowledge intensity, and imitability on international growth', *Academy of Management Journal*, **43** (5), 909–24.

Bell, J. (1995), 'The internationalization of small computer software firms', *European Journal of Marketing*, **29** (8), 60–75.

Bettis, R.A. and C.K. Prahalad (1995), 'The dominant logic: retrospective and extension', *Strategic Management Journal*, **16** (1), 5–14.

Bhave, M.P. (1994), 'A process model of entrepreneurial venture creation', *Journal of Business Venturing*, **9** (3), 223–42.

Bloodgood, J.M. and H.J. Sapienza (1996), 'The internationalization of new high-potential US ventures: antecedents and outcomes', *Entrepreneurship Theory and Practice*, Summer, 61–76.

Brush, C.G. (1995), *Factors Motivating Small Companies to Internationalize: The Effect of Firm Age*, DBA, Boston University (degree date: 1992), Michigan: UMI Dissertation Services, A. Bell & Howell Company.

Bull, A.C., M. Pitt and J. Szarka (1991), 'Small firms and industrial districts, structural explanations of small firm viability in three countries', *Entrepreneurship and Regional Development*, **3** (1), 83–99.

Calder, B.J., L.W. Phillips and A.M. Tybout (1981), 'Designing research for application', *Journal of Consumer Research*, **8** (September), 197–207.

Cavusgil, S.T. and R.W. Nason (1990), 'Assessment of company readiness to export', in H.B. Thorelli and S.T. Cavusgil (eds), *International Marketing Strategy*, 3rd edn, Oxford: Pergamon Press, pp. 129–39.

Chaganti, R. and J.A. Schneer (1994), 'A study of the impact of owner's mode of entry on venture performance and management patterns', *Journal of Business Venturing*, **9** (3), 242–60.

Christensen, P.R. (1988), *Østjyllands Eksport. En undersøgelse af servicesektorens betydning for eksporterhvervene* (Exports of East Jutland. A Study on the Importance of Service Sector to Export Industry), Handelshøjskolen, Århus: Institut for udenrigshandel.

Concept, http://www. library.wwu.edu/cbl/ray/literacy/concept.htm 19 June 2001, page 1.

Coviello, N. and H. Munro (1997), 'Network relationships and the internationalisation process of small software firms', *International Business Review*, **6** (4), 361–86.

Denbigh, K.G. (1981), *Three Concepts of Time*, New York: Springer-Verlag.

Eisenhardt, K.M. (1989), 'Building theories from case study research', *Academy of Management Review*, **14** (4), 532–50.

Fletcher, D. (2000), 'Learning to "think global and act local": experiences from the small business sector', *Education and Training*, **42** (4/5), 211–19.

Gauzente, C. (2001), 'Why should time be considered in market orientation research?', *Academy of Marketing Science Review*, Available: http://www.amsreview.org/amsrev/forum/gauzente01-01.html. 8 pages. 18 January 2001.

Globalisation and Small and Medium Enterprises (SMEs) (1997), vol. 1, Synthesis Report, Paris: Organisation for Economic Co-operation and Development.

Golden, B.R. (1992), 'The past is the past – or is it? The use of retrospective accounts as indicators of past strategy', *Academy of Management Journal*, **35** (4), 848–60.

Halinen, A. (1998), 'Time and temporality in research design: a review of buyer–seller relationship models', in P. Naudé and P.W. Turnbull (eds), *Network Dynamics in International Marketing*, Oxford: Elsevier Science Ltd, pp. 112–39.

Hordes, M.W., J.A. Clancy and J. Baddaley (1995), 'A primer for global start-ups', *Academy of Management Executive*, **9** (2), 7–11.

Hurmerinta-Peltomäki, L. (1995), *Shortened Adoption Lag in Small Businesses' Internationalisation – Fact or Fiction?* Publications of the Turku School of Economics and Business Administration, Series D-6:1995, Turku.

Hurmerinta-Peltomäki, L. (2001), *Time and Internationalisation. The Shortened Adoption Lag in Small Business Internationalisation*, Turku School of Economics and Business Administration, Series A-7:2001, Turku.

Huuskonen, V. (1992), *Yrittäjäksi ryhtyminen. Teoreettinen viitekehys ja sen koettelu* (The Process of Becoming an Entrepreneur – A Theoretical Framework with Empirical Experiments), Publications of the Turku School of Economics and Business Administration, Series A-2:1992, Turku.

Hyvärinen, L. (1990), 'Innovativeness and its indicators in small and medium-sized industrial enterprises', *International Small Business Journal*, **9** (1), 64–79.

Jones, M.V. (1999), 'The internationalization of small high-technology firms', *Journal of International Marketing*, **7** (4), 15–41.

Jones, M.V. (2001), 'First steps in internationalisation. Concepts and evidence from a sample of small high-technology firms', *Journal of International Management*, **7** (3), 191–210.

Knight, G.A. (1997), 'Emerging paradigm for international marketing: the Born Global firm', a dissertation submitted to Michigan State University in partial fulfillment of the requirements for the degree of doctor of philosophy. Department of Marketing and Supply Chain Management, Michigan: UMI Company.

Knight, G.A. and S.T. Cavusgil (1996), 'The born global firm: a challenge to traditional internationalization theory', in S. Tamer Cavusgil and Tage Koed Madsen (eds), *Advances in International Marketing*, vol. 8, Greenwich, CT: JAI Press, pp. 11–26.

Koski, P. and R. Immonen (1990), *Henkilöyhtiöt yritysmuotona, Yhtiöoikeus ja verotus* (Partnerships as a Form of Business Enterprise), Helsinki: Lakimiesliiton Kustannus.

Langley, A. (1999), 'Strategies for theorizing from process data', *Academy of Management Review*, **24** (4), 691–710.

Lehtimäki, A. (1992), *Product-Market Strategy Changes, Internationalization and Performance of European Small and Medium-sized Enterprises*, Tampere University of Technology, Publications 105.

Leonidou, L.C. and C.S. Katsikeas (1996), 'Managerial influences on export behavior: conceptual, methodological and empirical insights', in J. Berács, A. Bauer and J. Simon (eds), *Marketing for an Expanding Europe, Proceedings of the 25th Annual Conference of the European Marketing Academy*, vol. 1, Budapest: Budapest University of Economic Sciences, pp. 695–714.

Lincoln, Y.S. and E.G. Guba (1985), *Naturalistic Inquiry*, Beverley Hills: SAGE Publications.

Lindqvist, M. (1991), *Infant Multinationals: The Internationalization of Young, Technology-Based Swedish Firms*, a dissertation for the Doctor's Degree in Business Administration, Stockholm School of Economics, Stockholm, Sweden: Institute of International Business.

Loveman, G. and W. Sengenberger (1991), 'The re-emergence of small-scale production: an international comparison', *Small Business Economics*, **3** (1), 1–37.

Luostarinen, R. (1979), *Internationalization of the Firm, An Empirical Study of the Internationalization of Firms with Small and Open Domestic Markets with Special Emphasis on Lateral Rigidity as a Behavioral Characteristic in Strategic Decision-making*, Acta Academiae Oeconomicae Helsingiensis, Series A:30, Helsinki School of Economics.

Madsen, T.K. and P. Servais (1997), 'The internationalization of Born Globals: an evolutionary process?', *International Business Review*, **6** (6), 561–83.

Mamis, R.A. (1989), 'Global start-up', *Inc.*, August, 38–47.

McAuley, A. (1999), 'Entrepreneurial instant exporters in the Scottish arts and crafts sector', *Journal of International Marketing*, **7** (4), 67–82.

McDougall, P.P., S. Shane and B.M. Oviatt (1994), 'Explaining the formation of international new ventures: the limits of theories from international business research', *Journal of Business Venturing*, **9** (6), 469–87.

McNaughton, R.B. (2000), ‘Determinants of time-span to foreign market entry’, *Journal of Euromarketing*, **9** (2), 99–112.

Menguzzato, M., M. Ripollés and M. Iborra (2000), ‘The internationalization of new ventures: the Spanish case’, paper presented at RENT XIV, The Conference on Research in Entrepreneurship and Small Business, Prague, Czech Republic.

Miettilä, A. and J.-Å. Törnroos (1993), *The Meaning of Time in the Study of Buyer–Seller Relationships*, Publications of the Turku School of Economics and Business Administration, Series Discussion and Working Papers 4:1993, Turku.

Moen, Ø. (2000), ‘SMEs and international marketing: investigating the differences in export strategy between firms of different size’, *Journal of Global Marketing*, **13** (4), 7–28.

Mustaniemi, T. (1996), *Yritysdemografia-analyysin käyttö aitojen yrityssyntymien selvittämisessä* – Sovellus vuonna 1990 aloittaneisiin vähittäiskaupan ja teollisuuden yrityksiin (The use of company demographic analysis in clarifying real company births. A study of retail and manufacturing firms established in 1990), Master’s thesis, Joensuu University.

Nordström, K.A. (1991), *The Internationalization Process of the Firm – Searching for New Patterns and Explanations*, a dissertation for the Doctors Degree in Business Administration, Stockholm School of Economics. Sweden.

Nummela N. and L. Hurmerinta-Peltomäki (2001), ‘Exploring the twilight zone – an attempt to define a small firm’, in *Conference Proceedings of RENT XV, Research in Entrepreneurship and Small Business*, vol. 1, Small Business Institute, Turku School of Economics and Business Administration, pp. 424–38.

Oesterle, M.-J. (1997), ‘Time-span until internationalization: foreign market entry as a built-in mechanism of innovations’, *Management International Review*, **37** (2), 125–49.

Official Journal of the European Communities (1996), Series Legislation, 39(L 107/4), Brussels.

Oviatt, B.M. and P.P. McDougall (1994), ‘Toward a theory of international new ventures’, *Journal of International Business Studies*, **25** (1), 45–64.

Oviatt, B.M. and P.P. McDougall (1995), ‘Global start-ups: entrepreneurs on a worldwide stage’, *Academy of Management Executive*, **9** (2), 30–43.

Oviatt, B.M. and P.P. McDougall (1997), ‘Challenges for internationalization process theory: the case of international new ventures’, *Management International Review*, **37** (2), 85–99.

Oviatt, B.M., P.P. McDougall, M. Simon and R.C. Shrader (1991), ‘A new venture without geographic limits: case history of a global start-up’, in N.C. Churchill, W.D. Bygrave, J.G. Covin, D.L. Sexton, D.P. Slevin, K.H. Vesper and W.E. Wetzel Jr. (eds), *Frontiers of Entrepreneurship Research 1991, Proceedings of the Eleventh Annual Babson College Entrepreneurship Research Conference,* Babson College, MA, pp. 64–77.

Parker, B. (1998), *Globalization and Business Practice. Managing Across Boundaries*, London: SAGE Publications.

Penrose, E.T. (1980), *The Theory of the Growth of the Firm*, 2nd edn (1st edn in 1959), Oxford: Basil Blackwell.

Pettigrew, A.M. (1997), ‘What is a processual analysis?’, *Scandinavian Journal of Management*, **13** (4), 337–48.

Prasad, S.B. (1999), ‘Globalization of smaller firms: field notes on processes’, *Small Business Economics*, **13** (1), 1–7.

Preece, S.B., G. Miles and M.C. Baetz (1999), ‘Explaining the international intensity and global diversity of early-stage technology-based firms', *Journal of Business Venturing*, **14** (3), 259–81.

Reid, S.D. (1981), 'The decision-maker and export entry and expansion', *Journal of International Business Studies*, **12** (2), 101–12.

Rennie, M.W. (1993), 'Global competitiveness: born global', *McKinsey Quarterly*, **4**, 45–52.

Reynolds, P. and B. Miller (1992), 'New firm gestation: conception, birth, and implications for research', *Journal of Business Venturing*, **7** (5), 405–17.

Romano, C.A. (1989), 'Research strategies for small business: a case study approach', *International Small Business Journal*, **7** (4), 35–43.

Saarenketo, S. and T.S. Äijö (2000), 'Born Globals – conceptualization and empirical illustrations', paper presented at the High Technology Small Firms Conference 2000, Enschede, the Netherlands.

Sera, K. (1992), 'Corporate globalisation: a new trend', *Academy of Management Executive*, **6** (1), 89–96.

Shrader, R., B.M. Oviatt and P.P. McDougall (2000), 'How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century', *Academy of Management Journal*, **43** (6), 1227–47.

Smith, Ken G., M.J. Gannon and H.J. Sapienza (1989), 'Selecting methodologies for entrepreneurial research: trade-offs and guidelines', *Entrepreneurship Theory and Practice*, **13** (Fall), 39–49.

Stearns, T.M. and G.E. Hills (1996), 'Entrepreneurship and new firm development: a definitional introduction', *Journal of Business Research*, **36** (1), 1–4.

Walsh, J.P. and G.R. Ungson (1991), 'Organizational memory', *Academy of Management Review*, **16** (1), 57–91.

Wiedersheim-Paul, F., H.C. Olson and L.S. Welch (1978), 'Pre-export activity: the first step in internationalization', *Journal of International Business Studies*, **9** (1), 47–58.

Wright, P.C. (1993), 'The personal and the personnel adjustments and costs to small businesses entering the international market place', *Journal of Small Business Management*, **31** (1), 83–93.

Yin, R.K. (1981), 'The case study crisis: some answers', *Administrative Science Quarterly*, **26** (1), 58–65.

4. Portfolio entrepreneurship: a description and its link to international entrepreneurship

Sara Carter, Monder Ram and Pavlos Dimitratos

INTRODUCTION

Recent interest in the 'portfolio entrepreneurship' notion has been particularly noticeable, culminating in the publication of a dedicated research monograph in the UK (Westhead and Wright, 1998) and numerous journal articles including a special edition of *Entrepreneurship: Theory and Practice* (Vol. 22). Portfolio entrepreneurship refers to the simultaneous ownership of several businesses (Carter and Ram, 2003). It appears to be a ubiquitous feature of especially the small-scale and family-dominated production. It has long been recognized that a considerable proportion of business founders have had previous experience of business ownership and that many own more than one firm (Oxenfeldt, 1943; Donkels et al., 1987; Birley and Westhead, 1993).

While it is accepted that business survival is positively correlated to growth (Reynolds, 1993), recent research suggests that small business owners approach the growth process in a variety of ways (Scott and Rosa, 1996; Westhead and Wright, 1999). The analysis of business ownership activities of individuals suggests that some entrepreneurs are associated with a large number of enterprises (Kolvereid and Bullvag, 1992; Rosa and Scott, 1999). Moreover, it has been suggested that, where individual firm growth is restricted, for example by either fiscal or sectoral considerations, multiple business ownership may be used as a mechanism for achieving growth through the development of a portfolio of entrepreneurial interests (MacMillan, 1986; Donkels et al., 1987; Scott and Rosa, 1996).

There appears to exist a broad consensus regarding the reasons for the apparent invisibility of portfolio entrepreneurship until relatively recently. Scott and Rosa (1996) argued that the use of the firm as the main unit of analysis in small enterprise research had obscured the relationship between individual entrepreneurs and the potential multiplicity of enterprises with which they may be associated. Further support for reconsidering the unit of analysis was provided by Westhead and Wright's (1999, p. 24) view that 'the entrepreneur rather than the "individual" business should become the unit of policy focus (and analysis)'.

This chapter presents an overview of the literature, particularly on small firms, that focuses on portfolio entrepreneurship. The objectives are to describe portfolio entrepreneurship, explore its pervasiveness, dynamics and motivations behind it. Moreover, this chapter seeks to provide an overview of how portfolio entrepreneurship can be related to international entrepreneurship and why it is worth considering the two notions holistically.

This chapter is organized as follows. The second section elaborates on the prevalence of portfolio entrepreneurship by exploring studies from different research areas. The third section outlines the process and motives behind portfolio entrepreneurship. The fourth section discusses the association between portfolio and international entrepreneurship by resorting to the notion of growth strategies that the firm can pursue. The concluding section provides a synopsis along with some suggestions for further research.

THE OCCURRENCE OF PORTFOLIO ENTREPRENEURSHIP

The incidence of previous business ownership has been noted in almost every empirical investigation of entrepreneurship, from historical accounts of nineteenth-century petty bourgeois groups to more contemporary analyses of the small business sector (cf. Crossick, 1984; Faure, 1984; Jeremy, 1984; Storey, 1994). However, the evidence regarding the incidence of portfolio entrepreneurship is diverse. The reported incidence has varied from 12 per cent of firms across a broad range of sectors (Westhead and Wright, 1998), 21 per cent of business-owners in agriculture (Carter, 1998), to 'about one-fifth of *all* business founders and about one-third to four-fifths of the founders of limited [i.e. incorporated] companies' (Rosa and Scott, 1999, p. 33).

In a detailed analysis of gender and business performance, Rosa and Hamilton (1994) reported significantly different rates of portfolio entrepreneurship by gender (18.4 per cent males and 8.9 per cent females) and some variability by sector. Similarly distinctive results have been noted among ethnic minority groups in the UK. Aldrich (1983), for example, found that portfolio entrepreneurship was more prevalent among the Indian Punjabi Sikh community in the UK, 38 per cent of whom owned a portfolio of enterprises, compared with 20 per cent of the total sample comprised a range of ethnic minority and white business owners.

Insights from other disciplines beyond small business research reveal that portfolio entrepreneurship is, and always has been, a ubiquitous element of particularly small-scale production. While the terminology used within different disciplines varies substantially, all describe the core activity of portfolio entrepreneurship as an individual(s) simultaneously owning and engaging in a portfolio of entrepreneurial interests. Within the fields of anthropology (see Greenfield et al., 1979) and economic sociology (notably, Granovetter, 1995), scholars have remarked upon the prevalence of multiple business ownership, particularly in developing economies. For instance, Long (1979) described instances of small-scale entrepreneurs and traders in rural Peru in the late 1970s, who frequently diversified their economic activities to cover both production and distribution functions.

Also, agricultural economists and sociologists have developed an extensive and sophisticated research literature investigating the phenomenon (Hill, 1982; Gasson et al., 1988; Fuller, 1990; Bryden et al., 1992). The activities that are now described as portfolio entrepreneurship by small business researchers have been variously conceptualized within the farming sector as ‘part-time farming’, ‘multiple job holding farm households’, ‘other gainful activities incorporating on-farm and off-farm diversification’ and most recently as ‘pluriactivity’ (Fuller, 1983; Gasson, 1991; Lund, 1991; Bryden et al., 1992). It is now recognized that portfolio entrepreneurship is a widespread feature of the farming sector, apparent in all farm sizes, from the smallest family farms to the largest industrial agricultural enterprises (Bouquet, 1985; Friedmann, 1986; Gasson et al., 1988; McInerney and Turner, 1991).

However, portfolio entrepreneurship is not only a feature of the contemporary farm sector. Agricultural historians have noted that portfolio entrepreneurship approaches have always been used. Friedmann (1986, p. 43), for example, describing the development of agriculture in the late medieval period, stated that ‘proto-industry, often combined with agriculture, was a widespread and long-lived aspect of the formative period of capitalism’. Recent research suggests that, as successive family generations inherit the farmland and occupation, so they also inherit the tradition of engagement in alternative income-generating activities, although the form these take will vary according to the business context and current market opportunities (Bryden et al., 1992).

THE DYNAMICS AND MOTIVATION FOR PORTFOLIO ENTREPRENEURSHIP

The way in which the process of multiple business ownership is actually advanced is another issue that has eluded the extant discourse in the literature

(Carter and Ram, 2003). For family-dominated enterprises, a key element of the portfolio dynamics is likely to derive from the resources immediately available to the family. A specific advantage of small, family-dominated firms is the ability to vary the flow of capital, labour and other resources as and when conditions dictate. This advantage is seen particularly during unfavourable economic conditions. Profitability, for example, is not necessarily a condition for continuation in family enterprises. Similarly, personal consumption, unlike wages, can be adjusted to suit prevailing conditions. This interaction between household and business gives a specific dynamic to family enterprises. Portfolio ownership approaches can be seen both as a strategy for family survival through the introduction of alternative income sources, and as Ram (1994) and Mulholland (1997) both found, as a structural regulator to accommodate business succession.

In Mulholland's (1997) study, the success of business families was attributed to a combination of entrepreneurial qualities. 'Enabling resources' included a background, expertise and connections in business and a profound market awareness, coupled with the need to integrate educated 'male family members' into the enterprise (Mulholland, 1997, p. 695). As family members join the business, the firm partially fragments to accommodate their individual needs and expectations for business autonomy and control. Thus, while the need to provide employment for male members of a family may be a key motivation to implement a portfolio entrepreneurship strategy, it also informs the portfolio dynamics.

While there has been little investigation of how portfolio entrepreneurship strategies are undertaken, it is likely that the utilization of social networks is also critical (Long, 1979; Carter and Ram, 2003). Carter and Ram argue that future studies of portfolio entrepreneurship should examine the continuous development of professional and business networks, and the impact these relationships have on the portfolio approach. The same authors also suggest that future studies should investigate the use of familial and affinal relationships, and in what ways these support portfolio entrepreneurship approaches.

The incentives for developing portfolio entrepreneurship activities can be quite diverse. They range from entrepreneurs who invest in several sectors at once and who are hence able to move their capital between various enterprises as the market conditions require; to small-scale traders who diversify their economic activities to cover both productive and distributive functions; to the only survival strategy available to marginal businesses. Much of the wider literature also highlights the importance of the business-owning family in the decision to engage in portfolio strategies. The circumstances in which family businesses may decide to engage in portfolio approaches include: the development of opportunities for offspring or wider family members; the division of the business to accommodate the succession of multiple siblings;

and the search for alternative income opportunities when the core business faces unfavourable market conditions.

Mulholland's (1997) study of successful, middle-class business families provides an interesting case of entrepreneurs who invest in various sectors, moving capital between enterprises as conditions require. The study examines the entrepreneurial, managerial and preservation strategies characterizing successful family businesses, drawn from majority white and minority ethnic communities. Interestingly, Mulholland's sample of 70 family businesses contains 15 businesses that diversified into a wide range of activities. In one of these cases, owned by an ethnic minority family, the expansion of the business coincided with the incorporation of the founder's five siblings. Mulholland (1997, p. 695) argues that the employment of male siblings is consistent with the management practices characteristic of industrial family capitalism, 'providing career paths, while also safeguarding against labour market discrimination' that ethnic minorities potentially face.

An even sharper illustration of the rationale for portfolio entrepreneurship in middle-class settings is provided by Ram's (1994) ethnography of employment relations in small firms. During the course of the study, one of the three firms that were examined suddenly split into five separate companies. The need to accommodate seven male family members was the impetus for this. As one brother explained, 'The company was split not because there was any demand from the market for such a move, it was just to give them [the brothers] something to do' (Ram, 1994, p. 89).

As noted earlier, portfolio entrepreneurship is not necessarily a phenomenon confined to middle or professional classes. The wider literature highlights other contexts and very different motivations for engaging in portfolio entrepreneurship strategies. Small-scale traders can often diversify their economic activities in order to make a living in highly risky settings. Kibria (1994) provides an insight into this process in her ethnographic study of Vietnamese refugees, who had recently arrived in Philadelphia. The study shows that Vietnamese-refugee households that were most heterogeneous in age and gender composition were often well placed to gather a variety of resources from diverse social and economic arenas. This 'patchworking' strategy mitigated the instability and scarcity of available resources (Kibria, 1994, p. 82). Ram et al.'s (2000) analysis of the highly competitive ethnic minority restaurant sector in the UK provides similar illustrations of patchworking and highlights the widespread utilization of portfolio approaches as a strategy for economic survival.

Premised in the belief that previous business experience gives greater knowledge and insight into enterprise ownership, other studies viewed the importance of owning a multiplicity of enterprises (MacMillan and Katz, 1992) in terms of the risk reduction it offered in starting subsequent ventures. Influenced by Scott and Rosa's (1996) seminal paper, numerous studies discuss more strategic motives and conceptualize portfolio entrepreneurship as a lateral growth strategy (Carter, 1998; Rosa and Scott, 1999; Westhead and Wright, 1999).

GROWTH STRATEGIES, PORTFOLIO AND INTERNATIONAL ENTREPRENEURSHIP

Although as discussed the motives behind portfolio entrepreneurship can often be of a rather haphazard nature, it would be interesting and useful to link portfolio entrepreneurship to the notion of growth strategies traditionally explored in strategic management studies. Ansoff's (1957) product–market expansion grid represents a well-known tool that would aid the purpose of this discussion. His framework consists of four cells corresponding to four respective growth strategies that the firm may pursue: the firm can seek to gain additional market share with its current products in its current markets (market penetration strategy); develop new markets for its current products (market development strategy); develop new products of possible interest to its current markets (product development strategy); and develop new products for new markets (diversification strategy).

Portfolio entrepreneurship can be associated with a product development or a diversification strategy. A farmer that chooses to enter the fishing business in order to sell also fish to its current customers provides a new product offering to its existing market, and thus implements a product development strategy. The owner of a small grocery store who decides to actively pursue his hobby of growing vineyards and also sell wine to an unknown niche market effectively implements a diversification strategy. In essence, portfolio entrepreneurship refers to that value-generating behaviour that seeks to identify and exploit opportunities through the offering of new products to the current or new markets of the firm.

McDougall (1989) appeared to be the first to use the term 'international entrepreneurship' referring to the development of new ventures that from their inception go abroad. Ever since that time this area has drawn an increasing extent of attention. There seems to be a consensus that international entrepreneurship refers to the innovative, risk-taking and proactive behaviour of the firm in international markets (McDougall and Oviatt, 2000; Zahra and Garvis, 2000). International entrepreneurship lies at the crossroads of internationalization and entrepreneurship, and hence, all entrepreneurial activities of the firm in the international marketplace can be categorized under the international entrepreneurship umbrella.

It would be again useful to link international entrepreneurship to Ansoff's (1957) product–market expansion grid. International entrepreneurship can be associated with a market development or a diversification strategy. A software firm that expands in the international marketplace to sell its existing products implements a market development strategy. When this firm expands abroad with a new software product offering that is totally tailor-made to the needs of the foreign client, it implements a diversification strategy. In effect, international entrepreneurship refers to that value-generating behaviour that seeks to identify and exploit opportunities through the offering of current or new products to the foreign markets of the firm.

Taking all these into consideration, it appears that portfolio and international entrepreneurship are different facets of the entrepreneurial behaviour of the firm that aims at rent generation through the exploitation of market opportunities in the domestic and international marketplace (cf. Brown et al., 2001; Zahra et al., 2001). Viewed in this light, the two activities are aspects of the overall entrepreneurial behaviour which searches for effective growth strategies for the firm. Therefore, it is surprising why the two activities, which have very recently captured a growing degree of attention in the entrepreneurship and small business literature, have not been examined in combination in comprehensive research studies.

The examination of the growth of the firm through solely portfolio or solely international entrepreneurial activities disregards the fact that organizational development is a holistic process involving a variety of interrelated enterprise activities, such as sourcing arrangements and new product development (Young, 1987; Jones, 1999). It seems that future research examinations should pay special attention to the interaction of these activities. This appears to hold particularly in small firms that have restricted resources and, thus, may forego one growth strategy for another. Firms are usually confronted with a strategic choice with regard to the allocation of resources between domestic and foreign operations (Dalli, 1994; Leonidou and Katsikeas, 1996).

Such comprehensive examinations can also reveal which of the various growth strategies embraced by portfolio and international entrepreneurship may offer the fastest development and most profitable opportunities to organizational growth. For instance, challenging common beliefs, Bonaccorsi (1992) suggested that exporting (and, therefore, related international entrepreneurial activities) may stand for the easiest way to grow for Italian firms compared with regional expansion, horizontal growth and product diversification (and, therefore, related portfolio entrepreneurial activities). It may be that either portfolio or international entrepreneurship represents the easiest and most profitable route to enterprise growth under specific conditions, yet this statement merits empirical investigation.

CONCLUSION

This chapter has investigated the notion of portfolio entrepreneurship and its association with international entrepreneurship. Portfolio entrepreneurship takes different forms and performs different functions for firms, especially the smaller ones. It has been encountered in various disciplines, such as anthropology, economic sociology and agricultural economics. The dynamics of portfolio entrepreneurship largely are associated with family resources and relationships as well as broader social network associations. The motivations behind portfolio entrepreneurship have to do to a significant extent with family and community relationships but also with more strategic considerations, such as risk reduction and enterprise growth.

Thus, portfolio entrepreneurship offers the firm growth opportunities and may refer to either a product development or a diversification strategy. Similarly, in as much as international entrepreneurship is synonymous to entrepreneurial activities in the international marketplace, it can refer to either a market development or a diversification strategy. Both portfolio and international entrepreneurship would significantly benefit if they are examined in combination in future studies.

Moreover, such comprehensive examinations can also elaborate on the process and the context encompassing the portfolio and international entrepreneurship notions. Carter and Ram (2003) argue that the examination of portfolio enterprises necessitates also a 'portfolio approach', with researchers concerned with addressing each aspect of the organization (firm, individual and family) similarly. The family circumstances and enterprise networks are important aspects, and should be included in a research investigation in order to provide a holistic picture of portfolio entrepreneurship. In a related vein, researchers (Dimitratos and Plakoyiannaki, 2001; Zahra and George, 2002) suggest that international entrepreneurship constitutes a complex process involving a large number of organizational participants. Both portfolio and international entrepreneurship do not take place in a vacuum but in dynamic and multifaceted organizational settings encompassing different levels of actors. Examination of related processual and contextual aspects is key in order to comprehend the entrepreneurial behaviour of the firm in the domestic and international marketplace.

REFERENCES

Aldrich, H. (1983), 'From periphery to peripheral: the South Asian petite bourgeoisie in England', in I. Simpson and R. Simpson (eds), *Research in the Sociology of Work*, 2, Greenwich, CT: JAI Press, pp. 1–32.

Ansoff, H.I. (1957), 'Strategies for diversification', *Harvard Business Review*, **35** (5), 113–24.

Birley, S. and P. Westhead (1993), 'A comparison of new businesses established by "Novice" and "Habitual" founders in Great Britain', *International Small Business Journal*, **12** (1), 38–60.

Bonaccorsi, A. (1992), 'On the relationship between firm size and export intensity', *Journal of International Business Studies*, **23**, 605–35.

Bouquet, M. (1985), *Family, Servants and Visitors: The Farm Household in Nineteenth and Twentieth Century Devon*, Norwich: Geo Books.

Brown, T.E., P. Davidsson and J. Wiklund (2001), 'An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior', *Strategic Management Journal*, **22**, 953–68.

Bryden, J.M., C. Bell, J. Gilliatt, E. Hawkins and N. MacKinnon (1992), *Farm Household Adjustment in Western Europe 1987–1991*, Nethy Bridge: Arkleton Trust (Research).

Carter, S. (1998), 'Portfolio entrepreneurship in the farm sector: indigenous growth in rural areas?', *Entrepreneurship and Regional Development*, **10** (1), 17–32.

Carter, S. and M. Ram (2003), 'Reassessing portfolio entrepreneurship: towards a multi-disciplinary approach', *Small Business Economics*, **21** (4), 371–80.

Crossick, G. (1984), 'The petite bourgeoisie in nineteenth century Britain: the urban and liberal case', in G. Crossick and H. Haupt (eds), *Shopkeepers and Master Artisans in Nineteenth Century Europe*, London: Methuen, pp. 62–94.

Dalli, D. (1994), 'The exporting process: the evolution of small and medium-sized firms toward internationalization', in C.N. Axinn (ed.), *Advances in International Marketing*, **6**, Greenwich, CN: JAI Press, pp. 85–110.

Dimitratos, P. and E. Plakoyiannaki (2001), 'The dimensions of an international entrepreneurial culture: on the theoretical underpinnings of international entrepreneurship', *4th McGill Conference Proceedings*, 1, Glasgow: University of Strathclyde, pp. 354–83.

Donkels, R., B. Dupont and P. Michel (1987), 'Multiple business starters. Who? Why? What?', *Journal of Small Business and Entrepreneurship*, **5**, 48–63.

Faure, A. (1984), 'The grocery trade in nineteenth century Paris: a fragmented corporation', in G. Crossick and H. Haupt (eds), *Shopkeepers and Master Artisans in Nineteenth Century Europe*, London: Methuen, pp. 155–74.

Friedmann, H. (1986), 'Family enterprise in agriculture: structural limits and political possibilities', in G. Cox, P. Lowe and M. Winter (eds), *Agriculture: People and Policies*, London: Allen & Unwin, pp. 41–60.

Fuller, A. (1983), 'Part-time farming and the farm family', *Sociologia Ruralis*, **23** (1), 5–10.

Fuller, A. (1990), 'From part-time farming to pluriactivity: a decade of change in rural Europe', *Journal of Rural Studies*, **6** (4), 361–73.

Gasson, R. (1991), 'Part-time farming: a note on definitions – comment', *Journal of Agricultural Economics*, **42** (2), 200–201.

Gasson, R., G. Crow, A. Errington, J. Hutson, T. Marsden and D.M. Winter (1988), 'The farm as a family business: a review', *Journal of Agricultural Economics*, **39** (1), 1–41.

Granovetter, M. (1995), 'The economic sociology of firms and entrepreneurs', in A. Portes (ed.), *The Economic Sociology of Immigration*, New York: Sage, pp. 128–65.

Greenfield, S.M., A. Strickon, R.T. Aubey and M. Rothstein (1979), 'Studies in entrepreneurial behaviour', in S. Greenfield, A. Strickon and R. Aubey (eds), *Entrepreneurs in Cultural Context*, Albuquerque, NM: University of New Mexico Press, pp. 3–20.

Hill, B. (1982), 'Concepts and measurement of the incomes, wealth and economic well-being of farmers', *Journal of Agricultural Economics*, **33** (3), 311–24.

Jeremy, D. (1984), 'Anatomy of the British business elite', *Business History*, **26** (1), 1–23.

Jones, M.V. (1999), 'The internationalization of small high-technology firms', *Journal of International Marketing*, **7** (4), 15–41.

Kibria, N. (1994), 'Household structure and family ideologies: the dynamics of immigrant economic adaptation among Vietnamese refugees', *Social Problems*, **41** (1), 81–96.

Kolvereid, L. and E. Bullvag (1992), 'Novices versus experienced business founders: an exploratory investigation', in S. Birley, I. MacMillan and S. Subramony (eds), *Entrepreneurship Research: Global Perspectives*, London: North-Holland, pp. 275–85.

Leonidou, L.C. and C.S. Katsikeas (1996), 'The export development process: an integrative review of empirical models', *Journal of International Business Studies*, **27**, 517–51.

Long, N. (1979), 'Multiple enterprise in the Central Highlands of Peru', in S. Greenfield, A. Strickon and R. Aubey (eds), *Entrepreneurs in Cultural Context*, Albuquerque, NM: University of New Mexico Press, pp. 123–58.

Lund, P.J. (1991), 'Part-time farming: a note on definitions', *Journal of Agricultural Economics*, **42** (2), 196–9.

MacMillan, I.C. (1986), 'To really learn about entrepreneurship, let's study habitual entrepreneurs', *Journal of Business Venturing*, **1**, 241–3.

MacMillan, I.C. and J.A. Katz (1992), 'Idiosyncratic milieus of entrepreneurial research: the need for comparative theories', *Journal of Business Venturing*, **7**, 1–8.

McDougall, P.P. (1989), 'International versus domestic entrepreneurship: new venture strategic behavior and industry structure', *Journal of Business Venturing*, **4**, 387–400.

McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43**, 902–8.

McInerney, J.P. and M.M. Turner (1991), 'Farm diversification: enterprises and incomes', *Farm Management*, **7** (11), 525–34.

Mulholland, K. (1997), 'The family enterprise and business strategies', *Work, Employment and Society*, **11** (4), 685–711.

Oxenfeldt, A.R. (1943), *New Firms and Free Enterprise: Pre-war and Post-war Aspects*, Washington, DC: American Council on Public Affairs.

Ram, M. (1994), *Managing to Survive: Working Lives in Small Firms*, Oxford: Blackwell.

Ram, M., T. Abbas, T. Jones, B. Sanghera and G. Barlow (2000), *Ethnic Minority Business Development in an Inner-City Context*, End of Award Report, Swindon: Economic and Social Research Council.

Reynolds, P.D. (1993), 'High performance entrepreneurship: what makes it different?', *Frontiers of Entrepreneurship Research*, Wellesley, MA: Babson College, pp. 88–101.

Rosa, P. and D. Hamilton (1994), 'Gender and ownership in UK small firms', *Entrepreneurship: Theory and Practice*, **18**, 11–27.

Rosa, P. and M. Scott (1999), 'The prevalence of multiple owners and directors in the

SME sector: implications for our understanding of start-up and growth', *Entrepreneurship and Regional Development*, **11**, 21–37.
Scott, M. and P. Rosa (1996), 'Opinion: has firm level analysis reached its limits? Time for a rethink?', *International Small Business Journal*, **14**, 81–9.
Storey, D. (1994), *Understanding the Small Business Sector*, London: Routledge.
Westhead, P. and M. Wright (1998), 'Novice, serial and portfolio founders: are they different?', *Journal of Business Venturing*, **13**, 173–204.
Westhead, P. and M. Wright (1999), *Habitual Entrepreneurs and Business Angels*, ISBA Research Monograph No. 4, Leeds: Institute of Small Business Affairs.
Young, S. (1987), 'Business strategy and the internationalization of business: recent approaches', *Managerial and Decision Economics*, **8**, 31–40.
Zahra, S. and D.M. Garvis (2000), 'International corporate entrepreneurship and firm performance: the moderating effect of international environment hostility', *Journal of Business Venturing*, **15**, 469–92.
Zahra, S.A. and G. George (2002), 'International entrepreneurship: the current status of the field and future research agenda', in M. Hitt, D. Ireland, D. Sexton and M. Camp (eds), *Strategic Entrepreneurship: Creating an Integrated Mindset*, Oxford: Blackwell, pp. 255–8.
Zahra, S., J. Hayton, J. Marcel and H. O'Neill (2001), 'Fostering entrepreneurship during international expansion: managing key challenges', *European Management Journal*, **19**, 359–69.

PART III

The experiential emphasis in entrepreneurial internationalization

5. The export problems of internationalizing SMEs: some empirical evidence using a 'critical incident' technique

Fred Scharf, Jim Bell, Sharon Loane and Richard Fletcher

INTRODUCTION

One of the most frequently researched topics in the exporting literature is into the barriers and problems facing small internationalizing firms (see Miesenböck, 1988; Katsikeas, 1991; Leonidou, 1995, for comprehensive reviews of the literature). Typically and regardless of the location of the studies, most conclude that small firms face major problems in terms of the financial aspects of exporting (competitive pricing, delays in payment, foreign exchange risk, and so on). They also report difficulties in non-tariff barriers, import regulations, export documentation, obtaining suitable representation, modifying international product and/or communications strategies and overcoming cultural differences (Rabino, 1980; Bodur, 1986; Karafagliou, 1986; Bannock and Partners, 1987; Morgan, 1997; Crick and Chaudhry, 2000a; da Silva and da Rocha, 2001).

However, the dominant use of positivist methodologies, a prevalence of single-country investigations and a general absence of qualitative triangulation mean that while the problems may have been adequately quantified, there is little real understanding of their context and nature, or of the underlying issues that need to be addressed. Thus, ensuing recommendations are often little more than vague attempts to provide guidance to small-firm decision-makers on alleviating current or anticipated export problems. They also tend to lack the depth of detail required by policy-makers in order to provide appropriate, adequate and timely support to such firms. Given these limitations, Easterby-Smith et al. (1994) suggest that mixed methodologies involving qualitative approaches can usefully be employed in conjunction with business surveys in order to triangulate quantitative data.

A compelling argument for adopting much more qualitative approaches in such research, is that these provide richer explanatory data on the nature of the issues under investigation (Van Maanen, 1979; Yin, 1994; Carson and Coviello, 1996; Carson et al., 2000). In consequence, the present study adopts a qualitative ‘critical incident’ approach involving in-depth interviews with CEOs or key decision-makers of firms with fewer than 250 employees. These interviews explored a number of issues including: how and why the export problem occurred, how and whether it was successfully resolved and what were the direct and longer-term opportunity costs. In addition, respondents were asked to reflect upon lessons learned from the incident and the advice they would give other firms in similar circumstances. The present contribution reports on the results from the first wave of over 60 interviews conducted in Ireland. This enquiry is part of a larger study undertaken in collaboration with researchers in Australia, Canada, New Zealand and the United States.

SYNTHESIS AND CRITIQUE OF THE LITERATURE ON EXPORT PROBLEMS

In common with much of the research in the exporting field, enquiry into export problems can be characterized as ethnocentric in nature, with many previous studies focusing on the difficulties facing firms located in a particular market, typically the United States. Research on the topic also remains fragmented because of the autonomous nature of many studies, which has resulted in conflicting and often contradictory findings due to differences in context or focus and variations in methodological approaches. Nevertheless, a number of attempts have been made to synthesize the literature on export problems. For example, Bilkey (1978) reviewed the problems identified in earlier US studies. Despite differences between studies on the relative importance and strength of particular problems, he concluded that – in rank order – lack of finances, foreign government restrictions, ignorance of foreign sales practices, inadequate distribution and the lack of foreign market contacts were the most frequent serious obstacles to exporting.

During the late 1970s and early 1980s, although research was being undertaken in the UK (Pointon, 1978; Canon and Willis, 1981; Piercy, 1981), the bulk of the research into export problems emanated from the United States. While the majority of these investigations identified many common problems, their strength and importance varied from study to study. During this period a number of enquiries sought to explore the topic by adopting different foci in order to gain broader perspectives. Rabino’s (1980) study of 46 high-technology firms in New England is most interesting insofar as it identified not only the actual problems facing exporting firms, but also their perceptions as to why their peers did not export. Again, five major problems were cited in order of importance: paperwork, selecting a reliable distributor, non-tariff barriers, honouring letters of credit and communications with customers. Reasons suggested as to why other firms did not export included the lack of exposure to other cultures, a large domestic market, lack of staff time, paperwork and different quality or safety standards.

Tesar and Tarleton (1982) adopted a comparative approach in Virginia to replicate the Wisconsin studies conducted by Tesar (1974) and Bilkey and Tesar (1977). A major feature of all of these enquiries was that they differentiated between problems associated with export initiation and those that were of an ongoing nature. In the case of the former, identifying overseas opportunities, export documentation and the cost of initiating exporting were the top three problems, with no difference in ranking. Ongoing problems included obtaining suitable representation, servicing foreign markets, differences in standards and consumer habits, obtaining payment and – again – the high costs of doing business abroad. There were minor variations by location in the ranking of the last three of these variables.

Albaum (1983) surveyed 86 exporters in Oregon, Washington and Idaho that had less than 500 employees. He found that documentation requirements, a lack of customer leads, competing with foreign suppliers, identifying distributors, locating suppliers and financing export sales were significant problems. This study was particularly critical of the support provided by the US Department of Commerce, concluding that much of the assistance available was of little use to smaller firms.

Czinkota and Johnston's (1983) study of 237 small and medium-sized US manufacturers of avionics, instruments and material handling equipment identified problems in communications with clients as the major issue. Inadequate sales effort, intelligence gathering and after-sales service were also problematic. Significantly, only minor variations in response existed between firms when classified by export experience or company size.

Czinkota and Ricks (1983) recognized that certain issues might present frequent, but not serious, problems, and vice versa, and attempted a more complex analysis of the same data, using a multi-dimensional approach to explore the relative importance of problems, their intensity and the potential for improvement. They found that product adaptation issues were of greatest importance to firms and caused widespread concern. However, they did not pose as severe problems as communications with customers. Nor were they regarded as the most urgent issue firms would address in order to improve their performance, but rather, that greater sales effort was the top priority.

Cavusgil's (1984) study, based on in-depth interviews with 70 mid-western US firms, classified firms by export ratio as 'experimental', 'active' or 'committed' exporters (where exports as a proportion of total sales were less than 10 per cent, 10–20 per cent and more than 20 per cent respectively). Although the rank order of problems varied slightly between groups, exchange rate risks, working with foreign distributors and differences in the market environment were all significant.

Kaynak and Kothari (1984) undertook a cross-national study of 484 firms in Texas and Nova Scotia, comparing responses of exporters and non-exporters. Although some differences existed between the problems facing American and Canadian firms, the reasons for not exporting were most illuminating. In particular, the large size of the domestic market appeared to exert a significant negative influence on US firms, who also seemed to be rather more concerned about the 'complexities' of foreign markets.

Individually, each of these studies made an important contribution in terms of exploring issues such as differences in perceptions of problems among exporting firms versus non-exporters or between firms according to export experience and orientation. Nevertheless, because of the particular foci and methodological parameters adopted, these and other studies also collectively contributed to obfuscating the overall picture. In reviewing the literature, Bodur (1986) and Katsikeas (1991) were both highly critical of research efforts in the area. They contended that many studies lacked appropriate research frameworks, were poorly operationalized, and were methodologically unsound due to inattention to reliability and validity, sampling and measurement procedures, and so forth. Moreover, they argue that these limitations contribute to diverse conclusions. In this context, differences identified in regard to the nature, strength and ranking of export problems often reflect the size and resources of responding firms, domestic and target market environments, sector- or industry-specific issues, and other contextual factors. Nevertheless, while the precise nature and intensity of export problems varied from study to study, Katsikeas concurred with Bodur's (1986) assertion that:

> One common denominator … is the indication that most of these problems are infrastructural and institutional rather than marketing management orientated. Documentary requirements and paperwork, host and home government regulations, insufficient financing and lack of foreign market information and contacts are the most often cited problems in exporting. It is found that the nature of these problems does not vary across firms when 'annual sales' or 'export experience level' are the classifying criteria.

A second major criticism by these authors was the extent to which studies emanating from the United States dominated the area, leading Katsikeas (1991) to conclude that:

> *prima facie* the findings of (export) obstacles perceived cannot be considered to represent the export behaviour of firms primarily based in countries other than the USA.

In consequence, these authors challenged researchers to broaden the geographic scope of such enquiry to locations other than the large advanced industrial economies and to design and implement cross-national and cross-sectional studies.

From the mid-1980s onwards, an increasing number of studies have emanated from other locations; for example, Bodur (1986) and Karafakioglu (1986) both studied the problems of Turkish exporters. Although they produced somewhat different findings, the lack of foreign market information, high production costs and low product quality all featured prominently in both studies. Moreover, the high cost of export credits reported by Bodur contributes to the lack of incentives identified by Karafakioglu.

Other research has focused on the export problems of indigenous firms in diverse countries such as Australia, Brazil, Singapore, Norway and Korea (Barrett and Wilkinson, 1985; Christiansen et al., 1987; Keng and Jiuan, 1989; Gripsrud, 1990; Weaver and Pak, 1990). These involved firms of different sizes in a variety of industry sectors, and findings revealed that, although their rankings were different, the range of problems were broadly similar, although Korean firms did not encounter problems with product quality issues. However, none of these involved cross-national enquiry.

At the same time studies continued to be undertaken outside the United States. For example, Bannock and Partners (1987) highlighted finance-related issues – notably, delays in payment, experienced by 26 per cent of firms – as the most serious problems facing smaller UK exporters. Obtaining market information (14 per cent), product suitability (14 per cent), export documentation (14 per cent) and securing good representation (10 per cent) were also problematic. The same study revealed that firms regarded finding the right agents or distributors the single most important factor in export success.

It is interesting to compare the Bannock study with a later one conducted by Price Waterhouse and the Confederation of British Industry (1995) in Northern Ireland. This study revealed that while financial-related problems were still high, accounting for almost 30 per cent of the export difficulties encountered by all respondents, problems with export documentation and paperwork are significantly lower (7.1 per cent). These findings suggest that the impact of European integration and the implementation of Single Administrative Documentation (SAD) procedures have had a positive impact on reducing such problems. It is also noteworthy that nearly a quarter of all Northern Ireland firms indicated that they did not experience any difficulties with any of the problems listed in the study.

In Germany, Dichtl et al. (1990) compared problems of exporters and non-exporters. An interesting feature of this study was the segmentation of the former into 'systematic' and 'occasional' exporters. Their findings indicate only minor variations among both sets of exporters in terms of problems relating to language skills, import regulations, distribution systems and personnel. However, the nature of problems perceived by non-exporters was significantly different. This highlights the difference between actual problems experienced by active exporters and those perceived – and possibly encountered – by non-exporters. For the latter, lack of financial and human resources presented significant threshold difficulties.

Leonidou (1995) conducted the most recent comprehensive review of the literature on export problems. This analysed the findings of 35 investigations in the area and concluded that no uniform pattern could be observed in the studies investigated, primarily due to the diversity of methodological parameters and other situation specific factors. He concluded that research on the topic remained unsophisticated, conceptually naive and flawed in certain respects. For instance, some studies fail to differentiate between the actual problems faced by exporters and perceived barriers or obstacles among non-exporters. In common with Katsikeas (1991), he observed that the impact of other export problems varied from study to study. Nevertheless, an aggregation of the empirical data from these studies suggested that a lack of information needed to select and analyse foreign markets was the single most inhibiting export barrier.

Morgan (1997) also provided a useful review of the extant literature on export stimuli and barriers. A valuable contribution from this synthesis is a proposed classificatory schema to advance empirical research. He classified export stimuli into four broad categories (internal-proactive, internal-reactive, external-proactive and external-reactive). Similarly, export barriers were classified into four categories as internal-domestic, internal-foreign, external-domestic and external-foreign. Most of the export problems discussed in the extant literature fit into this conceptualization.

Since the aforementioned reviews by Leonidou (1995) and Morgan (1997), the number of new studies that specifically address export problems has declined markedly. Nevertheless, the issue is often explored in enquiries focusing on areas such as export orientation and performance (Morgan, 1999; Bagchi-Sen, 1999), the impact of the Internet on small firm internationalization (Hamill and Gregory, 1997; Bennett, 1997) or perceived export barriers within particular trade areas (da Silva and da Rocha, 2001). Notwithstanding the limited number of enquiries, recent contributions provide additional perspectives and extend the geographical or sectoral scope of enquiry.

A cross-national study of the export problems of 98 small computer software firms in Finland, Norway and Ireland conducted by Bell (1997) revealed relatively few differences in the nature, strength and ranking of export problems by country of origin. Delays in payment, pricing competitively and obtaining export finance featured prominently in all markets but significantly, were not considered to be more than a 'minor problem'. Four important findings emerged from follow-up interviews with CEOs. First, that problems with 'communications with customers' related to the cost of personal visits rather than other communication issues. Second, that the specific problems facing knowledge- and service-intensive firms were different to those of more traditional firms. For example, physical distribution was not problematic, but protection of proprietary knowledge was a concern. Third, that some problems, such as foreign exchange volatility, were often of a temporary nature. Finally, that problems generally involved financial, rather than marketing-related issues.

Morgan and Katsikeas (1998) reported on the export problems experienced by small and medium-sized UK industrial manufacturers. Two main problem areas were identified: export market knowledge or communication gaps, and a lack of international competitiveness. These findings are supported by studies by Poh-Lin (2000) into global start-up exporting companies in the US, Crick (2002) into the decision of UK SMEs to discontinue exporting and Graham (1999) into the reluctance of Australian small firms to engage in export activity.

Crick and Chaudhry (2000b) investigated the perceived export barriers and assistance requirements of UK agricultural exporters. This study is important insofar as it demonstrated that the strength and importance of export problems varied within different sub-sectors of a particular industry. Consequently, the type of export assistance required also varied from one sub-sector to another. In common with Bell's (1997) research, this study employed mixed methodologies involving both a postal survey and in-depth interviews. Both of these studies challenged researchers to incorporate greater cross-national dimensions and embrace greater methodological pluralism in export enquiries, in order to seek adequate explanations for differences in firm behaviour in particular countries.

From the preceding discussion it can be seen that, despite a considerable volume of enquiry into export problems, extant research is limited in a number of important respects. Firstly, cross-national studies remain comparatively rare, as the majority of studies have been conducted in a single market, predominantly the United States. The extent to which the US literature continues to influence the debate continues to be a matter for concern. Secondly, differences in the nature, strength and ranking of export problems often reflect issues such as firm size, age and export experience, domestic and target market environments, sectoral or industry-specific issues, and other contextual factors. Thirdly, methodological weaknesses in previous enquiries, such as the use of different measurement parameters or classification criteria, contribute to contradictory or conflicting findings.

Finally, according to Kamath et al. (1986), the dominant use of positivist methodologies in export research has been a contributory factor in limiting our greater understanding of the topic. While such approaches have the capacity to quantify the phenomenon being investigated or to explore relationships between different variables, they are much more limited in their explanatory power of why and how export problems occur. Moreover, very little attention has been focused on the immediate and longer-term consequences of export problems, or how firms have attempted to overcome these problems. In addition, the common practice of presenting firms with lists of problems may lead them to rank ones they have not actually experienced to any great degree. A predilection for using scales, such as Likert scales, may also lead to a tendency to gravitate towards the centre (which is often taken by inexperienced respondents as a 'neutral' answer). Thus, data may actually be inaccurate and no amount of sophisticated statistical manipulation will rectify this. There is also a danger that enquiries seeking to test hypotheses on the basis of the results of previous enquiries might be constructed on foundations that may be methodologically suspect. Such endeavours may only serve to compound and embed these weaknesses by perpetuating inaccurate and/or misleading results and providing inappropriate conclusions and recommendations. In these circumstances alternative research approaches are clearly desirable and probably long overdue.

RESEARCH APPROACH AND FOCUS

Given the preceding discussion, the methodology adopted in the current research involves a case study approach using a 'critical incident' technique (Bitner et al., 1985). Teams of researchers in Australia, Canada, Ireland, New Zealand and the United States are conducting face-to-face in-depth interviews with the CEO or key decision-maker of small internationalizing firms (c. 40–60+ interviews in each market). The sample consists of firms with less than 250 employees and is cross-sectoral in nature.

The in-depth interviews consist of two distinct phases. In the first, a predesigned template is employed to accurately record data on firm characteristics (age, size, industry sector), international behaviour (length of time exporting, key markets, export intensity) and other background variables. This template was pre-tested with a number of firms in the different research locations to ensure that it was 'fit for the purpose' and that it provided consistency in data collection procedures. In the second phase, a semi-structured approach is employed to focus on a specific 'critical incident' identified by the respondent.

The 'critical incident' explored is the firm's 'worst nightmare' in an exporting situation. Respondents are asked to 'tell the story' of the incident, its nature and consequences (Eisenhardt, 1991). They are probed on when, how and why the incident occurred, whether and how it was satisfactorily resolved, and what the immediate financial costs and the longer-term opportunity costs were. Interviewees are also asked to reflect on the specific event and advise other firms on how to avoid or rectify a similar problem. Respondents are requested to provide information about the firm at the time of the incident (age, size, turnover, export or total sales turnover and export experience) in order to estimate just how critical the incident was at the time and in terms of the firm's overall international development.

Over 60 in-depth interviews have been conducted in Ireland (North and South), an initial analysis of the Irish data has been undertaken and preliminary findings are presented hereafter. Once similar procedures are completed in each of the other research locations, a cross-national analysis will be undertaken to compare and discuss the overall findings. The overall objective of the study is to provide richer insights into both the nature and resolution of export problems that will inform practitioners and influence public policy-makers.

FINDINGS

Demographic Profile of the Irish Sample

The salient characteristics of the Irish sample are shown in Table 5.1. As can be seen, most of the firms (85 per cent) had been established for at least ten years. Nevertheless, they tended to be small firms: half had fewer than 50 employees and nearly 70 per cent had less than 100. Over 30 per cent of firms had an annual turnover of less than £1 million and over 75 per cent of below £5 million. Three-quarters of the firms had at least ten years' international experience and half had initiated exports from inception or within two to five years of start-up. Almost half of the firms had export ratios of more than 50 per cent of total sales. A quarter of the firms sold in only one export market and nearly half had sales in two to five markets.

The major market for the Northern Irish firms was the Republic of Ireland, while the UK (including Northern Ireland) was a major export destination for Irish firms. Other important markets were the United States, Germany and Holland, but firms also exported to the rest of Europe, Scandinavian countries and the Middle and Far East. A number of industry sectors were represented,

Table 5.1 Salient firm characteristics

Characteristic	**Band**	**%**[2] *(n = 68)*
Age of firm	<5 years	6
	5–9 years	9
	10–19 years	32
	>20 years	53
Size of firm	<20 employees	28
	20–49 employees	22
	50–99 employees	19
	100–250 employees	31
Turnover (£)	<1.0m	31
	1.1m–1.9m	9
	2–4.9m	37
	5–10m	–
	>10m	15
	not disclosed	9
International experience	<5 years	9
	5–9 years	15
	10–19 years	53
	>20 years	23
Pace of internationalization (speed into export markets)	From inception	41
	2–5 years after start-up	9
	6–19 years after start-up	32
	>20 years after start-up	18
Export ratio Export sales as % of turnover	<20%	22
	20–49%	29
	50–69%	24
	>70%	25
Number of export markets	One market	25
	2–5	46
	6–10	23
	>10	6

Table 5.1 continued

Characteristic	**Band**		**%**[2] *(n = 68)*
Top export markets[1] **(rank order)**	Ireland (NI firms only)	**(1)**	44
	UK (Irish firms only)	**(2=)**	18
	USA	**(2=)**	18
	Germany	**(4)**	9
	Holland	**(5)**	6
Industry/sector	Clothing & textiles		13
	Construction & related		9
	Electronics & engineering		16
	Food & drink		37
	Giftware		7
	Services		6
	Other		12

Notes:
1. Other markets include Australia, Belgium, Canada, France, Italy, Japan, Middle East, Spain, Switzerland and Scandinavian countries
2. % rounded up

including food and drink (37 per cent), electronics and electrical or mechanical engineering (16 per cent) and clothing and textiles (13 per cent). The ‘service’ and ‘other’ categories contain a number of information technology-related firms. The sample is regarded as fairly representative of the overall structure of Irish industry.

Findings

The overall results of the Irish study corroborate many of the findings in the extant literature into the nature and intensity of export problems (see Katsikeas, 1991; Leonidou, 1995). As can be seen from Table 5.2, the identification of suitable intermediaries, physical distribution, product adaptation and finance-related issues feature prominently in the accounts of ‘critical incidents’. Although a high incidence of problems relating to late or non-payment (24 per cent) had been anticipated in light of the findings of the Bannock (1987) and PW/CBI (1995) studies, the extent to which physical distribution problems were cited (39 per cent) was surprising and is discussed further hereafter. Finding suitable representation was also a

Table 5.2 Nature of 'critical' incident or problem

Nature of 'critical incident'	**%**[1] *n = 68*	**Specific issue**	**%**[2] *n = 68*
Channel partner/intermediary	24	Conflict with agent	9
		Finding suitable representation	15
Finance-related	41	Currency/exchange rates	9
		Pricing competitively	9
		Late payment	9
		Non-payment	15
Physical distribution	39	Damage in transit	9
		Pilferage in transit	15
		Transportation/documentation	15
Loss of business	9	Loss of major client	9
Product issues	27	Product suitability	9
		Product quality	9
		Adaptation/modification issues	9
Other problems	9	Tariff classifications	9
No problems	9		9

Notes:
1. Figures add to more than 100% due to combination of problems (for example slow payment and pilferage)
2. % rounded up

significant problem for many firms (15 per cent) and some (9 per cent) had also experienced conflict with agents or other channel partners that had adversely affected export business.

In common with previous studies (Keng and Jiuan, 1989; Dichtl et al., 1990; Graham, 1999; Poh-Lin, 2001; Crick, 2002), setting competitive export prices was also problematic. In this respect, Northern Ireland firms faced particular difficulties because of the high value of sterling against the euro. This impacted not only upon their Irish business, but also made them less competitive against other firms operating in the euro zone, including some of their Irish competitors. It also made them less competitive in the UK market against lower cost suppliers from the European Union (EU). Conversely, Irish firms gained advantage from this situation, although the high value of sterling did impact on the cost of raw materials imported from the UK.

Product quality, suitability and adaptation issues are recurring themes throughout the literature (Czinkota and Ricks, 1983; Karafakioglu, 1986; Christiansen et al., 1987; Bannock, 1987). It is therefore not surprising that they feature quite prominently in the 'critical incidents' experienced by 27 per cent of Irish firms. However, a noteworthy finding is the number of 'critical incidents' reported due to problems created by outsourcing or subcontracting, notably in terms of negative effects on product quality. Interestingly, in some cases where physical distribution problems had occurred, firms were also outsourcing offshore.

The 'critical incident' approach also shed some interesting perspectives on particular problems in relation to physical distribution and relationships with intermediaries. Incidents of damage or pilferage in transit were surprisingly high (24 per cent), as were problems with transportation and documentation (15 per cent). In a number of cases, pilferage in transit had led to significant difficulties for the firms and their clients, as had the appointment of agents who were less than reliable. A common assumption is that these difficulties are most likely to occur when dealing with emerging markets, where the risk of theft or damage is considered to be higher. However, in most incidents in the Irish study, the theft occurred before the goods left the country. Similarly, most incidents involving conflict or problems with channel partners had occurred in countries such as Belgium, France and Germany, that generally have a low perceived risk in relation to such matters.

Illustrative Cases

The main export problems emerging from the Irish study are highlighted hereafter via a number of illustrative cases that demonstrate the density and richness of the qualitative data that can be obtained using a 'critical incident' methodology (see Table 5.3). They also provide deeper perspectives on the causes, consequences and resolution of such problems, as well as mature reflection on lessons learned and advice to other firms in the light of experience.

'Critical incidents' that involved conflict with channel intermediaries, or highlight the problem of finding suitable overseas partners, are illustrated in Cases A and B.

Another firm (Case O) had similar problems, when a UK-based individual offered to develop international business. This character not only failed abjectly to deliver, but disappeared with a large assortment of valuable samples (some 500 items in all) that he claimed would be used to generate interest in the firm's products, but which may well have been sold on within the fashion trade.

Table 5.3 Illustrative case examples

Case firm	Nature of business	Nature of incident
A	Construction/homewares	Conflict between competing distributors in Middle East market and firm
B	Leisure/recreation products	Poor selection of agent to represent firm in German market
O	Designer clothing	Dishonest agent in UK market
C	Plastic moldings	Adverse exchange rates (£ vs. Euro zone), Northern Irish firm exporting to Ireland
D	Wood products	Late payment by customer from Ireland
E	Outdoor wear	Non-payment by Belgian customer
F	Fashion apparel	Damage/pilferage in transit to India
N	Gourmet foods	Loss of goods in transit to France
G	Designer knitwear	Pilferage of part-processed goods at Irish port of entry, export documentation
H	Giftware	Physical distribution and tariff classification problems with USA
J	Textiles	Loss of major client in USA due to outsourced product quality problems
K	Light engineering	Faulty products shipped to Germany due to problems with outsourced components
L	Clothing	Product design unsuitable for German market
M	Engineering	Product out of specification for USA market

CASE A: CONFLICT WITH AGENT

The firm was dealing with two agents/merchants in a small but wealthy Middle Eastern market. It offered a budget range to agent B, which undercut prices of the existing 'quality' range offered by both agents. As a consequence agent A lost business and was subjected to heavy price competition. He ceased trading with the firm and the relationship terminated. The respondent clearly recognized that his firm had been at fault and cautioned that 'competing on price rather than quality should be avoided at all costs'. Although the relationship with agent B is good, and turnover has increased, exploiting the market has been made that much more difficult.

CASE B: FINDING SUITABLE REPRESENTATIVES

This firm produces a range of leisure and recreational offerings that fills a gap in a very lucrative niche market. Having successfully established a distributor network in the UK and Ireland, it decided to enter the German market using a similar strategy. It identified five or six agents at a trade fair in Germany and after much deliberation opted to give exclusive rights to one of them. Unfortunately, this party failed to deliver in terms of working towards obtaining German standards approval (TUV). Nor has he made any progress in terms of market development. The firm is now faced with the difficult prospect of terminating the agreement, which is exacerbated by the fact that it cannot approach the potential channel partners they rejected in the first place. The CEO claimed that in future he would use multiple distributors and 'run with the one that delivered'.

Finance-related problems are a recurrent theme in the literature and often reflect poor credit control practices by the firm. Several incidents illustrate problems in regard to late or non-payment (Cases D and E).

Foreign exchange risk and the high value of the exporter's currency are problems experienced by many firms operating in international markets. The latter is particularly prevalent among UK firms at present due to the high value of sterling against the euro and other currencies still operating within

CASE D: BAD DEBTS

The company had been operating successfully for over 20 years and had substantial business in both the UK and Ireland. Adverse economic effects in the Irish market in the mid–late 1980s led to a number of their clients becoming insolvent and losses equivalent to 5 per cent of turnover and almost 20 per cent of export sales in one year. On reflection, the firm recognizes that it was not sufficiently experienced in dealing with payment problems and had conducted very little prior research on the creditworthiness of potential clients. According to the respondent, the firm now investigates any potential new customer very carefully 'before the sale'.

CASE E: NON-PAYMENT

The firm had more than six years' international experience in European markets and Japan when it decided to enter the Belgian market in 1999 after identifying a new customer at a trade fair in Belgium. This potential intermediary placed a significant order and was asked for an advance payment of 30 per cent in line with standard company practice, but refused to agree, claiming it was an insult to his integrity and reputation. In an attempt to develop a good business relationship, the firm checked out his credit ratings with Dun & Bradstreet and took advice from its bank, which suggested reducing the first order by 50 per cent. Instead, the firm took an even more conservative position and agreed to a trial order of 10 per cent and 30 days' credit facilities. The new customer received the goods, failed to pay and disappeared. Despite extensive efforts to find him to take the necessary legal steps to recover the debt, the situation was not resolved. This involved significant management time and effort, but also led to a lost opportunity as the firm was forced to abandon any attempt to enter the market.

the European Union. Moreover, for Irish firms, these problems affect North–South trade. Case C illustrates this type of incident and also the dangers it can pose in terms of late or non-payment.

CASE C: FOREX RISK AND LATE PAYMENT

This Northern Irish firm had extensive experience in the Irish market and entered the Belgian market in 2001. As the exchange rate between sterling and the Irish punt became less favourable, delays in payment became more prevalent. In some cases, despite the firm's best efforts, delays of 6–8 months were experienced. In one particular incident, legal action had to be taken to recover the debt. This was only partly successful as heavy costs were involved and only a partial recovery was possible. During these proceedings, the debtor had the audacity to try to place further orders under an assumed name.

A similar problem occurred with Case N, where a small shipment of perishable goods were shipped to France, but not paid for. Eventually the goods were recovered, but were by this stage past their sell-by dates and the shipment had to be scrapped. Again, it is interesting to note that in most cases, the incidents arose in dealings with firms in countries that would not normally be associated with high risk of non-payment. However, the incidents also illustrate the point that finance-related problems often actually increase with greater exposure to international markets and despite the fact that firms are sufficiently expert to take appropriate steps to prevent them.

Problems relating to physical distribution tend not to be fully addressed in the extant literature and are deemed to be more prevalent when doing busi-

CASE F: THEFT IN TRANSIT

Firm F has had two major incidents of theft in transit. In their first, their own vehicle was stopped at a bogus police check and both the goods and vehicle were stolen and not recovered. In the second, an independent carrier arrived at a Scandinavian customer only to discover that the trailer was empty and the contents had been stolen. In the first incident, an insurance claim was made and paid. In the second the carrier's insurance paid and the stolen garments were eventually recovered. In both cases the incidents happened in the UK and were costly to resolve in terms of time, effort, inconvenience to the customer, additional costs and lost revenues.

CASE G: THEFT OF SUB-ASSEMBLIES IN TRANSIT

The firm subcontracts outsourced garments from an Indian supplier which are finished in Ireland and then exported to North America, Europe and Japan. A shipment of these was stolen at the Irish port of entry. Fortunately the Indian supplier was able to replace goods quickly and an insurance claim is currently being processed. While the cost of the finished goods was not substantial, the sales value was significant. Including management effort and time, the cost of the incident is expected to be a six-figure sum. The incident also had a detrimental effect on sales and cash flow in the short term. The respondent's comment was that while they could not have prevented the incident, 'always be prepared for the unexpected!'

CASE H: DOCUMENTATION AND TARIFF CLASSIFICATION PROBLEMS

In addition to shipments being lost or misplaced, or the wrong goods being delivered to a new client, this firm has had major problems with US customs and many instances where giftware has been misclassified by the authorities. Some examples are quite humorous, such as sugar bowls (minus the sugar) being classified as 'foodstuffs' and horse box ornaments as 'agricultural products'. Clearly, the problems this created for the company and customers are not particularly funny. More to the point, the shipper is a very large international company with a global reputation and the small firm has little control of distribution or recourse against them. When the firm suspends payments for lost or missing shipments, it is threatened with legal action.

ness in emerging economies. Evidence suggests that many of these problems tend to be ongoing and tend to recur more frequently with greater exposure to international markets. As has already been noted, many of the incidents occurred before the goods left the country, but others were reported in what are normally regarded as safe countries. Cases F, G and H highlight specific incidents.

CASE J: LOSS OF BUSINESS

This firm is a long-standing Irish textile firm with over 50 years' international experience. It had a very stable relationship with a US company over many decades until a supplier that provided specialist fabrics to it started to ship inferior quality goods. The client was sufficiently disenchanted to terminate the relationship and the loss of business was irretrievable. This was exacerbated by a change of CEO in the client firm. The break-up literally involved weeks of management time and effort and the loss of about 50 per cent of the firm's fabric sales at the time. In hindsight the choice of an inexperienced supplier triggered the problem and the firm now pays much more attention to this issue.

CASE K: LOSS OF ORDERS

Case K also experienced difficulties with a subcontractor who provided faulty goods. However, in this case the management was able to retrieve the situation and save the relationship with a German client. While there was an estimated 600 man-hours and additional transportation costs involved in resolving the incident, there were no long-term opportunity costs. The sales director attributed this to 'excellent personal relationships with both the agent and the customer' and added that it was company policy to visit them at least four times a year.

An interesting finding emerges in terms of the role of subcontractors and the difficulties that they can cause for exporting firms. In some circumstances, sub-standard components or finished goods can lead to the total loss of business (see Cases J and K).

Incidents relating to product specifications and standards were also cited as critical by a number of firms. In several cases, firms had significant export experience prior to the incident; in others it happened at an early phase of internationalization. Cases L and M illustrate some of the difficulties these incidents cause.

CASE L: ONGOING PRODUCT DESIGN PROBLEM

The firm has over 100 years' experience in the clothing industry and began exporting in 1990. One of the early export targets was Germany, but the market did not develop as anticipated. The export sales manager indicated that the issue was 'fundamentally a design problem' where 'fit, patterns and style were not appropriate for the market'. He added that similar issues had emerged in both the French and Belgian markets. In hindsight the manager feels that the company has missed a major opportunity to establish a strong foothold in Germany and had lost major clients along the way. Not only is the situation beyond recovery, but the opportunity costs were estimated to be in excess of a five-figure sum in each of the five years they were in the market. The manager's advice to other firms was simple: 'understanding customer needs is crucial'.

CASE M: FAULTY PRODUCT SPECIFICATIONS

The firm produces large earth-moving equipment. In fact, the incident relates to a machine that was built too large for US specifications. This problem was only identified when the machine was unloaded at the dock in the US port and the haulage firm refused to move it. The cost to return the machine is a six-figure sum and it eventually had to be modified in situ at the port, at a cost of several thousand pounds, before it could be transported across the US. The production manager's comments on preventing a reoccurrence were 'I should really shoot the stupid #%$@&%* who let the machine go out the gate!'

DISCUSSION

The preceding case examples provide real instances of the types of export problems that smaller firms can encounter as they develop international activities. They also illustrate the ways in which management resolved or failed to adequately handle the incident, as salutary lessons to other firms who

Table 5.4 Synthesis of incidents, consequences, outcomes and reflection

Case firm	International development (early/late)	Whose blame? (firm/partner)	Issue resolved (yes/no)	Actual Cost*	Opportunity cost	Reflection on lessons learned/ advice to other firms
A	Early	Firm	No	Hard to quantify	Delay in market development	Compete on quality not price and take care not to create conflict between representatives
B	Pre-export	Firm	No	Hard to quantify	Delay in market entry	Make sure potential agents can deliver on agreement and don't offer on exclusive rights to a market
C	Experienced	Environment	Yes	£ moderate losses	Management time and effort	Check credit bona fides even more carefully
D	Experienced	Client	Yes	£ significant losses	Management time and effort	Tighter credit control implemented and credit insurance
E	Early	Client	No	£ moderate losses	Loss of market opportunity	Need to check potential customers very carefully
F	Experienced	Freight agent	Yes	£ moderate losses	Loss of profits and cash flow	Always insure goods in transit
G	Experienced	Freight agent	No	£ moderate losses	Goodwill of client	Quick solution required for client
H	Experienced	Freight agent	No	£ moderate losses	Management time and effort	Resolve documentation tariff issues
I	Experienced	Supplier	No	£ moderate losses	Loss of business	Better quality control on outsourced components
J	Experienced	Supplier	No	Huge fall in turnover	Major loss of market share	Care required when outsourcing products
K	Early	Firm	Yes	£ moderate losses	Loss of order and shipment	Good customer care and service recovery
L	Experienced	Firm	Eventually	£ significant losses	Delay in market development	Need to consider product design issues carefully
M	Early	Firm	No	£ significant losses	Management time and effort	Need to meet technical/legal specifications in market
N	Early	Firm	No	£ moderate losses	Loss of confidence	Need to check potential customers very carefully
O	Early	Firm	No	£ moderate losses	Delay in developing markets	Check out potential channel partners carefully

Note: * Most interviewees provided actual cash values, but these have been omitted to maintain confidentiality.

might encounter similar situations. These issues are synthesized in Table 5.4 and merit further elaboration. First, export problems occurred with experienced firms as well as those in the early stages of internationalization. Second, it is clear that despite involving a substantial amount of management time and effort or delaying the development of the target market, many firms managed to survive the 'critical incident' without incurring major financial losses, though in many cases business was lost as the problem was not satisfactorily resolved. Third, on mature reflection over half of the firms conceded that they were primarily to blame for the specific problem, rather than the client; however, freight agents and suppliers also played a contributory part. Finally, all respondents were happy to discuss how they had attempted to prevent a reoccurrence of the problem and to offer suggestions as to how other firms might avoid similar difficulties.

The adoption of a case study approach and a 'critical incident' methodology facilitates a much more comprehensive examination of the nature of export problems. By employing these techniques, a much deeper understanding of the causes, consequences and resolution of particular problems can be obtained. Indeed, the authors posit that such richness of information is unlikely to be gained from survey methodologies that adopt largely quantitative approaches, aggregate data and classify problems with little real concern for specific contextual details.

A number of important research and policy-support issues emerge from the Irish study. In terms of research, there is clear evidence that additional export problems are now occurring due to a growing reliance on outsourcing partners, and that difficulties occurring due to third-party involvement can reflect very badly on the principal and affect export performance. There are also some indications that differences exist in the nature of export problems faced by traditional and high-technology firms, where the former have greater problems with physical distribution and the latter show more concern for the protection of proprietary knowledge, patent infringement and so forth. Both of these issues merit further research. From a public-policy perspective, export support agencies need to recognize that, in addition to well-documented problems relating to financing export operations, gaining foreign market knowledge, identifying appropriate channel partners and so on, firms may also require greater advice and assistance in the areas of supply-chain management and the protection of intellectual property. Indeed, such issues will be further investigated in the larger study. Gaining a better understanding of the immediate and longer-term consequences of particular incidents and into how firms sought to resolve specific export problems is also important from both a firm strategy and a public-policy perspective. Finally, the additional perspectives gained from practitioners' mature reflections on particular 'critical incidents' may be invaluable to decision-makers in other internationalizing SMEs and public policy-makers seeking to improve the international competitiveness of the sector.

REFERENCES

Albaum, G. (1983), 'Effectiveness of government export assistance for US smaller-sized manufacturers: some further evidence', *International Marketing Review*, **1** (1), 68–75.

Bagchi-Sen, S. (1999), 'The small and medium sized exporters' problems: an empirical analysis of Canadian manufacturers', *Regional Studies*, **33** (3), 231–45.

Bannock, G. & Partners (1987), *Into Active Exporting*, BOTB Occasional Papers, Dd 8934782 J0229NJ, London: HMSO.

Barrett, N.J. and I.F. Wilkinson (1985), 'Export stimulation: a segmentation study of Australian manufacturing firms', *European Journal of Manufacturing*, **19** (2), 53–72.

Bell, J. (1997), 'A comparative study of export problems of small computer software exporters in Finland, Ireland and Norway', *International Business Review*, **6** (2), 1–20.

Bennett, R. (1997), 'Export manufacturing and the Internet', *International Marketing Review*, **14** (5), 324–44.

Bilkey, W.J. and G. Tesar (1977), 'Attempted integration of the literature: the export behaviour of firms', *Journal of International Business Studies*, **8** (2), 33–46.

Bitner, M.J., J. Nyquist and B. Booms (1985), 'The critical incident as a technique for analysing the service encounter', in T. Bloch, G. Uptah and V. Zeithaml (eds), *Services Marketing in a Changing Environment*, AMA, Chicago, pp. 48–51.

Bodur, M. (1986), 'A study in the nature and intensity of problems experienced by Turkish exporting firms', in S.T. Cavusgil (ed.), *Advances in International Marketing 1*, Greenwich, CT: Jai Press, 205–32.

Canon, T. and M. Willis (1981), 'The smaller firm in overseas trade', *European Small Business Journal*, **3**, 45–55.

Carson, D. and N.E. Coviello (1996), 'Qualitative issues at the marketing/entrepreneurship interface', *Marketing Intelligence and Planning*, **14** (6), 51–8.

Carson, D., A. Gilmore, C. Perry and K. Gronhaug (2000), *Qualitative Marketing Research*, London: Sage Publications.

Cavusgil, S.T. (1984), 'Differences among export firms based on their degree of internationalization', *Journal of Business Research*, **12**, 195–208.

Christiansen, C.H., A. da Rocha and R. Kerbel Gertner (1987), 'An empirical investigation of the factors influencing export success of Brazilian firms', *Journal of International Business Studies*, Fall, 61–77.

Crick, D. (2002), 'The decision to discontinue exporting: SMEs in two UK trade sectors', *Journal of Small Business Management*, **40** (1), 66–77.

Crick, D. and S. Chaudhry (2000a), 'UK SMEs' awareness, use and perceptions of selected government export assistance: an investigation into the effect of ethnicity', *International Journal of Entrepreneurial Behaviour and Research*, **6** (2), 72–84.

Crick, D. and S. Chaudhry (2000b), 'UK agricultural exporters' perceived barriers and government assistance requirements', *Marketing Intelligence and Planning*, **18** (1), 30–38.

Czinkota, M.R. and W.J. Johnston (1983), 'Exporting: does sales volume make a difference?', *Journal of International Business Studies*, **14** (1), 147–53.
Czinkota, M.R. and D.A. Ricks (1983), 'The use of multi-measurement approach in the determination of company export priorities', *Journal of the Academy of Marketing Science*, Summer, 283–91.
da Silva, P. and A. da Rocha (2001), 'Perceptions of export barriers to Mercosur by Brazilian firms', *International Marketing Review*, **18** (6), 589–611.
Dichtl, E., H.G. Koeglmayer and S. Mueller (1990), 'International orientation as a precondition for export success', *Journal of International Business Studies*, **21** (1), 23–39.
Easterby-Smith, M., R. Thorpe and A. Lowe (1994), *Management Research: An Introduction*, London: Sage.
Eisenhardt, K.M. (1991), 'Better stories and better constructs: the case for rigor and comparative logic', *Academy of Management Review*, **16** (3), 620–27.
Graham, P. (1999), 'Small business participation in the global economy', *European Journal of Marketing*, **33** (1), 88–102.
Gripsrud, G. (1990), 'The determinants of export decisions and attitudes to a distant market: Norwegian fishery exports to Japan', *Journal of International Business Studies*, **21** (3), 469–85.
Hamill, J. and K. Gregory (1997), 'Internet marketing in the internationalization of UK SMEs', *Journal of Marketing Management*, **13** (1), 9–28.
Kamath, S., P.J. Rosson, D. Patton and M. Brooks (1986), 'Research on success in exporting: past, present and future', in P.J. Rosson and S.D. Reid (eds), *Managing Export Entry and Expansion*, New York: Praeger, pp. 398–421.
Karafakioglu, M. (1986), 'Export activities of Turkish manufacturers', *International Marketing Review*, Winter, 34–43.
Katsikeas, C. (1991), 'A review of the literature on export marketing problems', in N. Piercy et al. (eds), *Preparing Marketing for the New Millennium*, Cardiff: Marketing Education Group, 601–25.
Kaynak, E. and V. Kothari (1984), 'Export behaviour of small and medium-sized manufacturers: some policy guidelines for international marketers', *Management International Review*, **24** (2), 61–9.
Keng, K.A. and T.S. Jiuan (1989), 'Differences between small and medium sized exporting and non-exporting firms: nature or nurture', *International Marketing Review*, **6** (4), 27–40.
Leonidou, L. (1995), 'Empirical research on export barriers: review, assessment and synthesis', *Journal of International Marketing*, **3** (1), 29–43.
Miesenböck, K.J. (1988), 'Small business and exporting: a literature review', *International Small Business Journal*, **6** (2), 46–61.
Morgan, R.E. (1997), 'Export stimuli and export barriers: evidence from empirical research studies', *European Business Review*, **97** (2), 68–79.
Morgan, R.E. (1999), 'Environmental determinants of export decision making: conceptual issues regarding the domestic market', *European Business Review*, **99** (5), 323–31.
Morgan, R.E. and C.S. Katsikeas (1998), 'Exporting problems of industrial manufacturers', *Industrial Marketing Management*, **27** (2), 161–76.
Piercy, N. (1981), 'Export strategy: key markets versus market spreading', *Journal of International Marketing* (UK), **1**, 56–67.
Poh-Lin, Y. (2000), 'Information acquisition activities: a study of global start-up exporting companies', *Journal of International Marketing*, **8** (3), 36–60.

Pointon, T. (1978), 'Measuring the gains from government export promotion', *European Journal of Marketing*, **12** (6), 451–62.
Price Waterhouse/Confederation of British Industry (1995), *Small Firms Export Survey*, Belfast, October.
Rabino, S. (1980), 'An examination of barriers to exporting encountered by small manufacturing companies', *Management International Review*, **20** (1), 67–73.
Tesar, G. (1975), 'Empirical study of export operations among small and medium-sized manufacturing firms', PhD dissertation, University of Wisconsin.
Tesar, G. and J.S. Tarleton (1982), 'Comparisons of Wisconsin and Virginia small and medium-sized exporters: aggressive and passive exporters', in M.R. Czinkota and G. Tesar (eds), *Export Management*, New York: Praeger, pp. 85–112.
Yin, R.K. (1994), *Case Study Research: Design and Methods*, Beverly Hills, CA: Sage Publications.
Van Maanen, J. (1979), 'Reclaiming qualitative methods for organisational research: a preface', *Administrative Sciences Quarterly*, **24** (December), 520–26.
Weaver, K.M. and J. Pak (1990), 'Export behaviour and attitudes of small and medium-sized Korean manufacturing firms', *International Small Business Journal*, **8** (4), 59–70.

6. Is the globe becoming small or is the small becoming global? Globalization and internationalizing SMEs

Niina Nummela

INTRODUCTION

Globalization has become a buzzword of everyday life, particularly from the viewpoint of business. Usually, as in this study, it refers to the changes in the way nations, regions, organizations, groups and individuals interact across national borders (Rondinelli and Behrman, 2000). This development is due to the increasing interdependence of markets and production in various countries through trade in goods and services, cross-border flows of capital and exchange of technology (Nunnenkamp et al., 1994). As a result, it is expected that the importance of borders and boundaries will decrease (Knight, 2000; Parker, 1996) and new linkages, structures and relationships will take the place of the traditional ones in the world economic system (Acs and Yeung, 1999).

The phenomenon as such is not new. This development has continued since the eighteenth century, as Kindleberger (2000) points out in his article on the roots of globalization. Globalization is indeed an ongoing process, but the pace varies. Political decisions and crises, such as major wars, have impeded it, whereas recent technological developments have stimulated it notably.

In addition to the macroeconomic interpretation of globalization, the concept has also been applied on a company level for diverse purposes. Levitt (1983) used the term 20 years ago when arguing that national and regional preferences are disappearing and that the world will become a single marketplace. At that time the discussion led to the debate on company strategies and whether the firm should standardize or differentiate its operations on international markets (see, for example, Douglas and Wind, 1987). However, the macroeconomic interpretation of globalization has dominated the recent discussion.

According to this perspective, it can be stated that a reciprocal relationship between globalization and organizations exist: organizations are not only passive followers of developments, but their own activities also have an effect on them. Activities on an organizational and an individual level stimulate, facilitate, sustain and extend globalization (Parker, 1998), and thus accelerate the process further. In spite of the equivocality of the phenomenon, some fundamental characteristics can be distinguished. First, it is clear that distances have become shorter during the globalization process, and the significance of physical location has decreased. Second, it has also been argued that because of globalization, national barriers are disappearing, or are at least losing their importance (Malmgren, 2000; Parker, 1998).

Additionally, it has to be kept in mind that although business activities are at the core of globalization, its impact extends beyond the boundaries of global organizations (Parker, 1996). Social and political consequences may include the emergence of new patterns of living, organization and governance, and new perceptions and values are required in order for people to make sense of and cope with largely uncontrollable changes (Rondinelli and Behrman, 2000). In all areas, boundary permeability or transcendence, a high rate of change, growing numbers and diversity of participants, and rising complexity and uncertainty seem to be the principal features of globalization (Parker, 1998, p. 38).

From a company perspective the concept of 'globalization' reflects (*Globalisation*, 1997, pp. 21–2):

- the ability to move flexibly and to identify and take advantage of opportunities anywhere in the world;
- the ability to source inputs, to distribute products and services and to move capital across borders;
- the lack of a home or national base (in the sense of not being committed to maintaining headquarters or a presence in a specific 'home' country);
- presence (usually as establishments, alliances or parts of networks) in a number of different countries;
- management that thinks and acts 'globally';
- the ability to market products and services successfully in different nations (although the products and services may be adapted to specific markets).

As a result of globalization, the pace of change in the economy has been accelerating, and the time span in all fields of business has generally shortened. Julien (1996) states that because of the increasing competition in consumer markets, products reach the end of their life cycles very quickly, which in turn enhances product volatility. Additionally, firms must constantly seek new markets in order to extend the life cycle of their products. It has also been argued that globalization is changing the business environment dramatically, and forcing firms of all sizes to share similar, even the same, competitive space (Etemad et al., 2001; Dana et al., 1999).

However, the current development is reflected in the operations of small and medium-sized enterprises (SMEs)[1] in a slightly different way than in the operations of their larger counterparts. Their position is somewhat similar to that of other firms, but there are also some distinct features that are particularly related to their international activities. Although SMEs are by no means a homogenous group, many researchers agree that, in general, they seem to differ from larger ones in their internationalization.[2] For example, their decision-making, international activities, internationalization processes and exporting stimuli are considered to be different. Research on small-business internationalization is usually based on the assumption that small and medium-sized firms suffer from disadvantages compared with their larger counterparts (*Globalisation*, 1997; Bonaccorsi, 1992; Miesenböck, 1988). Operating in international markets demands resources, experience, skills and knowledge which small businesses often lack (Bell et al., 1992). It is evident that the combination of insufficient resources and inadequate management skills discriminates against small firms compared to larger ones in the globalizing world (Etemad, 1999).

It has been argued that the driving forces of globalization have – at least partly – influenced SME internationalization. First, they have diminished the barriers preventing SME internationalization (Knight, 2001; Fletcher, 2000). Second, the increasing speed of business operations has also been reflected in the internationalization of small firms, which start operating internationally much more quickly than was previously the case. Additionally, due to the increasing competition, the ability of small firms to control their own development paths has been constrained (Etemad et al., 2001). In sum, this rapid development creates new pressures on small firms to internationalize, and novel approaches are required in order for them to succeed in the future.

SME INTERNATIONALIZATION: A LOOK BACK

Globalization and internationalization are strongly intertwined, and the overlap has also caused some confusion. Some researchers (for example, Prasad, 1999) even use the terms as synonyms, but usually the two phenomena are distinguished from each other (see, for example, Julien, 1996). Here, globalization is interpreted as the ongoing macroeconomic phenomenon of disappearing trade barriers and increasing communication with the help of advanced technology. On the other hand, internationalization is understood as the company-level activity in which the firm increases its involvement on foreign markets. This activity will be affected by phenomena such as increasing market potential, facilitated access to global markets, strengthening competition and an accelerating time span on international markets, all of which are related to globalization.

A PROCESS PERSPECTIVE

For around 40 years, researchers have been interested in the process by which firms become involved in international operations, but no conclusive theory of small-business internationalization has been developed. However, internationalization has often been defined as 'the process of increasing involvement in international operations' (Welch and Luostarinen, 1988, p. 36), and has therefore also generally been described as a gradual sequential process consisting of phases.[3] This processual perspective has also often been applied in analyses of small-business internationalization, and in fact the majority of empirical data to test these models has been collected from small and medium-sized enterprises (Leonidou and Katsikeas, 1996).

Internationalization has been analysed in these models as a step-by-step process in which separate phases could be distinguished. These different phases could be identified by following changes in aspects such as operation modes, attitudes towards internationalization, information acquisition and transition, the level of export involvement and successive decisions. In spite of numerous attempts, researchers have not been able to agree on one common view of the process. On the basis of a thorough review of existing process models, Leonidou and Katsikeas (1996) suggest three quite broad phases: (1) pre-engagement, (2) the initial, and (3) the advanced phase. According to their description, the first phase includes firms that operate on domestic markets and are not interested in exporting, domestic firms interested in exporting, and disappointed exporters who have ceased to export. Firms that are in the second phase export sporadically or are marginally dependent on exports. In the final, third phase, firms are regular exporters with experience of operating on international markets.

Despite its popularity, the processual perspective on internationalization has also been strongly criticized (for example, Clark et al., 1997; Madsen and Servais, 1997; Petersen and Pedersen, 1997; Andersen, 1993). Process models – like all models – are ideal cases and simplifications in some respects. However, the criticism of stage models seems partly justified, and probably arises from the different philosophical orientations of the critics. The majority of models have followed the most common theory of management literature: the life-cycle process theory. Affected by certain stimuli, a firm will proceed from one phase to another, for example, from a simple operation mode to more complex ones, and all firms will follow a similar pattern. These models are quite deterministic, and are based on an objectivist interpretation of reality and human nature: internationalization is seen as a response to a stimulus, either internal or external to the firm.

As a response to the previous models and to the increasing criticism, researchers with a more subjectivist approach later developed other process models that aim at understanding the internationalization process instead of explaining it. Many of these process models assume that internationalization is based on experiential knowledge, which the management collects from foreign operations.[4] The manager as a decision-maker is in a key role as a voluntary, individual actor in the process. These models highlight the significance of the individual decision-maker, and therefore seem quite applicable to small firms.

Experiential learning by key decision-makers in the company seems to be quite a suitable tool for describing the internationalization process of small firms. Companies engaged in foreign markets will recognize the opportunities and problems related to that market, and to internationalization in general; they will seek solutions to these problems and then put the solutions into practice. However, in addition to learning about external elements such as foreign markets and institutions, this also includes learning about the internal resources of a firm and its capabilities in new and unfamiliar conditions (Eriksson et al., 1997). Theories of individual learning also take into account the personal experience and knowledge that is stored in the firm from its birth. This means that when the key persons move from one company to another, they carry the experience with them, which partly explains the accelerating internationalization of SMEs and the leapfrogging of stages in the early phases (cf. Reuber and Fischer, 1997).

Although the underlying thoughts behind these process models – internationalization through increasing experience and learning – seem relevant, in practice the identification of separate stages is often quite complicated. Additionally, despite their voluntaristic approach to internationalization, most of these models still use the traditional life-cycle process theory as their starting point. Only in a few recent studies have researchers applied a more teleological interpretation of the process, according to which a company may take multiple routes in order to achieve the desired end state (for example, Bridgewater et al., 1999; Purchase and Ward, 1999; Andersen et al., 1997; Madsen and Servais, 1997).

To add to the discussion on stages, criticism concerning the impact of context, and particularly the ignorance of the use of external resources in internationalization, increased in the 1990s. This criticism has its roots in the different interpretations of the firm and its relationship to the environment. In the traditional approach to internationalization, firms have been considered as clearly defined decision units with internally controlled resources (Andersen et al., 1997). This has been questioned, and researchers have suggested that the environment in which it operates affects its internationalization.

Madsen and Servais (1997) argue that in order to study the internationalization of a firm, we need to understand the context in which it operates. The environment can also be seen as a source of resources, and internationalization as a process of developing and mobilizing these resources alone or in cooperation with other firms. For example, Christensen and Lindmark (1991) found previous studies on internationalization to be too focused on the internal commitment of the firm. In their opinion, the use of external resources is as important as the use of internal resources, particularly in small-business internationalization. Bonaccorsi (1992) and Christensen (1991) also emphasize the significance of external resources in small-business internationalization. Finally, Sadler and Chetty (2000), as well as Holmlund and Kock (1998), argue that models of the internationalization process ignore the importance of the network in which the companies are embedded. The following section thus focuses on the significance of the network in small-business internationalization.

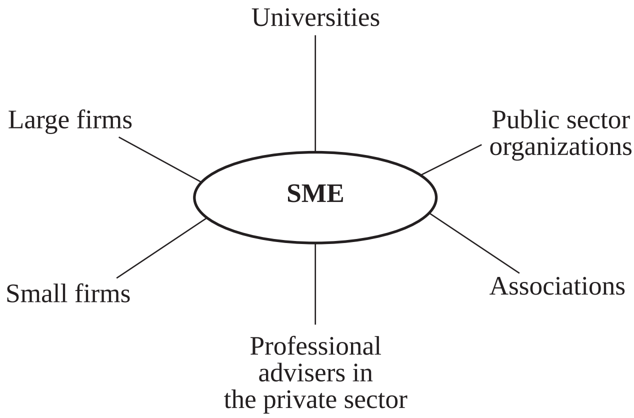
A NETWORK PERSPECTIVE

The SME and its Network

Networks have been studied in many contexts, and by researchers in different disciplines, and therefore it is very hard to imagine one, universally accepted network theory (for example, Easton, 1992; Mønsted, 1995). The network studies carried out by the so-called IMP (Industrial Marketing and Purchasing) Group have played a significant role in the field of business-to-business marketing. These studies have often analysed networks as a combination of actors, activities and resources. Actors perform and control activities with the help of resources. Through exchange processes, they develop and maintain relationships with each other. These relationships may be based on economic or non-economic exchange (Easton and Araujo, 1992). Exchange creates, maintains or strengthens different types of bonds between actors. Actors in a network are connected to each other by either strong or weak relationships (Granovetter, 1973). Relationships may be based on economic, legal, technical, knowledge, social and/or administrative bonds (Hammarkvist et al., 1982). They may include all types of bonds, or only some of them. All bonds do not develop at the same time, and Easton and Araujo (1992), for example, argue that social and knowledge bonds often precede the creation of economic bonds.

Different types of bonds are often the basis of studies in which researchers distinguish between different types of networks, such as the technological network, the regional network, the social network and the business network (for example, Halinen and Törnroos, 1998). Many studies highlight the significance of the entrepreneur's personal, particularly social, network (for example, Anderson, 1999; Greve, 1995; Butler and Hansen, 1991; Johannisson, 1988). Family, friends and acquaintances offer strong support to the entrepreneur, particularly in the early stages of the entrepreneurial process. However, the significance of the personal network probably decreases as the firm grows.

The network of a small firm is a complex combination of several embedded nets to which it belongs (Halinen and Törnroos, 1998; Easton, 1992). In order to distinguish the relevant actors, this complex reality needs to be simplified with the help of classification. Here, the classification was inspired by Smilor and Gill (1986), who studied networks in the context of business incubators and SMEs. They identified six different types of actors in a small firm's business network: major (large) and emerging (small) firms, universities, state and local support (public sector) and professional and other support (trade and other associations, chambers of commerce and so on) (Figure 6.1). It is assumed that all these actors may assist small firms in their internationalization.



Source: Adapted from Smilor and Gill (1986, p. 29).

Figure 6.1 The business network of a small firm

Analysts of the business network need to keep in mind that it changes over time (for example, Easton, 1992; Christensen and Lindmark, 1991). During its evolution it may be used for different purposes, since the firm needs different resources in different phases (Greve, 1995). Christensen and Lindmark (1991) describe this as an iterative process in which new actors are gradually involved and the relationships are deepened. The network of a small firm probably also changes during the internationalization process. Relationships with new actors are established in order to acquire the necessary resources, and at the same time some old relationships may be dissolved.

The Significance of Networks in SME Internationalization

Industrial marketing usually includes the international dimension, at least implicitly, because the niche markets of business marketers are scattered worldwide. However, research on networks and internationalization has been quite modest (Sadler and Chetty, 2000; Coviello and Munro, 1995), and it has concentrated on a few specific areas.

This discussion was introduced in the field of business-to-business relationships and networks by the Swedish researchers Johanson and Mattsson (1988), who pointed out that the network in which a company operates also affects its internationalization. Their work was based on the elementary idea of the network approach: when entering new markets a company also enters a new network, and it has to create new relationships. Johanson and Mattsson (1988) defined internationalization as a process by which network positions are established and changed in foreign networks. Probably the best-known of their findings is the categorization of firms into four types based on the degree of internationalization in the firm and in the market. In other words, it is not only the firm that internationalizes, but also the actors in the network in which it operates. The work of Johanson and Mattsson has since been criticized. For example, Chetty and Blankenburg Holm (2000) point out the lack of dynamics in the model, as well as its partly overlapping selection criteria. They also claim that the model ignores the importance of decision-maker and firm characteristics in utilizing opportunities that emerge from the network. In their opinion, the model also excludes networks that are purposely formed, for example as a result of some government intervention.

Network connections also seem to be generally significant in international business relationships and their overall importance has been highlighted in several studies (for a review, see Coviello and McAuley, 1999). A number of researchers have suggested that existing networks facilitate and accelerate the internationalization process of a small firm (Holmlund and Kock, 1998; Coviello and Munro, 1995, 1997; Bell, 1995). Despite this common argument, the role of networks in SME internationalization has remained vague.

Therefore the focus of our interest is on how SMEs utilize their network, that is, how they use their web of contacts to obtain the information, support and assistance needed in internationalization (Dana et al., 1999). In this overview we concentrate on the studies that have highlighted the significance and usage of internal connections in SME internationalization. For example, Jones (1999) and Coviello and Munro (1997) pointed out that the inward and outward activities in a small firm are tightly intertwined. Thus, experiences and contacts related to inward activities may facilitate and anchor the internationalization process. From the viewpoint of this study, even more interesting are the outward connections, which are established by small firms in order to compensate for their deficiencies and thus facilitate their internationalization.

Very few empirical studies describing SME usage of networks in internationalization exist, and these are mostly of an exploratory nature with quite scattered findings. The studies are often based on the common assumption that SME internationalization depends partially on the firm's set of network relationships (see Table 6.1).

The studies reviewed in Table 6.1 support the earlier arguments that the network has a significant impact on SME internationalization. This impact is realized, for example, in the selection of markets or operation modes. The effective utilization of the network may also anchor the internationalization process quite firmly. However, this may require its exploitation to be flexible and diverse. The significance of different actors varies during the process of internationalization. In the pre-export phase – when the firm is still searching for information and considering the possibility of entering international markets – the problems are mainly related to the lack of different resources. Consequently, the small firm seeks assistance from network actors that can offer the resources needed. In Anderson's (1999) and Nummela's (1997) studies, these actors were public or semi-public in nature,[5] but Holmlund and Kock (1998) also emphasized the significance of the entrepreneur's social network. Nummela concluded that SMEs in this phase seem to use their network broadly, but that there is no attempt to create long-lasting deeper relationships with the other network actors, since both parties are aware that, in the course of time, the firm is able to develop the skills and resources within its own organization.

On the other hand, later when a small firm is already involved in international operations, it faces competition and environmental turbulence in the market. These new circumstances create novel needs for external assistance, and the firm's interests also turn to different network actors. Other firms, both large and small, may seem to be suitable partners in this phase, when new strategy alternatives, and also business partners with market knowledge and long-term relationships, are sought. Existing relationships with, for example, customers and suppliers, may be utilized for this purpose, but sometimes also creation of novel network connections is required.

This also indicates the more efficient use of developed personal and business networks. These findings could be compared with the theory of

Table 6.1 Selected studies on networks and SME internationalization

Studies on networks and internationalization	**Empirical data**	**Findings**
Sadler and Chetty (2000)	survey among New Zealand exporters	• key network actors are customers, customers' customers and suppliers • the key actors have an impact on market selection
Anderson (1999)	interviews in six British case firms	• public and semi-public actors are the most significant supporters of SMEs at the beginning of their internationalization • other actors become more important later
Holmlund and Kock (1998)	survey among Finnish manufacturing SMEs	• relationships with foreign native partners are closer in the early stages of internationalization • when the company has acquired market knowledge, the importance of these relationships will decrease
Nummela (1997)	interviews in two Finnish case firms	• in the pre-export phase SMEs tend to seek assistance from public or semi-public actors, later other types of actors become important
Coviello and Munro (1995)	survey among New Zealand-based software firms	• initial market selection and entry mode are triggered by contacts in the network • general business contacts are most helpful • there are various motives for network usage
Coviello and Munro (1997)	interviews in four New Zealand-based firms	• rapid internationalization is a result of the company's involvement in international networks • networks facilitate internationalization, but also set some constraints • internationalization decisions and growth patterns are shaped by the network

Johanson and Mattsson (1988), who suggest that the importance of local partners is the greatest for early starters with little experience of foreign markets. In other words, the interpretation of internationalization as a learning process involving the collection of experiential information receives support.

Although existing research does not offer much empirical evidence, it is assumed here that existing business networks can offer small firms assistance in internationalization, as their actors may suggest some possible partners. Unfortunately, SMEs are not aware of all the potential partners in their network and, on the other hand, they do not know how to exploit them (Bell et al., 1992; Rothwell and Dodgson, 1991). Such ignorance probably means that very few small firms exploit their networks effectively.

SYNTHESIS

The previous sections discussed internationalization from two perspectives. Researchers have applied these perspectives in their studies either independently or as partly overlapping, but both perspectives have some distinguishable contributions to the research on internationalization. First, from the process perspective:

- internationalization is a gradually developing process;
- it is possible to identify a sequence of events in the company's internationalization which most companies follow;
- experience and learning are important elements in the process.

However, as mentioned earlier, traditional process models have been criticized heavily, and these elementary assumptions have also been questioned. For example, Jones (1999) found out in her empirical study that there was little evidence of a sequence of events that followed conventional international models. Several other researchers also argue that firms do not follow the theories of incremental internationalization (Oviatt and McDougall, 1994, 1997; Madsen and Servais, 1997). This does not necessarily mean that these critics are suggesting that the earlier theories are totally wrong, only that their use is rather limited as they apply only to some firms and industries (Oviatt and McDougall, 1994).

Second, the network perspective on internationalization has brought up some important issues, such as the following:

- a company and its internationalization is dependent on the environment in which it operates;

- the network offers various links and it can be exploited in numerous ways;
- effective usage of networks facilitates SME internationalization.

In addition to showing some elementary differences, the two perspectives also share a few characteristics. Both of them highlight the cumulative nature of the firm's activities, but the focus is different, either internal or external (Sadler and Chetty, 2000). Probably because of these common features, particularly in recent research, the two perspectives have been combined (Coviello and McAuley, 1999). For example, Madsen and Servais (1997) point out that the internationalization process partly depends on the network in which the company operates. It seems that, in a very internationalized industry, the process is also quite situation-specific (Madsen and Servais, 1997), and it probably proceeds more rapidly than usual (for example, Jones, 1999). Thus, a reciprocal relationship seems to exist between the internationalization of the company and its network, and as Coviello and McAuley (1999) have pointed out, the process and network perspectives provide complementary, not contradictory, views to internationalization.

Like all changes in the environment, the ongoing process of globalization is also reflected in the internationalization of SMEs, either in the process or in the governance structures selected. The effect may be either direct on the company, or indirect through the network. The next section discusses internationalization from the viewpoint of globalization.

THE IMPACT OF GLOBALIZATION ON SME INTERNATIONALIZATION

As the globalization of the economy is changing the nature and even the structure of industries and industrial systems (Varaldo and Pagano, 1998), it is bound to have an impact on the operations of small and medium-sized enterprises. As stated earlier, globalization seems to have both positive and negative effects. On the one hand, through opening markets it offers new opportunities, such as operating within a network of global firms (see, for example, Julien, 1996), and it has – at least partly – diminished barriers to small-business internationalization (Fletcher, 2000). Thus, it seems that globalization would accelerate the internationalization process of SMEs.

On the other hand, Varaldo and Pagano (1998) suggest that SMEs are affected by globalization particularly because the increasing competition and complexity in foreign markets require more effort. This calls for global products, which meet the strict product standards and reach the markets faster than earlier (Knight, 2000). In other words, globalization also contains elements which may delay the internationalization process of a small firm which does not have the capability to meet this challenge. This fits the traditional view of SME internationalization: because of their limited resources, and lacking management skills, they are more affected by globalization than larger firms (Knight, 2000; Etemad, 1999).

However, recently researchers have pointed out that actually globalization and its effects are converging small and large firms closer to each other as the small firms encounter the global competition, but competition also requires local responsiveness from large multinationals (Dana et al., 1999, 2000). It can be argued that as an attempt to manage the globalization process, large firms have become coordinators in broader networks of companies, which also include SMEs (Acs and Yeung, 1999). As a result, large firms will take a more visible role in SME internationalization as well. Altogether, it will become difficult to differentiate the impact of globalization on SMEs and MNEs as they are strongly intertwined. It is also important to recognize that SMEs cannot always be considered as a homogenous group of firms, and also that the impact of globalization varies.

All SMEs are Not Alike

There are some moderators that cause variation in the effect of globalization on SMEs. First, some of the fundamental assumptions may be questioned. Does globalization really lead to market convergence? Will there really be a universal consumer, as Levitt (1983) argued in the 1980s? This idea is supported by Dana et al. (1999), for example, who suggest that the competitive space of SMEs is extending outwards from regional and nation-based markets. They also add that actors on the globalizing markets are not limited to previous boundaries, but that local markets are becoming integral parts of global markets. However, what is the real impact on the operations of SMEs?

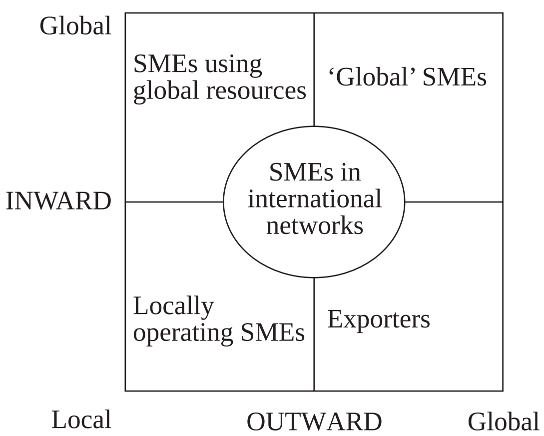
The realization of the consequences of globalization will take time, and it may facilitate the internationalization efforts of SMEs in that homogenous markets and customers are easier to satisfy. It is also possible that several strong regionally-based markets evolve to replace the single uniform market, and that although national barriers may lose importance, new regional barriers will arise. Additionally, it may be assumed that the differences inside markets and customer groups are bigger than between groups. In other words, although convergence among markets on the whole will increase as a result of globalization, the opposite trend – divergence – will simultaneously arise among customers. The impact of globalization will also be less visible because the majority of SMEs have selected – quite wisely – a niche strategy and aim at fulfilling the needs of a selected and limited customer segment.

Changes inside these smaller segments are probably slower, less radical and easier to follow.

Second, globalization is also a context-dependent phenomenon, and therefore its importance varies considerably across industries. High-tech firms in knowledge-intensive industries are usually mentioned as examples of high-impact business because the products have to be commercialized rapidly in lead markets, which might be dispersed all around the world (Madsen and Servais, 1997). First-movers have a clear advantage over competitors who try to acquire the new knowledge and create equivalent goods or services (Oviatt and McDougall, 1994). For companies in these industries, competitive pressures are as important a driving force as globalization. This does not mean that firms in more traditional sectors remain untouched. On the contrary, in some cases it is possible that the effects are more severe for them because they are quite often unprepared for globalization.

Third, from the perspective of globalization, SMEs cannot be analysed as a homogenous group, because they comprise various subgroups (see Figure 6.2). Julien (1996) argues that SMEs have four alternative ways of responding to globalization: (1) cheaper supplies through imports, (2) direct exports to global markets, (3) indirect imports and exports, and (4) utilization of international networks. Consequently, small firms can be classified into various types according to the internationalization of their inward and outward activities.

The impact of globalization on the five groups is quite different. It may be assumed that the effect is weaker in companies in which the scope of activi-



Source: Adapted from Julien (1996, p. 66).

Figure 6.2 A typology of small businesses' responses to globalization ties is local. Additionally, it may not be as clear for companies operating in international networks because it is probably indirect, and other network actors may act as a buffer against the turbulence. On the other hand, the other network members may use SMEs as buffers as well. The strongest impact will be seen on truly global firms whose inward and outward activities are based on a worldwide presence.

New Requirements for Internationalization

In spite of these moderating effects, it can be concluded that globalization has a notable impact on SME internationalization process. On the company level, internationalization seems to be a growth process, which is tightly intertwined with the company's other activities (see Jones, 1999). As earlier research suggests, it seems to be an incremental process. However, the timing and pace vary. As a general worldwide trend, internationalization seems to be accelerating (*Globalisation*, 1997). Additionally, its objectives are not necessarily perceived as a predetermined sequence of events, but may be achieved in several alternative ways. Globalization seems to require a more holistic approach to internationalization, and a teleological explanation of it (on teleology process theory, see, for example, Van de Ven, 1992).

Success of internationalization depends on factors at the company level, but individual factors are also of importance, particularly because experience and learning are considered as key features in internationalization. This internationalization of individuals can be described by several partly overlapping concepts. For example, global orientation refers to managers' positive attitude to international affairs and the ability to adjust to different cultures but it also includes other characteristics, which are considered typical for another concept, that is, international entrepreneurial orientation. These include proactiveness, innovativeness and risk-taking (for example, Knight, 2001; Harveston et al., 2000), which are all components of entrepreneurial orientation (Lumpkin and Dess, 1996).[6] In addition to these general features of entrepreneurial orientation, other features can be taken into account.

Earlier research suggests that internationally-oriented managers (1) have low psychic distance to foreign markets, (2) are well educated, master foreign languages and have experience of foreign countries, (3) are less risk-averse and resistant to change, and (4) have a positive attitude towards exporting and stays abroad (Holzmüller and Kasper, 1990; Dichtl et al., 1984). The role of internationally-oriented managers has been highlighted in more recent studies as well. For example, Knight (2001) found that it was critical in entry into new foreign markets, and was also related to the international performance of the firm. Consequently, it may be assumed that globalization requires a 'global mindset' of managers; Fletcher (2000) even argues that it is a fundamental prerequisite for international learning. According to her, this mindset includes the willingness to seize international opportunities, the ability to handle cultural diversity and the preparedness to take risks in building cross-border relationships.

Managers with these capabilities should be able to combine the resources from different markets better than others because of their competencies and experience. It is also possible that internationally-oriented managers consider broader regions as their home markets, instead of limiting their business to independent national markets. Thus, international entrepreneurial orientation makes the managers more aware of globalization and its effects, and improves their ability to respond to the changing environment. Consequently, it may be assumed that it has a positive impact on the international performance of the company as a whole.

Both globalization and the increasing international orientation of individuals are important determinants behind a topical phenomenon: the birth of companies that are international from inception.[7] Previously, these Born Globals have been exceptions to the rule (Welch and Luostarinen, 1988), but now their number is increasing. Research on Born Globals suggests that they can be found in several countries all over the world, and that they represent a wide range of industries. It has also been argued that they have unique products and services, are specialized and niche-oriented, and prefer to use hybrid structures for their international activities in order to acquire the necessary resources (Madsen and Servais, 1997; Oviatt and McDougall, 1994, 1997; McDougall et al., 1994).

The progress of Born Globals is attributed to three interrelated factors: new market conditions (the rise of niche markets, global sourcing, changes in technology, increased capacity in human resources to exploit the changes), technological developments in various areas and the capabilities of people (Madsen and Servais, 1997). Thus, the emergence of these organizations could be seen partly as a response to globalization, although the relationship between the two is somewhat controversial. How much of the increase in Born Globals is actually due to globalization, and what is the role of industry, products and internationally-oriented and experienced personnel in this development? On the other hand, it has been suggested that these firms have a proactive international strategy (Oviatt and McDougall, 1994). It can be assumed that, in the long run, their strategic decisions and activities may also have an impact on the environment. The two phenomena have probably boosted each other, and a reciprocal relationship exists between them.

As globalization requires a presence on several markets, novel resources and controlling systems are also needed. This will be reflected in the governance structures of SMEs. An increasing number of firms will seek assistance from their network, and networks will be utilized in various ways. The simplest way is to use them as a source of information; a further step would be to see them as a source of resources. The key question from the perspective of the SME manager is how to manage the enterprise. Alternative strategies are discussed in the following section.

SME RESPONSE TO GLOBALIZATION

A small firm has several options how to react to the changing environment. Generally, internationalization can be regarded as an adaptation process (Calof and Beamish, 1995), and globalization probably changes the process considerably. The key question concerns how they react to the new and constantly changing context. Should the company be reactive, that is, follow the changes and respond to them, or proactive,[8] that is, try to take the new opportunities offered and also create novel and innovative solutions? In general, internationalization quite often begins in SMEs as a reaction to some unexpected opportunities, but in the long run success requires both the early recognition of weak signals from the environment and a rapid response to them. This requires a wealth of resources to enable the SME to increase its knowledge of the markets, products and technologies (Varaldo and Pagano, 1998).

Small firms with their limited resources quite often start searching for support from their network (see also the earlier discussion on networks and internationalization). The shortened time span in business operations may require more effective and concise utilization of the network, particularly when it is a question of entering foreign markets. Utilization of the network also often creates novel governance structures. Thus the impact of globalization is both processual as well as structural. The effects also spread like ripples in a pond: the new structures and novel relationships are bound to have consequences in other parts of the network as well (Acs and Yeung, 1999).

Miles and Snow (1986, p. 63) suggested in the 1980s that evolving new organizational forms are both causes and results of the changing nature of the new environment. According to them, strategies and structures are based on managers' attempts to match companies' capabilities to the environment. Strategies and structures are tightly intertwined in this process, and changes in either cause variations in the other (Miles and Snow, 1986). Parker (1996) suggests that, because of globalization, the number of partnerships has been increasing, and organizations use more hybrid forms in place of traditional governance structures. As a result, the roles of network members become blurred and boundaries between the firm, its suppliers and customers, for example, disappear.

If these opportunities are to be grasped, and the necessary competence acquired, various boundaries have to be crossed. These may be internal or external, vertical or horizontal (Ashkenas et al., 1995) and tangible or less tangible (Parker, 1998). Crossing geographic borders in international business is self-evident, but crossing other types of borders requires some elaboration. External borders are of particular relevance from the perspective of SMEs. Firms may choose between two complementary strategies: horizontal and vertical cooperation. The first is based on horizontal partnerships, the other on vertical cooperation along the value chain. Both types of cooperation can and have been utilized in SME internationalization either to improve the firm's efficiency or to complement its inadequate resources. The common objective in all cooperative ventures is to increase the partners' competitiveness on international markets.

Cooperative strategies as responses to globalization have a few pitfalls as well. First, when the focus is on core competencies, it is assumed that complementary external resources exist and that they are applicable to the situation (Pihkala et al., 1999). Real-life experiences verify that this is not always the case. Second, one of the objectives of cooperation is to create a flexible solution to the problem. However, in the long run, cooperative arrangements tend to institutionalize and the threat is that collaboration will freeze into a fixed pattern and lose its flexibility. Third, the advantages of collaborative strategies are probably very industry- and company-specific, and are more suited to some industries than to others. New and emerging industries favour these kinds of operations, as the companies tend to be small and to lack hierarchical governance structures (Pihkala et al., 1999).

Changes in governance structures suggest that researchers should also adopt a more holistic perspective on internationalization. Fletcher (2001) and Jones (1999), for example, have emphasized this, and included both inward and outward activities in their analysis. There is still scope for further expansion, however. As Parker (1996) pointed out, the individual organization will probably not be the most fruitful unit of analysis in studies of SME internationalization in the future. Company boundaries will become difficult to define, and novel approaches are needed.

Theoretically, this means that research on small-business internationalization will become synergistic and it will combine research from various disciplines, as suggested by Coviello and McAuley (1999). Consequently, the currently fragmented field of research will be replaced by a new paradigm with roots in several research traditions. The evolving paradigm will look forward for explanations of internationalization, instead of forecasting the future by looking back at history.

In the future, researchers interested in small-business internationalization will have to solve a methodological problem as well. If globalization results in blurred boundaries and hybrid governance structures in companies, it may be questioned what will be the unit of analysis in the future studies on SME internationalization. Should researchers stick to the traditional definition of a firm and continue using it as the main target of their interests? Or should they broaden their perspective and also include the network of a small firm, or parts of it, in the analysis as well? No definite answers to these questions are available, but this issue certainly deserves more thought.

Existing research on small business internationalization highlights the fact that due to globalization and changing environment, managers cannot rely on internal resources alone but they have to create, sustain and manage diverse networks of relationships. This sets new requirements for the managers as well, particularly on their communication skills and ability to cooperate. Small-business managers may feel slightly constrained, not least because they often are entrepreneurs who appreciate their independence and flexibility in decision-making. In this sense, although globalization opens doors to numerous new possibilities, on the individual level it leaves less options available.

NOTES

1. The terms ‘small firm’, ‘small business’ and ‘small and medium-sized enterprise’ (SME) are used interchangeably throughout the text.
2. Although internationalization includes both the inward and outward operations of a firm (Welch and Luostarinen, 1988), this chapter focuses on the outward operations of SMEs, particularly on exporting, as it is the most common form of international operations among small firms.
3. In the literature the terms ‘phase’ and ‘stage’ are used interchangeably. The terms are seldom defined and it seems that several authors rely on their interpretation in everyday language. An example of a typical interpretation is the definition in the *Oxford Advanced Learner’s Dictionary* (1989): a phase is ‘a stage (i.e. point, period or step) in a process of change or development’. Here a phase or a stage is interpreted as a period of time in the process, which is characterized by certain, recognizable elements.
4. Some of the earlier models – for example, by the Uppsala school – are also based on experiential learning and knowledge (Johanson and Vahlne, 1977, 1990). However, in these models the learning occurs mostly on the level of the organization, whereas the later models emphasize the role of the individual decision-maker and his learning.
5. The organizations providing expert services can be classified into three groups: public sector organizations, semi-public organizations and private organizations (Smallbone et al., 1993). By public organizations we mean governmental agencies, both local and national. The services of public organizations are at least partly financed by government, while those provided by semi-public and private organizations can also be subsidized. Semi-public organizations such as trade associations and chambers of commerce usually rely on financial support from their member firms. The majority of services provided by private organizations, on the other hand, are normal market transactions in which the customer pays the market price for the services required.
6. In addition to these components, the concept of entrepreneurial orientation includes two others: aggressiveness toward competitors and a desire for independent and autonomous action (Lumpkin and Dess, 1996).

7. Several independent researchers in different countries have studied these companies. They have been called Born Globals (Madsen and Servais, 1997), international new ventures (Jones, 1999; Oviatt and McDougall 1994, 1997) and global start-ups (Oviatt et al., 1991). The term 'Born Globals' is used in this chapter, and it is defined here as a firm that, from its inception, derives competitive advantage from the use of resources and sale outputs in multiple countries (Oviatt and McDougall, 1994, p. 49).
8. On reactive and proactive behaviour, see, for example, Larson et al. (1986).

REFERENCES

Acs, Z.J. and B. Yeung (1999), 'Entrepreneurial discovery and the global economy', *Global Focus*, **11** (3), 63–71.

Andersen, O. (1993), 'On the internationalization process of firms: a critical analysis', *Journal of International Business Studies*, **24** (2), 209–31.

Andersen, P.H., P. Blenker and P.R. Christensen (1997), 'Generic routes to subcontractors' internationalisation', in I. Björkman and M. Forsgren (eds), *The Nature of the International Firm*, Copenhagen: Copenhagen Business School Press, pp. 231–55.

Anderson, V. (1999), 'Fostering growth through internationalisation. An investigation into the use of support agency advice and guidance by SMEs', *Proceedings of the 22nd ISBA National Small Firms Policy and Research Conference*, Vol. 1, Leeds, pp. 1–15.

Ashkenas, R., D. Ulrich, J. Todd and S. Kerr (1995), *The Boundaryless Organization. Breaking the Chains of Organizational Structure*, San Francisco: Jossey-Bass Publishers.

Bell, J. (1995), 'A comparative study of the export problems of small computer software exporters in Finland, Ireland and Norway', *International Business Review*, **6** (6), 585–604.

Bell, J., M. Murray and K. Madden (1992), 'Developing exportise: an Irish perspective', *International Small Business Journal*, **10** (2), 37–53.

Bridgewater, S., S. Stray and G. Murray (1999), 'The internationalisation process of small, high technology firms', Proceedings of the 28th EMAC Conference, Berlin.

Bonaccorsi, A. (1992), 'On the relationship between firm size and export intensity', *Journal of International Business Studies*, **23** (4), 605–35.

van Bulck, H.E.J.M.L. (1979), *Global orientation as a determinant of international marketing decision making*, PhD dissertation, University of Georgia.

Butler, J.E. and G.S. Hansen (1991), 'Network evolution, entrepreneurial success and regional development', *Entrepreneurship and Regional Development*, **3** (1), 1–16.

Calof, J.L. and P.W. Beamish (1995), 'Adapting to foreign markets: explaining internationalization', *International Business Review*, **4** (2), 115–31.

Chetty, S. and D. Blankenburg Holm (2000), 'Internationalisation of small to medium-sized manufacturing firms: a network approach', *International Business Review*, **9** (1), 77–93.

Christensen, P.R. (1991), 'The small and medium-sized exporter's squeeze: empirical evidence and model reflections', *Entrepreneurship and Regional Development*, **3** (1), 49–65.

Christensen, P.R. and L. Lindmark (1991), 'In search of regional support in internationalization of small and medium-sized firms – a network perspective', paper presented at the 38th North American Meeting of the Regional Science Association in New Orleans, Louisiana.

Clark, T., D.S. Pugh and G. Mallory (1997), 'The process of internationalization in the operating firm', *International Business Review*, **6** (6), 605–23.

Coviello, N. and A. McAuley (1999), 'Internationalisation and the smaller firm: a review of contemporary empirical research', *Management International Review*, **39** (3), 223–56.

Coviello, N.E. and H.J. Munro (1995), 'Growing the entrepreneurial firm. Networking for international market development', *European Journal of Marketing*, **29** (7), 49–61.

Coviello, N. and H. Munro (1997), 'Network relationships and the Internationalisation process of smaller software firms', *International Business Review*, **6** (4), 361–84.

Dana, L.P., H. Etemad and R.W. Wright (1999), 'The impact of globalization on SMEs', *Global Focus*, **11** (4), 93–105.

Dana, L.P., H. Etemad and R.W. Wright (2000), 'The global reach of symbiotic networks', *Journal of Euromarketing*, **9** (2), 1–16.

Dichtl, E., M. Leibold, H.G. Köglmayr and S. Müller (1984), 'The export-decision of small and medium-sized firms: a review', *Management International Review*, **24** (2), 49–60.

Douglas, S.P. and Y. Wind (1987), 'The myth of globalization', *Columbia Journal of World Business*, **22** (4), 19–29.

Easton, G. (1992), 'Industrial networks: a review', in B. Axelsson and G. Easton (eds), *Industrial Networks. A New View of Reality*, London: Routledge, pp. 1–27.

Easton, G. and L. Araujo (1992), 'Non-economic exchange in industrial networks', in B. Axelsson and G. Easton (eds), *Industrial Networks. A New View of Reality*, London: Routledge, pp. 62–84.

Eriksson, K., J. Johanson, A. Majkgård and D.D. Sharma (1997), 'Experiential knowledge and cost in the internationalization process', *Journal of International Business Studies*, **28** (2), 337–59.

Etemad, H. (1999), 'Globalization and the small and medium-sized enterprises: search for potent strategies', *Global Focus*, **11** (3), 85–104.

Etemad, H., R.W. Wright and L.P. Dana (2001), 'Symbiotic international business networks: collaboration between small and large firms', *Thunderbird International Business Review*, **43** (3), 481–99.

Fletcher, D. (2000), 'Learning to "think global and act local": experiences from the small business sector', *Education and Training*, **42** (4/5), 211–19.

Fletcher, R. (2001), 'A holistic approach to internationalisation', *International Business Review*, **10** (1), 25–49.

Globalisation and Small and Medium Enterprises (1997), Vol. 1, Synthesis Report, Paris: Organisation for Economic Co-operation and Development.

Granovetter, M.S. (1973), 'The strength of weak ties', *American Journal of Sociology*, **78** (6), 1360–80.

Greve, A. (1995), 'Networks and entrepreneurship – an analysis of social relations, occupational background and use of contacts during the establishment process', *Scandinavian Journal of Management*, **11** (1), 1–24.

Halinen, A. and J-Å. Törnroos (1998), 'The role of embeddedness in the evolution of business networks', *Scandinavian Journal of Management*, **14** (3), 187–205.

Hammarkvist, K-O., H. Håkansson and L-G. Mattsson (1982), *Marknadsföring för konkurrenskraft*, Malmö: Liber.

Harveston, P.D., B.L. Kedia and P.S. Davis (2000), 'Internationalization of born global and gradual globalizing firms: the impact of the firm-specific advantage', *Frontiers for entrepreneurship research 2000*, Proceedings of the 22nd Annual Babson College Entrepreneurship Research Conference, available at http://www.babson.edu/entrep/fer/XXII/XXIID/html/xxii-d.htm 14.6.2002

Holmlund, M. and S. Kock (1998), 'Relationships and the internationalisation of Finnish small and medium-sized companies', *International Small Business Journal*, **16** (4), 46–63.

Holzmüller, H.H. and H. Kasper (1990), 'The decision-maker and export activity: a cross-national comparison of the foreign orientation of Austrian managers', *Management International Review*, **30** (3), 217–30.

Johannisson, B. (1988), 'Business formation – a network approach', *Scandinavian Journal of Management*, **4** (3/4), 83–99.

Johanson, J. and L-G. Mattsson (1988), 'Internationalisation in industrial systems – a network approach', in N. Hood and J-E. Vahlne (eds), *Strategies in Global Competition*, London: Routledge, pp. 287–314.

Johanson, J. and J-E. Vahlne (1977), 'The internationalisation process of the firm – a model of knowledge development and increasing foreign market commitments', *Journal of International Business*, **8** (1), 23–32.

Johanson, J. and J-E. Vahlne (1990), 'The mechanism of internationalisation', *International Marketing Review*, **7** (4), 11–24.

Jones, M.V. (1999), 'The internationalization of small high-technology firms', *Journal of International Marketing*, **7** (4), 15–41.

Julien, P-A. (1996), 'Globalization: different types of small business behaviour', *Entrepreneurship and Regional Development*, **8** (1), 57–74.

Kindleberger, C.P. (2000), 'The historical roots of globalization', *Global Focus*, **12** (1), 1–26.

Knight, G. (2000), 'Entrepreneurship and marketing strategy: the SME under globalization', *Journal of International Marketing*, **8** (2), 12–32.

Knight, G.A. (2001), 'Entrepreneurship and strategy in the international SME', *Journal of International Management*, **7** (3), 155–72.

Larson, L.L., R.S. Bussom, W. Vicars and L. Jauch (1986), 'Proactive versus reactive manager: is the dichotomy realistic?', *Journal of Management Studies*, **23** (4), 385–400.

Leonidou, L.C. and C.S. Katsikeas (1996), 'The export development process: an integrative review of empirical models', *Journal of International Business Studies*, **27** (3), 517–51.

Levitt, T. (1983), *The Marketing Imagination*, New York: Free Press.

Lumpkin, G.T. and G.G. Dess (1996), 'Clarifying the entrepreneurial orientation construct and linking it to performance', *Academy of Management Review*, **21** (1), 135–72.

Madsen, T.K. and P. Servais (1997), 'The internationalization of born globals: an evolutionary process?', *International Business Review*, **6** (6), 561–83.

Malmgren, H.B. (2000), 'Trade and technology in the single global marketplace', *Global Focus*, **12** (1), 27–43.

McDougall, P.P., S. Shane and B.M. Oviatt (1994), 'Explaining the formation of international new ventures: the limits of theories from international business research', *Journal of Business Venturing*, **9** (6), 469–87.

Miesenböck, K.J. (1988), 'Small business and exporting: a literature review', *International Small Business Journal*, **6** (2), 42–61.

Miles, R.E. and C.C. Snow (1986), 'Organizations: new concepts for new forms', *California Management Review*, **28** (3), 62–73.

Mønsted, M. (1995), 'Processes and structures of networks: reflections on methodology', *Entrepreneurship and Regional Development*, **7** (3), 193–213.

Nummela, N. (1997), 'The significance of network in small business internationalisation', Proceedings of the 13th Annual Industrial Marketing and Purchasing Conference, Vol. 1, Lyon, 523–47.

Nunnenkamp, P., E. Gundlach and J.P. Agarwal (1994), *Globalisation of Products and Markets*, Tübingen: Mohr.

Oviatt, B.M. and P.P. McDougall (1994), 'Toward a theory of international new ventures', *Journal of International Business Studies*, **25** (1), 45–64.

Oviatt, B.M. and P.P. McDougall (1997), 'Challenges for internationalization process theory: the case of international new ventures', *Management International Review*, **37** (2), Special Issue, 85–99.

Oviatt, B.M., P.P. McDougall, M. Simon and R.C. Shrader (1991), 'A new venture without geographical limits: case history of a global start-up', in N.C. Churchill, W.D. Bygrave, J.G. Covin, D.L. Sexton, D.P. Slevin, K.P. Vesper and W.E. Wetzel (eds), *Frontiers of Entrepreneurship Research 1991*, Proceedings of the 11th Annual Babson College Entrepreneurship Research Conference, Wellesley, MA: Babson College, pp. 64–76.

Oxford Advanced Learner's Dictionary (OALD) (1989), Oxford: Oxford University Press.

Parker, B. (1996), 'Evolution and revolution: from international business to globalization', in R. Stewart, C.H. Clegg and R.N. Walter (eds), *Handbook of Organization Studies*, London: Sage Publishers, pp. 484–506.

Parker, B. (1998), *Globalization and Business Practice. Managing Across Boundaries*, Thousand Oaks, CA: Sage Publications.

Petersen, B. and T. Pedersen (1997), 'Twenty years after – support and critique of the Uppsala internationalisation model', in I. Björkman and M.Forsgren (eds), *The Nature of International Firm*, Copenhagen: Copenhagen Business School Press, 117–34.

Pihkala, T., E. Varamäki and J. Vesalainen (1999), 'Virtual organization and the SMEs: a review and model development', *Entrepreneurship and Regional Development*, **11** (4), 335–49.

Prasad, S. (1999), 'Globalization of smaller firms: field notes on processes', *Small Business Economics*, **13** (1), 1–7.

Purchase, S. and T. Ward (1999), 'Exploratory research into the internationalisation path of technical consultancies embedded within an industrial network approach', Proceedings of the 28th EMAC Conference, Berlin.

Reuber, A.R. and E. Fischer (1997), 'The influence of the management team's international experience on the internationalization behaviors of SMEs', *Journal of International Business Studies*, **28** (4), 807–25.

Rondinelli, D.A. and J.N. Behrman (2000), 'The promises and pains of globalization', *Global Focus*, **12** (1), 3–15.

Rothwell, R. and M. Dodgson (1991), 'External linkages and innovation in small and medium-sized enterprises', *R&D Management*, **21** (2), 125–37.

Sadler, A. and S. Chetty (2000), 'The impact of networks on New Zealand firms', *Journal of Euromarketing*, **9** (2), 37–58.

Smallbone, D., D. North and R. Leigh (1993), 'The use of external assistance by mature SMEs in the UK: some policy implications', *Entrepreneurship and Regional Development*, **5** (3), 279–95.

Smilor, R.W. and M.D. Gill (1986), *The New Business Incubator. Linking Talent, Technology, Capital and Know-How*, Lexington, MA: Lexington Books.

Van de Ven, A.H. (1992), 'Suggestions for studying strategy process: a research note', *Strategic Management Journal*, **13** (13), Special issue, 169–88.

Varaldo, R. and A. Pagano (1998), 'Can small and medium enterprises survive in the global economy?', in E. Kaynak, K. Becker and O. Kucukemiroglu (eds), *Proceedings of the 7th IMDA World Business Congress*, Santo Domingo, Dominican Republic, 1–8.

Welch, L.S. and R. Luostarinen (1988), 'Internationalization: evolution of a concept', *Journal of General Management*, **14** (2), 34–55.

PART IV

International entrepreneurship and the Internet: a developing research agenda

7. Internet-enabled international entrepreneurship: a conceptual model

Rasha Mostafa, Colin Wheeler and Pavlos Dimitratos

INTRODUCTION

Most of the research, theories and models in the entrepreneurship domain focus on the individual manager or entrepreneur, primarily because of the contribution the individual manager can make to the firm's entrepreneurial behaviour and effectiveness (Dess et al., 1997). However, there are different approaches to the question 'what is an entrepreneur?' One approach investigates the entrepreneur's personality traits (need for achievement, locus of control, risk-taking propensity and tolerance of ambiguity), another, demographic characteristics (work experience, family background, gender, age, educational level, ethnic group), and a third, owner-manager behaviour in diverse situations and under different circumstances (Carson et al., 1995). These approaches have similarities with the export behaviour literature where management characteristics and behaviour are associated with higher export performance.

Nevertheless, findings in the entrepreneurial literature are mixed and critics argue that the question 'what is an entrepreneur?' is the wrong question to ask (Gartner, 1988). Gartner suggests that the question 'what does the entrepreneur do?' is more appropriate, although Carland et al. (1988) criticize this view as narrow because it does not take into account all aspects of entrepreneurial activity including the traits of the individual. An alternative approach is the theory of effects proposed by Sarasvathy (2001), which posits that the decision-making process consists of choices made in a complex environment where the entrepreneur chooses between the effects of particular decisions. This approach suggests a more comprehensive study of entrepreneurial characteristics, circumstances and decision-making processes. This is compatible with the suggestion that the association between entrepreneurship and performance is context specific (Lumpkin and Dess, 1996).

In line with these views, in this chapter we seek to develop a conceptual model involving, but not limited to, entrepreneurship characteristics for decisions made by small exporting firms when seeking to tap market opportunities abroad using the Internet. A number of authors have criticized research on small firm internationalization for the lack of attention given to international entrepreneurship (Zahra, 1993; Oviatt and McDougall, 1994; Coviello and Munro, 1995). International entrepreneurship is the field of study described by McDougall and Oviatt (1997, p. 291) as being 'at the intersection of both entrepreneurship and international business fields which represent two growing areas of interest respectively'. According to these authors, international entrepreneurship deals with innovative, proactive and risk-seeking behaviour that traverses national borders (McDougall and Oviatt, 2000). In this chapter, we add to the small firm literature by incorporating entrepreneurship into how small businesses use the Internet to exploit market opportunities in the international marketplace.

The Internet with its potential to enhance communication and productivity (Hoffman and Novak, 1994; Paul, 1996; Kantor and Neubarth, 1996) is a technological innovation that is a challenge as well as an opportunity for the entrepreneur. Characterized as costless and timeless, the Internet enhances the potential of firms to enter and develop international markets (Hill, 1997; Leiner et al., 1997; OECD, 1999). However, the research on Internet and exporting is an emerging field in which key issues have remained, as yet, largely unexplored (Prasad et al., 2001). In addition, the Internet-related literature seems also to be lacking in solid theoretical models and failure to provide them may result in narrow and exceptionally descriptive research absent of any theoretical base. In this chapter, we seek to suggest and discuss a conceptual model linking the Internet and international entrepreneurship.

Thus, the purpose of this chapter is to set out a theoretical framework of Internet-enabled international entrepreneurship. The elements of the model are entrepreneurship, commitment to the Internet, facilitators and barriers to Internet commitment, and export performance. The essential argument underlying the model is that the more entrepreneurial the firm, the more likely it is to use the Internet in exporting and the more successful its export performance can be.

This chapter is organized as follows. Next we present and discuss the theoretical framework of the analysis. Entrepreneurship, Internet commitment, facilitators and barriers to Internet commitment, and export performance are the four main sets of variables guiding the discussion throughout the chapter. Following the presentation of this model, we elaborate on each of these four sets of variables. The chapter concludes with the main implications for managerial and research practice.

THE THEORETICAL MODEL

The conceptual model proposed in this chapter (see Figure 7.1) suggests that a key factor in the successful adoption of and commitment to the Internet and the Web is the extent of entrepreneurial behaviour exhibited in the firm. Top management characteristics, attitudes and experiences linked to entrepreneurship are key success factors in the adoption and implementation of any information technology (IT) innovation like the Internet (Rockard and Cresecenzi, 1984; Chulikavit and Rose, 2000; Gagnon et al., 2000).

Lymer et al. (1998) have presented the first attempt to synthesize the adoption of the Internet and the attributes of the entrepreneur. These authors assembled six case studies of UK small and medium-sized enterprises (SMEs). Their findings suggest that whoever is responsible for the introduction of the Internet to the firm exhibits entrepreneurial characteristics such as being proactive, challenging, innovative and computer literate. One way of explaining why the entrepreneur adopts the Internet before others is that he/she perceives greater advantages in using the Internet than the non-entrepreneur. Also, he/she is likely to exploit more Internet-enabled opportunities than the non-entrepreneur and thus show a higher level of commitment to the Internet.

Rogers (1995) sets out five attributes of an innovation: relative advantage, which is the degree to which an innovation is perceived as better than the idea it supersedes; compatibility, which is the degree to which an innovation is perceived as consistent with existing values, past experiences and needs of potential adopters; complexity, which is the degree to which an innovation is perceived as relatively difficult to understand and use; trialability, which is the degree to which an innovation may be experimented with on a trial basis; and observability, which is the degree to which the results of an innovation are visible to others.

Following the discussion on these attributes, the suggestion is that the entrepreneur better appreciates the advantages of using the Internet; is more ready to experiment with the innovation; does not perceive the complexity of the Internet as a barrier to adoption; and believes that it represents an opportunity to develop a competitive advantage. Hence, the Internet appears to be consistent with the entrepreneur's values and experience. Viewed in this light, adoption of the Internet in order to pursue international sales appears to be an entrepreneurial act.

The entrepreneur is better able to identify and exploit new opportunities made possible by the adoption of the Internet. As Porter (2001, p. 78) remarks, 'companies will be most successful when they deploy Internet technology to reconfigure traditional activities or when they find new combinations of Internet and traditional approaches'. Commitment to the Internet may be strongly affected by particular factors that are likely to act as facilitators

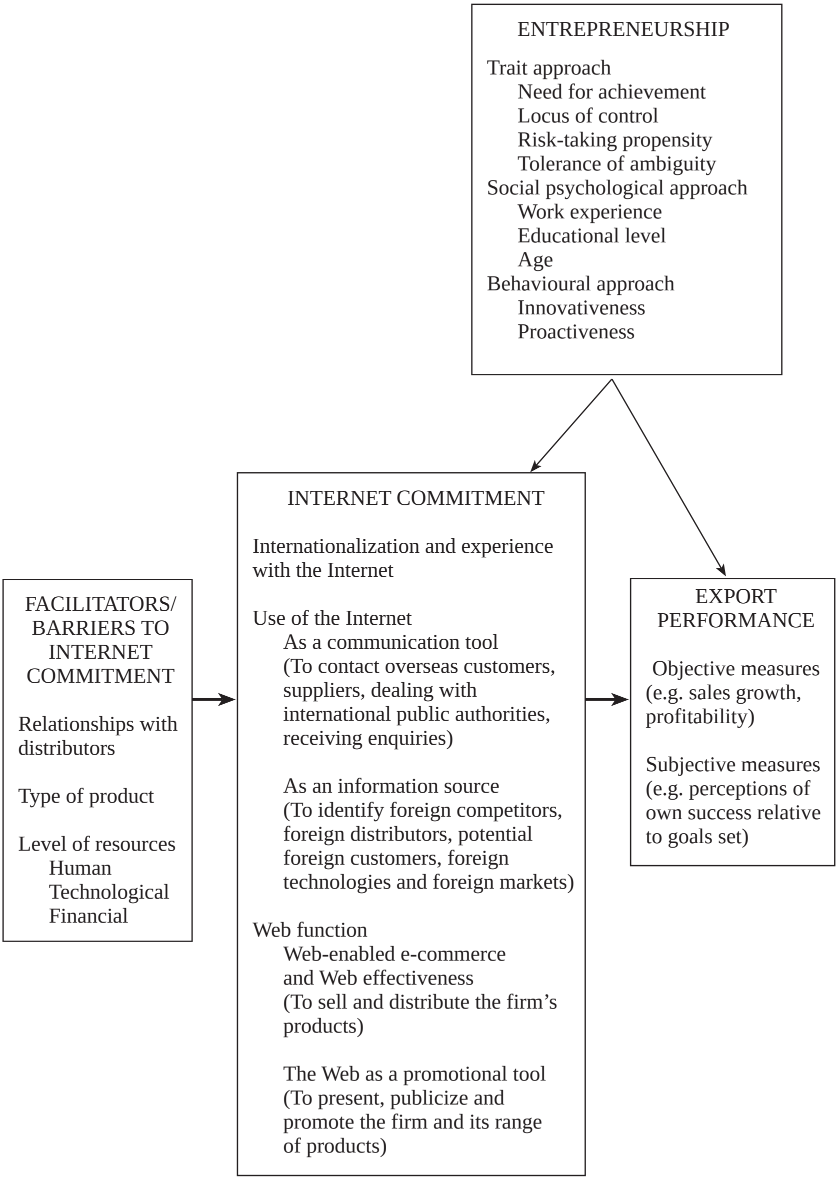


Figure 7.1 The conceptual model

or barriers, and are shown in Figure 7.1. Further, the positive relationship between entrepreneurship and performance of the firm abroad is a recurring theme in the recent literature (McDougall and Oviatt, 2000; Zahra and Garvis, 2000; Dimitratos et al., 2003), and is depicted in Figure 7.1 also.

The conceptual model of Figure 7.1 focuses on variable sets that are likely to influence Internet-enabled international entrepreneurship for exporting firms. The model is simple, as it underestimates other organizational, strategic and environmental variables possibly affecting entrepreneurship, Internet commitment and export performance. The justification for this is that many of these aforementioned variables may have a much lesser degree of impact on the behaviour of small firms. Small firms typically have a simple structure and thus their management layers and bureaucratic controls are minimal (Miller, 1986; Covin and Slevin, 1989). Strategies in small firms can also be based on intuition and are of inferior importance compared with that of other organizational or environmental variables (Chaganti, 1987; Brush and Chaganti, 1999). Also, small firms relative to their larger counterparts may be more exposed to environmental changes as they lack the necessary resources that could be used as buffers (Carter, 1990). Therefore, we seek to offer a model of Internet-enabled international entrepreneurship for small exporting firms assuming other organizational, strategic and environmental conditions are constant.

ENTREPRENEURSHIP

The conceptualization of entrepreneurship continues to be a matter for debate and there are a number of approaches to defining and empirically verifying the concept of entrepreneurship in the literature. The approach associated with personality traits, the social psychological approach and the behavioural approach (Figure 7.1) are of key importance to the entrepreneurship literature. These approaches have also been investigated to some extent in the export behaviour literature and are reviewed below.

Personality Traits-related Approach

Four personality traits have been examined extensively in the entrepreneurship literature. Need for achievement is the first of these and has been used to differentiate entrepreneurs from non-entrepreneurs (Begley and Boyd, 1987; Green and Dent, 1996; Lee and Tsang, 2001). However, the relationship between need for achievement and firm's performance is rather confusing and inconsistent: some studies find a relationship as, for example, Lee and Tsang (2001) who report an association with high performance; others, like

Begley and Boyd (1987) and Entrialgo et al. (2000) report no strong relationship between need for achievement and performance.

Locus of control is the second personality trait and refers to the degree to which an individual perceives success and failure as being contingent on personal initiative (Rotter, 1966; Brockhaus, 1982), and may be thought of as internal or external to the individual. People with internal locus of control are those who believe that they themselves rather than external events are in control of their destiny and can influence events in their lives, while people with external locus of control are those who believe that their lives are controlled more by luck or fate (Longenecker et al., 1994; Entrialgo et al., 2000).

As regards locus of control and firm's performance, there is some evidence to suggest a link. Boone and DeBrabander (1993) find that firms directed by CEOs with an internal locus of control perform better than those led by CEOs with an external locus of control. Similarly, Anderson (1977) associates internal locus of control with corporate financial performance. However, Entrialgo et al. (2000) find no association between managers' internal locus of control and firms' success.

In psychological terms, risk-taking propensity, which is the third personality trait, can be defined as 'dealing with uncertainties and the degree of readiness to bear it' (Ahmed, 1985, p. 781). High risk-taking propensity has been attributed to entrepreneurs (Busentiz and Barney, 1997; Thompson, 1999), but evidence for an association between propensity towards risk and firm's performance is mixed. Brockhaus (1980) reports no relationship between risk-taking propensity and financial performance, but Smith and Miner (1983) suggest that founders of firms experiencing fast growth rates are much more risk-averse than their counterparts. This is consistent with the view that entrepreneurs prefer to take calculated risks, where to a certain extent they have control over outcomes (McCleland, 1961).

Evidence suggests that tolerance of ambiguity, the fourth personality trait, differentiates entrepreneurs from non-entrepreneurs and is positively associated with firm's performance. There is some agreement that entrepreneurs exhibit greater tolerance of ambiguity when compared with top executives and non-founders (Schere, 1982; Sexton and Bowman, 1985; Begley and Boyd, 1987), and Entrialgo et al. (2000) find an association between tolerance of ambiguity with firm's success.

The Social Psychological Approach

The social psychological approach identifies the external factors which are more likely to stimulate entrepreneurial activity. Previous employment and/or work experience, educational level and age are external factors of interest to this examination since they refer to entrepreneurial characteristics that may influence Internet commitment and export performance (cf. Carson et al., 1995).

Much of the research on previous employment and/or work experience indicates that entrepreneurs in small firms are highly qualified individuals with previous managerial experience, who may have worked in large companies before (Bryson, 1996; Kirby and Jones-Evans, 1997) or worked in family businesses before starting out on their own (Shapero and Sokol, 1982; Basu and Goswami, 1999). Although all existing evidence does not support the influence of work experience on an entrepreneur (Green and Dent, 1996), such experience may help build the entrepreneur's knowledge base, develop access to market information and business networks, and improve his or her managerial capability. Also, in the international business literature there is evidence that managers with overseas work experience are more likely to internationalize when compared with their counterparts (Kwei-Cheong and Wai-Chong, 1988).

Nevertheless, Reuber and Fischer (1999) question the nature of experience and how it is measured, suggesting that conceptualizing it as both a stock and a stream of experience that are interrelated focuses attention on the age and relevance of an entrepreneur's experience. If the stock of experience is relatively old, it may be less useful and relevant than recent experience. Hence, it is possible that a person with limited but relevant experience is more effective than someone with more but less relevant and possibly dated experience.

There are differing views on how the level of education affects entrepreneurial behaviour. There is support for the positive impact of the entrepreneur's level of education on firm's performance and growth rate (Storey et al., 1989; Cressy, 1994; Basu and Goswami, 1999). It has also been suggested that even if educational level is not directly relevant to a business, it can still contribute to growth by enhancing the entrepreneur's communication skills and developing his or her analytical and managerial abilities, thus lowering business development barriers and helping firms to expand (Casson, 1991).

International business researchers (Reid, 1983; Axinn, 1988) propose that educated international managers are assumed to be more cosmopolitan and more willing to deal with foreign contacts than less educated managers, and are expected to perform better than their counterparts as well. However, the relationship between the entrepreneur/manager, educational level and international business performance is generally inconsistent, with some researchers reporting a positive association with export sales and export profitability (Nakos et al., 1998), while others reveal a weak relationship (Cavusgil and Naor, 1987), or even no association at all (Evangelista, 1994; Moini, 1995).

Different age groups may be associated with different levels of human and financial capital, motivations and objectives (Storey, 1994). Glancey et al.

(1998) suggest that the age of the entrepreneur at the time of business formation could be a possible determinant of subsequent performance. These authors conclude that younger individuals may have the ambition and drive, but are less likely to have the experience and financial capital of older managers. More generally, Thomas and Peyrefilte (1996) find that younger entrepreneurs are associated with growth, innovation and risk-taking, while older entrepreneurs are more risk-averse and tend to make more conservative decisions.

The Behavioural Approach

The behavioural approach tends to complement the trait and the social psychological approaches. The behavioural approach focuses on what the entrepreneurs do, for example, in dealing with their competitors or when confronted with decision-making situations involving uncertainty. Hence, the entrepreneurial orientation (EO) terminology that includes among others innovativeness and proactiveness (Covin and Slevin, 1989, 1991; Zahra and Garvis, 2000) is used to define the behavioural approach. Miller (1983, p. 770) suggests that an entrepreneurial firm is the one that 'engages in product market innovativeness, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch'.

Drawing on past literature, Lumpkin and Dess (2001, p. 431) suggest the two dimensions used in this section to operationalize EO as follows:

> *innovativeness* is the willingness to support creativity and experimentation in introducing new products/services, and novelty, technological leadership and R&D in developing new processes, *proactiveness* is an opportunity seeking, forward looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create change and shape the environment.

Research supports the view that EO does improve business financial performance in terms of sales growth and profitability (Wiklund, 1999; Barrett et al., 2000). Moreover, Barrett et al. (2000, p. 60) conclude that 'the more management is proactive toward customers and competitors; [more] innovative in its products and processes … the stronger will be the firm's business performance'.

Knight (2000) examined the central role EO plays in SME internationalization. The results indicate that EO directs or guides marketing strategy, international preparation and technology acquisition as well as indirectly promoting and improving the firm's overall international performance. Also, McDougall (1989) in a study of computer and communications manufacturing industries finds that internationally oriented new ventures pursue much more aggressive strategies compared with their domestic counterparts.

INTERNET COMMITMENT

Internet commitment in small firms can be conceptualized as having three dimensions (Figure 7.1): internationalization and experience with the Internet, use of the Internet, and Web function. Internationalization and experience with the Internet refers to the experience the entrepreneur and other employees of the firm have with Internet technologies, to employ the Internet to tap business opportunities in the international marketplace. Use of the Internet is concerned with its function as a means of communication with customers, suppliers, employees and other parties, as well as an information source to look for potential markets, and to identify foreign distributors and/or suppliers. However, when examining the Web as a promotional tool where the Web is used as a 'pull' rather than a 'push' medium, information about the firm and its range of products and/or services is available to anyone who uses the website. Therefore, the firm benefits by being able to use the Web to present, promote and publicize itself to a potentially worldwide market at minimal cost (Web function).

Internationalization and Experience with the Internet

Oviatt and McDougall (1999, p. 29) argue that 'the Internet may greatly decrease the time to internationalize and may increase the level of internationalization among the smallest businesses of the twenty-first century'. This implies that the earlier businesses adopt the constituent services of the Internet, the faster they will reap the benefits of internationalization such as scale economies, increased market share and building good customer relationships (Kleindl, 2000).

Hamill (1997) proposes that the Internet will have an important effect in overcoming barriers to internationalization in SMEs. Psychological barriers can be reduced by increased exposure to international customers as well as access to more information sources, with consequent increases in awareness of international business and commitment to international markets. Operational barriers such as documentation and payment can be eased through various means including electronic data transfers and payment. Organizational barriers such as the necessity to use intermediaries in foreign markets could be reduced by selling directly to a market. Product or market barriers could be reduced by greater access to electronic market research and development of global niche strategies. Poon and Jevons (1997) identify other ways in which the Internet can lead to new ways of competing, for instance, through different types of inter-organizational strategies like the establishment of small business groups that share resources through contractual agreements.

The Internet could also complement factors that have been identified as important for export success, for instance, the use of electronic searches could help find the 'right' agents and distributors, which the export behaviour literature generally suggests is an important factor in successful exporting (Hamill, 1997). Indeed Hamill proposes that 'traditional approaches to export strategy development should now be complemented by the development of Internet based strategies' (p. 316). Taking a broader view of strategy, Porter (2001) also argues that 'the Internet should be seen as a complement to, not a cannibal of, traditional ways of competing' (p. 63).

The introduction of the Internet and the experience of exporters with it may allow them to interact directly with existing and potential customers and could possibly reduce or eliminate the need for an intermediary (Peterson et al., 1997). With producers selling directly to consumers over the Internet, the need for certain types of intermediaries such as agents and distributors may be reduced (Strader and Shaw, 1999) and as a consequence channel conflict can increase. Firms, especially if they use the Internet for a long time, may want to sell directly to customers but the actions of their intermediaries, notably to stop selling the firm's products, could lead to an impasse.

As a result of the introduction of the Internet, setting up a direct sales channel is costly and takes time before the channel becomes operational, while in the meantime existing intermediaries may stop selling the firm's products with consequent loss of revenue (Thurow, 2001). Hence, some firms may use their website only as a promotional tool rather than for transactions because of the fear of jeopardizing profitable relationships with distributors. On the other hand, intermediaries play an important role in business exchange by limiting the risk to the trading parties, creating economies of scale and providing functions not easily provided by the exporter (Sarkar et al., 1995). Clearly, the Internet can reinforce the position of traditional intermediaries (Schmitz, 2000).

Use of the Internet

Using the Internet as a medium of communication enables firms to reach geographic areas that under normal circumstances they would not be able to penetrate because of their limited capabilities. Further, this contact with customers, suppliers, distributors and employees may reduce the need for expensive face-to-face meetings (Sterne, 1995; Collin, 1997). Nevertheless, more recent studies suggest that this is not the case (Kraut et al., 1998; Brock, 2000).

The Internet as an information source can help exporters with their diverse information needs to successfully enter international domains and identify markets, distributors, business partners and customers. The availability of such information may influence the decision to internationalize as well as the speed of internationalization. On the other hand, Hamill and Gregory (1997) find that lack of information and ignorance about using the Internet effectively are the reasons given by firms which do not use the Internet.

Web Function

Analysing the effectiveness of Web-enabled e-commerce and, specifically, how websites can facilitate export marketing among UK exporters, Bennett (1997) indicates that users look positively on the benefits provided by the Internet, particularly in areas such as market research, image enhancement, cost reduction and improvement of sales volume. These benefits are similar to those reported previously by Sterne (1995), Quelch and Klein (1996) and Ellsworth and Ellsworth (1997). However, firms without websites believe that the Internet is technically sophisticated and expensive, and above all perceive personal contact with customers rather than electronic contact as highly valuable. Pitis and Vlosky (2000) investigated American wood exporters' use of the Web in conducting international business and found that it was basically used as a promotional tool, with little emphasis on contacting customers or vendors or on-line buying and purchasing.

Further, despite the fact that the firms have multilingual websites (that is, French and Japanese), they were no more successful than English-only language sites. This provides support for Macleod's (2000, p. 37) view that '[t]he idea that English as the language of the Internet, and hence of e-commerce, is flawed … while as many as 98% of e-commerce sites are believed to be in English, over half the people using the web don't speak it … firms wishing to trade globally may have to consider providing content in a number of languages not only by providing translation but also localisation'.

Using the Web as a promotional tool increases the firm's chances of receiving unsolicited orders, thus driving them to explore the international market more rapidly (Oviatt and McDougall, 1999). Nevertheless, for this to happen and to acquire best results, the website needs to be well designed from a visitor's point of view. Research suggests that the better-looking the website, the more it appeals to different segments of the population; the easier to navigate and the faster to download; also, the more informative and up to date, the more likely it is that people wish to come back again (Sterne, 1995; Auger and Gallaugher, 1997; Hamill, 1997; Bennett, 1997, 1998; MacLeod, 2000).

FACILITATORS AND BARRIERS TO COMMITMENT

A number of facilitators and barriers to commitment are identified in the model (Figure 7.1), namely, relationships with distributors, type of product, and level of human, technological and financial resources, which may facilitate or hinder the adoption of and commitment to the Internet, and hence indirectly affect export performance.

With regard to relationships with distributors, the key question in the management of the liaison with a distributor is whether or not to jeopardize a good relationship by dealing directly with customers in the distributor's market. Possible problems with existing distributors may affect the decision to employ the Internet to internationalize. In relation to the type of products, some types of goods and services are more suited to the Internet than others. For example, digitizable products (CDs, music, newspapers and magazines) are particularly suited for electronic markets, as they are taking advantage of both a market and a distribution mechanism that has low costs and requires little time to fulfil product orders (Strader and Shaw, 1999).

As far as the level of resources is concerned, devoting adequate human, technological and financial resources to Internet-related activities reflects the extent to which firms are actually involved in and committed to the Internet. Lack of skilled IT staff and managerial personnel familiar with information technology, and scarce financial resources needed to develop proper electronic commerce strategies, are barriers hindering SMEs in particular from adopting the Internet (OECD, 2000). Brock (2000) suggests that the increase in the availability of information on the Internet makes finding and retrieving relevant information more time-consuming and costly, thus putting a premium on human resources. Also, according to his research, the development of the 'virtual market' made possible by the Internet is still at an early stage, partly because firms have concerns about security and credibility.

EXPORT PERFORMANCE

The realization of superior performance is key to the firm's survival and growth. Attaining superior performance through exporting operations is necessary to the success of many modern small firms. In this analysis we chose to focus solely on export performance because exporting is traditionally considered to be the first (and often single) stage in the SME's growth in the international marketplace (Bilkey and Tesar, 1977; Caves, 1982). Of relevance to the discussion in this chapter is to note that measuring export performance is a key issue in international marketing. Two types of variables dominate the literature (Morgan and Katsikeas, 1997), namely objective measures that include export sales, export growth and export profitability, and subjective measures that are mainly based on perceptions of managers (Figure 7.1).

However, the considerable diversity of both conceptual and operational measures of export performance is a reason for the fragmentation of findings, which in turn may hinder theory development. Indeed there is no uniformly accepted conceptualization and operationalization of export performance in the export marketing strategy literature (Zou and Stan, 1998). Export performance is a complex multidimensional construct wherein no one criterion is adequate to provide a reliable assessment. Thus, the trend in export performance studies is to use multiple measures along two and three sub-dimensions of performance (Lages, 2000). Nowadays the multidimensionality of performance is not the issue, but rather which performance measures to use (Griffin and Page, 1993). Such a comprehensive multidimensional scale is in line with the practice of previous researchers in the exporting field (for example Cavusgil and Zou, 1994; Styles, 1998).

CONCLUSION

The purpose of this chapter has been to develop a conceptual model of Internet-enabled international entrepreneurship in order to explore how entrepreneurial small firms are using the Internet in order to achieve export sales.

With regard to managerial implications of this model, one of the benefits of studying why and how entrepreneurs adopt and develop the Internet is the focus on best practice and the possibility of wide dissemination in the business community of the knowledge of Internet-based opportunities and applications created by entrepreneurs that seek to tap opportunities abroad. SME managers should take into consideration the facilitators and barriers related to Internet commitment and attempt to use them to their advantage. Besides knowledge of opportunities and applications in exporting firms, one of the themes of this chapter is the creation of opportunities by entrepreneurs as they become more committed to the Internet.

In relation to research implications of this model, empirical evidence employing this framework can be sought. We posit that this model represents one of the initial attempts to synthesize our knowledge on Internet-enabled international entrepreneurship. Therefore, the importance of this framework to researchers can be significant. As it was argued, the Internet-related international business literature is lacking in robust models dealing with relevant behaviour and growth of the firm, and this chapter represents an effort in this direction.

REFERENCES

Ahmed, S. (1985), 'nAch, risk-taking propensity, locus of control and entrepreneurship', *Personality and Individual Differences*, **6** (6), 781–2.

Anderson, C. (1977), 'Locus of control, coping behaviours and performance in a stress setting, a longitudinal study', *Journal of Applied Psychology*, **62**, 446–51.

Auger, P. and J. Gallaugher (1997), 'Factors affecting the adoption of an Internet based sales presence for small businesses', *Information Society*, **13** (1), 55–74.

Axinn, C. (1988), 'Export performance: do managerial perceptions make a difference?', *International Marketing Review*, **5**, Summer, 61–71.

Barrett, H., J. Balloun and A. Weinsten (2000), 'Marketing mix factors as moderators of the corporate entrepreneurship-business performance relationship – a multistage, multivariate analysis', *Journal of Marketing Theory and Practice*, **8** (2), 50–61.

Basu, A. and A. Goswami (1999), 'South Asian entrepreneurship in Great Britain: factors influencing growth', *International Journal of Entrepreneurial Behaviour and Research*, **5** (5), 251–75.

Begley, T. and D. Boyd (1987), 'Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses', *Journal of Business Venturing*, **2**, 79–93.

Bennett, R. (1997), 'Export marketing and the Internet: experiences of web site use and perceptions of export barriers among UK businesses', *International Marketing Review*, **14** (5), 324–44.

Bennett, R. (1998), 'Using the world wide web for international marketing: Internet use and perceptions of export barriers among German and British Businesses', *Journal of Marketing Communications*, **4**, 27–43.

Bilkey, W.J. and G. Tesar (1977), 'The export behavior of smaller-sized Wisconsin manufacturing firms', *Journal of International Business Studies*, **8** (1), 93–8.

Boone, C. and B. DeBrabander (1993), 'Generalized vs. specific locus of control expectancies of chief executive officers', *Strategic Management Journal*, **4** (8), 619–25.

Brock, J. (2000), 'Information and communication technology in the small firm', in S. Carter and D. Jones-Evans, *Enterprise and Small Business*, Harlow: Financial Times/Prentice Hall, pp. 384–408.

Brockhaus, R. (1980), 'Risk taking propensity of entrepreneurs', *Academy of Management Journal*, **23**, 509–20.

Brockhaus, R. (1982), 'The psychology of the entrepreneur', in C. Kent, D. Sexton and K. Vesper (eds), *Encyclopaedia of Entrepreneurship*, Englewood Cliffs, NJ: Prentice Hall, pp. 39–57.

Brush, C.G. and R. Chaganti (1999), 'Business without glamour? An analysis of resources on performance by size and age in small service and retail firms', *Journal of Business Venturing*, **14**, 233–58.

Bryson, J. (1996), 'Small business service firms and the 1990 recession in the United Kingdom', *Local Economy*, **11** (3), 221–36.

Busenitz, L. and J. Barney (1997), 'Differences between entrepreneurs and managers in large organizations: biases and heuristics in strategic decision-making', *Journal of Business Venturing*, **12**, 9–30.

Carland, J., F. Hoy and J.A. Carland (1988), '"Who is an entrepreneur?" is a question worth asking', *American Journal of Small Business*, **12** (4), 33–9.

Carson, D., S. Cromie, P. McGowan and J. Hill (1995), *Marketing and Entrepreneurship in SMEs: An Innovative Approach*, Hemel Hempstead: Prentice Hall.

Carter, N.M. (1990), 'Small firm adaptation: responses of physicians' organizations to regulatory and competitive uncertainty', *Academy of Management Journal*, **33**, 307–33.

Casson, M. (1991), *The Entrepreneur: An Economic Theory*, London: Gregg Revivals.

Caves, R.E. (1982), *Multinational Enterprise and Economic Analysis*, New York: Cambridge University Press.

Cavusgil, T. and J. Naor (1987), 'Firm and management characteristics as discriminators of export marketing activity', *Journal of Business Research*, **15**, 221–35.

Cavusgil, T. and S. Zou (1994), 'Marketing strategy-performance relationship: an investigation of the empirical link in export market ventures', *Journal of Marketing*, **58**, 1–21.

Chaganti, R. (1987), 'Small business strategies in different industry growth environments', *Journal of Small Business Management*, **25** (3), 61–8.

Chulikavit, K. and J. Rose (2000), 'E-commerce and the internationalization of SMEs', *Proceedings of the conference on International Entrepreneurship: Researching New Frontiers*, Vol. 1, 23–25 September, Montreal.

Collin, S. (1997), *Doing Business on the Internet*, London: Kogan Page.

Coviello, N. and H. Munro (1995), 'Growing the entrepreneurial firm: networking for international market development', *European Journal of Marketing*, **29** (7), 49–61.

Covin, J. and D. Slevin (1989), 'Strategic management of small firms in hostile and benign environments', *Strategic Management Journal*, **10**, 75–87.

Covin, J. and D. Slevin (1991), 'A conceptual model of entrepreneurship as firm behaviour', *Entrepreneurship Theory and Practice*, **16** (1), 7–25.

Cressy, R. (1994), 'Are business startups debt-rationed?', Small and Medium Size Enterprise Centre, Working Paper No. 20, Warwick Business School.

Dess, G., G. Lumpkin and J. Covin (1997), 'Entrepreneurial strategy making and firm performance: tests of contingency and configurational models', *Strategic Management Journal*, **18** (9), 677–95.

Dimitratos, P., S. Lioukas and S. Carter (2003), 'Entrepreneurial style and international performance: the moderating effect of international and domestic environmental contexts', Working Paper No. 1, Strathclyde International Business Unit.

Ellsworth, J. and M. Ellsworth (1997), *Marketing on the Internet*, New York: John Wiley & Sons.

Entrialgo, M., E. Fernandez and C. Vasquez (2000), 'Psychological characteristics and process: the role of entrepreneurship in Spanish SMEs', *European Journal of Innovation Management*, **3** (3), 137–49.

Evangelista, F. (1994), 'Export performance and its determinants: some empirical evidence from Australian manufacturing firms', *Advances in International Marketing*, **6**, 207–29.

Gagnon, Y., H. Sicotte and E. Posada (2000), 'Impact of SME manager's behaviour on the adoption of technology', *Entrepreneurship Theory and Practice*, **25** (2), 43–57.

Gartner, W. (1988), '"Who is an entrepreneur?" is the wrong question', *American Journal of Small Business*, **12** (4), 11–32.

Glancey, K., M. Greig and M. Pettigrew (1998), 'Entrepreneurial dynamics in small business service firms', *International Journal of Entrepreneurial Behaviour and Research*, **4** (3), 249–68.

Green, R. and M. Dent (1996), 'The Russian entrepreneur: a study of psychological characteristics', *International Journal of Entrepreneurial Behaviour and Research*, **2** (1), 49–58.

Griffin, A. and A. Page (1993), 'An interim report on measuring product development success and failure', *Journal of Product Innovation Management*, **10** (4), 291–308.

Hamill, J. (1997), 'The Internet and international marketing', *International Marketing Review*, **14** (5), 300–323.

Hamill, J. and K. Gregory (1997), 'Internet marketing in the internationalization of UK SMEs', *Journal of Marketing Management*, **13**, 9–28.

Hill, R. (1997), 'Electronic commerce, the world wide web, Minitel, and EDI', *Information Society*, **13** (1), 33–41.

Hoffman, D. and T. Novak (1994), 'Commercializing the information superhighway: are we in for a smooth ride?', http//www2000.ogsm.vanderbilt.edu/smooth.ride.html

Kantor, A. and M. Neubarth (1996), 'Off the charts, the Internet 1996', *Internet World*, **7** (12), 45–51.

Kirby, K. and T. Jones-Evans (1997), 'Small technology-based professional consultancy services in the United Kingdom', *Service Industries Journal*, **17** (1), 155–72.

Kleindl, B. (2000), 'Competitive dynamics and new business models for SMEs in the virtual marketplace', *Journal of Development Entrepreneurship*, **5** (1), 73–85.

Knight, G. (2000), 'Entrepreneurship and marketing strategy: the SME under globalisation', *Journal of International Marketing*, **8** (2), 12–32.

Kraut, R., V. Lundmark, M. Patterson, S. Kiesler, T. Mukopadhyay and W. Scherlis (1998), 'Internet paradox: a social technology that reduces social involvement and psychological well-being?', *American Psychologist*, **53** (9), 1017–31.

Kwei-Cheong, W. and K. Wai-Chong (1988), 'Export behaviour of small firms in Singapore', *International Small Business Journal*, **6** (2), 34–41.

Lages, L. (2000), 'A conceptual framework of the determinants of export performance: reorganizing key variables and shifting contingencies in export marketing', *Journal of Global Marketing*, **13** (3), 29–51.

Lee, D. and E. Tsang (2001), 'The effects of entrepreneurial personality: background and network activities on venture growth', *Journal of Management Studies*, **38** (4), 583–602.

Leiner, B.M., V. Cerf, D. Clark, R. Khan, L. Kleinrock, D. Lynch, J. Postel, L. Roberts and S. Wolf (1997), 'A brief history of the Internet', www.isoc.org/internet/history/brief.html

Longenecker, J., C. Moore and J. Petty (1994), *Small Business Management: An Entrepreneurial Emphasis*, Cincinnati, OH: South Western Publishing Co.

Lumpkin, G.T. and G.G. Dess (1996), 'Clarifying the entrepreneurial construct and linking it to performance', *Academy of Management Review*, **21**, 135–72.

Lumpkin, G.T. and G.G. Dess (2001), 'Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle', *Journal of Business Venturing*, **16** (5), 429–51.

Lymer, A., A. Nayak, R. Johnson and B. Spaul (1998), 'UK businesses and the information superhighway: the impact of the Internet on SMEs', Association of Chartered Certified Accountants (ACCA), Occasional Research Paper No. 23, 1–62.

MacLeod, M. (2000), 'Language barriers', *Supply Management*, **5** (14), 37–8.

McCleland, D. (1961), *The Achieving Society*, Toronto: D. Van Nostrong.

McDougall, P.P. (1989), 'International versus domestic entrepreneurship: new venture strategic behaviour and industry structure', *Journal of Business Venturing*, **4**, 387–400.

McDougall, P. and B. Oviatt (1997), 'International entrepreneurship literature in the

1990s and directions for future research', in D. Sexton and R.W. Smilor (eds), *Entrepreneurship 2000*, Chicago, IL: Upstart Publishing, pp. 291–320.
McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43**, 902–8.
Miller, D. (1983), 'The correlates of entrepreneurship in three types of firms', *Management Science*, **29** (7), 770–91.
Miller, D. (1986), 'Configurations of strategy and structure: towards a synthesis', *Strategic Management Journal*, **7**, 233–49.
Moini, A. (1995), 'An inquiry into successful exporting, an empirical investigation using a three stage model', *Journal of Small Business Management*, **33** (3), 9–25.
Morgan, R. and C. Katsikeas (1997), 'Obstacles to export initiation and expansion', *International Journal of Management Science*, **25** (6), 677–90.
Nakos, G., D. Brouthers and E. Brouthers (1998), 'The impact of firm and managerial characteristics on small and medium-sized Greek firms' export performance', *Journal of Global Marketing*, **11** (4), 23–47.
OECD (1999), 'The economic and social impacts of electronic commerce: preliminary findings and research agenda', http://www.oecd.org
OECD (2000), 'Enhancing the competitiveness of SMEs in the global economy: strategies and policies', Conference of Ministers Responsible for SMEs and Industry Ministers, Bologna, 14–15 June, 2000; http://www.oecd.org
Oviatt, B. and P. McDougall (1994), 'Toward a theory of international new ventures', *Journal of International Business Studies*, **25** (1), 45–64.
Oviatt, B. and P. McDougall (1999), 'A framework for understanding accelerated international entrepreneurship', in A. Rugman and R. Wright (eds), *Research in Global Strategic Management, International Entrepreneurship, Globalisation of Emerging Business 7*, Stamford, CT: JAI Press, pp. 23–40.
Paul, P. (1996), 'Marketing on the Internet', *Journal of Consumer Marketing*, **13** (4), 27–39.
Peterson, R., S. Balasubramanian and B. Bronnenburg (1997), 'Exploring the implications of the Internet for consumer marketing', *Journal of Academy of Marketing Science*, **25** (4), 329–46.
Pitis, O. and R. Vlosky (2000), 'Web presence of US primary wood products exporters', *Forest Products Journal*, **50** (7/8), 55–8.
Poon, S. and C. Jevons (1997), 'Internet enabled-international marketing, a small business network perspective', *Journal of Marketing Management*, **13**, 29–41.
Porter, M. (2001), 'Strategy and the Internet', *Harvard Business Review*, **79** (3), 63–78.
Prasad, V., K. Ramamurthy and G.M. Naidu (2001), 'The influence of Internet-marketing integration on marketing competencies and export performance', *Journal of International Marketing*, **9** (4), 82–110.
Quelch, J. and L. Klein (1996), 'The Internet and international marketing', *Sloan Management Review*, Spring , 60–75.
Reid, S.D. (1983), 'Managerial and firm influences on export behaviour', *Journal of the Academy of Marketing Science*, **11** (3), 323–32.
Reuber, A.R. and E. Fischer (1999), 'Understanding the consequences of founders' experience', *Journal of Small Business Management*, **37** (2), 30–45.
Rockard, J. and A. Crescenzi (1984), 'Engaging top management in information technology', *Sloan Management Review*, **26** (Summer), 3–16.
Rogers, E. (1995), *Diffusion of Innovations*, New York: Free Press, 4th edition.

Rotter, J. (1966), 'Generalised expectancies for internal versus external control of reinforcement', *Psychological Monographs, General and Applied*, **80** (1), 1–28.

Sarasvathy, S.D. (2001), 'Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency', *Academy of Management Review*, **26**, 243–63.

Sarkar, M., B. Butler and C. Steinfield (1995), 'Intermediaries and cybermediaries, a continuing role for mediating players in the electronic marketplace', *Journal of Computer Mediated Communication*, **1** (3); http://www.ascusc.org/jcmc/voll/issue3/sarkar.html

Schere, J. (1982), 'Tolerance of ambiguity as a discriminating variable between entrepreneurs and managers', *Proceedings of the Academy of Management Conference*, Academy of Management, 404–8.

Schmitz, S. (2000), 'The effects of electronic commerce on the structure of intermediation, *Journal of Computer Mediated Communication*, **5** (3); http://www.ascusc.org/jcmc/vol5/issue3/schmitz.html

Sexton, D. and N. Bowman (1985), 'The entrepreneur: a capable executive and more', *Journal of Business Venturing*, **1**, 129–40.

Shapero, A. and L. Sokol (1982), 'The social dimension of entrepreneurship', in C. Kent, D. Sexton and K. Vesper (eds), *The Encyclopaedia of Entrepreneurship*, Englewood Cliffs, NJ: Prentice Hall.

Smith, N. and J. Miner (1983), 'Type of entrepreneur, type of firm and managerial motivation: implications for organisational life cycle theory', *Strategic Management Journal*, **4**, 325–40.

Sterne, J. (1995), *World Wide Web Marketing: Integrating the Internet into Your Marketing Strategy*, New York: John Wiley & Sons.

Storey, D. (1994), *Understanding the Small Business Sector*, London: Routledge.

Storey, D., R. Watson and P. Wynarczyk (1989), 'Fast growth small businesses: case studies of 40 small firms in Northern England', Research Paper No. 67, Department of Employment, London.

Strader, T. and M. Shaw (1999), 'Consumer cost differences for traditional and Internet markets', *Internet Research, Electronic Networking Applications and Policy*, **9** (2), 82–92.

Styles, C. (1998), 'Export performance measures in Australia and the United Kingdom', *Journal of International Marketing*, **6** (3), 12–36.

Thomas, A. and J. Peyrefilte (1996), 'The impact of managerial discretion on firm performance', *Journal of Business Strategies*, **13** (1), 21–41.

Thompson, J. (1999), 'A strategic perspective of entrepreneurship', *International Journal of Entrepreneurial Behaviour and Research*, **5** (6), 279–96.

Thurow, L. (2001), 'Does the "E" in e-business stand for exit?', *Sloan Management Review*, **42** (2), 112–13.

Wiklund, J. (1999), 'The sustainability of the entrepreneurial orientation–performance relationship', *Entrepreneurship Theory and Practice*, **24** (1), 37–48.

Zahra, S. (1993), 'Environment corporate entrepreneurship, and financial performance: a taxonomic approach', *Journal of Business Venturing*, **8**, 319–40.

Zahra, S. and D. Garvis (2000), 'International corporate entrepreneurship and firm performance: the moderating effect of international environmental hostility', *Journal of Business Venturing*, **5** (6), 469–92.

Zou, S. and S. Stan (1998), 'The determinants of export performance: a review of the empirical literature between 1987 and 1997', *International Marketing Review*, **15** (5), 333–56.

8. Determinants of Internet export performance: a conceptual framework for small and medium-sized firms

Ioannis Georganas*

INTRODUCTION

Benjamin and Wigand (1995), based on economic theories, suggest that there will be an evolution from single-source sales channels to electronic markets. The reasoning behind their views is based on the fact that organizations coordinate their activities electronically which in turn allows consumers to have access to a vast selection of goods (Benjamin and Wigand, 1995). Along the same line of argument, Malone et al. (1989) assert that the development from single-source sales channels to electronic markets will evolve because cheap coordinative transactions and interconnected networks favour electronic markets. To expand on that argument, electronic markets may lower the physical distribution costs resulting in the partial or entire elimination of retailers and wholesalers (Narasimhan and Chatterjee, 1997). Thus it is argued that developing electronic marketplaces will transform today's business, as direct producer–consumer interactions become the dominant structure in electronic commerce (Sarkar et al., 1998; Narasimhan and Chatterjee, 1997; Hoffman and Novak, 1996; Benjamin and Wigand, 1995; Office of Technology Assessment, 1994).

Hoffman and Novak (1996), based on behavioural theories, argue along the same lines that: 'marketing activities are difficult to implement in their present form and must be reconstructed into a paradigm more compatible with the new media environments like the Web'. To expand on that argument, Hoffman and Novak suggest that the role of marketing is to identify and satisfy customer needs at a profit. However, only a few attempts have been made to include the consumer in the development of the emerging media (Hoffman and Novak, 1996). Instead, developments are based largely on the one-to-many mass communication model that presumes the growth of passive mass consumers rather than heterogeneous users. Yet in order to adapt to market orientations firms need to understand not only the customers but also the environment in which customers interact (Hoffman and Novak, 1996).

All these works based on either economic or customer behaviour theories alert academia that the Internet is going to transform today's business. However, current research has not yet been able to specifically determine how business will transform. This is mainly due to the fact that current research is unable to explain what factors will determine Internet performance on an international level (Poon and Swatman, 1998; Poon and Jevons, 1997; Hamill, 1997).

The research on international business suggests that small and medium-sized firms are often more innovative, adaptable and imaginative (Berry, 1996; Oviatt and McDougall, 1995; Verity, 1994). This is due to the fact that small and medium-sized firms are less affected by complexities, such as bureaucracy, than the multinational companies (Jones, 2001; Knight, 2001; Verity, 1994). Furthermore, the plethora of literature on the exporting phase, which is considered to be the first step towards internationalization (Young et al., 1989), of small and medium-sized firms suggests that the combination of a diversified management, in relation with balanced skills in other areas like marketing, proves to be viable in the firm's achievements (Smith and Fleck, 1987; Roberts, 1968). Similarly, previous studies have pointed out that strategy formulation, the qualities of the management, and firm characteristics are a few of the critical success factors in relation to the evolution of small firms (Dodgson and Rothwell, 1991).

Having in mind the preceding discussion the following section of the chapter focuses on identifying the determinants of export performance.[1] Using this as a platform, the major functions of the marketing channels are discussed. The chapter then identifies relationships between the functions of the marketing channels, and the functions of the Internet and finishes with the development of the new Internet-enabled framework.

LITERATURE REVIEW

Scope of Review

The two main paths of research focus on determinants of export performance (Katsikeas et al., 2000; Leonidou and Katsikeas, 1996; Katsikeas et al., 1996; Cavusgil and Zou, 1994; Ford and Leonidou, 1991) and on modelling export performance (Leonidou et al., 2002; Chetty and Hamilton, 1993; Aaby and Slater, 1988). The two major criteria used for the inclusion of studies are as follows: (1) the articles have to be empirical in nature, reporting data analysis and statistical tests, and (2) the studies have to use export performance measures as dependent variables.

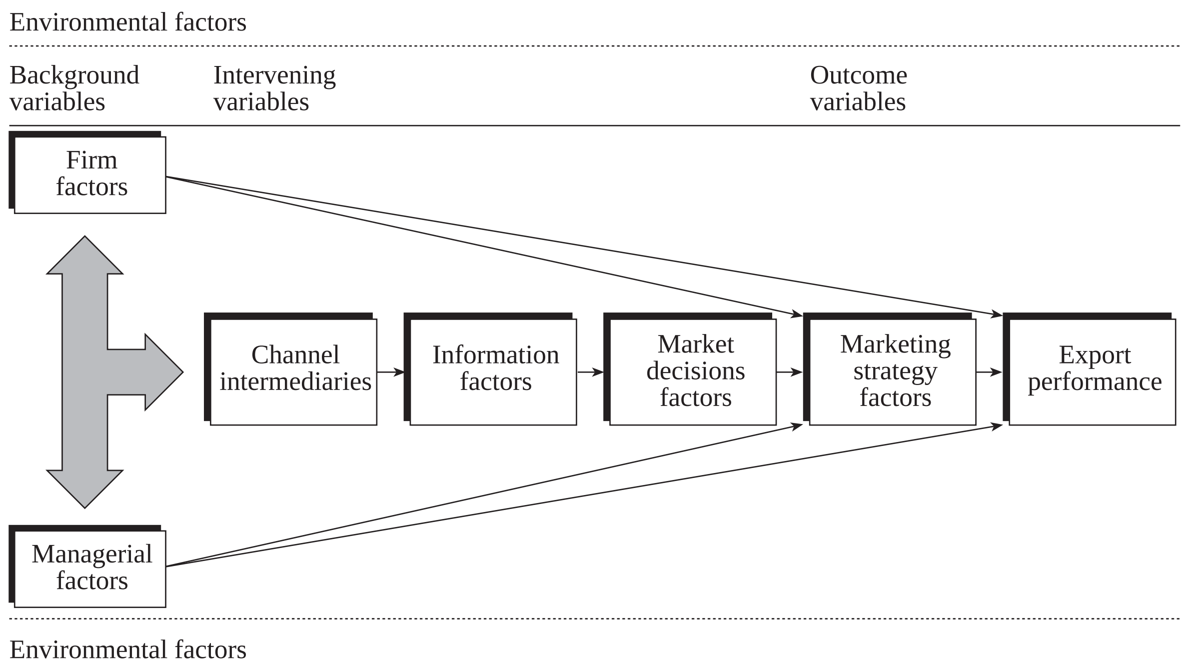


Figure 8.1 *A simplified export performance model*

Building upon the work of Katsikeas et al. (2000), Zou and Stan (1998), Aaby and Slater (1988), Styles and Ambler (1994), Chetty and Hamilton (1993) and Christensen et al. (1987), the indicators of export performance and their outcomes suggest a simple model consisting of three groups of variables. These are background, intervening (independent variables) and outcome variables (dependent variables), which are discussed, analysed and represented (see Figure 8.1).

Background variables

The background variables are divided in two sets of dimensions and their subsequent variables, the managerial and the firm variables.[2]

The managerial dimension refers to demographic, experiential, attitudinal, behavioural and other characteristics of the decision-maker within the firm who is potentially or actually involved in the export marketing process (Leonidou et al., 1998). The empirical findings suggest that there is an association of stimuli to export (motives), barriers to export (operational, psychological, organizational, product, market, government incentives), managerial skills (education, experience, involvement with international markets), technical skills (application of appropriate technology), management systems, management commitment and attitudes, and management perceptions on domestic market, competition, financial incentives, distribution, delivery service, pricing, risk, profit, promotion, international orientation and professional experience with export performance.

The classification of Leonidou and Katsikeas (1996) and Axinn (1988), between active and passive exporters, concerning export motives suggests a positive relationship for active exporters and a negative relationship for passive exporters, with sales as export performance measure. In the same line of argument Zou et al. (1997) and Culpan (1989) suggest a positive relationship of the export motives with profit and growth as measures of export performance respectively.

Evangelista (1994) suggests that the barriers to export (that is, operational, psychological, organizational, product market, government intervention) result in slow export growth, low export sales and fail to be significant predictors of export performance. International professional experience seems to have a positive effect on export sales (Kaynak and Kuan, 1993), export profits (Kaynak and Kuan, 1993), export growth (Gray, 1997).

Managerial skills (that is, education, experience and involvement with international markets) were found to have a significant effect on export sales, profit (Kaynak and Kuan, 1993) and growth (Gray, 1997).

Reid (1986) suggested a negative significance of the technical skills (that is, application of appropriate technology) with propensity to export as a measure. However, Cooper and Kleinschmidt (1985) suggested a positive significance of the technical skills with export growth intensity as a measure.

Exporters seem to place a great deal of reliance on management systems (that is, formal control of systems). Specifically, Brady and Bearden (1979) and Kirpalani and MacIntosh (1980) found a positive significance of the management systems with export attitudes and export growth.

The export commitment of the management has emerged as one of the key determinants of export performance regardless of export performance dimension (Cavusgil and Zou, 1994). The international orientation is found to be a very consistent predictor of good export performance, measured in financial terms (Axinn et al., 1996) or as a composite (Holzmüller and Stottinger, 1996).

In terms of management perceptions the findings suggest a positive relationship when attitudes toward exports (Johnston and Czinkota, 1985), technology adoption as a function of export (Daniels and Robles, 1982), perception of export success (Johnston and Czinkota, 1985), as exporters versus non-exporters and propensity to export are measured.

The firm dimension comprises demographic aspects, operating elements, recourse characteristics, and goals and objectives of the exporting firm (Leonidou et al., 1998). Certain firm features exhibit a positive relationship to export performance.

The empirical findings suggest that the firm's international competence (market knowledge, market planning, export policy, management control systems, quality control, communication ability) (Diamantopoulos and Inglis, 1988), size of the firm (Diamantopoulos and Inglis, 1988), export activity (non-exporters versus exporters) (Diamantopoulos and Inglis, 1988), experience (pre-involvement, initial, advanced) (Leonidou et al., 1998), resources (capital, personnel, production) (Reid, 1982), and adoption to international markets (Johnston and Czinkota, 1985) demonstrate a strong effect on export performance. Nevertheless, certain organizational characteristics such as adaptation to international markets (Johnston and Czinkota, 1985) and technology (Reid, 1986) had no significant effect on export performance.

Intervening variables

The intervening variables are divided in three sets of dimensions, namely information, market decision and strategy factors.

The information dimension relates to information about foreign opportunities, products, foreign markets, foreign market differences, and communication (Leonidou et al., 1998). The information characteristics take place at two stages: in the initial phase of the export development and during the export development. In the initial phase the new exporter tries to identify information for foreign market opportunities. In other words, the new exporter tries to uncover information concerning language, education, business practices, culture, industrial development, government-imposed barriers and so on (Johanson and Vahlne, 1977).

These variables tend to be more related to the physical distance of the new exporter with a market (Wiedersheim-Paul et al., 1978). However, as the firm progresses in the export process, it requires more specific information concerning products and foreign markets (Seringhaus, 1986). In other words, during the export development a firm requires information about products that may not be suitable for foreign markets, foreign market differences and so on. In this respect the rationale is that an increased level of visits and communication will lead the firm to a better understanding of the customer and its channel members needs and behaviour (Madsen, 1989). In the same line of argument Cunningham and Spigel (1971) found a positive relationship between visits and export performance, while Rosson and Ford (1982) suggested a positive relationship between contacts with distributors and export performance. However, the degree of uncertainty appears to be high during the initial stages of the export development while it gradually diminishes as a firm moves to more advanced stages (Welch and Luostarinen, 1988).

The market decision dimension relates to market research, market choice, market adaptation and market entry (Leonidou et al., 1998). The work of Madsen (1989) confirmed that there is a small association between market research and export performance. In his empirical study on Danish exporters there are no relationships between market research and export performance.

Johanson and Vahlne (1990) argue that new exporters tend to choose the psychologically closest countries to begin with, and then with experience extend progressively to countries that are psychologically more distant. In the same respect the more a firm can recognize and adapt its way of doing business to the local environment the better the chances of success (Jackson, 1981; Elbashier and Nicholls, 1983). To further that argument, firms that develop more in the different regions within the home market acquire useful experience for latter expansion (export activity). Subsequently, the expansion of a firm can take two different views. The one is dealing with market concentration, where the new exporter exports to the closest markets and the other is dealing with market spreading, where the exporter after acquiring information about the closest markets starts to export to as many overseas markets as possible (Piercy, 1981). Empirical evidence shows that companies attempt to create homogeneity in early stages of exporting, which will allow further expansion to more psychologically distant countries (Czinkota and Ursic, 1987).

However, the market choice and adaptation cannot be seen as separated from the export entry modes. Researchers like Brady and Bearden (1979) argue that during the initial phase of the export stages, firms with limited resources tend to adapt to foreign operations through indirect export methods such as export merchants or trading companies. As a firm progresses towards the export stages, it switches from indirect modes of entry to direct export modes such as agents or overseas distributors. The work of Turnbull (1987) concludes that the stages theory in the internationalization process portrays the international expansion of specific geographic areas within Europe. However, it does not support the proposition that the pattern of export organization development follows an evolutionary path or an incremental approach. Thus, the conclusion is that firms use a combination of entry modes to enter a market (Turnbull, 1987).

The strategy dimension refers to the company's export product, pricing, distribution and promotion strategy (Albaum et al., 1997). The empirical evidence suggests that there is a positive relationship between product (Dominguez and Sequeira, 1993), price (Samiee and Walters, 1999), distribution support (Cavusgil and Zou, 1994) and advertising (Styles and Ambler, 1994).

Outcome variable

The export performance dimension is the outcome of a firm's activities in export markets (Shoham, 1996). There are three ways of measuring export performance: financial measures (sales, profit and growth),[3] non-financial measures (perceived success, satisfaction and goal achievement),[4] and composite scales (Cavusgil and Zou, 1994; Zou and Stan, 1998; Katsikeas et al., 2000). The sales category includes measures of export sales or the export intensity. The profit category consists of measures of overall export profitability and measures such as export profit divided by total profit or by domestic market profit. The growth measures refer to changes in export sales or profits over a period of time. The perceived success category comprises measures such as the managers' belief that export contributes to a firm's overall profitability and reputation (Raven et al., 1994). Satisfaction is the managers' overall perception of whether the firm is performing or not (Evangelista, 1994); and goal achievement concerns the managers' assessment to performance compared to objectives (Leonidou and Katsikeas, 1996). Finally, the composite scales are based on measures of overall scores on a variety of performance measures.

Most background and intervening variables were associated with economic measures of export performance, particularly export sales intensity, export sales growth and export profitability (Katsikeas et al., 2000). However, export performance measures have attracted criticism on structural and methodological grounds (Katsikeas et al., 2000; Matthyssens and Pauwels, 1996).

From the structural point of view the review offered from Katsikeas et al. (2000) suggests five problems. Firstly, most studies looked at the determinants of export performance in relation to their outcomes, without associating the findings with the wider export theory. Secondly, export performance was studied in isolation from developments in domestic marketing, that is, interrelationships among the elements of domestic and export marketing have not been examined at all. Thirdly, the determinants affecting export performance were not considered in relation to other strategic options, that is, the allocation of organizational resources. Fourthly, research focuses on marketing issues in relation to export performance and overlooks the influence of strategic and operational activities in other functions such as production, finance, purchasing, and research and development. Finally, the association of relations between the different sets of variables faces criticism in that it: (1) assumes a unidirectional relationship, (2) ignores interrelationships among different sets of variables, and (3) considers factors effects on export performance as static rather than evolutionary.

Even more from the methodological point of view, both objective and subjective measures of export performance face criticism (Matthyssens and Pauwels, 1996). Objective assessment is considered reliable in measuring actual performance but can pose measurement problems in export performance evaluations in terms that the cut-off point for successful or unsuccessful firms is arbitrarily set by the researcher (Styles and Ambler, 1994). Furthermore company financial statements and reports do not distinguish export business operations nor provide venture information (Katsikeas et al., 2000). The subjective assessments indicate that the reference point against which actual performance is evaluated is not controllable (Katsikeas et al., 2000). Furthermore measurement information cannot be restricted to secondary sources alone (Matthyssens and Pauwels, 1996). Nevertheless, these were proven valid in measuring the long-term aspect of export performance (Katsikeas et al., 2000).

Export performance is a complex phenomenon involving organizational inputs and outputs (Lewin and Minton, 1986). Thus, by default, performance is a multidimensional construct (Bhargava et al., 1994).

SYNTHESIS OF THE EXPORT THEORIES

The majority of export marketing performance studies are based on the traditional marketing mix or neo-classical paradigm (Carman, 1980). However, under the concept of the relational paradigm the exporting process begins by forming relationships in the export market and according to the degree of the experiential knowledge that it gains from these relationships then a firm commits resources (Styles and Ambler, 1994). The relational paradigm suggests that exporters rely more on the information gathered via interactions with network members than it does consumer research or secondary market data and other objective information stressed by the neo-classical paradigm (Peng and Ilinitch, 1998; Styles and Ambler, 1994). Verification of these findings comes from the work of Rosson and Ford (1982) and Styles and Ambler (1994) who have modelled and tested the direct link between the relational variables and export performance. Subsequently, the export performance model has been revised to include the relational aspect.

The channel intermediary dimension is classified as distribution transaction and communication channels, each of which has a discrete function (Peterson et al., 1997). The function of distribution channels is to facilitate the physical exchange of products and services (Peterson et al., 1997). Transaction channels generate sales activities between buyers and sellers (Peterson et al., 1997). Finally, communication channels enable the exchange of information between sellers and buyers (Peterson et al., 1997). The key elements are the inclusion of the important 'key actors' in the network, the intensity of the relationships, the degree of reciprocity in decision-making, and the extent of long-term commitment between actors (Rosson and Ford, 1982; Styles and Ambler, 1994).

THE RELATION OF THE INTERNET WITH THE CHANNEL FUNCTIONS

As previously discussed, the functions of the marketing channels are distribution, transaction and communication. The application of the Internet can complement the functions of the marketing channels (Prasad et al., 2001; Kiang et al., 2000).

The application of the Internet as a distribution medium, promoting physical exchange of products and services, assists firms to: (1) minimize huge inventories, storage costs, and utilities, and (2) shorten the supply chain, thus reducing the operating costs (Edwards et al., 1998). As a transaction medium, generating sales activities, the Internet allows firms to: (1) reach wider market segments (Long et al., 1998); (2) identify selling opportunities thus improving revenues (Eichhorn and Helleis, 1997); (3) make more efficient the transaction processing which results in reducing task complexity, that is, transaction paperwork (Long, 1997); and (4) customize promotion and sales to individual customers thereby improving flexibility (Hawn, 1996). Also as a communication medium, an information exchange among producers and customers, the Internet gives firms the flexibility to: (1) access, organize and communicate information; (2) strengthen the interaction between sellers and buyers thus improving perceptual knowledge (Peterson et al., 1997); and (3) gather information about customers through surveys necessary for product screening, development, introduction, relationship building and personalization (Davy, 1998).

However, research has yet to identify the dimensions affecting Internet export performance. Thus the remainder of the discussion will focus on the development of the Internet performance model.

A PROPOSED INTERNET-ENABLED FRAMEWORK

Constructs of the New Theoretical Framework

The extensive literature review offered previously on indicators and theories affecting export performance offers a very good platform in order to develop the new Internet based model, which is analysed and graphically re-presented (see Figure 8.2).

The three groups of variables are: the background variables (firm factors and managerial factors), the intervening variables (Internet factors and marketing strategy) and the export performance variables, and are discussed in turn.

Background variables

The background variables consist of managerial and firm dimensions, which have been briefly discussed in the previous section. The initial criterion used for the inclusion of the variables follows the logic that variables which appear to have no significant relationship with export performance will not be included. However, until now the review of the determinants of the export performance points out that whether there is a positive or negative relationship of the determinants with export performance depends on the content and the context of the empirical studies.[5] To state an example, firm competencies and characteristics appear to be important determinants of export performance (Zou and Stan, 1998). Kaynak and Kuan (1993) report negative impact of firm's number of years on export profitability and sales. In the same line of argument the technology level is reported to have a positive effect on export performance in six studies, but a non-significant effect in five others (Zou and Stan, 1998). Subsequently, the new model incorporates the variables that are not clear in terms of affecting export performance since both the content and context are changing.

Intervening variables

The intervening variables consist of the Internet factors and marketing strategy dimensions. The Internet as a channel has three main functions as: (1) a communication channel, (2) a distribution channel, and (3) a transaction

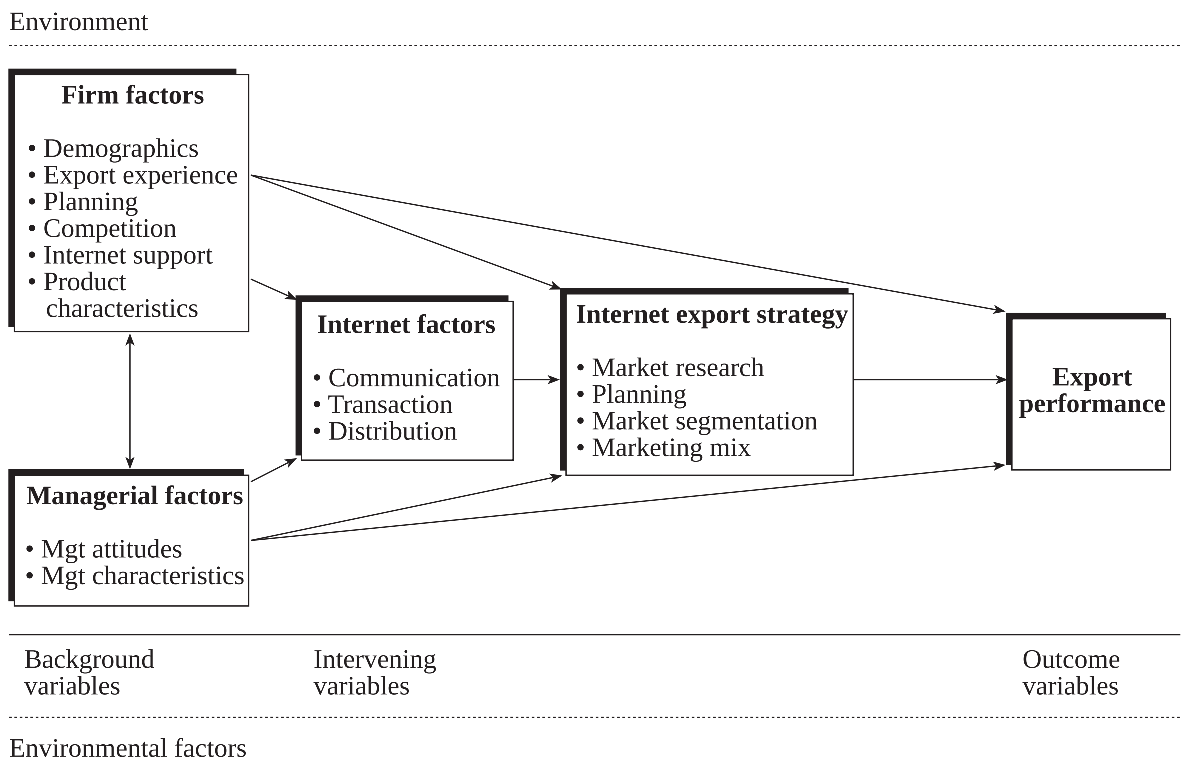


Figure 8.2 A simplified Internet Export performance model

channel. The criteria used for the inclusion of these variables, come from the work of Rangan et al. (1992) and Peterson et al. (1997) who suggest based on product classification, the significance of each factor on the success of a firm's online marketing approach. In terms of marketing strategy the criterion that has been used comes from a sizeable number of studies, which suggests a positive relationship between strategies and export performance (Samiee and Walters, 1999; Cavusgil and Zou, 1994; Styles and Ambler, 1994; Dominguez and Sequeira, 1993).

Measures of export performance

As has already been discussed there is still no agreement on how to measure export performance (Katsikeas et al., 2000). However, the work of Cavusgil and Zou (1994) suggests that the combination of both objective and subjective modes of assessment can assess the situation better. Thus both objective and subjective export performance measures will be used in this study.

Constructs of the New Operational Framework

The literature review of determinants on export performance has revealed a number of different dimensions and their variables. Based on justification given in the previous section, all dimensions with their relevant variables will need to be accommodated in the new model. However, the main problem is that the new Internet-enabled framework is quite extensive. Therefore, examining the multitude of dimensions and variables is challenging. Subsequently, the objective at this point is to balance the danger of having too many factors that are specific but lack parsimony, with that of having too many factors that are parsimonious but with lack of meaning (Madsen, 1989).

The work of Madsen (1989) suggests that studies which have a narrow model, that is, a small array of explanatory variables, usually face specification problems and the contingency analysis is limited. On the other hand, by having a broader model the specification problems are reduced and the possibilities of contingency analysis are increased. Following the views of Madsen this chapter will look at the broader model, by limiting the variables within each dimension, in order to increase contingency and limit specification problems.

Thus two more criteria were adopted, in addition to the ones mentioned in the literature review, which led to further fine-tuning of the variables within each dimension. These were: (1) to focus on variables, which have been examined to an extensive degree from the majority of other empirical studies; and (2) to group the variables into a reduced number of more general dimensions, based on their substantive conceptual meanings (Leonidou et al., 1998; Madsen, 1987).

Thus the managerial dimension has been divided into two sub-dimensions: (1) the managerial characteristics/skills, and (2) the managerial attitudes. The management characteristics/skills dimension includes the demographic, educational and experience aspects of the management, while the management attitudes dimension includes the control systems, commitment and perceptions aspects of the management. The firm dimension is comprised from the general firm's resources, ownership, Internet support, export experience, product characteristics and planning. The Internet dimension includes transaction, distribution and communication, which is further divided into investigation, interaction, support, feedback and information. The Internet export strategy dimension incorporates planning, market selection, market segmentation and marketing mix. The export market dimension includes the cultural, competitive, legal and regulatory aspects of the foreign market. Finally, the export performance dimension is comprised from both objective and non-objective measures.

PROPOSITIONS

The key propositions of this model are:

H1 Internet export performance is enhanced when the:
   a. environment is conducive to importing;
   b. Internet export strategy (market research, planning, market segmentation and marketing mix) increases;
   c. managerial attitudes (beliefs, commitment and control) towards the Internet are increased;
   d. Internet-related managerial background (education, experience) is strong;
   e. firm's capabilities (education of the employees, export experience, planning, competitive intensity, support, and product's maintenance and design) for the Internet are increased.

H2 The Internet export strategy increases when:
   a. the functions of the Internet (communication, transaction and distribution) are enhanced;
   b. managerial attitudes (beliefs, commitment and control) towards the Internet are increased;
   c. Internet-related managerial background (education, experience) is strong;
   d. the firm's capabilities (education of the employees, export experience, planning, competitive intensity, support, and product's maintenance and design) for the Internet are increased.

H3 The Internet functions are enhanced when:

a. managerial attitudes (beliefs, commitment and control) towards the Internet are increased;
b. Internet-related managerial background (education, experience) is strong;
c. the firm's capabilities (education of the employees, export experience, planning, competitive intensity, support, and product's maintenance and design) for the Internet are increased.

CONCLUSION

The rapid growth of on-line computing technologies makes it crucial for businesses to critically think about the Internet in order to avoid losing competition. The Internet can give direct contact between the firm and the consumer. The immediate impact of this direct relationship between the producer and the customer has considerable advantages when small and medium-sized firms adapt to the different functions – communication, distribution or transaction – of the Internet.

Furthermore, small businesses have the capability, even with limited financial resources, to conduct marketing activities on an international or even on a global level, in an effective and competitive manner. In addition, given the potential capabilities of the Internet as a communication tool, small and medium-sized firms may have the flexibility to become an important channel of a wider international network of members, which in effect can offer better access to suppliers and customers. On the other hand, the main implications are that the specific functions of the Internet can possibly lead to the alteration of the existing marketing channels or to the development of new ones, for example electronic channels. That in turn can result in the transformation of the value activities, that is, operations or structures, of a small or medium-sized firm, thus making the development of the marketing strategy complicated. However, there is no correct formula on how to design successful Internet marketing strategy. This is probably due to the fact that the academic research has not been able to establish which variables affect the Internet-enabled strategy and to what degree, thus affecting export marketing performance.

To conclude, the objective of this chapter was to develop an Internet-enabled conceptual framework that can enhance managerial decision-making when applying the new technology. In doing so, the author reviewed and synthesized the relevant export literature, identified the main dimensions that determined export performance, and explained the main role of the marketing channels and how the Internet can complement them. The chapter then continued by providing the constructs of the new Internet-enabled framework.

NOTES

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1. One of the main issues in the international business literature is the way that researchers measure the internationalization of a firm, which was suggested to be unreliable for measuring the actual performance of a firm (Katsikeas et al., 2000; Leonidou and Katsikeas, 1996; Matthyssen and Pauwels, 1996). Based on the review of the above-mentioned papers it was the feeling of the author to focus on export performance indicators that have been suggested to be more reliable in terms of measuring the performance of a firm (Katsikeas et al., 2000; Leonidou and Katsikeas, 1996, Matthyssen and Pauwels, 1996).
2. The author recognizes the existence of a third set of variables, namely external environment that comprises industrial characteristics, foreign market characteristics and domestic market characteristics (Zou and Stan, 1998). However, the external environment will not be studied since it is beyond the scope of this research.
3. These are the economic measures identified from Katsikeas et al. (2000).
4. These are the generic measures and non-economic measures identified from Katsikeas et al. (2000).
5. The author derives this conclusion after reviewing a considerable body of literature on determinants affecting export performance.

REFERENCES

Aaby, N.E. and S.F. Slater (1988), 'Management influences on export performance: a review of the empirical literature 1978–1988', *International Marketing Review*, **6** (4), 7–26.

Albaum, G., J. Strandskov and E. Duerr (1997), *International Marketing and Export Management*, Wokingham: Addison Wesley.

Axinn, C.N. (1988), 'Export performance: do managerial perceptions make a difference?', *International Marketing Review*, **5**, 61–71.

Axinn, C.N., T. Noordewier and J.M.J. Sinkula (1996), 'Export strategies and export performance: an empirical investigation of a products/markets typology', *Advances in International Marketing*, **8**, 27–58.

Benjamin, R. and R. Wigand (1995), 'Electronic markets and virtual value chains on the information superhighway', *Sloan Management Review*, Winter, 62–72.

Berry, M.M.J. (1996), 'Technical entrepreneurship, strategic awareness and corporate transformation in small high-tech firms', *Technovation*, **16** (9), 487–98.

Bhargava, M., C. Dubelaar and S. Ramaswami (1994), 'Reconciling diverse measures of performance: a conceptual framework and test of a methodology', *Journal of Business Research*, **31**, 235–46.

Brady, D.L. and W.O. Bearden (1979), 'The effect of managerial attitudes on alternative exporting methods', *Journal of International Business Studies*, **10** (3), 79–84.

Carman, J.M. (1980), 'Paradigms for marketing theory', *Research in Marketing*, **3**, 1–36.

Cavusgil, T.S. and S. Zou (1994), 'Marketing strategy performance relationship: an investigation of the empirical link in export market ventures', *Journal of Marketing*, 58, 1–21.

Chetty, S.K. and R.T. Hamilton (1993), 'Firm level determinants of export performance: a meta analysis', *International Marketing Review*, **10** (3), 26–34.

Christensen, C.H., A. da Rocha and R.K. Gertner (1987), 'An empirical investigation of the factors influencing exporting success of Brazilian firms', *Journal of International Business Studies*, Fall, 61–77.

Cooper, R.G. and E.J. Kleinschmidt (1985), 'The impact of export strategy on export sales performance', *Journal of International Business Studies*, Spring, 37–55.

Cunningham, M.T. and R.I. Spigel (1971), 'A study in successful exporting', *British Journal of Marketing*, **5** (1), 2–12.

Culpan, R. (1989), 'Export behaviour of firms: relevance of firm size', *Journal of Business Research*, **18**, 207–18.

Czinkota, M. and M.L. Ursic (1987), 'A refutation of the psychic distance effect on export development', *Developments in Marketing Science*, **10**, 157–60.

Daniels, J.D. and F. Robles (1982), 'The choice of technology and export commitment: the Peruvian textile industry', *Journal of International Business Studies*, Spring/Summer, 67–87.

Davy, J.A. (1998), 'Electronic commerce: is going online the right road for your company?', *Managing Office Technology*, **43** (5), 20–23.

Diamantopoulos, A. and K. Inglis (1988), 'Identifying differences between high and low involvement exporters', *International Marketing Review*, **5**, 52–60.

Dodgson, M. and R. Rothwell (1991), 'Technology strategies in small firms', *Journal of General Management*, **17** (1), 45–55.

Dominguez, L.V. and C.G. Sequeira (1993), 'Determinants of LCD exporters' performance: a cross national study', *Journal of International Business Studies*, First Quarter, 19–40.

Edwards, N., S. Hancock and J. Mullen (1998), 'Electronic commerce: reality bytes', *Supply Management*, 4 September, 32–4.

Eichhorn, O. and S. Helleis (1997), 'Cyberspace cross selling', *Credit Union Management*, **20** (9), 28.

Elbashier, A.M. and J.R. Nicholls (1983), 'Export marketing in the Middle East: the importance of cultural differences', *European Journal of Marketing*, **7**, 68–81.

Evangelista, F.U. (1994), 'Export performance and its determinants: some empirical evidence from Australian manufacturing firms', *Advances in International Marketing*, **6**, 207–29.

Ford, D. and L.C. Leonidou (1991), 'Research developments in international marketing', in S.J. Paliwoda (ed.), *New Perspectives on International Marketing*, London: Routledge.

Gottko, J. and R.O. McMahon (1988), 'Export marketing activities of small to medium sized manufacturers', California: Western Marketing Association.

Gray, B.J. (1997), 'Profiling managers to improve promotion targeting', *Journal of International Business Studies*, Second Quarter, 387–420.

Hamill, J. (1997), 'The Internet and international marketing', *International Marketing Review*, **14** (5), 300–323.

Hawn, M. (1996), 'Stay on the Web: make your Internet site pay off', *Mac World*, **13** (4), 94–8.

Hoffman, D.L. and T.P. Novak (1996), 'A new marketing paradigm for electronic commerce', *Information Society*, **13** (1).

Holzmuller, H.H. and B. Stottinger (1996), 'Structural modeling of success factors in exporting: cross validation and further development of an export performance model', *Journal of International Marketing*, **4** (2), 29–55.

Jackson, G.I. (1981), 'Exporting from the importer's viewpoint. The case of Israeli exporters of consumer goods to Great Britain', *European Journal of Marketing*, **15**, 3–25.

Johanson, J. and J.-E. Vahlne (1977), 'The internationalisation process of the firm: a model of knowledge development and increasing foreign market commitment', *Journal of International Business Studies*, **8** (1), 23–33.

Johanson, J. and J.-E. Vahlne (1990), 'The mechanism of internationalisation', *International Marketing Review*, **7** (4), 11–24.

Johnston, W.L. and M. Czinkota (1985), 'Export attitudes of industrial manufacturers', *Industrial Marketing Management*, **14**, 123–32.

Jones, M.V. (2001), 'First steps in internationalisation. Concepts and evidence from a sample of small high-technology firms', *Journal of International Management*, **7**, 191–210.

Katsikeas, C.S., L.C. Leonidou and N.A. Morgan (2000), 'Firm level export performance. Assessment: review, evaluation, and development', *Journal of the Academy of Marketing Science*, **28** (4), 493–511.

Kaynak, E. and W.K. Kuan (1993), 'Environment, strategy, structure, and performance in the context of export activity: an empirical study of Taiwanese manufacturing firms', *Journal of Business Research*, **27**, 33–49.

Kiang, M.Y., T.S. Raghu and K.H.M. Shang (2000), 'Marketing on the Internet: who can benefit from an online marketing approach?', *Decision Support Systems*, **27**, 383–93.

Kirpalani, V.H. and N.B. MacIntosh (1980), 'International marketing effectiveness of technology oriented small firms', *Journal of International Business Studies*, **11**, 81–90.

Knight, G.A. (2001), 'Entrepreneurship and strategy in the international SME', *Journal of International Management*, **7**, 155–71.

Leonidou, L.C. and C.S. Katsikeas (1996), 'The export development process: an interactive review of empirical models', *Journal of International Business Studies*, Third Quarter, 517–51.

Leonidou, L.C., C.S. Katsikeas and N.F. Piercy (1998), 'Identifying managerial influences on exporting past research and future directions', *Journal of International Marketing*, **6** (2), 74–102.

Leonidou, L.C., C.S. Katsikeas and S. Samiee (2002), 'Marketing strategy determinants of export performance: a meta-analysis', *Journal of Business Research*, **55**, 51–67.

Lewin, A.Y. and J.W. Minton (1986), 'Determining organizational effectiveness: another look and an agenda for research', *Management Science*, **32** (5), 514–38.

Long, G., M.K. Hogg, D. Davidson and J. Nuttall (1998), 'Marketing relationships and the Internet: towards a framework', *Journal of Database Marketing*, **6** (2), 105–26.

Madsen, T.K. (1987), 'Empirical export performance studies: a review of conceptualizations and findings', *Advances in International Marketing*, **2**, 177–98.

Madsen, T.K. (1989), 'Successful export marketing management: some empirical evidence', *International Marketing Review*, **6** (4), 41–57.

Malone, T.W., J. Yates and R. Benjamin (1989), 'The logic of electronic markets', *Harvard Business Review*, May/June, 166–72.

Matthyssens, P. and P. Pauwels (1996), 'Assessing export performance measurement', *Advances in International Marketing*, **8**, 85–114.

Narasimhan, A. and P. Chatterjee (1997), 'The Web as a distribution channel', http://ecommerce.vanderbilt.edu/ .

Oviatt, B.M. and P.P. McDougall (1995), 'Global start-ups: entrepreneurs on a world wide stage', *Academy of Management Exec*., **9** (2), 30–44.
Peng, M. and A.Y. Ilinitch (1998), 'Export intermediary firms: a note on export development research', *Journal of International Business Studies*, **29** (3), 609–20.
Peterson, R.A., S. Balasubramanian and B.J. Bronnenberg (1997), 'Exploring the implications of the Internet for consumer marketing', *Journal of the Academy of Marketing Science*, **25** (4), 329–46.
Piercy, N.F. (1981), 'Export strategy: key markets vs. market spreading', *Journal of International Marketing*, **1** (1), 56–67.
Poon, S. and C. Jevons (1997), 'Internet enabled international marketing: a small business network perspective', *Journal of Marketing Management*, **13**, 29–41.
Poon, S. and P.M.C. Swatman (1998), 'An exploratory study of small business Internet commerce issues', *Information and Management*, **35**, 9–18.
Prasad, K.V., K. Ramamurthy and G.M. Naidu (2001), 'The influence of Internet-marketing integration on marketing competencies and export performance', *Journal of International Marketing*, **9** (4), 82–110.
Rangan, K.V., M.A.J. Menezes and E.P. Maier (1992), 'Channel selection for new industrial products: a framework, method, and application', *Journal of Marketing*, **56**, July, 69–82.
Raven, P.V., J.M. McCullough and P.S. Tansuhaj (1994), 'Environmental influences and decision making uncertainty in export channels: effects on satisfaction and performance', *Journal of International Marketing*, **2** (3), 37–59.
Reid, S. (1982), 'The impact of size on export behavior in small firms', in M. Czinkota and G. Cesar (eds), *Export Management: an International Context*, New York: Praeger, pp. 18–38.
Reid, S. (1986), 'Is technology linked with export performance in small firms', in H. Hubner (ed.), *The Art and Science of Innovation Management*, Amsterdam: Elsevier Science, pp. 273–83.
Roberts, E.B. (1968), 'Entrepreneurship and technology: a basic study of innovators, how to help and capitalize on their talents', *Research Management*, **11** (4), 249–66.
Rosson, P.J. and D.I. Ford (1982), 'Manufacturer overseas distributor relations and export performance', *Journal of International Business Studies*, Fall, 57–72.
Samiee, S. and P.G.P. Walters (1999), 'Determinants of structured export knowledge acquisition', *International Business Review*, **8**, 373–97.
Sarkar, M., B. Butler and C. Steinfield (1998), 'Cybermediaries in electronic marketplace: toward theory building', *Journal of Business Research*, **41**, 215–21.
Seringhaus, R. (1986), 'The role of information assistance in small firm's export involvement', *International Small Business Journal*, **5**, 26–36.
Shoham, A. (1996), 'Marketing mix standardization: determinants of export performance', *Journal of Global Marketing*, **10** (2), 53–73.
Smith, J.G. and V. Fleck (1987), 'Business strategies in small high-technology companies', *Long Range Planning*, **20** (2), 61–8.
Styles, C. and T. Ambler (1994), 'Successful export practice: the UK experience', *International Marketing Review*, **11** (6), 23–47.
Turnbull, P.W. (1987), 'A challenge to the stages theory of the internationalization process', in P.J. Rosson and S.D. Reid (eds), *Managing Export Market Entry and Expansion Concepts and Evidence*, New York: Praeger, pp. 21–40.
Verity, J. (1994), 'The information revolution', *Business Week*, 18 May, 12–18.
Welch, L.S. and R. Luostarinen (1988), 'Internationalization: evolution of a concept', *Journal of General Management*, **14** (2), 34–55.

Wiedersheim-Paul, F., H.C. Olson and L.S. Welch (1978), ‘Pre export activity: the first step in internationalization’, *Journal of International Business Studies*, **9** (1), 47–58.

Young, S., J. Hamill, C. Wheeler and R. Davies (1989), *International Market Entry and Development*, H.J.: Prentice Hall.

Zou, S., D.M. Andrus and W.D. Norvell (1997), ‘Standardization of international marketing strategy by firms from a developing country’, *International Marketing Review*, **14** (2), 107–23.

Zou, S. and S. Stan (1998), ‘The determinants of export performance: a review of the empirical literature between 1987 and 1997’, *International Marketing Review*, **15** (5), 333–56.

9. The Internet and the internationalization of small knowledge-intensive firms: a conceptual approach*

Shameen Prashantham and Maureen Berry

INTRODUCTION

There is growing interest in the internationalization of small knowledge-intensive firms (SKIFs), particularly with respect to their often rapid internationalization and the role played by network relationships. The research question that this chapter seeks to answer is: what is the potential impact of the Internet on the internationalization of SKIFs?

Berry et al. (2001) have drawn attention to the apparent tension among themes such as 'global strategy', 'multinational enterprise' and 'Born Globals' in the literature. It may be argued that this has arisen from the dominance of the study of large multinational firms in international business theory (Oviatt and McDougall, 1994). However, it appears that more recently there has been growing interest in the internationalization of small firms. A specific subset of this interest has emerged in relation to those small firms that have exhibited accelerated internationalization (Young, 1987; Shrader et al., 2000), in contradiction to prevalent notions of incremental and gradual internationalization. This phenomenon has been noticeable in SKIFs (Bell, 1995; Crick and Jones, 2000).

Given this propensity to internationalize at a rapid rate and early on in their lives, it seems fair to suggest that SKIFs lend themselves readily to enquiry in the realm of international entrepreneurship, going by McDougall and Oviatt's (2000) definition of international entrepreneurship as 'a combination of innovative, proactive, and risk-seeking behaviour that crosses national borders and is intended to create value in organizations'.

The focus of this chapter, as indicated, is small knowledge-intensive firms. 'Small' – based on the most common cut-off in the literature (Brock, 2000) – is taken as a firm with less than 100 employees, and 'knowledge-intensity' as 'the extent to which a firm depends on the knowledge inherent in its activities and outputs as a source of competitive advantage' (Autio et al., 2000). Researchers such as McNaughton (2001) have accepted this definition of knowledge-intensity. It may be noted that some of the literature reviewed in subsequent sections makes reference to high-technology or technology-based firms; using the above definition, such firms can be categorized as SKIFs.

The ensuing discussion begins with an overview of the literature on (1) the internationalization of SKIFs, and (2) the Internet with respect to network relationships, followed by an attempt to synthesize these two bodies of literature with a view to inferring the potential impact of the Internet on the internationalization of SKIFs. In conclusion, implications for academics, managers and policy-makers are drawn; in relation to theory development the virtual absence of published research on the impact of the Internet on the internationalization of small knowledge-intensive firms in a developing economy context is identified and highlighted.

THE INTERNATIONALIZATION OF SKIFS: THE ROLE OF NETWORK RELATIONSHIPS

Within the body of literature on internationalization theory it is seen that the so-called 'stage' theories have acquired a dominant position. According to this school of thought there is an incremental process of internationalization among firms in terms of the commitment demonstrated through the selected entry mode (progressing from simple exporting to ultimately foreign direct investment to set up production facilities in international markets), and in terms of the psychic distance of the targeted markets. Key to this incremental process is the firm's progressively enhanced experiential market knowledge (Johansson and Vahlne, 1977, 1990). Summaries and reviews of the key literature on internationalization of the firm are well documented (see for example Andersen, 1993; Leonidou and Katsikeas, 1996; Coviello and McAuley, 1999), and therefore, rather than a repetitive account of internationalization theory in general, the specific focus of this section is on SKIFs.

The 'stage' theories have come under a fair amount of criticism (see for example Andersen, 1993; Bell and Young, 1998) particularly due to their failure to accurately predict the internationalization patterns of SKIFs. There is growing evidence that SKIFs have demonstrated acceleration in the internationalization process (Crick and Jones, 2000) and are often examples of a 'Born Global' (Rennie, 1993) or 'international new venture'. An 'international new venture' is defined as 'a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and sale of outputs in multiple countries … In contrast to organizations that evolve gradually from domestic firms to MNEs, these new ventures begin with a proactive international strategy' (Oviatt and McDougall, 1994).

Bell (1995) and Coviello and Munro (1995, 1997) have studied SKIFs – software firms – that demonstrated rapid internationalization. A significant factor that influenced the accelerated internationalization of these SKIFs was reported to be inter-firm relationships within a wider international network that might include customers, competitors, suppliers, support agencies – even family and friends. These network relationships influenced SKIFs' choice of markets and market entry mode. For example, Bell's (1995) study of software firms in Finland, Ireland and Norway suggests that three factors influenced the choice of market: client followership, sectoral targeting and computer industry trends – these in turn are influenced by relationships with other firms (such as clients).

Of course, there may be product and market characteristics that facilitate – and perhaps necessitate – such accelerated internationalization. For example Coviello and Munro (1995) mention the high research costs, shorter product life cycle and competitive markets that SKIFs tend to operate in, while Jones (1999) and McNaughton (2001) make reference to their greater uncertainty in terms of technology and strategy. However, in addition to these factors, it appears that network relationships accelerate SKIFs' internationalization process, resulting in the school of thought often referred to as the 'network' approach. The interaction among firms is seen as the most important factor in the choices made by firms *vis-à-vis* targeted markets and entry mode. However, this does not mean that the 'stage' and 'network' schools of thought are mutually exclusive; they may be seen as complementary rather than contradictory (Bell and Young, 1998; Coviello and McAuley, 1999).

In the wider context of firm internationalization, Johanson and Mattsson (1988) drew attention to the impact of network relationships; this has been reiterated by other authors as well (see for example, Johnsen and Johnsen, 1999; Korhonen et al., 1996). Network scholars have identified three interdependent elements of networks: actors, activities and resources (Johnsen and Johnsen, 1999). According to Johanson and Mattsson (1988), knowledge and social bonds between actors play a vital role in the emanation of international opportunities for members of a network. They made a useful distinction between the internationalization of firms and of their markets. Gulati et al. (2000) have proposed that networks can be 'strategic' for firms, that is, a source of competitive advantage albeit that this may also be a constraining factor, given the low mobility across networks that many firms experience. A significant point they make is that firms could earn rents on network resources – those that are external to the firms but internal to their network.

Kogut (2000) points out that firms in a network will often compete and cooperate with each other simultaneously. Firms will often jostle for greater control within their networks, and their relational position – not unlike Johanson and Mattsson's (1988) 'market position' – could be a source of competitive advantage (Gulati et al., 2000). This makes the issue of trust among members of a network a significant one, particularly among competing firms (Johnsen and Johnsen, 1999). Distinction is made between a firm's cooperation with customers and suppliers on the one hand, and competitors on the other (Chetty and Blankenburg Holm, 2000). These challenges notwithstanding, the resources and markets that firms may have access to through their network relationships are clearly seen as potentially beneficial to them, and policy-makers have been urged to facilitate such relationship-building (Demick and O'Reilly, 2000; Welch et al., 1998).

In the context of network relationships it is worthwhile to touch upon the issue of clusters, given the interesting parallels between network theory and cluster theory. Clusters, according to Porter (1998a, p. 199), are 'geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate'. Local rivalry tends to be of great intensity – partly since rival entrepreneurs compete not just commercially but also for a better position in the local social hierarchy (Enright, 1998) – which pushes firms to achieve greater levels of innovation and success (Porter, 1998b). A comparison of network and cluster theories, summarized in Table 9.1, suggests that, contrary to Enright's (1998; see his first footnote) distinction between clusters and business networks, it is reasonable to view a cluster as a type of network, albeit a geographically concentrated one. Indeed certain networks have been referred to as 'clusters' in the literature (Chetty and Blankenburg Holm, 2000). In the words of Porter (1998a, p. 225), 'A cluster is a form of network that occurs within a geographic location, in which the proximity of firms and institutions ensures certain forms of commonality and increases the frequency and impact of interactions'.

Returning to the specific matter of the internationalization of SKIFs, network relationships within a cluster could lead to marketing externalities such as, for example, intra-cluster referrals (Brown and Bell, 2000). Brown and McNaughton (2000) suggest that while the original location of a cluster may have been accidental rather than rational, younger firms often locate in such clusters to benefit from the ensuing externalities. While various so-called cluster strategies have been employed around the world by governments, a common element in these has been the facilitation of business networking and inter-firm collaboration; of vital importance in this connection is putting in place a coordination mechanism (Enright, 1999). Thus network relationships that influence the internationalization of SKIFs may exist within clusters.

Table 9.1 Parallels between network and cluster theory

Aspect of the collective entities (i.e., networks and clusters)	**Network scholars**	**Cluster scholars**
Simultaneous competition and cooperation exists	Kogut, 2000	Porter, 1998a
Main elements are interdependent firms, resources and activities	Johnsen and Johnsen, 1999	Enright, 1998
Resources that are external to firms but internal to the collective entity may be a source of competitive advantage	Gulati, Nohria and Zaheer, 2000	Porter, 1998a
The free flow of information and building of inter-firm bonds are vital to the success of the collective entity	Johanson and Mattsson, 1988	Saxenian, 1990
Policy should facilitate strengthening of the collective entity	Demick and O'Reilly, 2000; Welch et al., 1998	Porter, 1998a; Enright, 1998

This section has reviewed a selection of the key literature on the internationalization of SKIFs and the main point made is the significance of influential network relationships – which may also be geographically concentrated within clusters – on this process. To gauge the potential impact of the Internet on the internationalization of SKIFs, it therefore seems worthwhile to review the literature on the Internet in relation to inter-firm relationships in a network, which is the subject of the following section. The subsequent section will then discuss how the Internet could influence the internationalization of SKIFs, in the light of the literature reviewed in this and the following section.

THE INTERNET AND NETWORK RELATIONSHIPS

As evident from the wide coverage in the business press, the Internet was the object of much hype, which appears to have been the result of overexaggerated faith in its ability to foster a new era where old business or economic rules did not apply. The sentiment has dramatically changed since the heady days of 1999 and appears to be leading to a middle-of-the-road perspective that acknowledges the power of the Internet without abandoning business principles; it is the applications of the Internet that will create value, not the Internet itself (Porter, 2001).

A key theme in the literature on the business applications of the Internet deals with the digital networking of companies, which is unsurprising given that the Internet is, by definition, a network of networks (Hamill, 1997; Poon and Jevons, 1997). A unique characteristic of this medium of communication, in comparison with traditional broadcast media, lies in its ability to support many-to-many communication, that is, interactivity (Hoffman and Novak, 1996). Interactivity could greatly facilitate relationships with entities such as suppliers, customers and rivals as implied by the references made in the literature to: the 'e-business community' comprising networks of suppliers and distributors who communicate and transact via the Internet (Tapscott, 1999); the 'virtual factory' (Upton and McAfee, 1996) or 'virtual enterprise' (Schlegelmilch and Sinkovics, 1998) that operate in 'marketspace' (Rayport and Sviokla, 1995); 'microbusinesses' that tap into global networks that were previously the preserve of large MNEs (Malone and Laubacher, 1998); and the 'b-web' which is 'a distinct system of suppliers, distributors, commerce services providers, infrastructure providers, and customers that use the Internet for their primary business communications and transactions' (Tapscott et al., 2000, p. 17).

While the literature tends to have a large-firm bias (see for example, Hacki and Lighton, 2001; Hagel, 2000), the opportunities for small firms are great (Cronin, 1995). Poon and Jevons (1997) have addressed the issue of the Internet and network relationships from the perspective of small firms. Drawing on the work of Golden and Dollinger (1993) they argue that the Internet can enhance network relationships and discuss the potential impact of the Internet on four kinds of networks: confederations, conjugate collectives, agglomerate and organic collectives, as shown in Table 9.2.

Three broad applications of the Internet in particular appear to contribute towards the building and/or enhancement of such relationships: Internet marketing, Internet-supported supply chain management, and Internet-supported customer relationship management, which broadly correlate to Feeny's (2001) three dimensions of Internet application in companies: e-marketing, e-operations and e-services respectively. These are briefly discussed below.

Internet Marketing

While firms now have access to Internet technology that facilitates inter-firm network relationships, the task of creating such relationships in the first place remains. One possible means of doing so is through Internet marketing,

Table 9.2 The Internet and small firm network relationships

Inter-organizational relationship	**Definition**	**Internet marketing strategy**
Confederations	Firms which compete with one another but which maintain some contractual functional activities in common, coordinated by a central management. (e.g., small business groups sharing resources through contractual agreements)	• Central management provide resources for network members to market their products and services on the Internet (e.g., a virtual agency service) • Include in the agreements to provide reciprocal homepage links between members included in the contract.
Conjugate collectives	Firms which have contractual arrangements for symbiotic purposes. (e.g., closed group agreements between supplier and customer)	• Allow reciprocal links on members' homepages. • Make available market intelligence on the closed-group's intranet (if available) with login control. • Share market intelligence in order to improve supplier–buyer relationship.
Agglomerate collectives	Firms which compete within the same industry but have no contractual 'business' arrangements. (e.g., trade associations)	• Trade association provides market intelligence data (local and international) on its homepage for members use. • Mutual agreement between (international) trade associations to market the members' products and services.
Organic collectives (e.g., community service groups)	Firms (or their representatives) which engage in traditional networking, such as board memberships or other voluntary organizations, in an indirect and non-contractual form.	• Advertise products and provide low-cost/free services for charity members of community networks on the Internet (e.g., LinkNet; *www.link.net.au*). • Link community calender of events to one's home page.

Source: Adapted from Poon and Jevons (1997, pp. 36–7; based on Golden and Dollinger, 1993).

where firms seek to make themselves known to other entities in 'cyberspace' generally with a view to directing 'traffic' or visitors to a destination website (Kenny and Marshall, 2000). In relation to destination websites, recommended procedures include registration on prominent search engines (Hamill and Ennis, 1999) and partnership arrangements – another form of network relationships – such as obtaining reciprocal links on websites of interest (Hoffman and Novak, 2000). Also of potential benefit in relation to creating inter-firm relationships is participation in business-to-business (B2B) Internet hubs, variously referred to as B2B marketplaces, exchanges or e-hubs (Kaplan and Sawney, 2000).

Ramsdell (2000) defines a B2B marketplace as 'a World Wide Web site where goods and services can be bought from a wide range of suppliers'. He identifies three kinds of marketplaces based on their focus in terms of industry, product and function: vertical (based on industries), horizontal (based on products) and focusing on function (based on functional skills, for example, HR). According to Sculley and Woods (1999), 'the unique feature of a B2B Exchange is that it brings multiple buyers and sellers together (in a "virtual" sense) in one central market space and enables them to buy and sell from each other at a dynamic price which is determined in accordance with the rules of exchange' (Sculley and Woods, 1999, p. 14). According to Kerrigen et al. (2001), B2B marketplaces offer 'four roads to value': expanded market reach, lower prices, reduced buying costs and identification of industry best practices.

Internet-supported Supply Chain Management

A second application pertains to digitizing and connecting business activities with those of other firms that may be operating in a value chain. While this has been practised through proprietary networks such as electronic data interchange (EDI) in the past, the advantage that the Internet provides is universal standards that broaden the scope of participation, particularly in favour of smaller firms (Evans and Wurster, 1997, 2000). In the value chain, Internet-supported supply chain management primarily concerns three activities of the value chain: inbound logistics (for example, real-time integrated scheduling), operations (integrated information exchange) and outbound logistics (for example, real-time transaction of orders) (Porter, 2001). The specific application of the Internet will depend on the nature of the supply chain that a firm operates in (Poon and Joseph, 2000). Evans and Wurster (2000) highlight the implications for supply chain management of different kinds of companies and transactions as a consequence of the 'deconstruction' of businesses wrought by the Internet (see Table 9.3).

Here again B2B hubs could play a useful role, especially those that are centred around the value chain of an industry or organization. Klein and

Table 9.3 The impact of the Internet on supply chains on businesses

Types of businesses and transactions	**Impact of the 'blowing up' of supply chains**
Large corporations doing business with each other	The richness and reach they want already exist (through VPNs). New technologies can provide operational (rather than strategic) benefit – lower costs, improved functionality.
Smaller companies (and larger companies e.g., Wal-Mart and mid-sized suppliers)	Reach is sacrificed at present for richness (through EDI which locks in suppliers). New technologies allow public networks to replace the private ones; reach is enhanced and 'vertical ties loosened'.
Small, peripheral transactions	New technologies explode the possibilities for reach and comparing offerings at little extra cost.
Small companies doing business with each other	Market makers have great scope to reduce the difficulties and cost of search.

Source: Adapted from Evans and Wurster (2000), p. 171.

Quelch (1997) suggest that smaller firms can particularly gain from such entities, as they 'expand the market so that buyers and sellers, primarily smaller ones, who may have enjoyed only limited access to traditional distribution channels, can now participate on a more level playing field' (Klein and Quelch, 1997, p. 346). According to Porter (2001, p. 70), the benefits to buyers of digital marketplaces include low transaction costs, easier access to price and product information, convenient purchase of related services and the pooling of volume of transactions; benefits to vendors include lower selling costs, access to wider markets and non-confrontation with powerful channels.

Internet-supported Customer Relationship Management

There is a growing and prominent strand in the Internet-related business literature that highlights the role of the Internet in supporting customer relationships (Hamill and Prashantham, 2001). The interactivity element of the Internet makes it particularly amenable to the creation and management of individual relationships or 'one-to-one marketing' (Peppers and Rogers, 1997; Peppers et al., 1999) with other entities (Ellsworth and Ellsworth, 1995;

Wind and Mahajan, 2001), especially customers. According to Siegel (1999), a customer-oriented Web strategy should be based on principles such as discriminating and dealing appropriately with different types of 'e-customers' (for example, on the basis of whether they are beginners, intermediates or experts).

Of vital importance in Internet-supported customer relationship management is the management of databases for the storage and subsequent utilization of knowledge about customers (or indeed, business partners) that may be captured through the firm's website or social interactions within a network (Brown and Duguid, 2000; Davenport et al., 2001). Obtaining as wide and deep information as possible allows firms to obtain an in-depth understanding of customers (Seybold, 2001), which in turn could result in collaborative new product development (Iansiti and MacCormack, 1997) and thereby greater personalization of service, something that may be especially important for SKIFs.

THE INTERNET AND THE INTERNATIONALIZATION OF SKIFS

The research question that this chapter seeks to answer is: what is the potential impact of the Internet on the internationalization of SKIFs? Answers are not easily forthcoming from the limited body of literature on the Internet and small firm internationalization, the main themes of which include the potential for leapfrogging conventional stages of internationalization and the diminished importance of psychic distance (see for example, Bennett, 1997; Hamill, 1997; Quelch and Klein, 1996; and Samiee, 1998). However, the veracity of such claims, including those made by Yip (2000), that 'cyberspace' can substitute much of the learning that takes place in the traditional global marketplace, is difficult to judge as surprisingly little empirical work has been done in this area (Brock, 2000). The answer must therefore, for the moment at least, be sought conceptually through a synthesis of the literature in the previous sections.

It should be evident from the preceding two sections that (1) network relationships have a strong influence on the internationalization of SKIFs, and (2) the Internet offers applications that facilitate network relationships, enabling firms to interact more widely and intimately with other actors including customers, suppliers and fellow competitors. It can thus be argued that the Internet offers SKIFs the potential for creating and enhancing network relationships, which in turn are likely to influence and shape their internationalization process. This section amplifies this argument, making reference to the three Internet applications discussed in the previous section and drawing out a key benefit of each that influences network relationships.

Internet marketing is seen to contribute to greater visibility (Hoffman and Novak, 2000) within a network; Internet-supported supply chain management can contribute to greater operational efficiency or performance (Fisher and Reibstein, 2001); and Internet-supported customer relationship management could lead to greater intimacy (Siegel, 1999; Seybold, 2001) in network relationships.

Visibility

In relation to the first-mentioned application, Internet marketing, it is argued that this could potentially raise visibility for SKIFs in marketspace, as they seek to create network relationships. Visibility is important because of the competition for network relationships that SKIFs will face from other SKIFs and actors in a network. It is argued that – although the literature does not seem to clearly deal with the strategic value of network relationships – in the internationalization of SKIFs, their network relationships are a potential source of competitive advantage and differentiation. Thus it is worthwhile for SKIFs to proactively seek network relationships that will potentially lead to useful internationalization opportunities. A starting point to this would be visibility within a network in the first place to provide the opportunity to interact with other players, which is clearly the chief benefit of Internet marketing.

Efficiency

In relation to the second-mentioned application, Internet-supported supply chain management, it is argued that this could potentially lead to efficiency in business activities conducted in the context of SKIFs' network relationships. Efficiency is important because of the issue of control in network relationships. Coviello and Munro (1995, 1997) have highlighted the jostling for power and control that typically accompanies those network relationships that influence the internationalization of SKIFs. Both the literature on the internationalization of SKIFs (for example, Coviello and Munro, 1997) and the Internet and network relationships (for example Hacki and Lighton, 2001) mention the tendency for large firms to dominate networks. Such a scenario suggests that SKIFs could be at a relative disadvantage with greater need for inclusion in the network and consequently lower bargaining power. It is argued that efficient functioning of business activities could lead to better performance (say in terms of meeting targets or deadlines, as well as cost-cutting) and thereby stronger financial position and reputation, which in turn could strengthen SKIFs' ability to control network relationships better, or at the very least be less buffeted by undesirable shaping of their internationalization by actors with greater power.

Intimacy

In relation to the third-mentioned application, Internet-supported customer relationship management, it is argued that this could potentially enhance the intimacy of SKIFs' network relationships in terms of helping them better understand the needs of their partners. Intimacy is important because of the coherence it can lead to in a SKIF's internationalization process. As has been alluded to, the literature that highlights the crucial role of network relationships in the internationalization of SKIFs does not appear to clearly grapple with the strategic issues involved; for example, can every opportunity that emanates from the network be acted upon irrespective of its fit with the firm's overall strategy (if it has one)? It is argued that a strategic approach is required on the part of SKIFs in relation to their internationalization process, and greater coherence in their strategy can be achieved by better understanding the strategic intents of their fellow actors in the network as well as expressing their own. This can result when there is greater intimacy, that is, greater knowledge of the other actors. Further, intimate network relationships could lead to indirect positive consequences for SKIFs' internationalization process through a greater propensity to share business leads or do business in new foreign markets with them, rather than their rivals within a network. Table 9.4 summarizes the foregoing discussion.

IMPLICATIONS

This chapter attempts to synthesize literature on the internationalization of SKIFs, and the Internet and network relationships. In doing so, the authors' aim is to develop a new conceptual approach to the potential impact of the Internet on the internationalization of SKIFs and to propose associated implications for theory development, management and policy-making. This is now discussed below.

Theoretical Implications

The development of the Internet and its growing ubiquity implies that Internet-related variables – such as access to the Internet, experience with Internet usage and so on – must inevitably be factored into macro-environment and firm-related variables while seeking to understand better the phenomenon of small firm internationalization. This, of course, is likely to be handled slightly differently depending upon the main thrust(s) of the theoretical base used in a piece of research. For example, a promising avenue of research is the impact of the Internet on international new ventures – there may well be a 'chicken

Table 9.4 The Internet and the internationalization of SKIFs

Internet application	**Impact on network relationships**	**Impact on internationalization**
Internet marketing: involves the proactive marketing of a destination website, chiefly with a view to generating awareness and disseminating information	*Visibility*: makes the SKIF visible within a network and provides an opportunity to offer information about itself and credentials	*Competition*: visibility is important given that SKIFs and other actors within a network compete for network relationships that will positively influence their internationalization
Internet-supported supply chain management: involves the digitizing and connection of activities into a wider value chain network via the Internet and Web-enabled networks (such as intranets)	*Efficiency*: provides savings of cost through greater efficiency of information transfer and the saving of time; also allows for the pooling of resources to achieve greater volumes and lower prices in B2B exchanges	*Control*: efficiency is important given that actors in a network jostle for control and greater efficiency could lead to a more competitive position and consequently greater bargaining power
Internet-supported customer relationship management: involves the building and maintenance of deep relationships with 'customers', a broad definition of which would include business partners	*Intimacy*: provides the opportunity for SKIFs to better understand the strategic intents and other aspects of fellow actors in a network; and to be better understood as well	*Coherence*: intimacy is important because it allows SKIFs to better ensure coherence and consistency in their internationalization strategies in relation to long-term objectives

and egg' situation here with the Internet encouraging firms to be international from inception, and internationally-inclined firms finding it easier to be so, as a result of the Internet. It may be noted that studies of international new ventures in particular have used the resource-based view, which is characteristic of a substantial body of literature in strategy but not in internationalization (Bell and Young, 1998). Viewing Internet technologies as resources and the ability to apply them as competencies will perhaps throw light on emerging means of managing the internationalization process more effectively.

As mentioned earlier, little empirical work in the area of the Internet and small firm internationalization has been done, with notable exceptions being

Bennett's (1997) study of British exporters with and without websites, Hamill and Gregory's (1997) study of Scottish exporters and non-exporters, and Brock's (2000) study of German technology-based firms (possibly the only empirical work that deals specifically with SKIFs). Clearly there is need for further empirical study on the impact of the Internet on small firm internationalization in general, and SKIF internationalization in particular, given that the use of the Internet is no longer optional for firms.

It may also be noted that while the Internet's potential benefit for firms based in developing economies has been suggested (Quelch and Klein, 1996), no empirical study appears to have been done in a developing economy context, as seen in Table 9.5. This applies to the area of the internationalization of SKIFs as well.

Table 9.5 Examples of SKIF studies in developed economies

Author	**Nationality of sample studies**
Bell, 1995, 1997	Finland, Ireland and Norway
Coviello and Munro, 1995, 1997	New Zealand
Jones, 1999	United Kingdom
Brock, 2000	Germany
McNaughton, 2001	Canada

There is clearly a need to address the obvious gap in this area of the literature by conducting empirical research that examines the impact of the Internet on the internationalization of SKIFs, in a developing economy context. Such work is critical if SKIFs in developing economies are to benefit from the Internet, since most of the small firm internationalization theory focuses on developed economy contexts and may not readily hold in a developing economy context (Ibeh, 1999) that has peculiar market- and policy-related problems (Das, 1994; Ibeh and Young, 2001; Maddy, 2000). A potentially interesting case would be the Bangalore software industry, which has been cited as an excellent example of a developing economy plugging into the wider global economy (Kobrin, 1999).

Managerial Implications

In the days after the Internet hype it is perhaps easier – and certainly more useful – to assess realistically the benefits and applications of its technologies to firms in general, and SKIFs in particular. It has become more evident that the impact of the Internet is likely to be different on different industries

(Evans and Wurster, 2000) and different parts of the value chain (Roehl et al., 2001). In the foregoing discussion it has been suggested that firms can improve their visibility, efficiency and intimacy with other actors in a network. This is a more broad-based view compared to the literature that has solely emphasized – sometimes unrealistically – the enhanced visibility that can come from a website. Thus, an important implication for entrepreneurs and managers is the importance of viewing Internet technologies holistically, and at the same time specifically, that is, in terms of specific tools such as business-to-business exchanges. Managers can expect greater competition from rivals who will also seek cheaper suppliers and deeper customer relationships – to name just a couple of factors – through the Internet. Thus, the ability to exploit Internet technologies can be seen as a determinant of competitive advantage and success.

Another implication, in the context of internationalization, pertains to decisions of market selection and entry mode. Once again, a balanced approach would be prudent – caution is required when receiving the suggestion of certain authors (as discussed earlier) that the entire world is a potential market for a firm and that traditional entry modes are less relevant. Equally, it must be realized that certain barriers and the speed of market development may well be reduced. The network perspective that has been utilized in this chapter suggests that a useful approach is to examine the possibility of network relationships in markets of interest through the Internet and the entry modes that are available through these relationships.

Managers responsible for the internationalization of SKIFs will need to actively take the applications of the Internet into account as part of their activities geared towards creating and enhancing network relationships through greater visibility, efficiency and intimacy in network relationships. Indeed in the case of SKIFs where rapid internationalization is virtually imperative owing to product and market characteristics, the use of the Internet to positively influence this by facilitating network relationships can be deemed to be obligatory. Of course other actors in the network will require access to the Internet as well; this, however, in the developed world at least, is likely to be the case more often than not. More importantly, managers must have the right mindset towards managing information technology such as the Internet and not be apathetic to its potential benefits (Bensaou and Earl, 1998; Poon and Joseph, 2000). Further, it is recommended that SKIFs adopt a strategic approach to their network relationships and internationalization process so that opportunism is tempered with long-term goals such as profitability.

There exists a strong need for managing knowledge and knowledge-building through collaboration with other firms for SKIFs (Tenkasi and Boland, 1996). Such collaboration could constitute a part of a SKIF's internationalization activities. Irrespective of whether these firms are geographically concentrated or not, the application of the Internet as discussed in this chapter is especially relevant. The simple matter of using e-mail has implications for how entrepreneurs and managers in SKIFs communicate, even in respect of the level of formality in their language – e-mail correspondence can be very different from that in formal correspondence. The cross-cultural aspect of this – just as in other matters such as marketing – must be considered when the communication takes place across international borders. E-mail aside, more sophisticated components of knowledge management such as electronic repositories or databases of knowledge could use Internet-based interfaces to enhance access to it by network actors.

Policy Implications

Policy-makers have a facilitative role to play to ensure that SKIFs have ready access to, and knowledge of, the Internet. In the case of SKIFs this is expected to be less onerous a task as SKIFs are possibly technology-savvy with access to the Internet and related technologies; nevertheless, appropriate support must be extended to them to make the best use of the Internet in the context of their internationalization.

Indeed, inasmuch as a supportive environment of entrepreneurship is generally helpful, an 'Internet-friendly' environment should facilitate the adoption of Internet technology (Oxley and Yeung, 2001). Such an environment could be created through greater access to the Internet. Further, initiatives should be taken to enable SKIFs – and indeed all small firms, in general – to become aware of the potential benefit of the Internet to their internationalization efforts. These firms could then be provided with access to technical expertise, including through consultants in the private sector, to help them to apply Internet technologies in practice. These are particularly relevant to a developing economy, and the efforts of multilateral funding bodies and aid agencies in this regard may be particularly helpful.

In relation to clustering policies for SKIFs – which are often based on the regional character of much of the innovation that occurs in an economy (Almeida, 1999) – there is nothing to suggest that the Internet necessarily makes agglomeration less relevant or likely (Leamer and Storper, 2001). There are therefore no grounds for reversing cluster-facilitating policies. Needless to say, however, firms within clusters can be expected to actively seek network partners beyond their geographic confines utilizing Internet technology, and this should be encouraged as mentioned above.

In the realm of export policy, governments now have to deal with the exports of digitized products, such as software, and this may be of particular concern in developing economies where imports and exports tend to be closely monitored with a view to ensuring that foreign exchange reserves are sufficient. Clearly, it is much more difficult and complicated to monitor the export of software code in comparison to tangible, manufactured goods. One potential approach for governments to take is to set up special export zones to take care of the needs of software firms and other such SKIFs where the ‘product’ is exported digitally, which provide incentives to these firms by way of infrastructure but also allow easier monitoring of their activities.

Another aspect of policy that must be addressed pertains to international law (Kobrin, 2001) governing Internet-related transactions across borders. This requires national governments to both come out with coherent and appropriate legislation pertaining to that nation, as well as cooperate with each other through forums and agreements that allow smooth transactions, while taking into account national interests. For developing economies, the challenge is often to ensure that their legislation keeps pace with international developments in the more advanced economies. Achieving more cooperation in policy- and law-making may be a tall order because of the degree of multilateral cooperation required as well as the rapidity with which technology changes *vis-à-vis* policy-making, which could struggle to keep pace. Nonetheless, these policy efforts are vital and imperfect solutions may be more useful than not having any.

Specifically in the context of a developing economy, the following recommendations made by the Boston Consulting Group (2001) to the Indian government are pertinent: legal and regulatory issues for e-commerce transactions should be resolved, development of communications infrastructure should be accelerated, computer and Internet education should be encouraged, the creation of technology standards should be facilitated, and industry associations should be encouraged to benchmark Internet technology adoption across industries. Developing economies would do well to follow examples of good policy in advanced economies. For instance, in relation to the last-mentioned point, useful examples that could be considered are Australia’s tracking of Internet technology adoption by the Bureau of Statistics and the annual *Digital Economy* publication of the US Department of Commerce, which benchmarks e-commerce and IT adoption (Boston Consulting Group 2001).

CONCLUDING REMARKS

The ubiquity and importance of the Internet in the twenty-first century is beyond debate. As Porter (2001, p. 64) has said, ‘The key question is not whether to deploy Internet technology – companies have no choice if they want to stay competitive – but how to deploy it’. In the context of small knowledge-intensive firms, whose very nature and operating environment present great challenges, utilizing the Internet to enhance their network relationships and thereby the internationalization process is a strategic imperative, rather than a luxury. In the context of developing economies, where market- and policy-related factors intensify the challenge of internationalization for small firms, including SKIFs, the Internet offers application of great value. However, bridging the gap between theoretical promise and actual realization in practice calls for considerably more effort on the part of entrepreneurs, managers, policy-makers and researchers.

NOTE

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REFERENCES

Almeida, P. (1999), 'Semiconductor startups and the exploration of new technological territory', in Z.J. Acs (ed.), *Are Small Firms Important? Their Role and Impact*, Boston, MA: Kluwer Academic Publishers, pp. 39–50.

Andersen, O. (1993), 'On the internationalisation process of firms: a critical analysis', *Journal of International Business Studies*, **24** (2), 209–31.

Autio, E., H.J. Sapienza and J.G. Almeida (2000), 'Effects of age at entry, knowledge intensity, and imitability on international growth', *Academy of Management Journal*, **43** (5), 909–24.

Bell, J. (1995), 'The internationalization of small computer software firms', *European Journal of Marketing*, **29** (8), 60–75.

Bell, J. and S. Young (1998), 'Towards an integrative framework of the internationalization of the firm', in G. Hooley, R. Loveridge and D. Wilson (eds), *Internationalization: Process, Context and Markets*, London: Macmillan, pp. 5–28.

Bennett, R. (1997), 'Export marketing and the Internet: experiences of web site users and perceptions of export barriers among UK businesses', *International Marketing Review*, **14** (5), 324–44.

Bensaou, M. and M. Earl (1998), 'The right mind-set for managing information technology', *Harvard Business Review*, **76** (5) September–October, 118–28.

Berry, M., P. Dimitratos and M. McDermott (2001), 'Globalisation and the smaller firm: reconcilable notions?', paper presented at the AIB (UK Chapter) Conference, Cardiff, April.

Boston Consulting Group (2001), *E-Commerce Opportunities for India Inc.*, New Delhi: National Association of Software and Service Companies.

Brock, J.K-U. (2000), 'Virtual globals – marketspace and the internationalisation of small technology-based firms', unpublished PhD thesis, University of Strathclyde, Glasgow.

Brown, J.S. and P. Duguid (2000), 'Balancing act: how to capture knowledge without killing it', *Harvard Business Review*, **78** (3) May–June, 73–80.

Brown, P. and J. Bell (2000), 'Industrial clusters and small firm internationalisation', in S. Young and N. Hood (eds), *27th Annual Conference UK Chapter Academy of International Business: The Multinational in the Millennium: Companies and Countries, Changes and Choices, Volume 1*, Glasgow: University of Strathclyde, pp. 73–96.

Brown, P. and R. McNaughton (2000), 'Cluster development programmes: panacea or placebo for promoting SME growth and internationalisation?', paper delivered at the Conference on International Entrepreneurship: Researching New Frontiers, 23–25 September, Montreal.

Chetty, S. and D. Blankenburg Holm (2000), 'Internationalisation of small to medium-sized manufacturing firms: a network approach', *International Business Review*, **9**, 77–93.

Coviello, N.E. and A. McAuley (1999), 'Internationalisation and the smaller firm: a review of the contemporary empirical research', *Management International Review*, **39** (3), 223–56.

Coviello, N. and H. Munro (1995), 'Growing the entrepreneurial firm: networking for international market development', *European Journal of Marketing*, **29** (7), 49–61.

Coviello, N. and H. Munro (1997), 'Network relationships and the internationalization process of small software firms', *International Business Review*, **6** (4), 361–86.

Crick, D. and M.V. Jones (2000), 'Small high-technology firms and international high-technology markets', *Journal of International Marketing*, **8** (2), 63–85.

Cronin, M.J. (1995), *Global Advantage on the Internet: From Corporate Connectivity to International Connectedness*, New York: John Wiley & Sons.

Das, M. (1994), 'Successful and unsuccessful exporters from developing countries: some preliminary findings', *European Journal of Marketing*, **28** (12), 19–33.

Davenport, T.H., J.G. Harris and A.K. Kohli (2001), 'How do they know their customers so well?', *MIT Sloan Management Review*, Winter, 63–73.

Demick, D.H. and A.J. O'Reilly (2000), 'Supporting SME internationalisation: a collaborative project for accelerated export development', *Irish Marketing Review*, **13** (1), 34–45.

Ellsworth, J.H. and M.V. Ellsworth (1995), *Marketing on the Internet*, New York: John Wiley & Sons.

Enright, M.J. (1998), 'Regional clusters and firm strategy', in A.D. Chandler Jr, Ö. Sölvell and P. Hagström (eds), *The Dynamic Firm: The Role of Technology, Strategy, Organization and Regions*, Oxford: Oxford University Press, pp. 315–42.

Enright, M.J. (1999), 'The globalization of competition and the localization of competitive advantage: policies towards regional clustering', in N. Hood and S. Young (eds), *The Globalization of Multinational Enterprise Activity and Economic Development*, London: Macmillan, pp. 303–32.

Evans, P.B. and T.S. Wurster (1997), 'Strategy and the new economics of information', *Harvard Business Review*, **75** (5) September–October, 70–82.

Evans, P.B. and T.S. Wurster (2000), *Blown to Bits: How the New Economics of Information Transforms Strategy*, Boston, MA: Harvard Business School Press.

Feeny, D. (2001), 'Making business sense of the e-opportunity', *MIT Sloan Management Review*, Winter, 41–51.

Fisher, M. and D.J. Reibstein (2001), 'Technology-driven demand: implications for the supply chain', in J. Wind and V. Mahajan (eds), *Digital Marketing: Global*

Strategies from the World's Leading Experts, New York: John Wiley & Sons, pp. 285–309.
Golden, P.A. and M. Dollinger (1993), 'Cooperative alliances and competitive strategies in small manufacturing firms', *Entrepreneurship Theory and Practice*, **17** (4), 43–56.
Gulati, R., N. Nohria and A. Zaheer (2000), 'Strategic networks', *Strategic Management Journal*, **21**, 203–15.
Hacki, R. and J. Lighton (2001), 'The future of the networked company', *McKinsey Quarterly Review*, **3**.
Hagel, J. (2000), 'Spider versus spider', *McKinsey Quarterly*, **3**.
Hamill, J. (1997), 'The Internet and international marketing', *International Marketing Review*, **14** (5), 300–323.
Hamill, J. and S. Ennis (1999), 'The Internet: the direct route to growth and development', in M.J. Baker (ed.), *The Marketing Book*, 4th edn, Oxford: Butterworth-Heinemann, pp. 693–705.
Hamill, J. and K. Gregory (1997), 'Internet marketing in the internationalisation of UK SMEs', *Journal of Marketing Management*, **13** (1–3), 9–28.
Hamill, J. and S. Prashantham (2001), 'Internet supported customer relationship management: a key opportunity for the twenty-first century', *International Marketing Review*, **18** (2), 102–4.
Hoffman, D.L. and T.P. Novak (1996), 'Marketing in hypermedia computer-mediated environments: conceptual foundations', *Journal of Marketing*, **60** (3) July, 50–68.
Hoffman, D.L. and T.P. Novak (2000), 'How to acquire customers on the Web', *Harvard Business Review*, **78** (3) May–June, 179–88.
Iansiti, M. and A. MacCormack (1997), 'Developing products on Internet time', *Harvard Business Review*, **75** (5) September–October, 108–17.
Ibeh, K.I.N. (1999), 'Initial export stimulation: any difference between developed and developing country factors?', Strathclyde International Business Unit, Working Paper Series, No. 9909, Glasgow: University of Strathclyde.
Ibeh, K.I.N. and S. Young (2001), 'Exporting as an entrepreneurial act: an empirical study of Nigerian firms', *European Journal of Marketing*, **35** (5/6), 566–86.
Johanson, J. and L-G. Mattsson (1988), 'Internationalization in industrial systems – a network approach', in N. Hood and J-E. Vahlne (eds), *Strategies in Global Competition*, London: Croon Helm.
Johanson, J. and J-E. Vahlne (1977), 'The internationalization process of the firm – a model of knowledge development and increasing foreign market commitment', *Journal of International Business Studies*, **8**, Spring/Summer, 23–32.
Johanson, J. and J-E. Vahlne (1990), 'The mechanism of internationalization', *International Marketing Review*, **7** (4), 11–24.
Johnsen, R.E. and T.E. Johnsen (1999), 'International market development through networks: the case of the Ayrshire knitwear sector', *International Journal of Entrepreneurial Behaviour and Research*, **5** (6), 297–312.
Jones, M.V. (1999), 'The internationalization of small high-technology firms', *Journal of International Marketing*, **7** (4), 15–41.
Kaplan, S. and M. Sawney (2000), 'E-Hubs: the new B2B marketplaces', *Harvard Business Review*, **78** (3) May–June, 97–103.
Kenny, D. and J.F. Marshall (2000), 'Contextual marketing: the real business of the Internet', *Harvard Business Review*, **78** (6) November–December, 119–25.
Kerrigen, R., E.V. Roegner, D.D. Swinford and C.C. Zawada (2001), 'B2Basics', *McKinsey Quarterly*, **1**, 45–53.

Klein, L.R. and J.A. Quelch (1997), 'Business-to-business market making on the Internet', *International Marketing Review*, **14** (5), 345–61.

Kobrin, S.J. (1999), 'Development after industrialization: poor countries in an electronically integrated global economy', in N. Hood and S. Young (eds), *The Globalization of Multinational Enterprise Activity and Economic Development*, London: Macmillan, pp. 133–54.

Kogut, B. (2000), 'The network as knowledge: generative rules and the emergence of structure', *Strategic Management Journal*, **21** March, 405–25.

Korhonen, H., R. Luostarinen and L. Welch (1996), 'Internationalization of SMEs: inward–outward patterns and government policy', *Management International Review*, **36** (4), 315–29.

Leamer, E.E. and M. Storper (2001), 'The economic geography of the Internet Age', *Journal of International Business Studies*, **32** (4), 641–65.

Leonidou, L. and C.S. Katsikeas (1996), 'The export development process: an integrative review of empirical models', *Journal of International Business Studies*, **27** (3), 517–51.

Maddy, M. (2000), 'Dream deferred: the story of a high-tech entrepreneur in a low-tech world', *Harvard Business Review*, **78** (3) May–June, 56–69.

Malone, T.W. and R.J. Laubacher (1998), 'The dawn of the e-lance economy', *Harvard Business Review*, **76** (5) September–October, 144–52.

McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43** (5), 902–6.

McNaughton, R.B. (2001), 'The export mode decision-making process in small knowledge-intensive firms', *Marketing Intelligence and Planning*, **19** (1), 12–20.

Oviatt, B.M. and P.P. McDougall (1994), 'Toward a theory of new international ventures', *Journal of International Business Studies*, **25** (1), 45–64.

Oxley, J.E. and B. Yeung (2001), 'E-Commerce readiness: institutional environment and international competitiveness', *Journal of International Business Studies*, **32** (4), 705–23.

Peppers, D., M. Rogers and B. Dorf (1999), 'Is your company ready for one-to-one marketing', *Harvard Business Review*, **77** (1) January–February, 151–60.

Peppers, R. and M. Rogers (1997), *Enterprise One to One: Tools for Competing in the Interactive Age*, London: Piatkus.

Poon, S. and C. Jevons (1997), 'Internet-enabled international marketing: a small business network perspective', *Journal of Marketing Management*, **13** (1–3), 29–41.

Poon, S. and M. Joseph (2000), 'Product characteristics and Internet commerce benefit among small business', *Journal of Product and Brand Management*, **9** (1), 21–34.

Porter, M.E. (1998a), 'Clusters and the new economics of competition', *Harvard Business Review*, **76** (6) November–December, 77–90.

Porter, M.E. (1998b), *On Competition*, Boston, MA: Harvard Business School Press.

Porter, M.E. (2001), 'Strategy and the Internet', *Harvard Business Review*, **79** (3) March, 62–78.

Quelch, J.A. and L.R. Klein (1996), 'The Internet and international marketing', *Sloan Management Review*, Spring, 60–75.

Ramsdell, G. (2000), 'The real business of B2B', *McKinsey Quarterly*, **3**, 174–84.

Rayport, J.F. and J.J. Sviokla (1995), 'Exploiting the virtual value chain', *Harvard Business Review*, **73** (6) November–December, 75–85.

Roehl, T.W., S. Standifird and S. Globerman (2001), 'Globalization and electronic commerce: inferences from retail brokering', *Journal of International Business Studies*, **32** (4), 749–68.

Samiee, S. (1998), 'Exporting and the Internet: a conceptual perspective', *International Marketing Review*, **15** (5), 413–26.

Saxenian, A. (1990), 'Regional networks and the resurgence of Silicon Valley', *California Management Review*, Fall, 89–112.

Schlegelmilch, B.B. and R. Sinkovics (1998), 'Viewpoint: marketing in the information age – can we plan for an unpredictable future?', *International Marketing Review*, **15** (3), 162–70.

Sculley, A.B. and W.W.A. Woods (1999), *B2B Exchanges: The Killer Application in the Business-to-Business Internet Revolution*, Hamilton, Bermuda: ISI Publications.

Seybold, P.B. (2001), 'Get inside the lives of your customers', *Harvard Business Review*, **79** (5) May, 81–9.

Shrader, R.C., B.M. Oviatt and P.P. McDougall (2000), 'How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century', *Academy of Management Journal*, **43** (6), 1227–47.

Siegel, D. (1999), *Futurize Your Enterprise: Business Strategy in the Age of the E-Customer*, New York: John Wiley & Sons.

Tapscott, D. (1999), 'Introduction', in D. Tapscott (ed.), *Creating Value in the Network Economy*, Boston, MA: Harvard Business School Press.

Tapscott, D., D. Ticoll and A. Lowy (2000), *Digital Capital: Harnessing the Power of Business Webs*, London: Nicolas Brealey Publishing.

Tenkasi, R.V. and R.J. Boland (1996), 'Exploring knowledge diversity in knowledge intensive firms: a new role for information systems', *Journal of Organizational Change*, **9** (1), 79–91.

Upton, D.M. and A. McAfee (1996), 'The real virtual factory', *Harvard Business Review*, **74** (4) July–August, 123–33.

Welch, D.E., L.S. Welch, L.C. Young and I.F. Wilkinson (1998), 'The importance of networks in export promotion: policy issues', *Journal of International Marketing*, **6** (4), 66–82.

Wind, J. and V. Mahajan (2001), 'The challenge of digital marketing', in J. Wind and V. Mahajan (eds), *Digital Marketing: Global Strategies from the World's Leading Experts*, New York: John Wiley & Sons, pp. 3–25.

Yip, G.S. (2000), 'Global strategy in the Internet era', *Business Strategy Review*, **11** (4), 1–14.

Young, S. (1987), 'Business strategy and the internationalization of business: recent approaches', *Managerial and Decision Economics*, **8**, 31–40.

PART V

Contacts, links and networks: process-driven internationalization

10. International entrepreneurship and network relationships: the international marketing communications sector

Dev K. Boojihawon

INTRODUCTION

The growing influence and spread of highly entrepreneurial small to medium-sized firms in the global economy is widely acknowledged. In today's global environment, small business entrepreneurs and their businesses have become less limited to domestic markets. Small service firms, in particular, are entering the realm of international business. The success of such locally oriented service entrepreneurs seems to be increasingly determined by their ability to be competitive internationally, although they are unable to compete in several places simultaneously.

Despite this noted international expansion, research into aspects of international entrepreneurship and strategies of small service firms, if not small firms in general, is limited. The focus of international business researchers has been primarily on established multinational companies. Entrepreneurship researchers, on the other hand, have centred their attention on the value creation activities, and the management of small businesses within national contexts (McDougall and Oviatt, 2000). Having said so, there exists a significant repository of knowledge on the 'internationalization' and 'export behaviour' of small firms; but there has been little effort to integrate the resulting theories towards improved understanding of international entrepreneurship amongst small firms.

The objective of this chapter is to make a preliminary contribution to understanding how network relationships impact on service SMEs' ability to implement international entrepreneurial initiatives and strategies. More specifically, the chapter analyses the case of a small to medium-sized agency firm (SMA) in the international marketing communications industry, and the process by which it integrated with an international agency network, fostering its growth and penetration in foreign markets. The chapter starts by reviewing relevant literatures pertaining to international entrepreneurship, services internationalization and network-based view to internationalization illustrating its theoretical underpinnings. Based on the review, a conceptual framework is proposed which supports the key research questions of the study. Discussion is then advanced on the research method utilized, and the presentation of the case analysing the different research issues. The chapter concludes on an analytical note over the main findings and their research implications.

LITERATURE REVIEW

International Entrepreneurship

The definition of 'international entrepreneurship', both as a concept and a field of study, has evolved since 1989. An early understanding of the term focused on the international activities of new ventures to the exclusion of established firms; it was defined as 'the development of international new ventures or start-ups that, from their inception, engage in international business, thus viewing the foreign operating domain as international from the initial stages of the firm's operation' (McDougall, 1989, p. 189). By the mid-1990s, the international dimension of international entrepreneurship attracted much attention as it was identified as an emerging avenue for international business research (see for example, Wright and Ricks, 1994). More importantly, it was the value creation activities that became the primary unit of analysis, as Wright and Ricks observed that it is firm-level business activity that crossed national borders, while focusing on the relation between businesses and their international environments. Such similar assertions led to further refinement as well as the broadening of the definition of international entrepreneurship. A good illustration of this is the definition postulated by McDougall and Oviatt (1997, p. 293) arguing international entrepreneurship as involving 'new and innovative activities that have the goal of value creation and growth in business organisations across national borders'.

To date, consensus on a definition of entrepreneurship remains elusive. The difficulty seems to lie in the very domain of 'entrepreneurship' as a concept, in that it overlies and envelops several constructs of other study fields, such as innovation, change management and strategic management. Hence, attempts to define the term have resulted in arguments that the concept needs to be kept broad and 'multidimensional'. Nonetheless, the efforts to improve understanding on the concept has been consistent, in particular we refer to the work of such authors as McDougall and Oviatt (1997). Until recently, they redefined the term 'international entrepreneurship' as a 'combination of innovative, proactive, and risk-seeking behaviour that crosses national borders and is intended to create value in organizations' (McDougall and Oviatt, 1997, p. 293). However, further efforts are needed as 'international entrepreneurship' remains without a unifying and clear theoretical and methodological direction as a research avenue.

This chapter undertakes such an effort to add to theory and methodology in the field by analysing international entrepreneurship in the case of a small to medium-sized agency. The chapter adopts the understanding of McDougall and Oviatt (1997) as a starting point, and attempts to merge research and knowledge accumulated from the internationalization schools in studying small to medium-sized service firms. This integration draws upon several insights by arguing that 'internationalization' is the result of 'a mixture of strategic thinking, strategic action, emergent developments, chance and necessity' (Johanson and Vahlne, 1990, p. 22). Besides, 'internationalization' is more mature both as a concept and research stream than 'international entrepreneurship'.

Network-Based Perspective to Internationalization

As with 'international entrepreneurship', it is arduous to find a single, universally accepted definition of the term 'internationalization' (Young, 1987; Welch and Luostarinen, 1988; Whitelock and Munday, 1993). However, there are a number of schools of thought in the literature that discuss what constitutes internationalization. For instance, one school of internationalization considers it to be a pattern of investment in foreign markets explained by rational economic analysis of internalization, ownership and location advantages (Williamson, 1975; Dunning, 1988). A second group of scholars avows that internationalization is an ongoing process of evolution whereby the firm increases its international involvement as a function of increased knowledge and market commitment (Melin, 1992; Johanson and Vahlne, 1977).

Linked to the process view, a third school of internationalization argues that internationalization does not always involve a 'smooth, immutable path of development', and may include both 'outward' and 'inward' patterns of international expansion (Welch and Luostarinen, 1988, 1993). Some of the early proponents of this perspective like Johanson and Vahlne (1977) argue that international involvement is manifested primarily in the markets entered and mechanisms used for market entry. Welch and Luostarinen (1988) add that it is also reflected in more firm-specific constructs like market offering, organizational capacity, personnel and structure. Several such arguments are spread throughout the literature on internationalization. But one well-received definition of internationalization, acknowledged time and again, is that of Beamish (1990, p. 77), who defines internationalization as: 'the process by which firms both increase their awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with other countries'.

This latter definition was deemed most useful in this context as it blends several views from the three schools into one holistic interpretation of the internationalization concept. Coviello and McAuley (1999) agree, and argue that Beamish's (1990) definition attempts to capture the essence of internationalization in four key ways. First, it integrates the internal learning of the organization with its patterns of investment. As such, it recognizes that internationalization has both behavioural and economic dimensions. Second, the definition is process-based. This implies that internationalization is dynamic and evolutionary. Third, the definition is not restricted to outward patterns of investment, and thus allows for the firm to be involved with inward internationalization activities such as importing or counter trade. Fourth, and more importantly, the definition implies that during internationalization, relationships and networks established through international transactions influence the firm's growth and expansion to other countries.

The network-based perspective, a novel approach of research and study of the internationalization phenomenon, suggests an alternative view to the 'stage models'. Coviello and McAuley (1999) conducted a comprehensive analysis of the internationalization literature and concluded on the increasing prominence of researchers adopting the network school of thought, but recognized that other theories are also needed for a comprehensive analysis. The network school focuses on non-hierarchical systems where firms invest to strengthen and monitor their position in international networks (Johanson and Mattsson, 1988, 1992; Sharma, 1992). This view draws on the theories of social exchange and resource dependency, and focuses on firm behaviour in the context of a network of interorganizational and interpersonal relationships (Axelsson and Easton, 1992). Such relationships can involve customers, suppliers, competitors, private and public support agencies, family or friends; organizational boundaries, therefore, incorporate both business (formal) and social (informal) relationships. Such formal and informal relationships can in turn act as important drivers to internationalization.

The network perspective also adopts a complementary view to FDI theory, given the latter does not account for the role and influence of social relationships in business transactions (Granovetter, 1985). Further, Coviello and McAuley (1999) argue that internationalization decisions and activities in the network perspective emerge as patterns of behaviour influenced by various network members. Hence, in contrast to the FDI theory, which assumes rational strategic decision-making, and the stage models, which suggest that 'internationalization' is a unilateral process, the network perspective introduces a 'more multilateral element' to internationalization (Johanson and Vahlne, 1990, p. 12).

Interestingly, this perspective has evolved from Johanson and Vahlne's work, mentioned earlier, and reflects their ongoing efforts and research exploring the management of foreign market entry. For instance, in their 1992 study of internationalization in the context of exchange networks they found that although foreign market entry is a gradual process (supporting the Uppsala model), it results from interaction, and the development and maintenance of relationships over time. These findings support Sharma and Johanson (1987), who found that professional service firms like technical consulting firms operate in networks of connected relationships between organizations. These relationships become 'bridges to foreign markets', and provide firms with the opportunity and motivation to internationalize. Along the same line, Johanson and Mattsson (1988) suggest that a firm's success in entering new international markets is more dependent on its relationships within current markets than on market and cultural characteristics. With these arguments and findings in mind, the next section reviews the insights from research applying the network perspective to study the internationalization of small service firms.

Small Service Firm Internationalization and Networks

Generally speaking, 'internationalization' research and literature have focused on small and multinational manufacturing firms as traditional units of analysis. Limited treatments have been attributed to small to medium-sized service firms despite their increasingly active involvement in international markets, equally contributing to economic growth and prosperity of the general economy. In particular, this emphasis on small service firms is heightened given the argument that smaller service firms differ from larger firms, as well as manufacturing SMEs, in terms of their managerial style, independence, ownership, scale and scope of operations, and characteristics of service outputs (Schollhammer and Kuriloff, 1979; O'Farrell et al., 1998; Coviello and McAuley, 1999). Further, the small firm manufacturing-based export literature is substantial, and encompasses general research on the behaviours and strategies associated with exporting and the international business activities of such firms (Kaynak et al., 1987; Bonaccorsi, 1993; Baird et al., 1994; Dalli, 1994; Douglas, 1996). Until recently, however, there has been a shift of interests in exporting *per se*, as such literatures were criticized as lacking depth in explaining the processes and patterns of international involvement of such firms over time (Coviello and McAuley, 1999). This chapter intends to contribute towards elucidating this process by investigating the entrepreneurial behaviour and internationalization process and patterns of a particular small service firm.

Smaller firms deserve separate analysis because they have been observed to implement different managerial processes (Smith et al., 1988), and operate with structures that are less rigid, sophisticated and complex than those in larger firms (Carrier, 1994; Carson et al., 1995). Additionally, Shuman and Seeger (1986, p. 8) state that: ‘Smaller businesses are not smaller versions of big business … smaller businesses deal with unique size-related issues as well, and they behave differently in their analysis of, and interaction with, their environment.’ In the context of internationalization, Calof (1994) concludes that size (defined by number of resources and employees) is not necessarily a barrier to internationalization, as SMEs have been found to find unique ways to overcome their ‘smallness’ (see also Bonaccorsi, 1992; Gomes-Casseres, 1997). Moreover, with the present rate of technological advancement, and the possibility that small firms may be networked both figuratively and literally (for example, through information technology), the focus on size is becoming obsolete. This, however, does not solve other internal constraints such as limited capital, management, time, experience and information resources that SMEs face in implementing their international strategies (Buckley, 1989). In addition to these, external barriers may be encountered in the form of entrenched firms or the government (Acs et al., 1997). Such internal and

Table 10.1a Service characteristics: historic and current

Then:	services were time-dependent and could not be inventoried.
Now:	because of technology, information is a significant part of the solution which can be stored, retrieved and transported.
Then:	services always had to have local presence with service providers physically on the scene.
Now:	many services can come from far away via some remote link-ups.
Then:	services were culturally bound and difficult to transplant from one country to another.
Now:	technology has created many new types of services which have no prior cultural associations.
Then:	services were considered to be a domestic business.
Now:	many services are global, customers neither know nor care where they originate.
Then:	most services were accessible only at certain times in clearly defined places.
Now:	it’s possible to deliver a growing proportion to any place at any time.

Source: Adapted from Segal-Horn and Faulkner (1999, pp. 203–4).

Table 10.1b Service characteristics and their implications for internationalization

Service characteristics	Implications for internationalization
Intangibility: services cannot be seen, felt, tasted or touched in the same manner in which goods can be sensed.	Subjective determination of service quality, hence service quality perception can vary across national markets and cultures; how to influence customer perceptions of service quality? Advertising mainly through word of mouth: who are the influential opinion makers in each market? Validity of a 'follow the client' strategy in entering international markets? Managing corporate image in multiple markets.
Heterogeneity: concerns the potential for high variability in the performances of services.	How to reduce across country variations in service quality influenced by variations among service providers? Can all service personnel in several countries be trained to the same level and quality of performance? Impact of cultural differences affecting extent and kind of training in each market.
Perishability: means that services cannot be saved or stored. Services businesses find it difficult to synchronize supply and demand.	Can excess capacity in one market be used to satisfy demand in another? How to forecast service demand patterns in different markets? (Databases requirements, differences in seasonal variations.) Are there similarities in the model for service demand across countries? Can standardized incentives be used to manage demand across countries?
Simultaneity of production and consumption (inseparability): involves simultaneous production and consumption of goods which characterizes most services. Inseparability forces the buyer into intimate contact with the production process.	Can service be provided at a distance internationally? (Role of technology, electronic delivery, i.e. ATMs – Automatic Teller Machines). If not, what should the mode of entry be? How much service production can be placed in the 'back office'? Sharing of back-office functions across markets. The need to find service providers places a constraint on the pace of international expansion.
Consumer participation in service creation/delivery.	Are customers in all markets equally willing to participate in the service creation process? Customers perception of service quality may be affected by culture.
Service as a process.	Is the service concept culture-bound? Adaptation vs. standardization of the service concept for overseas markets. Can standardized 'scripts' for the service encounter be used across countries?

Source: Adapted from Zeithaml (1985) and Sarathy (1994).

external constraints arguably vary, given the heterogeneity of small firms' characteristics across manufacturing and service industries.

Referring to the services' internationalization literature, very limited attention has been devoted towards the analysis of small firms. In fact, its advancement as a research stream seems to be caught in the continuous dilemma or debate amongst fellow researchers on the nature or characteristics of international services. On the other hand, service industries have evolved over time. To illustrate, Table 10.1a summarizes the changing characteristics of services over time, and Table 10.1b highlights the implications the characteristics hold with regard to services internationalization. Further, despite several attempts to study international services there is no convincing theory that is concretely valid to explain the strategic or entrepreneurial behaviour of international service firms (Daniels, 1985, 1993).

Looking into the studies reviewed for the purpose of this research exercise, the first group of scholars who attempted to develop a conceptual framework to explain the interaction between international growth of services and service MNEs were economists Boddewyn and Halbrich (1986), Dunning (1989), and Li and Guisinger (1992). Secondly, another group of researchers have focused on industry-specific studies to investigate the reasons for internationalization of service firms (see, for example, Dunning, 1993a). In that respect, there exists a wide variety of studies on the internationalization of services, treating specific service industries as cases. These include those on the international construction and design engineering industry (Enderwick, 1989); multinational news agencies (Boyd-Barrett, 1989), the accounting industry (Daniels, 1993) and hotels (Dunning and Kundu, 1994). Again, some of these have been directed towards theorizing the determinants of foreign production than explicating the processes undertaken by these firms. These studies, however, indicate that the export of managerial skills, information and organizational techniques is one of the main forms of intra-firm cross-border trade among service firms. Further, some scholarly work has also been done evaluating the impact of transnational service corporations on both developed and developing countries (Dunning, 1993b). Last but not the least, until recently, authors have also analysed the entry mode choices of service firms (see, for example, Erramilli, 1989; Ekeledo and Sivakumar, 1998) and global marketing strategy or transnational strategy in service businesses (Lovelock and Yip, 1996; Lovelock, 1999). In further support and describing some of the above key studies, Table 10.2 summarizes the key findings of works studying international services businesses.

Specifically speaking, literature pertaining to small service firm internationalization is even more scant. Out of 16 articles reviewed by Coviello and McAuley (1999), only two focused solely on service organizations (Björkman and Kock, 1997; O'Farrell et al., 1998). Some studies in their sample also examined software or information technology firms, while it may be argued that software firms are in the service industry (Bell, 1995; Coviello and Munro, 1995, 1997). These authors observed the relative lack of empirical evidence on service SMEs' entrepreneurship, despite the significant role played by small service firms in international trade. The same group of authors also highlights the potential impact of network relationships on small firm internationalization, and particularly on the conduct of international marketing activities. This appears to be supported by O'Farrell et al. (1998) and also Korhonen et al. (1996) who found that cooperative relationships were used by 34 per cent of SMEs at some point in the internationalization process. The conclusions of all these studies call for further research examining the role of networks in small firms' ability to undertake international entrepreneurial initiatives across borders. These arguments lend support to and state that the network approach provides valuable insight into the dynamics of internationalization. It allows for a more plausible description of the process as it is linked to the strategic direction and actions providing the firm a way of doing business.

Other studies utilizing the network perspective as a framework for analysing the internationalization of SMEs (see, for example, Coviello and Munro, 1995; Holmlund and Kock, 1998) conclude with similar arguments. Both these studies seem to find there is an energy created by networks, where relationships create a scenario that is greater than the sum of the parts (2 + 2 = 5). In other words, developing and managing business and social network relationships can increase the smaller firm's stake of international development, and the general intensity of what can be achieved is enhanced. Along the same line, Björkman and Kock (1997) provide parallel conclusions by analysing the patterns of inward internationalization. Furthermore, Berra et al. (1995), O'Farrell and Hitchins (1998) and Zafarullah et al. (1998) identify the influence of 'relationships' in the context of internationalization. This supports the concept of 'ties' offered by Granovetter (1985). Overall, perhaps the most interesting result in the context of this study is that recent FDI research, while limited, clearly finds SME internationalization to be more than a pattern of investment based on rational economic and transaction cost analysis. This is reflected in the recent conclusions of Chen and Chen (1998) who found that networks are important determinants of location choice in FDI, particularly for small firms. They observe that such findings are explained by the less rigid and more fluid managerial processes in the smaller firm; processes which are often driven by the nature of the owner and manager and their personal contact networks (Carson et al., 1995). The next section explains how these perspectives are integrated into the conceptual framework of the study.

Table 10.2 A selection of key studies on the internationalization of the services industry

Studies/authors	Key findings with respect to international services transactions
Sampson and Snape (1985)	Four categories of international trade in services: ● transactions may occur without the movement of factors of production or the receiver of the service. These are referred to as 'separated' services for they are separated from both factors of production and receivers; ● transactions may occur as a consequence of the movement of factors of production, but not of the receiver of the service; ● transactions may occur with the movement of the receiver of the service, but not of the provider; ● transactions may occur with the movement of both factors of production and the receiver of the service, that is, the transaction occurs in a third country.
Grubel (1989)	Services can cross international borders only if they are embodied in either material substances or people. All international trade involving electronics results in the crossing of borders by material signals that in principle are recordable and measurable, much like books, letters and floppy disks.
Stern and Hoekman (1988)	Four categories of international services transaction are identified asking the question: Is the movement of the provider and demander of the service required between countries?: ● no movement of providers or demanders (separated services); ● movement of providers only (demander located services); ● movement of demanders only (provider located services); ● movement of providers and demanders (foot loose, non-separated services). Each type of transaction can be further divided by distinguishing services that are related to goods, from services that are independent of goods.

Vandermerwe and Chadwick (1989)	A classification system of international service transactions based on two axes. These are: (1) ‘relative involvement of goods’, that is, pure service/low on goods, services with some goods, or delivered through goods and services embodied in goods; (2) ‘degree of consumer/producer interaction’ from lower to higher. This two-way classification produces a six-sector matrix within which services tend to cluster. Three main clusters are identified which relate to the internationalization nodes of: exporting; franchising, licensing, joint ventures or similar; and wholly owned subsidiary. The value of this classification system lies in the way it links certain critical service characteristics with modes of internationalization.
Aaronvitch and Samson (1985)	Additional forms of international transactions can be identified when exploring individual services sectors. Aaronvitch and Samson (1985, pp.152–3) determine seven types of international service transactions in relation to insurance. These are: ● branch establishment; ● establishment of subsidiaries registered in the host country as legal entities; ● equity stakes in foreign countries whether simply as ‘trade investments’ or to exercise some degree of influence or control – such a stake may also be a prelude to a takeover bid; ● joint ventures such as Concorde-Minerve in Belgium or Norwich Wintertum UK; ● collaborative/cooperative arrangements, such as AREA, UNISON or Campanie L’International d’Assurances et de Reassurance; ● correspondents or agencies – all major companies have a substantial network or correspondence and agents, frequently brokers and broking groups; ● underwriting business in other countries from home base to the degree that is possible or allowed.
Erramilli (1989); Ekeledo and Sivakumar (1998)	They suggest that it is possible to relate the foreign entry mode of firms (graded by the degree of resource commitment involved) to the motives of entry, and these in turn to different kinds of services (hard vs. soft). In particular the authors distinguish between client-following (CF) and market-seeking (MS) entry strategies.

Table 10.2 continued

Studies/authors	Key findings with respect to international services transactions
Mathe and Perras (1994)	They highlight the forces governing international competition in the service sectors, drawing attention to the organizational issues lying at the core of successful development of global strategies. They argue that the global development of service imposes as much on the importance of having the right organizational structure properly interlaced with its international strategy.
Campbell and Verbeke (1994)	They give significance to the concept of 'network flexibility' as the most critical strategic variable in the successful operation of multinational service firms. Networking flexibility refers to 'the extent to which a multinational service firm is able to adapt its behaviour and organisational structures to conform to the pressures for similarity in various global market places' (Campbell and Verbeke, 1994, p. 98). Given the simultaneity in consumption and production of services and the pressure to maintain uniform quality standards this represents the ability within sub-units of the firm to develop networks of relationship with external parties in order to improve the firm's 'legitimacy' and thus the service experience of customers. This concept mirrors a company's potential in imitating organizational structures and patterns of behaviour which appear legitimate to customers. It thus reflects the firm's ability to develop networks of relationships at various levels, including the local, sub-national, national, regional trading bloc and even global level.
Roberts (1998)	A classification system looking at international transactions in business services: ● those which are non-traded; ● those which are traded; and ● those which involve factor movements. She further argues that for business services pure cross-border trade means the provision of a service by, for example, a letter, a report, a telephone conversation, computer to computer transfer of electronic information via a telecommunications network, software on a disk or similar means. In practice, however, business services are rarely transacted in this fashion alone (that is, apart from intra-firm trade), but more often in

	conjunction with other methods. The cross-border movement of consumers or factors of production are necessary. For a number of services the movement of the consumer is not an option. Most of these services are knowledge- and skill-intensive rather than capital-intensive. The competitive advantage of such firms are rooted mostly in intangible assets such as human capital, firm-specific experience and accumulated technological information, or goodwill. Thus internationalization will frequently necessitate the movement (temporary or permanent) of highly skilled professional staff abroad. Given that the firm's assets are primarily incorporated in personnel, the costs of setting up a presence overseas are relatively low when compared to a firm in the manufacturing sector. All that is required is an office to accommodate the appropriate personnel.
Gronroos (1999)	He distinguishes between five main strategies for internationalizing services, which are not mutually exclusive and can be equally applied to manufactured goods. These are: ● Direct export: direct export of services may basically take place in industrial markets. Consultants and firms repairing and maintaining valuable equipment may have their base in the domestic market and whenever needed move the resources and system required to produce the service to the client abroad. No step-by-step learning takes place, as the service has to be produced immediately. Consequently, the risk of making mistakes can be substantial. ● Systems export: this is a joint export effort by two or more firms whose solutions complement each other. A service firm may support a goods-exporting firm or another service firm. As the literature suggests, this is similar to client-following strategies. ● Direct entry: means that the service firm establishes a service-producing organization of its own on the foreign market; this can be done through acquisition of a local partner or joint venture. ● Indirect entry: is used when the service firm wants to avoid establishing a local operation that is totally or partly owned by itself, e.g. franchising, management contracts. ● Electronic strategies: the service firm extends its accessibility through the use of advanced electronic technology. The firm is not bound to any particular location. The service can be administered from anywhere on the globe and still reach customers in international markets who are connected to the Web or exposed to satellite television broadcasting

THE CONTEXT OF THE STUDY AND THE CONCEPTUAL FRAMEWORK

This research aimed at examining how small service firms (in particular, small to medium-sized agencies, SMAs) are using their network relationships to implement their entrepreneurial initiatives and internationalization strategies in the context of the international marketing communications sector (also referred to as the international advertising industry). SMAs are essentially professional services firms which are information-intensive, and considered to be operating on similar grounds as such services as accountancy and computer services, management consultancy, public relations and market research services. These services share a number of commonalties, for instance, the need for personal contact between producer and client, the importance of quality and reputation, a long-term buyer–seller relationship, human capital and information intensiveness, and the need for cultural sensitivity. Further, in the majority of such professional services local knowledge of regulatory and market characteristics are highly valued as they are deemed to be important sources of competitive advantage over local suppliers. Additionally, new information and communication technologies (ICTs) are also having a major impact on both the production and delivery of such services (Roberts, 1998) and, indeed, upon the manner in which such service firms are becoming international service providers.

Based on the above discussions, the international entrepreneurship literature, *per se*, proved limited in its ability to provide a useful framework to analyse the issues of interest to this study. In contrast, the growing body of literature and empirical evidences from the network-based internationalization school were deemed useful and integrated to the study the potential influence of network relationships on the international entrepreneurial initiatives and internationalization strategies of small service firms. The network perspective was anticipated to offer richer insights and explanations with respect to the influence of small service firm internationalization through networks given limited empirical insights available in the specific context of small service firms and networks.

As such, this research proposes a conceptual framework (see Figure 10.1), which seeks to understand the internationalization/globalization of independent small service firms through network relationships or network structures. Based on the review of the above literature:

- The model, firstly, integrates the internal learning of the organization with its pattern of entrepreneurial activities. Supporting Beamish (1990), it argues that international entrepreneurship has both economic and behavioural dimensions.

- Secondly, the model argues that international entrepreneurship is both dynamic and evolutionary. In other words, it is process-based as it is not restricted to outward patterns of entrepreneurial activities, and thus allows the firm to consider inward pattern of international investments (Björkman and Kock, 1997).
- Thirdly, with the network perspective in mind, the model postulates international entrepreneurship as a multilateral concept, and argues that international entrepreneurship initiatives can emerge and develop as a result of informal, unstructured interaction of the firm with its network's actors.
- Fourthly, the model also emphasizes relationships developed through international transactions, and argues that such relationships (inter-organizational or interpersonal) can be instrumental in a firm's ability to implement its international entrepreneurship initiatives.
- Fifthly, since the chapter is using the context of small service firms, it also argues that service firms' characteristics, as defined by the nature of services delivered and the nature of service transactions, influence international entrepreneurship in such firms. As mentioned earlier, studies relating to the internationalization of service firms have acknowledged the influence of services' characteristics in the internationalization process of service firms.

Referring to Figure 10.1, the framework suggests that international entrepreneurial initiatives or motives of small service firms are influenced by firm-specific factors, the characteristics of service output and external or industry influences. Firm-specific factors include such variables as, leadership characteristics and managerial commitment, internationalization motives, attitudes and risks tendency, information and communication technologies, adoption and integration of the firm's resource and skill bases. The firm-specific factors include firm-level as well as individual decision-makers' characteristics, since Cicic et al. (1999) and Ibeh and Young (1999) suggest individual and firm factors to be antecedents to service firms' and small firms' export-entrepreneurial orientation. External or industry influences are also expected to affect the process as influences or motivations arising from market pull factors, domestic push, market opportunities, and last but not least the globalization of their clients.

Further, the network relationship spectrum, in the framework, is postulated as a continuum bipolarized by international inter-firm (usually bilateral) structures on the one hand (Bell, 1995; Korhonen et al., 1996; O'Farrell and Hitchins, 1998) and multinational or global hierarchies or governance structures (usually large, vertically and horizontally integrated, multi-layered hierarchies) on the other (Williamson, 1975; Piercy and Cravens, 1995; Anchrol

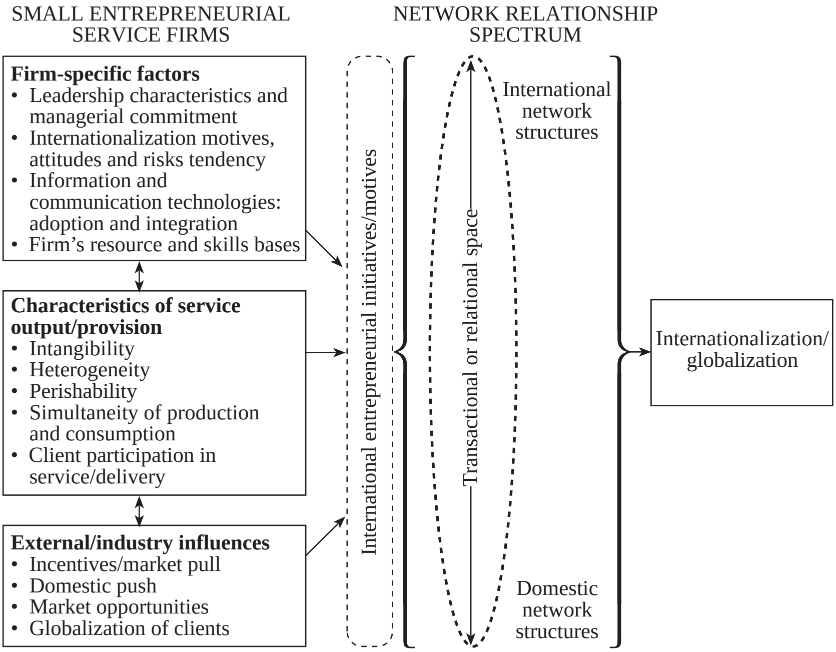

Figure 10.1 *International entrepreneurship and network structures: a conceptual framework*

and Kotler, 1999). This bipolarization of the spectrum leaves a transactional or relational space in between for international entrepreneurial motives or initiatives of the small service firms to interface and materialize into 'ties' (Granovetter, 1985), exchanges (Oburai and Baker, 1999) or relationships (Anchrol and Kotler, 1999). These, ultimately, result in the internationalization or globalization of the small service firm. In short, two research questions underlie the thinking behind this framework:

1. How do firm-specific, service output characteristics and external or industry influences affect the international entrepreneurial motives or initiatives, and network relationships in SMAs' internationalization?;
2. What are the key success factors and challenges for SMAs in using network relationships to implement international entrepreneurship initiatives and strategies?

METHOD

A variety of research methods characterize the SME internationalization literature and the methods used in each study appear to reflect the nature of the research problem. For example, Björkman and Kock (1997), Coviello and Munro (1997) and Zafarullah et al. (1998) attempt to understand complex, context-specific issues related to learning and social processes. Thus, their research designs required a rich, qualitative and grounded approach, and case research was applied. Conversely, those studies using a relatively small number of in-depth interviews or a combined survey and interview approach, examine internationalization in the context of the behavioural and/or relationship schools of research. In contrast, other studies are interested in what happens during internationalization, and not why or how the process occurs. Thus, they use large-scale survey data and databases to identify general patterns such as investment activity and the number or type of international business agreements used by SMEs (Coviello and McAuley, 1999).

The empirical data for this study were derived from a recent international strategy-oriented study conducted across the UK. This qualitative research involved the preparation of in-depth interviews in 19 advertising agencies involved in international business activities. Senior company management of these agencies were interviewed on a confidential basis over two hours, and where appropriate and available secondary data on the various companies were used to support the data. The agency chosen for this chapter is called Accent, UK and its international network called Brusselslinks (fictitious names to maintain promised anonymity). The managing director was interviewed for two hours in November 2000 on the various issues related to the research questions and the main findings are discussed below.

CASE EVIDENCE: ACCENT, UK AND BRUSSELSLINKS

Background to Industry: The International Marketing Communications Industry

The post-1992 recession period marked the turning point of significant structural changes that the UK advertising industry has undergone so far. Industry globalization pressures and global consolidation processes at the client-end has affected large and small industry players. These forces are of increasing concern to date as the international industry still seems to be adjusting to the twin pressures of increased global geographical coverage and better client servicing in foreign markets. In response to these pressures, the international industry is, on the one hand, dominated by converged multinational conglomerates and media buying shops, and on the other, by independent small to medium-sized full-service ad agencies (SMAs). The latter are catering largely for domestic markets while handling minimal international business.

As such, multinational ad agencies have converged into fewer larger global networks to achieve scale economies and to better service global clients with global brands. They have positioned themselves as central strategic one-stop creative shops with some regional or global emphasis. SMAs, given their size-related limitations, do not want to compete with the multinational agencies up front. Instead, they have positioned themselves to largely focus on domestic or secondary or tertiary brands. However, with increased internationalization of their clients, and enforced competition from multinational agencies in domestic markets, SMA agencies feel compelled to either sell out to bigger agencies in order to survive, or penetrate international markets by joining international networks regrouping similar-sized independent agencies across borders. The case below provides an illustrative example of a small to medium-sized UK-based agency and its internationalization through such an international network. This case study presents the key characteristics of a firm in such an international network, its integration into that network, its international growth and expansion strategies, and some of the key challenges and success factors that underlie the implementation of its strategies.

Background to Case

Four senior partners founded the company – ACCENT, UK – in 1990 as a typical 'breakaway' agency. 'Breakaway', because it was primarily a full service agency set up by the founding partners with an average of 15–25 years of experience working in multinational agencies like Publicis, Grey Worldwide and Ogilvy & Mather. At present, its billings amount to over EUR 37.4 million and it employs around 21 professionals. It joined an independent international network called Brusselslinks Communications three years ago. Accent, UK has grown consistently over the past ten years of its existence, and joining Brusselslinks has enabled and furthered its abilities to handle international businesses. It is presently servicing foreign clients in five main markets including France, Germany, Belgium, Italy and the US (New York) through partnership arrangements with sister agencies in the network.

Brusselslinks was founded in the 1980s by a group of independent small to medium-sized advertising agencies from across Europe. Established in Switzerland as a limited stock company, with equity shared by key players, the organization has grown to a network of 21 offices spread across Europe, a representation in New York and seven joint ventures with local operators in Eastern Europe. Brusselslinks is Europe's second-largest such independent network. It currently represents 12 international clients in three or more markets. Its group consolidated billings amount to over $609 million worldwide (1999). Table 10.3 provides an international as well as a financial profile of both organizations.

Table 10.3a SMA (small to medium-sized agency): Accent, UK

	1998/99
Billings	EUR 37.4 m
Income	EUR 4.2 m
Number of people employed	21
Main markets	
France (sister-network agency)	EUR 91.5 m
Germany (sister-network agency)	EUR 46 m
Belgium (sister-network agency)	EUR 37 m
Italy (sister-network agency)	EUR 30 m
New York (sister-network agency)	$180 m
Mode of servicing international markets	Partnership arrangements and joint ventures
Proportion of billings:	
UK	90%
International	10%
Proportion of client base:	
UK	80%
International	20%

Table 10.3b Independent international network: Brusselslinks

	1998/99
Worldwide gross income	$94.4 m
Group consolidated billings:	
Worldwide (incl. USA)	$609 m
Europe	EUR 380 m
Number of partner agencies	21
Presence in number of countries	16

Characteristics of the SMAs and the Independent International Networks

Accent, UK was founded with the corporate vision of creating a respected, productive medium-sized high-calibre agency. Its size meant that it was manageable by the four partners, and was able to provide an environment that was proactive and very fulfilling to work in. Its mission was to help clients build better successful brands with great creative work and strong insightful strategies. Essentially, it represents a small to medium-sized agency deliberately set up in this way to enable regular and direct involvement by partners with clients in a 'happy family' style while handling their challenging businesses. Accent, UK states that it has no aspiration to join the top 20 or 30 UK agencies, but it has the ambition to be the best among small to medium-sized calibre agencies. The agency targets mainly 'secondary and tertiary brands' for its business (basically brands that come second or third to leading brands in the market), and wants to be recognized for the quality of its creative work, strategic thinking and client servicing rather than the quantity of its works. In the words of the interviewee:

> We believe in our intensive care approach to clients. We aim to prove two plus two can equal five. We are geared to providing clients with business solutions that are both new (and imaginative) and advertising strategies that are truly different (and sharper). This approach challenges us to think and act creatively, in everything we do. We strongly believe that we cannot always outspend our competitors but we can out-think them.

Brusselslinks, on the other hand, aims to 'provide a close-knit group of owner-driven entrepreneurial advertising agencies covering the main markets of new Europe'. It defines itself as an 'unconventional European network' with the resources and flexibility to tailor itself to the needs of its clients. It does so:

- By drawing on local insights within carefully selected cross-border clusters, enabling itself to translate regional patterns into a streamlined European strategy:

> We have no egos and are accustomed to working in a framework where respect for cultural identities and understanding of respective markets are key.

- By enabling cooperation between free-spirited entrepreneurs, not tied down by multi-layered bureaucracy. Partner agencies are not owned by the network, but the network is owned by them. For instance, Accent, UK holds equity in Brusselslinks, but Brusselslinks has no share of ownership in Accent, UK:

> We are not blocked by multinational agency bureaucracy. We are a close-knit group of advertising agencies, with each partner participating in the network's activities and sharing its profits. Our clients are dealing with local entrepreneurs in each of the markets they are operating in – and owners make better and fully accountable drivers. These are people who are keen to integrate, not ignore, cultural and social differences.

- By recognizing and enabling central planning and monitoring:

> we have backed the network with an HQ Co-ordination Centre in Brussels with short lines of communication (including intranet), common procedures and staffed by professionals with international experience and language fluency. It is a system that works; regardless of which partner is the client's lead agency.

In sum, Brusselslinks is a network set up by a group of independent advertising agencies as a reactive measure to provide a better alternative to an international client initiative, choosing between them or a multinational rival agency. That network is given a formal philosophy, body and structure, and distributes its ownership or equity among its member partners. On the whole, the following key generic characteristics can be noted about a SMA and an independent international agency network. First, the SMA is usually made up of senior, experienced and entrepreneurial partners emphasizing full service and direct, regular involvement in the challenging business problems of their clients. Second, the SMA is not necessarily a top-ranking agency in the industry or a cash-rich agency. It targets secondary and/or tertiary brands and aims to make itself recognized through the quality of its creative outputs, strategic insights and client servicing. An independent international network regroups agencies which aim to provide consistent and involved agency management; it is agency-owned and operated locally; it is multi-domestic and not multinational; cooperation is high and overheads are low.

Reasons for joining Brusselslinks

Accent, UK was approached by Brusselslinks three years ago and it joined that network because of a combination of internal as well as industry influences.

Internal drivers

First, at its inception, the agency was founded by four senior partners with considerable previous experience in handling international businesses. So it was basically an international intent inscribed in the agency's DNA at set-up.

Second, there were limited risks, financial and strategic, attached to the venture since the network was not going to share Accent, UK's equity but vice versa.

Third, there was significant similarity in the background and experience of firms forming the network. Most of the agencies in the network were 'breakaways', set up by senior partners who had left multinational agencies, and running on secondary- or tertiary-type brands in the respective markets.

Fourth, there were compatible visions between the firm and the network, sharing the philosophy that 'we cannot always outspend our competitors but we can out-think them'.

External drivers

For defensive reasons:

> We wanted to be recognised as an agency with international capabilities at the point of selection by the clients. Even though they might not be looking for an international agency we wanted them to be reassured that we had the capabilities if needed. So at minimal, it was a defensive one.

The clients' call:

> we were getting more and more of our clients wanting us to help them with their international expansion. Having declined these offers we would have made ourselves vulnerable.

Opportunity for new business development:

> it was just for straight proactive new business development. There is a hell of a lot of new international business opportunities there and with the network we were able to enjoy several new initiatives coming from member agencies which might want to come to the UK.

International Strategies: Growth and Expansion in an Independent International Network

Growth and expansion in such a network seems to be working as in an 'osmosis'. Figure 10.2 diagrammatically depicts the international strategy process of the case firm. New businesses' and existing businesses' servicing is primarily handled through proactive use of the established network relationships or cross-referral based on flexible, non-binding contractual agreements. Accent, UK explains:

> We have started to export some of our accounts and works to other European countries and we have been handling some businesses coming from France and income is shared depending on the nature of businesses handled and contractual agreements drawn. Usually a percentage of the income goes on a commission to the HQ. International businesses are handled in three ways in such networks: first, through the HQ going European-wide or global; second, at a Satellite-level where

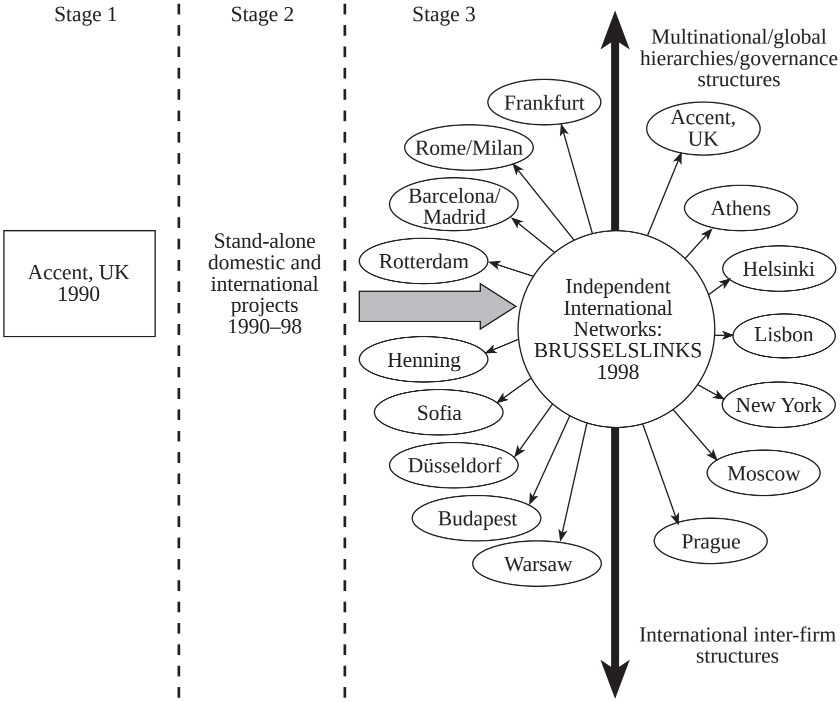

Figure 10.2 Phases of internationalization of Accent, UK

> two or more partner agencies collaborate to pitch for a big international account at their own discretion and third at a Local level basically foreign market servicing of domestic clients.

Furthermore, the very organization of the independent international agency network is designed to promote flexibility and coordination, and avoid the red-tape and bottlenecks involved in multinational agency structures. In that way, there is a degree of respect, relationship, autonomy yet consideration to key expertise being catered for when handling international businesses in the network. As the interviewee explains:

> although we have our headquarters (HQ) established and common procedures set up, there are loose rules within the network structure. I don't have to take any business they want me to work on. They can't give me a cigarette account if I don't want to. This in no way means that I will lose my membership. In essence, we are part of a family and we respect each other's choice.

Key Success Factors and Challenges

Essentially, the challenges facing SMAs in such a network are the same as those they would face in handling domestic markets in terms of quality of thinking and quality of output. However, two main issues are noted in the case of Accent, UK which have often deterred the efficient handling of international businesses.

Agencies in the network differ in culture and in ways of operation. Even though the agencies share more or less the same philosophies at corporate levels, they are very often not organized or managed in the same way. As the interviewee explains:

> managing an international network is probably more complicated in the sense that there are different approaches to handling international businesses, different styles of management and different ways to go about strategy.

There are also significant differences in the ways they accounted for their profitability. In the words of the interviewee:

> It's very often difficult to draw the lines on the share of income and dividends in handling international businesses, unless partnership agreements draw precise guidelines on the financial arrangements.

In that respect, mutual gain and mutual respect among the network partners becomes the key to successful relationships in such independent international networks.

DISCUSSION AND IMPLICATIONS OF FINDINGS

Overall, the analysis of the case illustrates that independent international agency networks are acting as 'bridges to foreign markets' (agreeing with Sharma and Johanson, 1987), and enabling or motivating SMAs to expand into entrepreneurial activities across borders. But, in contrast to Johanson and Mattsson's (1988) conclusion, success here depends less on success within current markets but more on the agency's own ability and initiative to take advantage, and build upon its accumulated realm of relationships in the international network, irrespective of its size-related or resource-related limitations.

Implications of Firm Characteristics, Service Characteristics and Industry Effects

As mentioned in an earlier part of this chapter, studying small service company internationalization and international entrepreneurship demands an understanding of the key characteristics of the small service firms and the nature of the industry effects in which they are established. This finding tallies with Scholhammer and Kuriloff (1979), O'Farrell and Hitchins (1998) and Coviello and McAuley (1999) who argued that small firms are different from larger firms in their managerial style, independence, ownership and scale or scope of operations. This chapter takes this argument further to emphasize that these dimensions also vary with respect to small to medium-sized service firms, in particular, depending on the industry and environment in which they are operating. Firm characteristics, service characteristics and more particularly the nature of the owner-managers (Chen and Chen, 1998), and industry effects, affect the nature of relationships and network structures within a service industry and the growth strategies of the firms. As illustrated, Accent, UK is essentially made up of senior, experienced and entrepreneurial people focusing on secondary brands with the aim of demonstrating high involvement in the service delivery process. These characteristics essentially directed the agency to choose an independent international network (Brusselslinks) that was made up with like-minded partners with whom they could interface and do business.

Relationships and Arrangements in Independent International Networks

Examination of the case also suggests that the international agency network (Brusselslinks) is regionally based and multi-domestic rather than multinational in its set-up and organization. In essence, the network is a formal personification of a non-hierarchical structure governed by a group of independent entrepreneurial like-minded agencies, coming together to conduct and foster their businesses on a non-equity basis. These assertions support Bell's (1995) study where firms in networks are encouraged to undertake entrepreneurial initiatives, but are limited in their ability to expand to markets which are 'close' geographically rather than psychically. Agreeing further with Bell (1995), Coviello and Munro (1997) and Fontes and Coombs (1997), the case emphasizes the significance of inter-firm relationships as key to successful international operation in such international networks. Inter-firm relationships in Brusselslinks took the form of cooperative projects, collaborative agreements and equity or non-equity based partnership arrangements, which are either based on the free will of the partner members or formalized through the formal body managing the network relations.

Growth and Expansion in Independent International Networks

The orientation of growth and expansion strategies in international independent networks are unstructured, based on serendipity and the entrepreneurial motivation of the firm's management. New business development and effective client servicing in Brusselslinks are essentially achieved through the member agencies' own initiatives and intelligence in making proactive use of established network relations or cross-referral based on flexible, non-binding agreements. As such, this study supports the finding of Coviello and Munro (1995) that such relationships create synergy for member partners in the network, but there is limited evidence here to suggest or identify processes or stages, as in Coviello and Munro (1997), that SMAs go through to realize their international entrepreneurship initiatives. This attracts attention for further research in studying the implementation dimension of network relationships.

Key Success Factors and Challenges in Independent International Networks

Similarly, there is little empirical evidence here which reports on the nature of strategic challenges and key success factors facing SMEs, particularly small service firms, undergoing network-based internationalization. Buckley (1989) and Acs et al. (1997) do point to some evidence of some external and internal constraints that are likely to impact upon small firm internationalization, but these again are of a very generic nature. That said, the case illustrated that the success of entrepreneurship initiatives in international markets is a function of the successful interaction(s) resulting from relationship dynamics in an international network setting. The case pointed out three key impediments to such successful interaction(s), namely: clash of different agency cultures, accounting for remuneration and profits; and mutual gain and mutual respect, which were crucial to the efficient operation of the member agencies.

CONCLUSION

The general aim of this chapter was to extend existing knowledge of the impact of network relationships on international entrepreneurship initiatives and strategies of small service firms. The literature review complemented up-to-date understanding of international entrepreneurship to the relative mature and rich internationalization research stream, in particular the network school, to investigate two key research questions through a conceptual framework. The chapter presents its findings by discussing the case illustration of a small to medium-sized advertising agency (SMA). Data was collected using in-depth interviews, and the key findings can be summarized as follows.

First, success of SMAs operating in independent entrepreneurial international networks seems to depend on the agencies' own learning abilities, and their capabilities to take advantage or build upon the accumulated realm of relationships in their international network, irrespective of their size-related or resource-related limitations.

Second, the study of small service firm internationalization and international entrepreneurship demands a thorough understanding of the key characteristics of the small service firms, the characteristics of their service outputs, and the nature of the industry in which they are established.

Third, inter-firm relationships are essential to successful collaboration in independent international networks. These can take the form of cooperative projects, entrepreneurial collaborative agreements and equity or non-equity based partnership arrangements. These can be achieved by the free will of the partner members or formalized through the formal body managing the network relations.

Fourth, growth orientation and expansion strategies of small advertising agencies operating in close collaboration with international networks seem to be unstructured, or based on serendipity and the entrepreneurial determination of the service firm's management.

Fifth, more research is needed, as this study provided limited evidence on the nature of strategic challenges and key success factors facing SMEs, particularly small service firms, undergoing network-based internationalization.

Besides the above findings, it has to be noted that this research is context-specific as it examined the influence of network relationships on entrepreneurship behaviour of a single small to medium-sized advertising agency. Such firms are noted to be entrepreneurial by nature, but tend to be owned and managed by specialists who create, develop and market adverts, an offering more intangible than traditional manufactured goods, and requiring significant follow-up support and servicing to create value. At a market level, the ease with which clients can be pitched for and projects gained can affect both foreign market selection and mode of entry decisions. This is compounded by the fact that development and implementation of agreements between clients and agency firms is an industry norm. Thus the industry is characterized by inter-firm cooperation affecting the firm growth or expansion. These factors were noted to affect the pattern and process of implementing international entrepreneurship initiatives of the case firm.

Also, conceptually speaking, the author acknowledges that the framework needs to be evaluated in the light of more quantitative as well as qualitative empirical evidences. Indeed, it is difficult to capture the essence of the internationalization process and its entrepreneurial behaviour using single-case evidence. However, the preliminary findings do support the key assertion of the SME network-based internationalization literature. This school of thought recognizes the potential influence of formal and informal network relationships on the internationalization process, and this research suggests that future research must take a more complementary stance towards studying the 'international entrepreneurship' concept by using multiple research methods rather than blurring our understanding by relying solely either on qualitative, aggregate data or more quantitative, sector-specific data.

Finally, the present research focused on exploration and theory-building, and was designed to contribute towards the limited literature of international entrepreneurship amongst small service firms. The issues and concepts discussed here are part of a more extensive study being undertaken presently across the UK. The conceptual issues, therefore, will be subsequently revised in the light of findings from the wider range of case studies undertaken.

REFERENCES

Aaronovitch, S. and P. Samson (1985), 'Insurance industry in the countries of the EEC: structure, conduct and performance', Office for Official Publications of European Communities, Luxembourg.

Acs, Z.J., R. Morck, J.M. Shaver and B. Yeung (1997), 'The internationalization of small and medium-sized enterprises: a policy perspective', *Small Business Economics*, **9** (1), 7–20.

Anchrol, R.S. and P. Kotler (1999), 'Marketing in the network economy', *Journal of Marketing*, **63**, 146–63.

Axelsson, B. and G. Easton (eds) (1992), *Industrial Networks: A New View of Reality*, London: Routledge.

Baird, I.S., M.A. Lyles and J.B. Orris (1994), 'The choice of international strategies by small businesses', *Journal of Small Business Management*, **32** (1), 48–59.

Beamish, P.W. (1990), 'The internationalisation process for smaller Ontario firms: a research agenda', in A.M. Rugman (ed.), *Research in Global Strategic Management – International Business Research for the Twenty-First Century: Canada's New Research Agenda*, Greenwich: JAI Press, pp.77–92.

Bell, J. (1995), 'The internationalisation of small computer software firms – a further challenge to "stage" theories', *European Journal of Marketing*, **29** (8), 60–75.

Berra, L., L. Piatti and G. Vitali (1995), 'The internationalization process in the small and medium-sized firm: a case study of the Italian clothing industry', *Small Business Economics*, **7** (1), 67–75.

Bjorkman, I. and S. Kock (1997), 'Inward international activities in service firms – illustrated by three firms from the tourism industry', *International Journal of Service Industries Management*, **8** (5), 362–76.

Boddewyn, J.J. and M.B. Halbrich (1986), 'Service multinationals: conceptualisation, measurement and theory', *Journal of International Business Studies*, 41–57.

Bodur, M. and T.K. Madsen (1993), 'Danish foreign direct investments in Turkey', *European Business Review*, **93** (5), 28–43.

Bonaccorsi, A. (1992), 'On the relationship between firm size and export intensity', *Journal of International Business Studies*, **4** (4), 605–35.

Bonaccorsi, A. (1993), 'What do we know about exporting by small Italian manufacturing firms?', *Journal of International Marketing*, **1** (3), 49–75.

Boyd-Barrett, O. (1989), 'Multinational news agencies', in P. Enderwick (ed.), *Multinational Service Firms*, London: Routledge, pp. 107–31.

Buckley, P.J. (1989), 'Foreign direct investment by small and medium-sized enterprises: the theoretical background', *Small Business Economics*, **1**, 89–100.

Calof, J.C. (1994), 'The relationship between firm size and export behaviour revisited', *Journal of International Business Studies*, **25** (2), 367–87.

Campbell, A.J. and A. Verbeke (1994), 'The globalisation of service multinationals', *Long Range Planning*, **27**, 95–102.

Carrier, C. (1994), 'Intrapreneurship in large firms and SMEs: a comparative study', *International Small Business Journal*, **12** (3), 54–61.

Carson, D., S. Cromie, P. McGowan and J. Hill (1995), *Marketing and Entrepreneurship in SMEs: An Innovative Approach*, Hemel Hempstead: Prentice Hall (International).

Chen, H. and T-J. Chen (1998), 'Network linkages and location choice in foreign direct investment', *Journal of International Business Studies*, **29** (3), 445–78.

Cicic, M., P.G. Patterson and A. Shoham (1999), 'A conceptual model of the internationalisation of services firms', *Journal of Global Marketing*, **12**, 81–105.

Coviello, N.E. and A. McAuley (1999), 'Internationalisation and the smaller firm: a review of contemporary empirical research', *Management International Review*, **39**, 223–56.

Coviello, N.E. and H.J. Munro (1995), 'Growing the entrepreneurial firm: networking for international market development', *European Journal of Marketing*, **29** (7), 49–61.

Coviello, N.E. and H.J. Munro (1997), 'Network relationships and the internationalisation process of small software firms', *International Business Review*, **6** (2), 1–26.

Dalli, D. (1995), 'The "exporting" process: the evolution of small and medium-sized firms towards internationalisation', *Advances in International Marketing*, **6**, 85–110.

Daniels, P.W. (1985), *Service Industries: A Geographical Appraisal*, London: Methuen.

Daniels, P.W. (1993), *Service Industries in the World Economy*, Cambridge: Blackwell Publishers.

Douglas, M. (1996), 'The strategies and characteristics of exporting SMEs: a study of Peruvian firms', *Journal of Global Marketing*, **9** (4), 35–56.

Dunning, J.H. (1988), 'The eclectic paradigm of international production: a restatement and some possible extensions', *Journal of International Business Studies*, **19**, Spring, 1–31.

Dunning, J.H. (1989), *Transnational Corporations and the Growth of Services: Some Conceptual and Theoretical Issues*, New York: UN.

Dunning, J.H. (1993a), *Multinational Enterprises and the Global Economy*, Workingham: Addison-Wesley Publishers.

Dunning, J.H. (1993b), 'The globalisation of service activities', in J.H. Dunning (ed.), *The Globalisation of Business*, London: Routledge, pp. 242–84.

Dunning, J.H. and S.K. Kundu (1994), 'The internationalisation of the hotel industry – some new findings from a field study', *Management International Review*, **35**, 101–33.

Ekeledo, I. and K. Sivakumar (1998), ‘Foreign market entry mode choice of service firms: a contingency perspective’, *Journal of the Academy of Marketing Science*, **26**, 274–92.

Enderwick, P. (1989), *Multinational Service Firms*, London: Routledge.

Erramilli, K.M. (1989), ‘Entry mode choice in service industries’, *International Marketing Review*, **7**, 50–62.

Fontes, M. and R. Coombs (1997), ‘The coincidence of technology and market objectives in the internationalisation of new technology-based firms’, *International Small Business Journal*, **15** (4), 14–35.

Gomes-Casseres, B. (1997), ‘Alliance strategies of small firms’, *Small Business Economics*, **9** (1), 33–44.

Granovetter, M.S. (1985), ‘Economic action and social structure: the problem of embeddedness’, *American Journal of Sociology*, **91** (3), 481–510.

Gronroos, C. (1999), ‘Internationalisation strategies for services’, *Journal of Services Marketing*, **13**, 290–97.

Grubel, H.G. (1989), ‘Multinational banking’, in P. Enderwick (ed.), *Multinational Service Firms*, London: Routledge, pp. 61–78.

Holmlund, M. and S. Kock (1998), ‘Relationships and the internationalisation of Finnish small and medium sized companies’, *International Small Business Journal*, **16** (4), 46–63.

Ibeh, K.I.N. and S. Young (1999), ‘The contingency model of export entrepreneurship: a proposed conceptual framework for initial export venturing’, *Working Paper Series, Strathclyde International Business Unit*, **5**, 1–25.

Johanson. J. and L.G. Mattsson (1988), ‘Internationalisation in industrial systems – a network approach’, in N. Hood and J.E. Vahlne (eds), *Strategies in Global Competition*, London: Croom Helm, pp. 287–314.

Johanson, J. and L-G. Mattsson (1992), ‘Network positions and strategic action – an analytical framework’, in B. Axelsson and G. Easton (eds), *Industrial Networks: A New View of Reality*, London: Routledge, pp. 205–17.

Johanson, J. and J-E. Vahlne (1997), ‘The internationalisation process of the firm – a model of knowledge development and increasing foreign market commitments’, *Journal of International Business Studies*, Spring/Summer, 23–32.

Johanson, J. and J-E. Vahlne (1990), ‘The mechanism of internationalisation’, *International Marketing Review*, **7** (4), 11–24.

Kaynak, E., P.N. Ghauri and T. Olofsson-Bredenlow (1987), ‘Export behaviour of small Swedish firms’, *Journal of Small Business Management*, **25** (2), 26–32.

Korhonen, H., R. Luostarinen and L. Welch (1996), ‘Internationalisation of SMEs: inward–outward patterns and government policy’, *Management International Review*, **36** (4), 315–29.

Li, J. and S. Guisinger (1992), ‘The globalisation of service multinationals in the “Triad” regions: Japan, Western Europe and North America’, *Journal of International Business Studies*, **23** (4), 659–75.

Lovelock, C.S. (1999), ‘Developing marketing strategies for transnational service operations’, *Journal of Services Marketing*, **13**, 278–89.

Lovelock, C.S. and G.S. Yip (1996), ‘Developing global strategies for service businesses’, *California Management Review*, **38**, 64–86.

Mathe, H. and C. Perras (1994), ‘Successful global strategies for service companies’, *Long Range Planning*, **27**, 36–49.

McDougall, P.P. (1989), ‘International versus domestic entrepreneurship: new ven-

ture strategic behaviour and industry structure', *Journal of Business Venturing*, **4**, 387–401.
McDougall, P.P. and B.M. Oviatt (1997), 'International entrepreneurship literature in the 1990s and directions for future research', in D.L. Sexton and R.W. Smilor (eds), *Entrepreneurship 2000*, Chicago, IL: Upstart Publishing, pp. 291–320.
McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43**, 902–6.
Melin, L. (1992), 'Internationalisation as a strategy process', *Strategic Management Journal*, **13**, pp. 99–118.
Oburai, P. and M.J. Baker (1999), 'Empirical research into collaborative alliances in industrial markets: a case for balanced approach to theory building', at the 28th Annual Conference of European Marketing Academy, Humboldt University, Berlin.
O'Farrell, P.N. and P.W.N. Hitchins (1998), 'Alternative theories of small firm growth: a critical review', *Environment and Planning*, **20**, 365–82.
O'Farrell, P.N., P.A. Wood and J. Zheng (1998), 'Internationalisation by business service SMEs: an inter-industry analysis', *International Small Business Journal*, **16** (2), l3–31.
Piercy, N.F. and D.W. Cravens (1995), 'The network paradigm and the marketing organisation: developing a new management agenda', *European Journal of Marketing*, **29**, 7–34.
Roberts, J. (1998), *Multinational Business Service Firms: The Development of Multinational Organisational Structures in the UK Business Services Sector*, Aldershot: Ashgate Publishing Company.
Sampson, G.P. and R.H. Snape (1985), 'Identifying issues in trade in services', *World Economy*, **8** (2), 171–82.
Sarathy, R. (1994), 'Global strategy in service industries', *Long Range Planning*, **27** (6), 115–25.
Schollhammer, H. and A.H. Kuriloff (1979), *Entrepreneurship and Small Business Management*, Chichester: John Wiley.
Segal-Horn, S. and D. Faulkner (eds) (1999), *The Dynamics of International Strategy*, London: International Thomson Business Press.
Sharma, D. (1992), 'International business research: issues and trends', *Scandinavian International Business Review*, **1** (3), 3–8.
Sharma, D.D. and J. Johanson (1987), 'Technical consultancy in internationalisation', *International Marketing Review*, Winter, pp. 20–29.
Shuman, J.C. and J.A. Seeger (1986), 'The theory and practice of strategic management in smaller rapid growth companies', *American Journal of Small Business*, **11** (1), 7–18.
Smith, K.G., M.J. Gannon, C. Grimm and T.R. Mitchell (1988), 'Decision-making in smaller entrepreneurial and larger professionally managed firms', *Journal of Business Venturing*, **3**, 223–32.
Stern, R.M. and B.M. Hoekman (1988), 'Conceptual issues relating to services in the international economy', in C.H. Lee and S. Naya (eds), *Trade and Investment in Services: In the Asia-Pacific Region*, Pacific and World Studies No. 1, Boulder, Co: Westview Press.
Vandermerwe, S. and M. Chadwick (1989), 'The internationalisation of service industries', *Services Industries Journal*, **9**, 79–93.
Welch, L.S. and R. Luostarinen (1988), 'Internationalisation: evolution of a concept', *Journal of General Management*, **14** (2), Winter, 34–55.

Welch, L.S. and R.K. Luostarinen (1993), 'Inward and outward connections in internationalisation', *Journal of International Marketing*, 46–58.

Whitelock, J. and P. Munday (1993), 'Internationalisation of the firm: two cases in the industrial explosives industry', *Journal of International Marketing*, **1** (4), 19–30.

Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: Free Press.

Wright, R.W. and D.A. Ricks (1994), 'Trends in international business research: twenty-five years', *Journal of International Business*, **25**, 687–94.

Young, S. (1987), 'Business strategy and the internationalisation of business: recent approaches', *Managerial and Decision Economics*, **8**, 31–40.

Zafarullah, M., M. Ali and S. Young (1998), 'The internationalisation of the small firm in developing countries: exploratory research from Pakistan', *Journal of Global Marketing*, **2** (3), 21–40.

Zeithaml, V.A., A. Parasuraman and L.L. Berry (1985), 'Problems and strategies in services marketing', *Journal of Marketing*, **49**, 33–46.

11. Returning to the field in internationalization: an exploratory study of contemporary small firms in the advanced medical products industry

Thandiwe Phiri, Marian V. Jones and Colin Wheeler

INTRODUCTION

It is generally held that four main groups of theoretical explanation are relevant to the study of internationalization. These are, in parsimonious categorizations, the internalization or transaction cost approach, the internationalization or network approach, the export development approach, and the resource-based view. Coviello and McAuley (1999) indicated that the internationalization of the small firm is inadequately explained by any of these approaches individually. Research on Born Globals or international new ventures which focuses on the early stages of internationalization in young firms has been particularly critical of the inadequacy of conventional theoretical approaches to explain rapid or immediate internationalization in the face of sometimes considerable resource challenges. This has led to an increased interest in the entrepreneur as a driver of internationalization, and also to a number of calls in the literature for new theories, or for a useful integration of key concepts from traditional theories. To that end, the imperatives are: to return to the theories and re-examine their constructs, logic and implications; and to return to the field and re-examine internationalization as it occurs in firms, and as experienced by entrepreneurs or managers in a contemporary context. This chapter concentrates on the latter and reports the findings from an exploratory empirical study of small firms in the advanced medical products industry in central Scotland at the turn of the millennium.

THE CONTEXT OF THE STUDY

The world's medical device industry produces over 130 000 products that are sold to hospitals, physicians and dentists, nursing homes, clinics, home health care operators and others. Hospitals form the biggest customer group and the market for commodity-type products manufactured by a relatively small number of large manufacturers is a mature market consisting of products such as intravenous and anaesthesia products, surgical apparel and other conventional diagnostic and therapeutic products. It is characterized by low margins, high volume and long-term contracts with relatively large customers. A more profitable sector of the industry comprises innovative and specialized high-technology products such as implantable cardiac defibrillators and sophisticated diagnostic imaging systems, often emerging from research laboratories, and designed for specific markets. Such products are typically targeted at smaller patient populations, thus requiring niche strategies, but tend to be significantly more profitable than commodity items.

The United States (US) is the global leader in the production of medical equipment and supplies and is the largest market. Developed countries represent a growing market for advanced medical devices due to ageing populations and unhealthy lifestyles. Simultaneously, countries in the developing world are modernizing their health care and delivery systems, a process predicted by the WHO (World Health Organization) to increase the demand for more advanced medical products. Developments in medical device technology relate to computer-related technology, drug delivery systems and drugs, organ replacements and assists, a move to minimally invasive products and molecular medicine. Products tend to be sophisticated, knowledge-intensive and multi-disciplinary in relation to the technologies involved. Research and development costs tend to be high. Although the investment climate in many countries is improving, firms trying to exploit new technologies are faced with multiple challenges in developing and testing products, and developing or entering new markets. Simultaneously they might be creating a new venture and embarking on cross-border business activities because of technological specialization in relation to production, and market specialization in relation to product applications.

The medical device industry is subject to regulation in most countries of the world. Approval of the Food and Drug Administration (FDA) is required in the US, and products need to undergo lengthy tests and meet stringent quality standards before they are approved for sale in the US market. The FDA system is reputedly the slowest and most expensive in the world (http//www.curenet.org/biodimensions), therefore, while the US represents the most attractive market, entering it may result in lengthy delays and significantly increased R&D costs for aspiring companies.

Spiralling costs of R&D have increased the need for R&D results to be commercialized irrespective of whether results emerge from public or private laboratories. One of the results of this process is the establishment of new ventures to exploit new technologies, or the transfer of technologies to firms that are able and willing to commercialize them. This chapter is concerned with small firms involved in the development and/or commercialization of new technologies, and in particular, with the cross-border contacts, links and activities which impact upon or relate to that process.

SMALL FIRMS AND INTERNATIONALIZATION

Research on the internationalization of firms has traditionally focused on manufacturing firms. This focus is natural, since manufacturing firms have had a significant historical importance in international trade and national development (Arvidsson, 1997). But small firms, especially high-technology firms, are being recognized for their dominant role in innovation that has contributed to economic regeneration. Given that multinationals and small firms operate in the same environment, it would be expected that the large and well-established firms endowed with financial assets, a variety of skills, and other resources would be first, most active and good performers in internationalization activities. However, research has shown that no clear correlation emerges between firm size and ability to internationalize or international performance (Aaby and Slater, 1989; Culpan, 1989; Samiee and Walters, 1990). Indeed SMEs are internationalizing more rapidly than in the past. Moreover, some firms adopt an international or even global approach from their birth or very shortly after. This is reinforced by the findings of Knight and Cavusgil (1996), Turnbull (1987) and Madsen and Servais (1997).

However a criticism of most research on internationalization, especially on exporting, has been the lack of distinction between the foreign market entry processes of large and small firms (Reid, 1981). There is a view that the study of SME internationalization should take into account their unique operating conditions, resources, influences and problems. Small firms are likely to be limited in financial, management, human and information resources and therefore their internationalization process is likely to be different from bigger firms.

A significant number of studies on the internationalization of small firms have mainly been focused on their behaviour, strategies and performance in exporting, but since the early 1990s, more studies have leaned towards exploring SME internationalization by taking a more holistic approach. By ‘holistic’ in this study we mean the inclusion of all aspects of the firm’s value chain within the growth and development process of the firm, and not internationalization as characterized solely by downstream marketing and distribution activities typical of export development approaches to internationalization.

A recent review of contemporary empirical research on internationalization and the smaller firm by Coviello and McAuley (1999) shows that the SME internationalization is not fully represented by one set of theories. Rather, it is best understood by integrating major theoretical frameworks. The network perspective is said to be the most useful to understanding SME internationalization since it has been supported by most research. A number of studies have confirmed that current network relationships may offer the potential for small firms to develop foreign markets (Coviello and Munro, 1997; Johnsen and Johnsen, 1999). A study of small software manufacturing firms showed that foreign market selection and entry initiatives emanate from opportunities created through network contacts, rather than solely from the strategic decisions of managers in the firm (Bell, 1995). In addition to international market entry, there is a heavy reliance on network relationships for marketing-related activities (Coviello and Munro, 1997). Other strategic benefits in networking emerge from horizontal cooperation (links with possible competitors), and these include sharing competencies and experiences of other firms, reducing risk, and exploiting synergies in production or R&D (Elg and Johansson, 1996).

Networking or the formation of cross-border links has particularly been associated with small high-technology firms (Jones, 1999; Bell, 1995; Coviello and Munro, 1997). Bell (1995) identified a rapid, non-incremental internationalization process in small high-technology firms. He suggested that inter-firm relationships (for example clients, supply chain partners) are influential in the internationalization of small high-technology firms. Echeverri-Caroll (1999), comparing Japanese and US high-technology firms, concludes that high-technology firms that establish partnership relationships involving frequent exchange of information with suppliers, customers and other organizations, tend to develop products and processes faster than their competitors who do not develop such relationships.

Apart from links explaining internationalization and success, it is technological innovation among small high-tech firms that has led to new product or service development with international or global demand. At the national level, innovation in these firms has led to economic regeneration, through job creation, and their contributions as leading edge and science-based innovators and contract manufacturers (Jones, 1999). The challenge for these small but international firms is to survive by responding in the increasingly competitive global marketplace. One of the advantages of being small is the ability to be flexible and quickly adjust to changing market conditions (O'Farrell et al., 1998). Nevertheless, this is only possible with adequate resources to invest in R&D activities, marketing and other value chain elements (Oviatt and

McDougall, 1997). A unique characteristic in high-tech firms is that their competitive advantage is mostly vested in their ability to develop and exploit new innovations, carve out narrowly defined and defensible niches, and adapt rapidly to change (Jones, 1999). Another characteristic leading to success of small high-tech firms is their ability to access and integrate external sources of knowledge, which enables them to overcome skill and resource deficiencies within the firm. This also enables them to reduce the problems associated with high cost and risks; thus, external linkages can and often do provide a potential source of competitive advantage (Berry, 1998).

AIMS, OBJECTIVES AND METHODOLOGY

The aim of the research was to explore internationalization in a group of small firms, homogeneous to the extent that they operate within the same industry, were located in the same geographical area, were founded within a reasonably similar reference time, and had made some progress in establishing international business activity. The study was exploratory and undertaken as a preliminary stage of a more extensive longitudinal study of small firms in the medical products industry. The specific objectives of the preliminary study were to:

1. Establish the foundation process of each firm, taking into account the purpose and means of its foundation, its initial resource base, the nature of its business and the nature of any international resources or connections at the outset of its operations.
2. Determine the form of the firms' internationalization, taking into account the process, method of business operations, contacts and links made and emergent patterns or trajectories.
3. Explore the relationship between internationalization decisions and processes, and the more holistic growth and development processes of the firm itself.

The intention was to report internationalization stories as described and explained by the respondents and substantiated by events and other factual material reported in company websites, and their published company reports, bulletins, press releases and accounts.

The sample used in the study comprised a convenience sample of six small high-technology firms in the advanced medical products manufacturing industry, based in central Scotland. Fictitious names are used to preserve confidentiality. The control variables that determined the parameters of the study were that the firms should:

- employ 250 or less employees at the time of interview;
- be located in central Scotland, an area with a radius of under 30 miles;
- have some current involvement in international business activity;
- have been established within the last 20 years;
- have an accessible and informed respondent with personal knowledge of the foundation process of the firm.

A list of company names was compiled with assistance from Scottish Enterprise, through accessing information on company databases at the Glasgow Chamber of Commerce offices and through websites that feature the UK's biomedical industry. Addresses of 20 companies were initially obtained. Ten firms satisfied all of the above criteria except the central location. Five fully met the criteria and were invited to participate in the study. One further firm, a US subsidiary, was included for comparative purposes and because its history indicated a cross-national foundation process of some relevance and interest for this study.

A multi-case study methodology was used. This approach is thought most appropriate for the research because case study research has been proposed, by Johnsen and Johnsen (1999) being the most suitable method for examining networks, to facilitate an in-depth understanding of the phenomenon under study. A sample drawn from a single industry has been used in order to eliminate the likely response differences that would arise due to different industry environments.

Interviews were carried out in the summer of 2001 with senior managers, who were in most instances also founders of the firms. Interview questions consisted of open-ended and some semi-structured questions to allow detailed explanations, and to collect information that would not be revealed otherwise. Respondents were encouraged to tell their story in their own words so as to identify their own 'native categories' of data (Buckley and Chapman, 1997; Harris, 2000). The information gathered covered company history, international activities or links the company has undertaken since its formation, the benefits sought from international networks, company emphasis on their value chain activities, products and services that are sold or exchanged in international links, factors leading to competitiveness, and the company's future plans. As far as possible, information on the internationalization links made by the companies was collected in chronological order to allow better understanding of the cause and effect of each of the activities. The interviews took approximately an hour each and all the responses were noted. These were rewritten in full immediately after the interview. Companies were contacted by phone after the interviews to clarify any queries that arose. Information on firm activities was also taken from websites, CD-ROMs and brochures. The results are reported here, firstly as individual case histories, and secondly, as cross-case comparison of key issues.

CASE STUDY SUMMARIES

The following accounts summarize the foundation and internationalization processes described by respondents and verified through follow-up telephone interviews and recourse to secondary data sources. To conserve space, summaries rather than actual narratives are reported.

Hemming

Hemming is a small, Scottish-based company established in 1998. It produces near-patient diagnostic equipment systems for the analysis of red blood cells. The product was an innovation developed from the research of a university pathologist, and a software innovation, developed elsewhere, which was bought over by the firm founders. The company was founded and initially staffed by three founders, the afore-mentioned pathologist, a statistician and an engineer with connections in the software industry. Access to laboratory equipment of major hospitals was crucial in the product development stages prior to the founding of the company in 1998, which was made possible through government funding.

At start-up, the firm's staff complement consisted of the three founders. Turnover at the end of the first year had reached just over £0.25 million and products were being sold in two countries as well as the domestic UK market. Two years later, when we interviewed the company, its turnover had risen to around £1.25 million, it had a staff complement of nine employees and was selling to seven countries: Spain, Portugal, Italy, Kuwait, Germany, Taiwan and Israel. It had targeted the USA but was awaiting approval from the FDA, and had also targeted Canada and China.

The firm was established on the basis of a product innovation which, as described by the founders, was portable, while competing products were not, and was faster, more reliable and cheaper than similar equipment on the market. The product fulfils a very specific need and therefore its market consists of a very narrowly defined, but potentially international market, consisting of hospitals, hospital laboratories and point of care surgeries. The firm sells a similar product for use in veterinary practice. Recognizing the international scope of their market, and their head-start gained through technological innovation, the founders had planned international sales from the outset.

Initial market entry was achieved through the formation of sales and distribution agreements with trade partners distributing medical devices. The criteria the firms used for country selection were that the countries did not require FDA approval, that the distributors in the foreign country carried complementary products, that the distributor covered the target market extensively, and that distribution costs were reasonable. The firm admitted that they did not always have prior knowledge of their country markets, but tended to make contact with distributors and agents through international medical conferences and through advertisements in medical magazines.

Beyond initial sales and distribution agreements, the firm has agreed to have its product manufactured by a medical device manufacturer in Italy and sold under the brand name of that firm as part of an exclusive distribution arrangement covering the whole of Italy. Further international contracts with large manufacturing companies with complementary product lines are being sought for several reasons. These include: to overcome the problems associated with being a small, new company whose product, brand name and company reputation are not widely known, to benefit from the larger firm's established distribution systems and channels, and to overcome cultural differences and national regulation barriers in some markets, particularly in countries like Russia and China, where, the respondent felt, they had no knowledge of the language and where logistics could be difficult.

When asked about their international competitiveness, Hemming felt that its major competitors were most likely to be very large players like Abbott Laboratories, and Becton Dickinson. They felt, however, that the uniqueness of their product, a competitive pricing strategy, low overheads and the ability to provide fast and flexible responses to customer needs would keep them ahead of the competition. They saw their links with a major university and other university hospitals as fundamental to their success, and a source of their knowledge resource and major competitive advantage. Their long-term goals were to increase foreign market sales, expand production and increase profitability to the point that the firm would become attractive to potential investors and acquisition within around five years.

Artan

Artan is a small firm that was founded originally in California. The first generation of its product was removed from the market and its operations in the USA were consolidated. The company then set up manufacturing operations in Scotland. At the time we contacted the firm, they had been in operation in Scotland for less than one year, at what was essentially the development stage of its second-generation product. The firm was located in Scotland to benefit from links with a Scottish-based manufacturer with appropriate experience and facilities for the development of the second-generation product known as the Autologous Pericardial Heart Valve (APHV), and also because the first valves of this type were to be used in Europe in the first instance.

The company's strategy was concerned with seeking and establishing corporate alliances or other international links to assist in the development stages of its new technology, including the completion of animal tests, human clinical trials, the attainment of the CE mark, and also entry into the European market and progress towards FDA approval and re-entry to the USA market. Although the firm was located in a cluster of firms involved in similar or related technologies, it claimed that such locational benefits were of no particular interest to them.

The internationalization process in the case of Artan was mainly motivated by the pursuit of company growth. Since the product was seen to be unique, competition in the home market or target countries was not seen as a driver of internationalization decisions. In the words of the then director: 'choice and order of market entry was not planned, it was solely induced by the availability of friends in particular countries'.

The alliances and links sought by this company were related to product development and required significant investment, that is, FDA approval, obtaining a CE mark, clinical trials and so on. The company's focus was on product development and production and it was anticipated that marketing and sales operations could be subcontracted. Since we interviewed the company in 2000, it has withdrawn its activities from Scotland, and now operates from the USA.

Atrium

Atrium, founded and located in Scotland in 1992, also had its origins in the USA in the form of a mechanical heart-valve. The valve was invented in the US but manufactured in the UK. Two of the founders of Atrium bought the patent rights and the UK-based manufacturing plant with their own sources of finance. The five founders consisted of an accountant, an electronics engineer who was previously an entrepreneur, the former European marketing director of a large biochemical MNE, and a medical consultant specializing in cardio-physiology. In total, three of the founders had held senior positions in large multinational companies. Amongst motives for founding Atrium was the desire for independence, and to move out of the large firm sector: 'We were fed up with large company ethos, we wanted to run our own show, and do the show right.'

The firm was international from the outset, due to the acquisition of patent rights from the US inventor. Commencing business with the five founders and eight employees in the UK, within three years the firm was employing 100 employees in the UK, three in the US, three in the Netherlands and six in

Australia. Further funding came in the form of £750 000 venture capital from 3i, and a further £17.5 million from going public in 1997.

Growth of this company has largely been achieved by collaborative arrangements with other firms with complementary products or technologies, followed by acquisition of the firms themselves, or their patent rights. Initial acquisition of the US patent rights and UK manufacturing plant was followed six years later by the acquisition of an Australian company, which was the sole manufacturer of a polymer substance integral to the success of the firm's main product – tissue heart valves. Further acquisition consisted of a Leeds manufacturer of tissue-based catheters. The scope of the firm's operations by the year 2000 covered 23 country markets across Europe, the Middle East, Africa, South America, the Far East and Australia. The company anticipated further acquisitions or joint ventures in Germany and Singapore and hoped for major market developments in India.

Atrium considered their competitive strengths to lie in their general flexibility, and ability to react quickly to the results of R&D. The high level of specialist medical knowledge amongst the firm's directors, together with considerable senior-level management experience in multinational firms in relevant industries, was also considered advantageous. The firm recognized potential and serious growth limitations due to the labour intensity of the tissue heart valve, and restricted entry to some major markets including Japan and the US. Financial arrangements for a negotiated joint venture arrangement with a contract manufacturer fell through during the months following 9/11. Atrium ceased trading in March 2003 and exists now as a specialized R&D facility.

Desco

Desco manufactures diagnostic ultrasound equipment. Two colleagues, a psychologist and an electrical engineer who previously worked for a large company manufacturing a range of medical devices, founded it in 1983. Desco's product was one of a range of ultrasound devices manufactured by, but not core to their previous employer's business. A new product was developed from the original with help from two skilled engineers, some venture capital and a bank loan. The firm employed ten employees in its first year. The advantages of this product over existing X-ray equipment and ultrasound devices were better imaging and its portability. The firm's original market consisted of the National Health Service, small private clinics and veterinary practices. Due to market saturation, the firm sought overseas markets for its products in 1984, mostly in Europe. At the time of interview, the firm was selling to 100 or more country markets around the world.

Desco indicated that their country markets were selected according to their market potential, and the availability and willingness of distributors to carry their product. Desco communicates with their markets through advertising in professional and trade magazines, and participation in trade and industry exhibitions. The firm sees the basis of its competitive advantage as lying in the quality imaging produced by their product, their team of experienced engineers, investment in R&D, a narrow product focus and low prices.

Milo

Milo was originally founded, under a different name, in 1991 by four electrical engineers, with financial assistance from a bank and an Israeli company. Two of the founders were American and were developing an X-ray generator at their home in the US. The other two were Scots, independently working on a similar product whilst employed for a large, X-ray generator manufacturer in Scotland. Acquisition of the original firm in 1999 by the American multinational, Milo, has resulted in a loss of some corporate memory but it is clear that early development was focused on the commercialization of the product innovation developed by the entrepreneurs; the nature of the Israeli company's involvement is not clear. The product, an X-ray generator, had the properties of being significantly smaller than competing products, with higher-voltage production and microprocessor-controlled internal diagnostics, and was capable of greater technical accuracy and reliability. Also, the price was low. Demand was found in developing countries where the equipment needed to be transported long distances to areas of war, and to refugee camps. Through the World Health Organisation, the firm was able to sell its products to Angola, Ethiopia, Liberia, Tanzania, Kenya and South Africa in its first year. The firm started selling to its home market, the UK, two years later. At that time, the company had four employees and a turnover of only £0.33 million. A market gradually opened up in Europe as small hospitals realized that a smaller generator, as well as being more portable, would save space. Through distributors, the firm was able to enter a number of Eastern European markets in 1995. The company was badly affected by economic downturn in some of those markets in 1996. Facing liquidation, it was acquired by Milo in 1999.

Harrow

Harrow UK is a subsidiary of Harrow International, which is a US-headquartered MNE. It was founded in 1974 in the US by a scientist and entrepreneur who was researching blood separation technologies. He developed a process called 'apheresis'. Harrow was formed to commercialize that process, which has been the root of the firm's success. Harrow currently has offices in 14 countries throughout the world and has an annual revenue of around $282 million. Harrow (UK) was established in Scotland in 1994 as a sales branch for HQ, but later began to manufacture its own products. Ninety per cent of the Scottish subsidiary's products are sold to its US HQ, to other buyers in the US, and across most of the countries in continental Europe. Only 10 per cent of the subsidiary's products are sold within the UK. The Scottish subsidiary has 215 employees compared to the 1400 employed by the group as a whole. In its first year of operation its revenue was £5 million, and by the year 2000, it was £30 million. The Scottish subsidiary now has a sales branch in Leeds.

The products offered by the firm are used for blood separation, collection and salvage. Its customer groups include hospitals and blood collection centres. Markets entered include the US in the first instance, followed by Europe and then Asia. The respondent indicated that the firm followed a gradual step-by-step expansion because of perceived market differences, especially language barriers. However, expansion was relatively rapid due to the firm's drive to increase product sales based on their knowledge that they were sole pioneers of a unique product and faced guaranteed demand in most countries. At the time of interview, the firm had established sales branches in most of their main country markets. Sales subsidiaries are preceded in most instances by sales through distributors facilitated at trade exhibitions. In successful markets, alliances are forged with distributors but the establishment of sales branches eventually replaces most such arrangements. The respondent indicated that overseas expansion is very deliberately progressed through the development of networks of distribution contacts, and also networks of contacts with regulatory bodies in target markets to keep abreast of changes, and with customers because of the importance of their input to technological and product development processes.

The internationalization process of this firm has taken around 20 years to date. It has consisted of a gradual expansion of international sales through network contacts. Importantly, customers have been instrumental in the continuing development of the firm's product technology.

CROSS-CASE ANALYSIS

The first objective of the study was to examine the foundation conditions and processes of the case firms. The results are listed in Table 11.1. All of the firms, with the exception of Desco, were ten years old or under at the time of the interviews and were therefore still in their early growth stages. Evidence suggests that in most cases, there was a good corporate memory of the firm's foundation history. The firms can be divided into two groups on the basis of the nature of their innovation. The first three firms listed in Table 11.1, Hemming, Artan and Atrium, were exploited to develop technologies that could be considered as leading-edge technological breakthroughs in their relevant fields. The latter three firms, Desco, Milo and Harrow, were established to exploit innovations which could be considered as incremental developments of existing technologies or products. Although all the firms were founded to exploit the benefits of new technology, it is likely that the difference between new, leading-edge innovation and incremental innovation will significantly affect the development process of the firm, and the nature of internationalization. This can be seen to some extent in the nature of the funding utilized by the two groups of firms. The leading-edge firms were funded by combinations of government funding in the form of R&D grants and awards, and private investment, followed in the case of Atrium by venture capital and an IPO. The incremental innovators were funded through venture capital, bank loans, and in the case of Harrow through investment money provided through its acquisition by its US parent (Table 11.1).

Another major difference between the two groups of firms is the extent of specialization of the products. Marketing considerations are detailed in Table 11.2. The leading-edge firms were all working on the development of products that were highly specialized within the medical field and would therefore be marketed to small specialist units in leading hospitals around the world. These firms' strategies were therefore, from the outset, driven by the need to serve a specialized global niche, and by default fell into the category of 'Born Global'. The incremental innovators were working with products with much wider application within the medical field, with established technologies but improvements in the form of efficiency, portability, reliability and so on. While the leading-edge innovators faced the problem of developing new markets for new and to some extent unproven technology, the incremental innovators faced ready-established markets which were competitive and consisted of domestic and international competitors with well-known brand names. While the basis for commencing internationalization for all firms was to establish or increase sales, the primary motivation for the leading-edge firms appears to have been mainly connected with the need to further develop the technology and to have it accepted by leading surgeons, and regulatory authorities. This group's internationalization modes involved transactions and investments across several value chain activities relating to R&D, manufacturing and marketing, and consisted of both inward and outward connections. The incremental firms all internationalized in an outward direction and concentrated their internationalization efforts on cross-border marketing and distribution arrangements.

In all cases, early internationalization was achieved through the networks of the founding team which, due to the knowledge intensive nature of the technology, consisted of human capital in the form of qualifications and

Table 11.1 Foundation processes

	Foundation date	Basis for foundation	Human capital
Hemming	1998 (UK)	Innovation from haematology research at Glasgow University. Development of product. Acquisition of software manufacturer.	Specialist knowledge of founders: ● pathologist, ● statistician, ● engineer and software specialist.
Artan	1990 (US) 1992 (UK)	Technological breakthrough permitting the development of new generation products.	Specialist technological and manufacturing knowledge: ● cardiac surgeon, ● surgeon's son working in manufacturing.
Atrium	1992 (UK)	Acquisition of patent rights from the American inventor, and of the UK-based manufacturing facility (previously US-owned).	● experienced MNE marketing director, ● financier/ accountant, ● electronics engineer, ● cardio-physiologist, ● investor/ entrepreneur.
Desco	1983 (UK)	Acquisition of peripheral technology from previous employer.	● electronic engineer, ● other engineering specialists, ● psychologist.
Milo	1991 (UK) acquired by US parent. Existence pre-dates acquisition	Exploit the UK firm's development of X-Ray equipment.	● 2 Scots engineers ● 2 US engineers engaged in collaborative product development.
Harrow	1994 (UK) relatively independent subsidiary of US parent	Sales branch of parent, but acquired because of its technological capabilities.	Not known

Resource issues and social capital	**Basis for internationalization**	**Growth challenges**
Government funding. Access to university and hospital laboratory equipment and testing facilities.	To increase sales and benefit from first-mover advantage into new country markets.	● Production costs and profitability; ● Breaking into new country market distribution channels; ● Unknown product; ● FDA approval.
Private funding.	Technological breakthrough. Sales through founders' network of contacts in the medical field.	Funding required for further company growth. Initial failure to meet product standards in US market.
Private funds. Venture capital from 3i. Initial Public Offering (IPO).	Specialist product, global niche. Internationalization required to increase sales and fund company growth.	● Shortage of development capital; ● Labour intensity of production; ● Sourcing of materials; ● Foot and mouth epidemic; ● 9/11.
Bank loan. Venture capital. Founder networks with surgeons.	Saturated UK market. Sales to grow company and increase productivity.	Competition from Japanese and Korean firms.
Venture capital from Israeli company.	Small portable product suitable to medical outreach through WHO.	Fall in the economy of their major market.
Financial support, knowledge and networks of parent.	Sales of own product to country markets, also to parent HQ.	Breaking into foreign markets, especially because of language difficulties.

Table 11.2 Marketing considerations

	Product	Customers/client group	Perceived competitive advantage
Hemming	Near-patient diagnostic equipment systems.	● Hospitals ● Hospital laboratories ● Point of care surgeries	● Product-based, portability, reliability, faster, cheaper; ● Small company, quick, flexible solutions.
Artan	Autologous tissue prosthetic heart valves.	● Hospitals ● Specialist clinics	Advantages over previous generation products especially as regards rejection.
Atrium	Tissue and mechanical heart valves, cardiac monitors, polymers.	● Hospitals ● Specialist clinics	● Superior tissue product; ● Firm flexibility; ● High level of medical knowledge of founders; ● Technology awards.
Desco	Diagnostic ultra-sound equipment.	● Health service clinics ● Small provate clinics ● Veterinary practice	Product-based, small, portable. Was an innovation in 1983.
Milo	Portable X-Ray equipment.	● Small hospitals and clinics in developing countries ● Small medical practices and hospital departments in developed countries	Product-based, small, portable with diagnostic ability. Continued R&D. Engineering skills.
Harrow	Apheresis blood collection process.	● Hospitals ● Blood collection centres	Pioneer product. Strong customer networks. Customer involvement in product development. Technological capabilities of sales staff.

Perceived competition	**Industry applications**	**Firm's aspirations and goals**
Little direct competition initially but competition from large branded product manufacturers anticipated.	Blood processing and diagnostics: ● human ● veterinary	● Increase production, sales, country spread and profitability; ● Secure contracts with large manufacturers; ● To be acquired by investors.
Other small knowledge-intensive specialized firms.	Specialized cardiac surgery.	● Alliances with firms that can assist in human and animal trials and further market entry in EU; ● FDA approval in US.
Large manufacturers of traditional mechanical heart valves.	Specialized cardiac surgery.	● Improve and develop the technology; ● Grow the company; ● Expand into India.
Larger Japanese and Korean manufacturers.	Wide within medical industry.	● Continue international expansion; ● Increase sales.
Two named main competitors.	Wide within medical industry. Wide application within remote areas in developing countries.	● Form alliances with larger firms for market access and brand names.
Two named competitors, one Swedish, one US.	Wide within medical industry but specialized to blood collection.	Continue to improve ability to meet customer needs.

Table 11.3 Internationalization processes

	Foundation	First international business activities: Year	First international business activities: Mode	First country markets
Hemming	1998 (UK)	1998	Distributor export	UK and 2 others (not US)
Artan	1990 (US)	1992	FDI in Scotland following closure of US base	UK
Atrium	1992	1992	Acquisition of patent rights from US	UK, Germany, France, Italy
Desco	1983	1984	Distributor export to Europe	Not listed
Milo	1991	1991	Founded in Scotland following cross-national R&D collaboration by the founders. Funding provided by an Israeli company.	Angola, Ethiopia, Liberia, Tanzania, Kenya, South Africa
Harrow	1994	1994	Founded in Scotland as a sales branch of a US MNE. Later manufactured its own products based on locally developed technology.	US, and later, gradually, Europe and beyond

Subsequent country markets	Cross-border business modes	Future expansion plans
Spain, Portugal, Italy, Kuwait, Germany, Taiwan, Israel	Distributor export. Contract manufacture for distributor brands.	US, Canada, China (following FDA approval) and piggyback distribution arrangements with larger manufacturers of complementary products.
Spain France, Germany, Belgium, Netherlands	Distributor export. Direct sales through network of contacts and friends.	Further penetration of Europe, and US following FDA approval.
23 other countries excluding the US	Distributor export. Distributor alliances. Contract-out manufacture. Supplier alliances. Cooperative R&D.	Asia, especially India as markets. Australia as a source of material through backward vertical integration.
100 countries mostly entered years after initial European entry	Distributor export.	Further export diversification and penetration of existing export markets.
Yugoslavia, Czechoslovakia, Germany, Hungary, Switzerland, Slovenia and Russia were entered in 1995 (listed by their former names)	Contacts through the WHO. Distributor export through trade fairs and exhibitions.	Was acquired in 1999; new parent intends further expansion through alliances with very large multinational companies with global operations.
Around 120 countries	Distributor alliances. Networks with regulatory bodies. Close customer networks for NPD.	Continued, gradual incremental expansion which so far has taken nearly 20 years.

expertise gained through international academic networks, and previous work experience in multinational firms and cross-industry environments. The human and social capital held collectively by the founders of Atrium (Table 11.1) cover a spectrum of medical electronic and business knowledge and expertise and provide an extensive international network of contacts and links across relevant industries. Growth challenges again differed between the two groups, and the leading-edge firms faced funding challenges as they moved from the pre-competitive to the competitive stages of technology development. Additionally, the products developed by these firms demanded advances in the technology of materials and components used in conjunction with them. Atrium, for example, worked in close collaboration with developers of catheters and polymer substances to ensure the quality and reliability of component and associated products. Ultimately this work led to a domestic and a cross-border acquisition of partner firms within the first three years of the firm's lifespan.

The second objective of the study was to examine the firms' internationalization processes and patterns. A number of foundation conditions, such as the firms' human and social capital, the nature of their technology, the international nature of their markets and so on, have already been noted. Table 11.3 shows clearly that all firms commenced international activity immediately, and interestingly, four of the six firms were established at the outset by a cross-national transfer of operations or of international property rights; that is, Artan and Desco were founded in the UK following closure of US-based operations and early failure to achieve FDA approval for the US market. Atrium was founded in the UK for similar reasons. In this case, no US-based operations had been established, but US-invented technology was transferred to the UK for development through acquisition of the intellectual property rights. Milo was founded following a cross-national R&D collaboration between researchers from two countries and funded by venture capital from a third. What is interesting here is that the internationalization for these firms commenced with a direct investment in a foreign market rather than the expected commencement through exporting following a period of domestic development. For all of the firms, export through overseas distributors was important and the usual mode of contact with them was through trade fairs, exhibitions and trade magazines. The three incremental innovator firms reported distributor export to be their main form of entry into foreign markets. Reasons for using this mode were given as language problems, the liability of newness, and competition from other manufacturers. Alliances were sought with large firms in foreign markets to overcome the liability of newness and foreignness. The leading-edge firms reported a wider range of international business modes which reflected funding needs, knowledge needs associated with R&D activities, production needs associated with the new technology, and market needs which tended to be seen as required to fund organizational growth and recoup R&D costs rather than as a determined marketing strategy. International networks of contacts, friends and particularly surgeons and other medical and specialized industry-based fraternity formed the first and most fundamental step in the internationalization process of the leading-edge firms. Five of the firms internationalized to one or two countries in the first year of operation, and quickly extended to other countries. Desco and Milo reported sales to over 100 countries through distributor-based exports. Atrium, on the other hand, established an R&D to production to marketing and distribution value chain that extended across five countries and three regions (the US, Europe and South-East Asia) within the first five years of its operations.

The third objective of the study was to examine internationalization in relation to the more holistic growth and development process of the firm itself. Evidence discussed above suggests that international contacts, links and business activities in general are important at the foundation stage of the firm, and for its growth and development thereafter. International modes of activity were associated with several aspects of the value chain for most of the firms and international markets were imperative for all of them. Table 11.4 details some of the more important international links made by the case firms, the nature of the arrangements made, and how they relate to the firms' value chain activities.

DISCUSSION AND CONCLUSIONS

This exploratory study has focused on six small medical products manufacturers located in Scotland at the turn of the millennium. All of the firms could be described as rapid internationalizers and three of them as Born Globals. Returning to the field has provided respondent accounts of the foundation and early development of the case firms and their own description of the international aspects of their business. The descriptions documented describe internationalization as part of the more holistic development of the firms, and raise a number of issues worthy of consideration in relation to established internationalization theory

The term 'internationalization' has been defined in a number of ways. The classical writers of internationalization (Johanson and Vahlne, 1977) have defined it to mean both the step-by-step increasing involvement of the firm in the individual foreign country, and successive establishment of operations in new countries. Luostarinen (1980) introduced a broader definition, saying internationalization is not only evidenced by a firm's extent of foreign operation methods, but also by the number of sales objects, the markets entered, a

Table 11.4 *Links and contacts that have international implications*

	Cross-border transfer of operations	Cross-border links with small firms	Links with large firms	Joint project operations / subcontracting	Acquisitions of other firms
Hemming		Mainly distributor networks.	Contract with large Italian manufacturer of branded medical products for exclusive distribution in Italy (market entry).		
Artan	US to UK because of product failure in initial trials.		Intends to seek such links to carry the firm's marketing/distribution.		
Atrium	IPRs transferred from US to UK pending FDA approval, also UK manufacturing facilities available.	Distribution agreement followed by acquisition of UK tissue manufacturer (supply of component material). Acquisition of medical products distributor in Germany (market access).	International network of contacts across medical and pharmaceutical industries and cardiac units in hospitals (product development and market entry).	Manufacturing agreement with Singapore contract manufacturer (production capability and market access). Proposed acquisition of same failed. Marketing agreement with South American manufacturer of catheters (component needed for heart surgery).	R&D collaboration with Australian polymer manufacturer followed by its acquisition (polymer substance required to reduce rejection rates in heart surgery – supply of component material).
Desco		Mainly distributor networks.			
Milo		Mainly distributor networks.	Alliance with large firm in Czech Republic to sell under their brand name.		Acquisition of UK-based firm to gain access to their international markets.
Harrow		Mainly distributor and customer links.	Not required due to support from parent.		

firm's organizational structure and personnel's international skills, experience and training. There have been more definitions, but a universally accepted definition has remained elusive (Young, 1987; Welch and Luostarinen, 1988; Coviello and Munro, 1997). However, recently there seems to be a move towards a more 'holistic' approach to internationalization. This view does restrict internationalization to being process-based, but it recognizes that internationalization has other aspects:

- there are both behavioural and economic components;
- it is dynamic and evolutionary;
- it incorporates both outward and inward internationalization activities, for example exporting or importing, inward and outward investment and so on.
- it can occur through relationships established through international transactions since these can influence a firm's growth and expansion to other countries (Beamish, 1990; Coviello and Munro, 1997).

Therefore, internationalization may include all cross-border links a firm makes with individuals and organizations based in overseas countries in its core value chain functions. These could be links in research and development, production and marketing (Bell et al., 1998; Bell and Young, 1998; Jones, 1998, 1999; Ibeh, 1999). While the interest of the research is not to find the best definition for the term, it is important to mention here that for the purposes of this research internationalization refers to the holistic approach mentioned above.

The stages theory of internationalization, also known as the 'incremental' theory or Uppsala model, argues that firms develop from their domestic market because of a series of incremental decisions. That is, firms start selling abroad using independent representatives and later set up foreign subsidiaries. The theory assumes that obstacles to internationalization are lack of knowledge and resources. Evidence from this study suggests that the stages theory may be more relevant for firms with existing products and targeting established markets and which have been active domestically for some time. The new ventures examined in this study, with new or still-developing technologies, follow internationalization trajectories determined by the stage of development of the firm itself, its technology, the technology in the wider context of its level of scientific development, and the stage of development of the market, as well as considerations relating to local, international or global applications for the technology.

Foreign direct investment theory has developed from the neo-classical and industrial trade theory, and it advocates the internalization of a firm's activities in international expansion under certain conditions (Dunning, 1981, 1989;

Buckley and Casson, 1979). Alternative market-entry methods could also be used to earn loyalties for a unique asset of a firm, for example a company can license its unique manufacturing knowledge. An interesting development here is that the FDI in two of the case firms took the form of the establishment of a new venture in a foreign country on the basis of an invention without the prior existence of a domestic HQ. Expansion of the theory to accommodate entrepreneurial foreign direct investment (EFDI) is worthy of some consideration. Also, temporary investment in overseas markets, exhibited by some of the case firms in order to exploit a competitive advantage, is one way of circumventing the temporal market failure imposed by the FDA procedure.

FDI theories and some export development theories suggest internationalization trajectories following a sequential hierarchy of modes from low-cost, low-risk modes such as exporting, to higher-cost, higher-risk modes such as investment in overseas production. However, research on patterns of formation of cross-border links shows that high-technology firms have no one specific sequence of entry modes: while most start out with importing, some also export, and others form other links simultaneously (Jones, 1999). The cases in this study suggest that international expansion is likely to be made on the basis of rational decisions, but that the criteria on which internationalization decisions are made need to be expanded beyond the export sales and overseas production imperatives to accommodate resourcing and knowledge transfer imperatives. In addition, a recent description of internationalization as a process includes both inward and outward activities and cooperation as part of the process (Welch, 1992; Welch and Luostarinen, 1993; Jones, 1999); again, the case firms illustrate these two dimensions.

The network theory of internationalization (originating from work on industrial networks; see Johanson and Mattsson, 1986, 1988) suggests that the firm's success in entering new markets is more dependent on its position in a network and relationship within current markets, than on market and cultural characteristics. The thrust of this theory is that firms will internationalize in order to take advantage of other resource assets owned by international firms. In these networks, operating companies occupy a clearly defined position which governs the relationship of each firm with every other firm. The theory assumes that the essential exchange of resources between companies requires relation-specific investments that create value in the link *per se* (Forsgren, 1989). According to this view, internationalization means joining networks that are active across national boundaries. Also in agreement with this view is Bell (1995), who postulates that interconnected exchange relationships evolve in a dynamic, less structured manner and that increased mutual knowledge and trust lead to greater commitment between international market actors.

This theory is logically developed in that it points out that due to a particular resource need, firms will internationalize to take advantage of resources in the international environment. Nevertheless, it does not specifically expose what the resources are that would give such a drive. In this study, links and alliances were formed for a number of reasons relating to research and input needs, technological and market knowledge needs and so on.

The resource-based theory was originally introduced by Grant (1991) and has recently been developed by Bell et al. (1998) in relation to internationalization. Firms are seen as having different mix or competencies and resource or competence gaps, and their strategic responses to these allow for the different paths to growth and internationalization (Bell et al., 1998). In conjunction with the network theory, the firms can also be externally leveraged, for example through network relationships. Again, the case firms examined in this study exhibit the tendency to internationalize in ways that will best exploit their capabilities and competencies whilst protecting their unique advantages.

There are a number of important implications emerging from this study that may give rise to a paradigm shift in the way that internationalization is examined and explained. For example, from this study it is clear that internationalization is context-specific – it is dependent on relatively unique combinations of firm, industry, and local and international market factors. Internationalization has a temporal component and has influences and drivers that may pre-date the foundation of the firm itself. The case firms in this study verify the existence of firms that are early internationals or Born Globals, but as yet, little is known about their survival rates or performance in relation to firms that internationalize in more traditional, gradual or incremental ways.

REFERENCES

Aaby, N.E. and S.F. Slater (1989), 'Management influences on export performance: a review of the empirical literature 1978–1988', *International Marketing Review*, **6** (4), 7–26.

Arvidsson, N. (1997), 'Internationalisation of service firms: strategic considerations', in G. Chryssochoidis, C. Millar and J. Clegg (eds), *Internationalisation Strategies*, New York: Macmillan Press, pp. 71–90.

Beamish, P.W. (1990), 'The internationalisation of smaller Ontario firms: a research agenda', in A.M. Rugman (ed.), *Research in Global Strategic Management – International Business Research for the Twenty-First Century: Canada's New Research Agenda*, Greenwich: JAI Press, pp. 77–92.

Bell, J. (1995), 'The internationalisation of small computer software firms: a further challenge to "stage" theories', *European Journal of Marketing*, **29** (8), 60–75.

Bell, J., D. Crick and S. Young (1998), 'A holistic perspective on small firms growth and internationalisation', in *Academy of International Business Annual UK Conference*, London: City University Business School.

Bell, J. and S. Young (1998), 'Towards an integrative framework of the internationalisation of the firm', in G. Hooley, R. Loveridge and D. Wilson (eds), *Internationalisation: Process, Context and Markets*, London: MacMillan.

Berry, M. (1998), 'On the internationalisation of small high-tech firms', Working Paper 1998/5, Strathclyde International Business Unit, University of Strathclyde.

Buckley, P.J. and M. Casson (1979), 'A theory of international operations', in P. Buckley and P. Ghauri (eds), *The Internationalisation of the Firm: A Reader*, London: Academic Press, pp. 45–50.

Buckley, P.J. and M. Chapman (1997), 'The use of native categories in management research', *British Journal of Management*, **8** (6), 283–99.

Coviello, N. and A. McAuley (1999), 'Internationalisation and the smaller firm: a review of contemporary empirical research', *Management International Review*, **39**, 223–56.

Coviello, N. and H. Munro (1997), 'Network relationships and the internationalisation process of small software firms', *International Business Review*, **6** (4), 361–86.

Culpan, R. (1989), 'Export behaviour of firms: relevance of size', *Journal of Business Research*, **18**, 207–18.

Dunning, J.H. (1981), *International Production and the Multinational Enterprise*, London: Allen & Unwin.

Dunning, J.H. (1989), 'Transitional corporation and the growth of services: some conceptual and theoretical issues', *UNCTC, Current Studies*, Series A, No. 9, New York: United Nations.

Echeverri-Carroll, E.L. (1999), 'Knowledge flows in innovation networks: a comparative analysis of Japanese and US high-technology firms', *Journal of Knowledge Management*, **3** (4).

Elg, U. and U. Johansson (1996), 'Networking when national boundaries dissolve', *European Journal of Marketing*, **30** (2), 61–74.

Forsgren, M. (1989), *Managing the Internationalisation Process: The Swedish Case*, London: Routledge.

Grant, R.M. (1991), 'The resource-based theory of competitive advantage: implication for strategy formultation', *California Management Review*, Spring, 114–35.

Harris, S. (2000), 'Reconciling positive and interpretative international management research: a native category approach', *International Business Review*, **9** (5), 755–70.

Ibeh, K. (1999), 'The internationalisation behaviour of Nigerian SMEs – further support for the holistic perspective', Working Paper 1998/8, Strathclyde International Business Unit, University of Strathclyde.

Johanson, J. and L.G. Mattsson (1986), 'International marketing and internationalisation processes – a network approach', in S. Paliwoda and P.W. Turnbull (eds), *Research in International Marketing*, London: Croom Helm.

Johanson, J. and L.G. Mattsson (1988), 'Internationalisation and industrial systems: a network approach', in N. Hood and J.E. Vahlne (eds), *Strategies in Global Competition*, New York: Croom Helm, pp. 287–314.

Johanson, J. and J. Vahlne (1977), 'The internationalisation process of the firm – a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies*, **18** (1), 23–32.

Johnsen, R.E. and T.E. Johnsen (1999), 'International development through networks: the case of the Ayrshire knitwear sector', *International Journal of Entrepreneurial Behaviour and Research*, **5** (6), 297–312.

Jones, M.V. (1998), 'A preliminary analysis of the patterns, processes and decisions that constitute the internationalisation of small UK high technology firms', Working Paper 1998/7, Strathclyde International Business Unit, University of Strathclyde.
Jones, M.V. (1999), 'The internationalisation of small high-technology firms', *Journal of International Marketing*, **7** (4), 15–41.
Knight, G. and S.T. Cavusgil (1996), 'The Born Global firm: a challenge to traditional internationalization theory', in *Advances of International Marketing 8*, Greenwich, CT: JAI Press, 11–26.
Luostarinen, R. (1980), *The Internationalization of the Firm*, Helsinki: Helsinki School of Economics.
Madsen, T. and P. Servais (1997), 'The internationalisation of born globals: an evolutionary process?', *International Business Review*, **6** (6), 561–83.
O'Farrell, P.N., P.A. Wood and J. Zheng (1998), 'Regional influences on foreign market development by business service companies: elements of a strategic context explanation', *Regional Studies*, **32** (1), 31–48.
Oviatt, B.M. and P.P. McDougall (1997), 'Challenges for internationalisation process theory: the case of new ventures', *Management International Review*, Special Issue **2**, 85–99.
Reid, S.D. (1981), 'The decision maker and export entry and expansion', *Journal of International Business Studies*, Fall, 101–12.
Samiee, S. and P.G.P. Walters (1990), 'Influence of size on export planning and performance', *Journal of Business Research*, **20**, 235–48.
Turnbull, P.W. (1987), 'A challenge to the stage theory of internationalisation process', in P.J. Rosson and S.D. Reid (eds), *Managing Export Entry and Expansion*, New York: Praeger, pp. 21–40.
Welch, L. (1992), 'Internationalisation', *Scandinavian International Business Review*, **1** (1), 21–37.
Welch, L.S. and R. Luostarinen (1988), 'Internationalisation: evolution of a concept', *Journal of General Management*, **14** (2), 46–58.
Welch, L.S. and R. Luostarinen (1993), 'Inward–outward connections in internationalisation', *Journal of International Marketing*, **9** (1), 44–56.
Young, S. (1987), 'Business strategy and the internationalisation of business: recent approaches', *Managerial and Decision Economics*, **8**, 31–40.

12. The role of inward FDI in internationalization of six affiliates in Estonia: a network perspective

Tiia Vissak

INTRODUCTION

In Estonia, export competitiveness is still at a low level. After the dissolution of the Soviet Union, many trading arrangements broke down and most firms were forced to find new foreign buyers and suppliers. The size of the country, with a population of approximately 1.4 million, can mean that even very young companies have to internationalize quickly. This is not easy especially for smaller local enterprises due to a lack of resources, capabilities and contacts. Consequently, these firms often require external assistance to become internationally competitive.

The aim of this chapter is to analyse the impact of foreign direct investment (FDI) inflows on the internationalization of six Estonian affiliates and to demonstrate the importance of networks in this process. First, an overview of five different research themes will be given. Based on the discussion, two propositions will be drawn and examined, using the data from six foreign affiliates in Estonia. The firms' internationalization patterns and benefits from obtaining access to their foreign parent companies' networks will be demonstrated. Finally, further research directions will be recommended.

There is still much to be learned from examining the network approach in the context of an entrepreneurial firm (Coviello and Munro, 1995). There is no common body of knowledge concerning the interaction between trade, FDI and international production networks (Ernst and Guerrieri, 1998). The internationalization models, the network perspective or the foreign direct investment theory, when examined independently, cannot fully describe the firms' complex internationalization process. Consequently, future research should attempt to develop an all-inclusive perspective (Coviello and McAuley, 1999). This chapter will seek to do so.

LITERATURE REVIEW

The Uppsala and Innovation-related Internationalization Models

A large quantity of internationalization research has been based on the Uppsala (U) model. This model claims that internationalization is usually a long, slow and incremental process (Johanson and Vahlne, 1977) driven by experiential market knowledge that generates business opportunities (Johanson and Vahlne, 1990). A firm possessing sufficient market knowledge can expect a lower level of risk. Consequently, it can export more or even establish a foreign subsidiary. This, in turn, provides more knowledge and leads to higher exports and FDI (Johanson and Vahlne, 1977).

According to this model, companies at first enter similar markets and then progress to further countries that are more different in terms of language, culture, politics, education and industrial development (Johanson and Vahlne, 1990). They pass through a number of steps from a situation of no regular export activities to export via independent representatives or agents, overseas sales subsidiaries and production or manufacturing units (Johanson and Wiedersheim-Paul, 1975).

There are three exceptions to this rule (Johanson and Vahlne, 1990). Large firms or those with substantial resources can more easily internationalize. When market conditions are stable, relevant market knowledge can be obtained in other ways than through experience. When a firm has considerable experience in similar markets, it may make use of this experience in a specific market.

From the Uppsala model, the following four conclusions can be drawn. First, a lack of foreign market knowledge leads to a slow internationalization process. Second, companies usually enter similar markets first. Third, enterprises will progress from simpler to steadily more demanding market operation forms. Fourth, this model applies to smaller and less experienced firms that have fewer resources and act in unstable market conditions.

Researchers espousing the innovation-related internationalization (I) models (Bilkey, 1978; Cavusgil and Nevin, 1981; Czinkota, 1982; Pavord and Bogart, 1975; Reid, 1981) also suggest that firms internationalize through a step-by-step process. Each new step represents a greater degree of experience and involvement in foreign trade and investment. If a company has never exported, it should gain basic export experience; start exporting to similar markets; move on to dissimilar markets by concentrating on the most attractive ones; and at a later stage, possibly establish foreign production facilities (Bilkey, 1978).

In these studies, different factors that influence enterprises' export initiation and behaviour have been emphasized (Bilkey, 1978; Cavusgil and Nevin, 1981; Pavord and Bogart, 1975). They include national export policies; home market conditions; industrial associations; top managers' attitudes; the competitive advantages and stages of internationalization of different firms. From the I-models, we can conclude that many factors influence firms' internationalization, including knowledge and top managers' attitudes.

Based on the conclusions made from the U- and I- models, Proposition 1 can be drawn (see Figure 12.1):

> *P1: Companies, especially if they are small, less experienced, have fewer resources and act in unstable market conditions, normally start their internationalization from similar markets and simple market operation modes. Afterwards, they progress to other markets and more advanced market operation forms.*

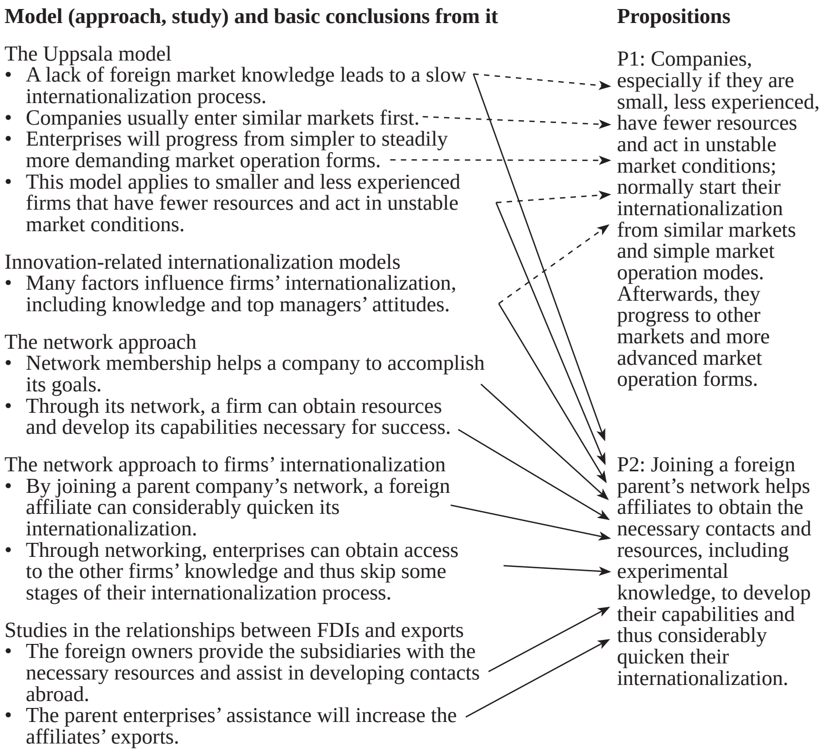

Figure 12.1 Construction of propositions

The Network Approach to Internationalization, and Studies in the Relationships between FDI and Exports

Interest in the network approach (Achrol, 1997; Anderson et al., 1994; Blankenburg Holm et al., 1996; Håkansson and Snehota, 1990, 1995; Möller and Wilson, 2001) has increased since the early 1980s. It is based on the social exchange perspective on dyadic relations and social exchange networks (Cook, 1977; Emerson, 1972; Tichy et al., 1979). Two important features are stressed. First, a relationship is developed only if the parties consider it profitable. Second, cooperation in business relationships involves an informal process of coordinated action between firms (Blankenburg Holm et al., 1996). The social capital perspective (Burt, 1997; Lin, 1999; Nahapiet and Ghoshal, 1998) is also close to the network approach. It is concerned with the patterns of relationships among network members, and the ways these relationships are created and used as resources to accomplish organizational tasks (Maznevski et al., 2000).

Basically, the network approach examines a network from an aggregate, holistic perspective. The unit of the analysis is the network of inter-organizational relationships, not an individual firm or relationship (Salmi, 1996). Through the relationships, firms can mobilize and use some resources controlled by the other actors (Håkansson and Snehota, 1990). A network structure can also be used for several other reasons: for example, acquiring new skills, reducing costs, damaging possible competitors and gaining a good reputation.

From the above, it can be concluded that network membership helps a company to accomplish its goals. Through its network, a firm can obtain resources and develop its capabilities necessary for success.

Numerous authors have used the network approach to study firms' internationalization (Axelsson and Johanson, 1992; Blankenburg Holm, 2001; Chetty and Blankenburg Holm, 2000; Forsgren and Johanson, 1992; Johanson and Mattsson, 1988; Johanson and Vahlne, 1990; Welch and Luostarinen, 1988; Welch and Welch, 1996). Some authors have also employed the network approach to examine FDI abroad as a market entry mode (Bridgewater, 1999; Chen and Chen, 1998; Ghauri and Holstius, 1996; Johanson and Johanson, 1999; Salmi, 2000) or analyse the impact of FDI on foreign affiliates' internationalization (Hunya, 1998; Kaminski and Smarzynska, 2001).

While traditional literature largely concentrates on the processes of deciding and planning to enter a market and on modes of entry, the network approach stresses the actual process of entering the market and becoming a player in the network (Salmi, 2000). From this point of view, a firm's internationalization means that it creates, maintains and extends business relationships in networks in other countries (Johanson and Mattsson, 1988). A company's degree of internationalization depends on its business network. A firm can have most of its physical assets located domestically but still be an important player in an international network (Björkman and Forsgren, 2000). Enterprises can also gain access to the other firms' experiential knowledge without necessarily going through the same experiences (Eriksson et al., 1998). Thus, a typical internationalization sequence has changed from gradual to rapid expansion by joining the networks (Hertz, 1996).

Two conclusions can be drawn from the above. First, by joining a parent company's network, a foreign affiliate can considerably quicken its internationalization. Second, through networking, enterprises can obtain access to the other firms' knowledge and thus skip some stages of their internationalization process.

Studies in the relationships between FDI and exports have shown that foreign affiliates usually export more than local capital-based enterprises. There is much evidence for this with regard to Estonia (Varblane and Ziacik, 1999), the Czech Republic, Hungary, Slovakia (Hunya, 1998), Poland (Kaminski and Smarzynska, 2001) and Slovenia (Rojec et al., 2000). There are two reasons for this (Blomström, 1990; Dunning, 1994; Kaminski and Smarzynska, 2001). First, foreign affiliates may have a better export potential than local firms because of their business contacts abroad, management and marketing skills, the right to use their parent companies' brand names, better technology and greater general know-how. Second, the parent companies can also help their affiliates to set up a distribution network, follow consumer tastes, industrial norms and safety standards and deal with product image, design, packaging, distribution and servicing.

We can conclude that the foreign owners provide the subsidiaries with the necessary resources and assist in developing contacts abroad. The parent enterprises' assistance will increase the affiliates' exports.

Based on the conclusions made from the network approach (to internationalization), studies in the relationships between FDI and exports, and, to a smaller extent, the U- and I-models (see Figure 12.1), Proposition 2 can be drawn:

> *P2: Joining a foreign parent's network helps affiliates to obtain the necessary contacts and resources, including experimental knowledge, to develop their capabilities and thus considerably quicken their internationalization.*

THE EVIDENCE FROM SIX ESTONIAN ENTERPRISES

Methodology

Case studies have often been used in the network approach (Möller and Wilson, 2001). By combining previously developed theories with new empirically derived insights (Yin, 1994), the case study approach is especially appropriate in emerging research areas. It can transcend the local boundaries of the investigated cases, capture new layers of reality and result in developing novel, testable and empirically valid theoretical insights. It may also be used for theory testing purposes (Easton, 1992; Eisenhardt, 1989; Tsoukas, 1989), and consequently, this approach was chosen in order to examine the impact of FDI on the internationalization of six Estonian companies.

To demonstrate the impact of FDI and the foreign parent companies' networks on their affiliates' internationalization from as broad a perspective as possible, six affiliates of different sizes, with different types of foreign owners and from different industries were selected (see Appendix). These affiliates were among the market leaders in their respective industries.

To increase the validity and reliability in the estimation of the impact of FDI on these firms' internationalization and the role of networks, one-hour personal interviews were conducted with each firm's general manager during April–May 2002. The interviews were semi-structured around several key open-ended questions derived from the five theoretical streams outlined previously. The managers were invited to respond to questions about their firms' international development, to describe the parent companies' role in their enterprises' international activities and to analyse their firms' strengths and weaknesses. All the interviews were taped, subsequently transcribed and sent to the interviewees for necessary corrections or additional information. In addition to the interviews, other materials such as newspapers, firms' Internet home pages and annual reports were used. This proved a useful way of confirming dates and figures and helped in posing additional questions. The following two sections address the two research propositions of the study, while the Appendix provides details on the investigated firms.

The Case Firms' Internationalization Process

Firm 1 (a manufacturer of mechanical and electronic components) had developed internationally in three stages. First, when Estonia regained its independence, it started to fill small, unsolicited export orders, producing very simple items for the Scandinavian market. It searched actively for export opportunities. Second, when acquired by a Swedish company in 1996, the firm's turnover and exports started to grow fast. Firm 1 became an experienced exporter and started to form a 'technology village' to offer complete solutions in association with its suppliers. Third, in 2001, the growth stabilized. The company exported two-thirds of its production to over 30 foreign clients in Scandinavia, Germany, Ireland and the USA. In 2002, the firm was also considering starting production in Russia.

Firm 2 (a bank) described its internationalization as follows. At first, there was a big 'hooray': an enthusiastic leap into the foreign market. Then, a 'hangover', namely difficulties in and a lack of understanding about the foreign market, followed. Finally, everyday routine – letting the local people do their job and helping them where necessary – began. In 1995, Firm 2 opened a branch in Latvia, a year later a leasing company in Lithuania. In 1998, the firm acquired a bank in Latvia. A year later, it started offering banking services in Lithuania. In 2001, it bought another bank there. In August 2002, the firm also decided to offer leasing services in Russia where it had operated from 1997 to 1998, but after the crisis, had withdrawn. Although in 2002, Estonia was still the main market for Firm 2, it expected a major shift to Lithuania over the coming years.

Firm 3 (a recruitment company) operated locally from 1996 to 1999, and afterwards it swiftly decided to internationalize. In 2000, it entered the markets of Latvia, Lithuania, Russia, Poland, the Czech Republic, Hungary and Romania. A year later, when it understood that the organization had grown too large to manage efficiently, Firm 3 backed out of Russia and Romania. In 2002, it had offices in Estonia and six foreign countries: Latvia, Lithuania, Poland, Hungary, Slovakia and the Czech Republic. It also formed an alliance with a large international headhunting company present in 13 Western European countries to deliver a personnel selection service to international and multinational clients.

Firm 4 (a clothing company) described its internationalization in the following way. In the beginning of the 1990s, the firm re-exported about half of its production: it sewed together material sent from abroad. In 1993 the firm opened its first shop in Lithuania, in 1994 in Russia, in 1996 in Latvia, and in 2000 in Poland and Ukraine. Firm 4 also opened sales companies in Sweden and Finland. In 2002, its retail chain had over 60 shops in seven countries. The firm exported about two-thirds of its turnover. It was active in 11 foreign markets: Latvia, Lithuania, Poland, Russia, Ukraine, Sweden, Finland, Norway, Denmark, United Kingdom and Germany. In 2000, Firm 4 also entered the USA on an experimental basis, but closed its operation a year later. In general, the company's philosophy was to concentrate on neighbouring markets and through them go to their nearest markets. The firm also plans to become more active in Central and Eastern Europe (CEE) in the near future, and after that, in Scandinavia. By 2004, its retail network should consist of at least 90 stores.

Firm 5 (a textile manufacturer), excluding its activities before 1991 shortly described in the Appendix, followed two stages in its internationalization. Between 1991 and 1995, the firm filled unsolicited export orders for buyers from different countries but had no resources, knowledge or original products to export directly. A foreign owner bought it out in 1995 and the second stage in the firm's operations began: the company started developing and exporting its own products. By 2000, Firm 5 exported to 24 countries. It had sales departments in Sweden, Germany and England. In 2002, it also planned to open an office in Holland. In total, about 90 per cent of its turnover was exported (about three-fifths to the European Union, one-fifth to the USA and one-tenth to the other countries). As soon as Russia joins the World Trade Organization, the firm plans to start exporting there.

Firm 6 (a glass producer) described the internationalization process in the following way. First, after developing a product, information from the market has to be gathered. Second, contacts must be established and strengthened by personal relationships. Third, the product becomes successful and everyday routine begins. Finally, the customer is lost and everything will start all over again. The company moved to the third stage rapidly. By 1992, it sold only a tenth of its production in Estonia. The rest was exported to Germany, Holland, Sweden, Poland and several other countries. By 2002, its share of exports per turnover had increased to over 95 per cent. The firm exported to Western Europe (over a third of total exports went to Germany, but also to Austria, the Netherlands, Sweden, Denmark and Norway), CEE (Latvia, Lithuania, Poland, Croatia, Russia, Ukraine) and, to a lesser extent, the USA, Asia and Africa.

In conclusion, it can be said that these enterprises internationalized gradually: Firms 1, 2 and 4 started their internationalization with a couple of neighbouring markets. Firm 3 went to several countries rapidly. Only Firms 5 and 6 started with more distant markets, but Firms 3, 5 and 6 did not suffer from a lack of resources. All the six firms eventually penetrated more distant markets. Also, all these enterprises started with simple market operation modes and after that, five of them moved to more complex methods, except Firm 6, which started with direct exporting and had not used any other market entry modes.

The Impact of Foreign Parent Companies' Networks on the Internationalization of the Selected Firms

The perceptions of the six general managers of their foreign parent companies' role in their firms' internationalization are presented below.

Firm 1 was taken over by a Swedish company in 1996. Since then, its turnover almost doubled every year. The firm received capital investment in machinery, renovated the production facilities and, in 1999, received the ISO 9001 certificate. Through know-how and knowledge transfer, the investor improved Firm 1's ability to export. In 2002, over a third of the firm's production was exported through the parent company's marketing group that was constantly introducing them to new clients. In addition, having a foreign owner helped Firm 1 to obtain necessary electronic components.

Firm 2 was also taken over by a Swedish company. The firm concedes that they did not gain remarkably from that. They did not acquire any business information, technology or foreign market opportunities. Still, the parent company had helped Firm 2 with internal audit and risk management, and thus, the enterprise's credit rating improved. The fact that the firm had a Swedish owner was a sign of stability and improved its image in Latvia and Lithuania. Firm 2 clearly benefited from that when it bought a Lithuanian bank in 2001.

Firm 3 had received capital, information and management know-how from its foreign owners. In addition, they obtained new ideas from their owners' affiliates in other countries: for example, launching job offers via mobile phones. The owners also helped the company to open and develop its offices in Central and Eastern Europe and find new customers. Firm 3 paid much attention to its long-term relationships with major newspapers, Internet portals and its main customers both in Estonia and abroad.

Firm 4 did not comprehend any considerable benefits from the parent company. The owner from Guernsey invested in the firm, when necessary, and supported its development, but it did neither offer any technology and information nor did it create any market opportunities and in-house training opportunities for the employees. The firm had to find its foreign buyers and suppliers and create long-term relationships on its own.

Firm 5 quickly realized that having a solid Swedish owner was one of its main strengths. It did not gain much in terms of technological solutions or foreign customers. Yet, the parent company had helped it considerably with advice and support in some projects. Also, the takeover had to some extent improved the company image.

Firm 6 developed close relations with its French owner, a large and well-known corporation. This improved the subsidiary's image. Firm 6 also received technology, information, know-how and, since August 1998, the right to use the parent firm's brand names, yet also retaining its own trademark. Moreover, the parent company had helped Firm 6 with product and process innovation. From June 1997, its production met ISO 9002 requirements. In addition, the owner had helped Firm 6 to reduce its financing and marketing risks. The company mostly exported through the French corporation's network. This was especially helpful in entering distant markets. Some raw materials were also bought through the owner.

It can be concluded from the above that all the six firms (especially Firms 1, 3 and 6) had received at least some assistance from their foreign owners or some other network partners. Only Firm 4 gained relatively less than the others. In addition, all these firms obtained support for fostering their foreign market entry. Firms 1 and 6 exported a large share through their parent companies' networks, Firms 2 and 5 improved their image, Firm 3 received help in finding foreign customers and Firm 4 obtained financing.

DISCUSSION

All five research themes introduced in the literature review have highlighted some aspects of the case firms' internationalization process. The Uppsala model, indicating the role of experimental knowledge and stating that companies usually start their foreign entry with simpler market operation forms, has been especially useful in examining the case firms' initial internationalization. The innovation-related internationalization models, which concentrate on gradual internationalization, have demonstrated the importance of many other factors for this process besides knowledge. Both of these models seem to be more suitable for smaller and/or less-experienced local companies that are not a part of larger international networks.

On the other hand, the network approach seems to be more appropriate in analysing the internationalization of the six case companies after they became foreign-owned. This approach explains why some of these firms entered several foreign markets almost immediately and how they acquired necessary resources, capabilities and contacts. This approach, together with studies in the relationships between FDI and exports, can also help to understand the parent companies' impact on this process.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

In conclusion, current studies have demonstrated some important aspects of firms' internationalization, but to understand the process more clearly it may be useful to adopt a wider approach. This chapter examined five different research themes. Based on the data from six foreign affiliates in Estonia, two main conclusions were made. First, the case firms started their internationalization from similar markets and simple foreign operation modes. Thereafter, they penetrated more distant markets with more complicated operation modes.

Second, foreign owners helped the companies with necessary resources and contacts with foreign customers, and so all firms were able to internationalize relatively quickly.

This chapter covered only some issues. Much research has still to be done. The five above-mentioned research themes are not able to demonstrate clearly why some of the case firms were able to gain more from FDI than others. In this area, studies of multinational corporations as inter-organizational networks and international entrepreneurship issues can be of assistance. Entrepreneurial behaviour may lead these firms to higher value-added activities, increasing efficiency, managerial expertise and, as a result, successful internationalization.

The indirect impact of FDI inflows, for example, whether local firms start subcontracting for foreign-owned firms, and through these relationships obtain resources and contacts necessary for internationalization, should also be examined. Up to now, relatively little attention has been paid to this aspect.

Firm and host country characteristics could also be important in assessing the impact of FDI on foreign affiliates' internationalization. Different host countries (for example, small or large, advanced or developing) and firms should attract different types of FDI, and thus, their impact on the foreign affiliates may also be different.

The parent's and the affiliate's managers' different approaches, for example, a short-term or long-term perspective, seeking or avoiding long-term relationships, should also be analysed more thoroughly: relationships between the parent and its subsidiary may largely depend on their managers, and their capabilities to create, maintain and improve these relationships. This topic should be especially important in examining foreign affiliates' autonomy inside the multinational corporation.

It would also be interesting to analyse a firm's experience with FDI in different CEE countries: how economic, cultural and other differences have influenced its policy toward different foreign affiliates and how these affiliates have achieved their internationalization.

Finally, more attention should be paid to negative impacts of parent firm strategies on foreign affiliates' internationalization, for example, forcing them to follow certain export orders or blocking their access to some markets. By doing so, it is possible to offer more specific suggestions to managers on how to act or react in certain situations and indicate what changes host countries should make in order to attract more FDI.

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REFERENCES

Achrol, Ravi S. (1997), 'Changes in the theory of interorganizational relations in marketing: toward a network paradigm', *Journal of the Academy of Marketing Science*, **25** (1), 56–71.

Anderson, James C., Håkan Håkansson and Jan Johanson (1994), 'Dyadic business relationships within a business network context', *Journal of Marketing*, **58** (4), 1–15.

Axelsson, Björn and Jan Johanson (1992), 'Foreign market entry – the textbook vs. the network view', in Björn Axelsson and Geoffrey Easton (eds), *Industrial Networks. A New View of Reality,* London and New York: Routledge, pp. 218–34.

Bilkey, Warren J. (1978), 'An attempted integration of the literature on the export behavior of firms', *Journal of International Business Studies*, **9** (1), 33–46.

Björkman, Ingmar and Mats Forsgren (2000), 'Nordic international business research', *International Studies of Management and Organization*, **30** (1), 6–24.

Blankenburg Holm, Desiree (2001), 'A network approach to foreign market entry', in Kristian Möller and David T. Wilson (eds), *Business Marketing: An Interaction and Network Perspective*, 2nd edn, Boston, Norwell and London: Kluwer Academic Publishers, pp. 375–405.

Blankenburg Holm, Desiree, Kent Eriksson and Jan Johanson (1996), 'Business networks and cooperation in international business relationships', *Journal of International Business Studies*, **27** (5), 1033–53.

Blomström, Magnus (1990), *Transnational Corporations and Manufacturing Exports from Developing Countries*, New York: United Nations.

Bridgewater, Susan (1999), 'Networks and internationalisation: the case of multinational corporations entering Ukraine', *International Business Review*, **8** (1), 99–118.

Burt, Ronald S. (1997), 'A note on social capital and network context', *Social Networks*, **19** (4), 355–73.

Cavusgil, S. Tamer and John R. Nevin (1981), 'Internal determinants of export marketing behavior: an empirical investigation', *Journal of Marketing Research*, **18** (1), 114–19.

Chen, Homin and Tain-Jy Chen (1998), 'Network linkages and location choice in foreign direct investment', *Journal of International Business Studies*, **29** (3), 445–67.

Chetty, Sylvie and Desiree Blankenburg Holm (2000), 'Internationalisation of small to medium-sized manufacturing firms: a network approach', *International Business Review*, **9** (1), 77–93.

Cook, Karen S. (1977), 'Exchange and power in networks of interorganizational relations', *Sociological Quarterly*, **18** (1), 62–82.

Coviello, Nicole E. and Andrew McAuley (1999), 'Internationalisation and the smaller firm: a review of contemporary empirical research', *Management International Review*, **39** (3), 223–56.

Coviello, Nicole E. and Hugh J. Munro (1995), 'Growing the entrepreneurial firm:

networking for international market development', *European Journal of Marketing*, **29** (7), 49–61.
Czinkota, Michael R. (1982), *Export Development Strategies: US Promotion Policies*, New York: Praeger Publishers.
Dunning, John H. (1994), 'Re-evaluating the benefits of foreign direct investment', *Transnational Corporations*, **3** (1), 23–51.
Easton, Geoff (1992), *Learning from Case Studies*, 2nd edn, Essex, UK: Prentice-Hall.
Eisenhardt, Kathleen M. (1989), 'Building theories from case study research', *Academy of Management Review*, **14** (4), 532–50.
Emerson, Richard M. (1972), 'Social Exchange Theory', *Annual Review of Sociology*, **2**, 335–62.
Eriksson, Kent, Jan Johanson, Anders Majkgård and D. Deo Sharma (1998), 'Time and experience in the internationalization process', in Anders Majkgård (ed.), *Experiential Knowledge in the Internationalization Process of Service Firms*, Uppsala: Department of Business Studies, pp. 185–217.
Ernst, Dieter and Paolo Guerrieri (1998), 'International production networks and changing trade patterns in East Asia: the case of the electronics industry', *Oxford Development Studies*, **26** (2), 191–212.
Forsgren, Mats and Jan Johanson (1992), 'Managing internationalization in business networks', in Mats Forsgren and Jan Johanson (eds), *Managing Networks in International Business*, Philadelphia and Amsterdam: Gordon & Breach, pp. 1–15.
Ghauri, Pervez N. and Karin Holstius (1996), 'The role of matching in the foreign market entry process in the Baltic States', *European Journal of Marketing*, **30** (2), 75–88.
Håkansson, Håkan and Ivan Snehota (1990), 'No business is an island: the network concept of business strategy', *Scandinavian Journal of Management*, **4** (3), 187–200.
Håkansson, Håkan and Ivan Snehota (eds) (1995), *Developing Relationships in Business Networks*, London and New York: Routledge.
Hertz, Susanne (1996), 'The dynamics of international strategic alliances', *International Studies of Management and Organization*, **26** (2), 104–30.
Hunya, Gabor (1998), 'Integration of CEEC manufacturing into European corporate structures by direct investments', *Vienna Institute for International Economic Studies Working Paper*, 245.
Johanson, Jan and Martin Johanson (1999), 'Developing business in Eastern European networks', in Jan-Åke Törnroos and Jarmo Nieminen (eds), *Business Entry in Eastern Europe. A Network and Learning Approach with Case Studies*, Helsinki: Kikimora Publications, pp. 46–71.
Johanson, Jan and Lars-Gunnar Mattsson (1988), 'Internationalization in industrial systems – a network approach', in Neil Hood and Jan-Erik Vahlne (eds), *Strategies in Global Competition*, London: Croom Helm, pp. 287–314.
Johanson, Jan and Jan-Erik Vahlne (1977), 'The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies*, **8** (1), 23–32.
Johanson, Jan and Jan-Erik Vahlne (1990), 'The mechanism of internationalisation', *International Marketing Review*, **7** (4), 11–24.
Johanson, Jan and Finn Wiedersheim-Paul (1975), 'The internationalization of the firm: four Swedish cases', *Journal of Management Studies*, **12** (3), 305–22.
Kaminski, Bartolomiej and Beata K. Smarzynska (2001), 'Foreign direct investment

and integration into global production and distribution networks: the case of Poland', *World Bank Policy Research Working Paper*, 2646.

Lin, Nan (1999), 'Building a network theory of social capital', *Connections*, **22** (1), 28–51.

Maznevski, Martha L., Nicholas A. Athanassiou and Lena Zander (2000), 'Global teams in a multinational enterprise: a social capital and social networks perspective', 6th Organization Science Winter Conference, Keystone, Colorado, http://ciber.fuqua.duke.edu/oswc/2000/papers/friday/MarthaMaznevski.doc

Möller, Kristian and David T. Wilson (2001), 'Interaction and network approach to business marketing: a review and evaluation', in Kristian Möller and David T. Wilson (eds), *Business Marketing: An Interaction and Network Perspective*, 2nd edn, Boston, Norwell and London: Kluwer Academic Publishers, pp. 587–613.

Nahapiet, Janine and Sumantra Ghoshal (1998), 'Social capital, intellectual capital, and the organizational advantage', *Academy of Management Review*, **23** (2), 242–66.

Pavord, William C. and Raymond G. Bogart (1975), 'The dynamics of the decision to export', *Akron Business and Economic Review*, **6** (1), 6–11.

Reid, Stanley D. (1981), 'The decision-maker and export entry and expansion', *Journal of International Business Studies*, **12** (2), 101–12.

Rojec, Matija, Jože P. Damijan and Boris Majcen (2000), 'Export propensity of foreign subsidiaries in Slovenian manufacturing industry', *6th EACES Conference*, Barcelona, CD Rom.

Salmi, Asta (1996), 'Russian networks in transition: implications for managers', *Industrial Marketing Management*, **25** (1), 37–45.

Salmi, Asta (2000), 'Entry into turbulent business networks. The case of a Western company on the Estonian market', *European Journal of Marketing*, **34** (11/12), 1374–90.

Tichy, Noel M., Michael L. Tushman and Charles Fombrun (1979), 'Social network analysis for organizations', *Academy of Management Review*, **4** (4), 507–19.

Tsoukas, Haridimos (1989), 'The validity of idiographic research explanations', *Academy of Management Review*, **14** (4), 551–61.

Varblane, Urmas and Terry L. Ziacik (1999), 'The impact of foreign direct investment on the export activities of Estonian firms', *Journal of East–West Business*, **5** (1/2), 173–90.

Welch, Denise E. and Lawrence S. Welch (1996), 'The internationalization process and networks: a strategic management perspective', *Journal of International Marketing*, **4** (3), 11–28.

Welch, Lawrence S. and Reijo Luostarinen (1988), 'Internationalization: evolution of a concept', *Journal of General Management*, **14** (2), 34–57.

Yin, Robert K. (1994), *Case Study Research Design and Methods*, Thousand Oaks, CA, London and New Delhi: Sage.

APPENDIX: ADDITIONAL DATA ABOUT THE CASE FIRMS

Description

1 Firm 1, an assembler and manufacturer of a large variety of mechanical and electronic components, was established in 1907. Before the Second World War, it exported successfully to 27 foreign countries, including those from Asia and the USA. From 1944 to 1992, when the company was subordinated to Moscow, it produced only for the Soviet market. In 1992, it became a state company. In 1993, cooperation with a Swedish company started. In 1996, the company bought 60 per cent of Firm 1's shares. In 2002, the share of Swedish capital was 85 per cent. Following investment, the number of employees had almost tripled: from about 200 in 1996 to over 600 in 2002.

2 Firm 2, a bank, which also offered leasing services through its subsidiaries, started its operations in 1991 as a part of another bank. In 1992, it became independent. In 1998, it merged with another Estonian bank. In the same year, a Swedish bank, which had had no foreign affiliates before, acquired over 50 per cent of it. In 2002, the share of Swedish capital was 60 per cent. The firm's shares were quoted in the main list of the Tallinn Stock Exchange. In 2002, Firm 2 had 6800 employees, almost 50 per cent of them in Lithuania, a third in Estonia and the rest in Latvia.

3 Four Estonian entrepreneurs founded Firm 3, a recruitment company, in 1996. It started as a traditional recruitment company, online services followed in 1997. In 2002, they already formed about 75 per cent of total services. In 1999/2000, the firm expanded considerably. Its turnover and number of customers increased almost ten times. In 2000, the firm found two investors: investment funds from Estonia and the USA. A year later, another investment, by an investment fund owned by English, German and Finnish investors, further expanded Firm 3's capital base. The firm refused to give exact information about the share of the foreign investors, but admitted that the initial founders' share was still over 50 per cent. In 2002, Firm 3 had 110 employees in eight countries, only 13 of them in Estonia.

4 Firm 4, a clothing retail, manufacturing and logistics company, was founded in 1928. Until 1988, it only made men's clothes. Then, it started to produce women's clothes. In 1991, it founded a chain of stores. In 1940–91, the firm was state-owned. It was privatized in 1991. In 1996, an investment firm registered in Guernsey invested in the company. In 2002, it had almost 40 per cent stock. From 1997, Firm 4's stocks had been listed in the additional register of Tallinn Stock Exchange. The company described its evolution in the following way. Up to 1991, it was a produc-

tion company, from 1991 to 1999, a clothing manufacturer, from 1999 to 2000, a clothing manufacturer with a retail chain, from 2000 to 2001, a clothing retail company with manufacturing, from 2001, a company that offers final consumers the very best service: the product together with logistical services. In 2002, the firm had 1500 employees, around 10 per cent of them abroad, in retailing.

5 Firm 5, a textile manufacturer, was founded in 1857. Then it mainly produced for the Russian market. After Estonia became independent in 1918, the firm was restructured. Instead of trading with Russia, it started exporting to Western Europe and Scandinavia. In 1940, the firm was nationalized. It started producing mostly for the Soviet market. All of its exports were coordinated from Moscow. In 1991, Firm 5 became Estonian state-owned. In 1995, over 80 per cent of the firm was sold to a Swedish owner. Since 1999, it has been fully owned. In 2002, Firm 5 had almost 5000 employees.

6 Firm 6, a glass producer, was founded in 1989 and started production in 1991. Until 1995, 51 per cent of the firm was state-owned and 49 per cent belonged to a Swedish company. From 1995, it had been fully owned by the Swedish firm, which, in turn, was a part of a French group, the largest manufacturer of similar products in the world. The corporation also had some other investments in Estonia. Firm 6's number of employees doubled from 60 in 1995 to 120 in 2001. Its turnover grew steadily each year.

Sources: Interviews with general managers of the firms, webpages, annual reports and newspapers.

PART VI

Cross-sectoral, cross-national and cross-cultural comparisons

13. Chinese, Italian and Sikh ethnic entrepreneurship in Canada: implications for the research agenda, education programmes and public policy

Louis Jacques Filion, Charles Ramangalahy, Gabrielle A. Brenner and Teresa V. Menzies

INTRODUCTION

Interest in ethnic groups has a long history in academia. However, research and theory building on the subject of ethnic businesses and ethnic managerial practices remains underdeveloped (Rath and Kloosterman, 1999; Werbner, 1999). Knowledge of the characteristics of ethnic enterprises, the process of new venture creations, business successes and problems may be helpful in framing government policies and programmes for immigrants (Brenner et al., 1992a; Camarota, 2000; De Lourdes Villar, 1994). Immigrants or ethnic community entrepreneurs with strong links to their homeland may have formal and informal networks that will be of use to the entrepreneurs themselves, companies intending to do business overseas and local Canadian communities (for example, Chamard, 1995; Kotkin, 1988; Razin and Langlois, 1998; Saxenian, 1999; Tseng, 1995; Wong, 1997; Wong and Ng, 1998). Immigrant and ethnic community entrepreneurs are one of Canada's largest natural resources, and one that remains largely untapped.

A critical review of research into ethnic entrepreneurship by Rath and Kloosterman (1999) showed that most research in this area was mainly concerned with policy-making, lacked an integrative model and had little theoretical value. Reviews of the literature from Canada (Robichaud, 1999; Menzies et al., 2003), the Netherlands (Rath and Kloosterman, 1999), the UK (Deakins, 1999) and the USA (Aldrich and Waldinger, 1990) all point to the limitations of current knowledge, the lack of currently viable theoretical models and the need for research. This chapter follows and is an extension of the article by Filion et al. (2001).

In recent years, both governments and researchers have begun to pay more attention to ethnic entrepreneurship. Several factors, centred on a new awareness and recognition of the social and economic impact of ethnic entrepreneurs and businesses on the economy of the host country, as well as increased immigration streams into some countries, explain this renewed interest. In the United States, for example, the revitalization of the economy in several small towns has been linked to ethnic entrepreneurs (Lachman and Brett, 1996; Butler and Greene, 1997), and the global advantage and spin-offs of Silicon Valley have been ascribed to the ethnic diversity of its businesses (Engardio and Burrows, 1997; Saxenian, 1999). A Canadian study by Head and Ries (1998) underlines the fact that ethnic entrepreneurs increased their exports to their countries of origin ten times faster than Canadian exporters, thanks to their knowledge of and increased access to the markets concerned. However, the studies completed to date, especially in Canada, share a number of weaknesses. First, most focus on a specific ethnic group and give only a partial view of ethnic entrepreneurship overall; next, even when several different ethnic communities are surveyed, the differences between the groups are not analysed in depth; ethnic entrepreneurs and businesses are generally studied as though they constituted a homogeneous group, although several clues in the literature tend to suggest otherwise; last, most of the research has concentrated on the characteristics of the entrepreneurs themselves, contributing little to an understanding of the impact of ethnic entrepreneurship.

The characteristics of ethnic businesses and the differences among these businesses by ethnicity have received very little attention, and are not well understood. We consider that a better grasp of these issues could enhance our understanding of ethnic entrepreneurship and help to improve immigration policies, as well as assistance and training programmes aimed at ethnic entrepreneurs and businesses. The results presented in this chapter provide some interesting insights. They are derived from the second phase of a four-year, pan-Canadian research project which aims to cover over 1500 respondents from five ethnic communities. More specifically, the project was designed to answer two questions: what are the similarities and differences among different ethnic groups in Canada as far as entrepreneurship and businesses are concerned? What are the implications of the similarities and differences observed for research, training and government policy? This chapter reports on Chinese, Italian and Indian Sikh entrepreneurs and businesses.

THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

Butler and Greene (1997) suggested that early writers on the subject of entrepreneurship and ethnicity (Weber, 1930; Schumpeter, 1934) developed ideas based on the stranger as trader, the social structure of society, the value systems produced and religious tenets. These fundamental issues led to the emergence of a theoretical framework for ethnic entrepreneurship. Historically, 'enclave theory', 'middleman theory' and 'theories of immigration' have been used as the basis for much of the research. Current studies, however, suggest that these existing theories need to be augmented (Marger and Hoffman, 1992). Enclave theory is concerned with immigrants, entrepreneurship and labour market issues (Nee and Nee, 1986). Middleman theory relates to the type of service or business that immigrant or ethnic entrepreneurs engage in. They act as traders or negotiators (Zenner, 1991). Theories of immigration are concerned, for example, with migration patterns, networks and economic benefits (Muller, 1993).

This brief review of the literature is introduced so that the rationale behind the research hypotheses can be understood. As a result, the factors explaining differences between entrepreneurs, their businesses, the problems they encounter and the use they make of social capital will also be easier to understand.

Ethnic Entrepreneurs and Businesses

Several studies have suggested that entrepreneurs and businesses in ethnic communities constitute a heterogeneous set. Among the factors of heterogeneity are sex (Paré, 2000), ethnic origin (Aldrich and Waldinger, 1990), economic status (Rafiq, 1992; De Lourdes Villar, 1994; Lee, 1999), the presence of well-established organizations and networks (Waldinger, 1995; Cobas and DeOllos, 1989), and location (Aldrich et al., 1989). In general, the research shows low female representation (Paré, 2000) and a higher level of education among ethnic entrepreneurs (Bates, 1994). But in addition to the similarities, several differences have been observed.

According to Bates (1994), Korean entrepreneurs differ from Afro-American entrepreneurs in several ways, including the fact that they invest more in the business start-up, that their businesses record lower sales and profits, and that they are more strongly represented in sectors in which small businesses are generally active, such as retail food sales, garment manufacture, food product processing and printing. A study by Lee (1999) shows that Jewish entrepreneurs dominated the furniture, durable goods and jewellery sectors, while Korean entrepreneurs dominated the grocery, fishmongery, beauty products and take-away food sectors. Rafiq (1992) reports that Muslim Asian businesses are smaller and concentrated in ethnic markets or in low-profit sectors, as compared to non-Muslim Asian businesses. While use of co-ethnic employees is common among Chinese (Wong, 1997; Wong and Ng, 1998), Light et al.'s (1994) studies of Iranians in the US found that only 4.6 per cent of employees worked for a co-ethnic employer.

On the basis of these findings, we can advance our first research hypothesis:

Hypothesis 1: The characteristics of ethnic entrepreneurs and businesses differ by ethnic origin and gender.

Problems Faced by Ethnic Businesses

If it is true that ethnic businesses make a real contribution to economic growth in their host countries, then there is a real need to support them as they face up to their problems, to increase both their survival rate and their effectiveness. Unfortunately, very little information is available on the nature of the problems they encounter. This may be due in part to the fact that most research on the subject has focused in the past on the characteristics of the entrepreneurs and their businesses, and on the determinants of venture creation and success.

Surveys of the problems faced by ethnic businesses are either partial or very general in nature. Some authors, for instance, explain the high venture creation and self-employment rates in ethnic communities as a means of integration in the face of rejection and discrimination by the host community (Light and Rosenstein, 1995; Mohammed, 1988; Toulouse and Brenner, 1988; Waldinger et al., 1990). Some authors point out problems specific to the use of co-ethnic labour. Sometimes entrepreneurs feel they are training would-be competitors and ethnic clustering can lead to fierce intra-ethnic competition (Lee, 1999). De Lourdes Villar (1994) found that the use of co-ethnic labour, considered an unfair business advantage, caused considerable conflict with other ethnic business owners, and Bates (1994a) found that for Vietnamese owner-managers, reliance on co-ethnic labour increased the likelihood of business failure.

In a comparative study of Chinese entrepreneurs in Calgary and Armenian entrepreneurs in Los Angeles, Ray et al. (1988) noted that ethnic entrepreneurs face three types of problems, namely access to start-up funding, adaptation to local standards, and nostalgia. These difficulties are less marked in the Chinese communities, due partly to the major role played by the ethnic network in providing social and financial support, and partly to the fact that the Chinese communities seem to make relatively less effort to adapt to the local culture. Research has also shown that immigrant entrepreneurs generally make little use of government networks and support services (Brenner et al., 1992a and b) or of the host society's business associations (Québec Communautés Culturelles et Immigration Québec, 1993). Immigrants who do not have the capital they need obtain it in the form of loans from within their communities, through community institutions, relatives or family members.

We need to look at the literature from small and medium-sized businesses to find basic references to these problems. Two main points emerge from this literature. First, business failure is explained to a large degree by the owner-managers' inability to solve problems (Castaldi, 1986; Dollinger, 1985; Dun & Bradstreet, 1987; Gaskill et al., 1993; Ibrahim and Goodwin, 1986). And second, the nature and especially the scope of these problems vary according to business' development stages (Churchill and Lewis, 1983; Kurato and Hodgetts, 1989; Lorrain et al., 1994). A number of taxonomies have been proposed, which we examine below. Following a survey of 91 respondents, Gaskill et al. (1993) divided difficulties leading to small business failure into four groups, namely strategic management, marketing, competitive environment and growth. Based on a two-step survey involving a sample of 257 entrepreneurs and owner-managers, Taylor and Banks (1992), using factorial analysis, found eight groups of problems related to human resources, competitiveness, productivity, costs generated by legal constraints, financial needs, tax policies, international competition and the consumption of illegal substances. The respondent entrepreneurs said the main problems were the costs generated by legal constraints, financial needs and tax policies. Tepstra and Olson (1993) are among those who have undertaken the most meaningful studies on the subject. Following a survey of 121 small business owner-managers, these authors drew a distinction between start-up problems and growth problems. They processed their data to develop a comprehensive grid covering nine categories of problems related to outside funding, financial management, marketing and sales, product development, production, general management, human resources, economic environment and legal environment. The dominant problems at the start-up phase were related, in decreasing order of importance, to marketing, obtaining funding and financial management. At the growth stage, the dominant problems were related to marketing and sales, financial management, human resources and general management. A study by Huang and Brown (1999), involving 973 SMEs, confirmed the findings by Tepstra and Olson (1993). Lastly, in a study carried out among 4044 small business owner-managers in the United States, ten main problems were identified, as follows: cost of health insurance, federal taxes on business income, locating qualified employees, unreasonable government regulations, social security taxes, state taxes on business income, workers' compensation costs, federal paperwork, cash flow, and cost of natural gas, gasoline and fuel oil (Dennis, 2000).

For the purposes of this study, we modified and adapted the grid developed by Tepstra and Olson (1993). This grid can be regarded as one of the most rigorous prior studies in existence on this topic when the questionnaire for this research was developed in 1998.

On the basis of these studies, we can put forward our second research hypothesis:

Hypothesis 2: The problems faced by ethnic businesses are similar, regardless of the ethnic origin or gender of the entrepreneur.

Use of Social Capital by Entrepreneurs

Authors have suggested that entrepreneurship is a phenomenon that can be regarded as 'embedded in networks of continuing social relations' (Aldrich et al., 1989, p. 8). Thus, social capital and networks become central themes. Social capital, sometimes referred to as cultural capital, refers to the potential benefits of belonging to a specific group. In the literature on minority entrepreneurship, social capital is illustrated by the use of co-ethnic employees, markets, suppliers, community sources of capital, advice and information, as well as membership of ethnic and/or community organizations. Networks are an integral part of social capital, since it is through the interconnectedness of the attributes of social capital that the networks exist.

The concept of social capital is used to designate a reliance on employees, information, markets, suppliers and sources of financing within the ethnic community (Menzies et al., 2003). The entrepreneurial dynamism of ethnic communities is often associated with the availability of financing for prospective entrepreneurs. It is also generally held that the ethnic community plays various other roles that support the emergence and growth of ethnic businesses.

According to Aldrich and Waldinger (1990), the ethnic community constitutes the first source of support and business opportunities encountered by immigrant entrepreneurs. Toulouse and Brenner (1988) state that the ethnic community offers several advantages, including access to a pool of potential investors, experienced entrepreneurs, low-priced manpower, social and emotional support, and the possibility of operating in the entrepreneur's native language and in a familiar social and cultural environment. The community is also identified as providing protection against hostile actions and competitors, and as a means of facilitating communications with the host society and acquiring management knowledge and skills (Waldinger et al., 1990). Bertot and Jacob (1991) go even further, stating that the ethnic community allows immigrants to deal with cultural, socio-economic, psychosocial and political isolation. In an extensive review of the literature on social capital, Menzies et al. (2003) reported that the use of co-ethnic employees and family members as workers, the use of co-ethnic markets as customers and suppliers and the use of family members and co-ethnics as primary sources of financing were very common.

Based on the above works, we would conclude that no meaningful differences would be expected to be found in the use of social capital by different ethnic groups. Nonetheless, some research indicates that these general observations may be misleading. The results of the first phase of our research programme (Brenner et al., 2000) demonstrated that Chinese women entrepreneurs relied more on their ethnic group for financing and sales. In addition, entrepreneurs of both sexes established in the Montreal urban area were more involved in social and business associations, and recruited more employees from their ethnic group, than their counterparts in Toronto and Vancouver. Researches by Wong and Ng (1998), Marger (1990) and Light et al. (1994) have shown that reliance on co-ethnic employees, while common, is by no means universal. One of the most satisfactory explanations of these observations has been provided by Tenenbaum (1986), who considers that communities that have been established for a longer period of time have established more structured networks of institutions and social links that facilitate manpower mobility, reinforce ties between players, elevate members towards the spheres of the host society and ease access to resources that are unavailable within the formal host network, a finding somewhat confirmed by Tseng (1995) in his study of 310 Taiwanese business owners in the greater Los Angeles area. A study by Putnam and Helliwell (1995) shows that the development of social capital varies according to location, and explains why some regions are more prosperous.

Regardless of the positive aspects of social capital, it should be mentioned that Ram (1994) proposes that networks resulting from the use of social capital may be in response to racism that is encountered by ethnic entrepreneurs. His research found ‘social restraints in the market’ due to racism (p. 48). In a study of Asian retailers in England, Ram (1994) draws the conclusion that ‘recession, racism and general economic decline – not cultural flair’ (p. 50) accounts for much of the push for self-employment.

On the basis of these considerations, we can advance our last research hypothesis:

> *Hypothesis 3: The use of social capital by entrepreneurs varies according to ethnic origin and gender.*

RESEARCH METHODOLOGY

A quantitative method was selected for the purposes of this survey, because of the size of the sample considered. This four-year research programme will cover a total of around 1500 entrepreneurs and non-entrepreneurs established in the urban centres of Montreal, Toronto and Vancouver.

Survey Questionnaire

The survey questionnaire was adapted and improved from the methodology experimented by Toulouse and Brenner (1988) and by Brenner et al. (1992a and b). It was divided into two sections and was designed to determine the socio-demographic profile, businesses and entrepreneurial experience of the respondents. We used closed or multiple-choice questions to gather some information, such as the level of education, languages used, sources of financing, business turnover and reasons for launching a business. In other cases, we used open questions that required the respondents to order their answers, as in the questions bearing on the reasons for immigration, the problems encountered, the identification of business opportunities and the perception of Canada.

Information Gathering and Data Processing

In order to maximize the response rate and reliability, the questionnaire was administered by researchers from the same ethnic background as the entrepreneurs surveyed. This approach eliminated language and cultural barriers, established a climate of confidence and facilitated the identification of study participants.

At the processing stage, we used two types of statistical analysis. Descriptive methods were used to identify the socio-demographic characteristics of the respondents, their entrepreneurial experience and their businesses. To test the plausibility of our research hypotheses, we carried out independence tests for the variables measured by frequency and mean comparison tests for continuous variables.

Survey Sample

In all, 422 entrepreneurs took part in this study. The data is drawn from a survey of 848 Chinese, Italian and Sikh entrepreneurs and non-entrepreneurs (see Table 13.1). More men (75.4 per cent of respondents) than women (24.6 per cent of respondents) are represented, especially in Montreal (83.4 per cent).

Table 13.1 Characteristics of participants according to location, ethnic group and gender

		Status and gender of respondents				
		Entrepreneurs[1]		Non-entrepreneurs[1]		
Urban location	Ethnic origin	Male	Female	Male	Female	Total
Montreal	Chinese	39	11	33	15	98
	Italian	46	8	22	26	102
	Sikhs	31	4	23	9	67
Toronto	Chinese	29	22	31	19	101
	Italian	36	20	26	26	108
	Sikh	46	5	37	19	107
Vancouver	Chinese	33	15	24	26	98
	Italian	15	10	17	21	63
	Sikhs	41	9	32	18	100
Total		316	104	245	179	844

Note: 1. Gender was not identified for two entrepreneurs and two non-entrepreneurs.

RESULTS

The results are presented in four sections, based on the descriptive analyses and comparisons of entrepreneur characteristics, businesses features, problems faced at the time of the survey, and use of social capital.

Entrepreneur Characteristics

To compare the characteristics of the entrepreneurs surveyed (see Table 13.2), we selected nine variables relating to length of residency in Canada, age, educational level attained, main language used at home and at work, number of years of work experience before emigrating to Canada, business ownership by a family member, frequency of trips to the country of origin, and reasons for launching a business.

The descriptive results allow the following observations to be made (column 2). On average, the foreign-born entrepreneurs surveyed had been established in Canada for two decades (over 23 years). They were generally older (over 44) and well educated (on average, college graduates). At home, they generally spoke a language other than French or English. English was the main language

Table 13.2 *Socio-demographic characteristics of entrepreneurs*

Variable	Frequency[(a)] Mean[(b)] Sample	Ethnic origin of respondent				Sex of respondent		
		Chinese	Italian	Sikh	Chi-sq. F anova	Male	Female	Chi-sq. F anova
Years of residency	23.31[b]	16.00	39.00	21.44	190.67*****	23.64	22.66	0.388
Age	44.58[b]	44.20	46.80	42.74	5.13****	44.71	44.06	0.281
Level of education[1]	3.07[b]	3.23	249	3.42	16.35*****	3.07	3.07	0.003
Main language at home								
English	154[a]	13	74	67	79.78*****	116	38	0.0001
French	7[a]	1	6	0	9.63***	6	1	0.419
Other	260[a]	136	55	69	83.36*****	193	65	0.067
Main language at work								
English	266[a]	69	79	118	53.53*****	208	57	4.08**
French	41[a]	7	33	1	50.33*****	34	7	1.44
Other	114[a]	74	23	17	58.39*****	73	40	9.39****
Years of experience								
Before emigrating	8.10[b]	4.88	11.15	8.71	25.66*****	8.06	8.29	0.063
In Canada	9.14[b]	8.00	9.40	10.15	0.519	8.17	11.82	3.12*
Business ownership by family member	161[a]	56	53	52	0.143	125	36	0.808
Frequency of trips to country of origin[2]	2.78[b]	3.83	2.36	2.11	7.21*****	2.52	3.68	5.68**
Reason for starting business[3]								
Create own job	1.83[b]	1.99	1.67	1.81	1.82	1.83	1.86	0.034
Make money	1.64[b]	1.92	1.47	1.49	6.26****	1.58	1.82	2.76*
Be own boss	1.67[b]	2.03	1.48	1.46	10.86*****	1.65	1.75	0.469
Tradition	1.98[b]	2.74	1.73	1.38	19.92*****	1.90	2.27	2.56
Other reason	1.00[b]	1.65	0.74	0.50	16.23*****	0.90	1.31	3.45*

Notes:
* p 0.10 ** p 0.05 *** p 0.01 **** p 0.005 ***** p 0.001
1: 0 = No education, 1 = Elementary education, 2 = Secondary education, 3 = College education, 4 = Undergraduate university education, 5 = graduate university education
2: During last 5 years
3: 1 = More important, 5 = Less important

spoken at work for 63 per cent, and French for less than 10 per cent and only in Montreal. These entrepreneurs were generally experienced, since they had an average of eight years' work experience before coming to Canada and nine years' since their arrival in Canada. Over one-third (38.1 per cent) had a business background in their family. They travelled frequently to their country of origin (more than three times over the last five years). The main reason mentioned for starting a business was to make money.

The results of the comparison tests showed significant differences linked to ethnic origin (columns 3 to 9) as to the length of residency in Canada, the frequency of trips to the country of origin, and reasons for starting a business. Sikh entrepreneurs were younger and better educated, were more likely to speak English whether at work or at home, and travelled less frequently to their country of origin. They started their businesses by tradition, and to be their own boss. Italian entrepreneurs had been settled in Canada longer, were older, less educated, more likely to speak English at home and French at work (in Montreal), and had more experience before coming here. Their main reasons for starting a business were to create their own jobs and to make money. Chinese entrepreneurs were more recent arrivals in Canada. They were more likely to speak a language other than English or French at work and at home, and had less experience before immigrating. They travelled more to their country of origin, and were less likely to have started a business for reasons of tradition, to be their own boss, to make money or to create their own job.

The differences by gender were less significant. Men were more likely to speak both English and another language other than French at work. They had less work experience in Canada, travelled less to their country of origin and were more likely to have started a business to make money. Women were less likely to speak English or French at work, had more work experience in Canada, travelled more frequently to their country of origin and were less likely to have started a business to make money. We can conclude that as to ethnic origin, the first hypothesis was validated for 15 of the 18 entrepreneur characteristic variables, but only for six variables as to gender.

Overall, the results tend to show that immigrant entrepreneurs fulfilled different needs of immigration policy. Sikh entrepreneurs fulfilled the need for younger, better-educated immigrants more likely to integrate into the English-speaking community, and more motivated by considerations of independence. Italian entrepreneurs met the need for more experienced immigrants, more likely to integrate into Canada's bilingual culture (in Montreal) and more motivated by job creation and monetary reasons. Lastly, Chinese entrepreneurs and women entrepreneurs met the need for the development of business relations with the countries of origin. The partial validation of the first research hypothesis underlines the relevance of comparative studies of ethnic businesses.

Business Features

We selected eight variables to describe the features of the businesses sampled: sector of activity, the amount of the initial investment and the share held by the entrepreneur, the number of employees, the business turnover, the proportion of sales made to the ethnic group, the proportion of purchases made within the ethnic group and the country of origin, and the percentage of exports (see Table 13.3).

The descriptive results allow the following general observations to be made (column 2). The data on the sectors of activity of the businesses surveyed (not included here) showed that the businesses operated mainly in four sectors: services (29.4 per cent), retail sales (32.7 per cent), restaurant services (11.4 per cent) and wholesaling (7.3 per cent). On average, over $157 000 was invested in the business start-up, most of which (over 77 per cent) was provided by the entrepreneur. Most of the businesses were small, with on average just over nine employees, mostly (70 per cent) full-time. Roughly half of the businesses (49.0 per cent) had a turnover of $250 000 or less. Over half of their sales were made to the ethnic group, and only a fraction represented exports (1.63 per cent). They made a substantial number of purchases within the ethnic group (31.29 per cent) and in the country of origin (14.81 per cent).

The results of the ethnic-based comparison tests show some differences (columns 3 to 8). The share of the entrepreneur's start-up investment, the number of full-time employees, the level of turnover, the percentage of sales to the ethnic group, and the percentage of purchases made within the ethnic group and in the country of origin differs among the ethnic groups. The share of the start-up investment provided by the entrepreneur was highest for the Chinese. Their businesses were more likely to have a turnover of $100 000 or less, but less likely to have a turnover of $2.5 million or more. Lastly, they both sold more to the ethnic group and purchased more within the group and in the country of origin. Italian businesses had more full-time employees and were more likely to have a turnover of $2.5 million or more. They were less likely to have a turnover under $100 000, and sold and purchased the least within the ethnic group. Sikh businesses recorded the lowest share in the initial investment provided by the entrepreneur, and the lowest level of purchases in the country of origin.

Gender-based differences were found for five variables: share in the initial investment, number of full-time employees, turnover, sales to the ethnic group and proportion of purchases made in the country of origin. Male entrepreneurs had more full-time employees, and were more likely to have a turnover of $100 000 or less, between $250 000 and $500 000, and between $2.5 million and $10 million. Women entrepreneurs had a larger start-up

Table 13.3 Business features

Variable	Frequency[(a)] Mean[(b)] Sample	Ethnic origin of respondent: Chinese	Italian	Sikh	Chi-sq. F anova	Sex of respondent: Male	Female	Chi-sq. F anova
Initial investment:								
Total amount (thousands)	157.47[b]	114.75	148.50	210.40	1.03	182.77	82.20	2.39
Share owned	77.29[b]	83.83	76.88	71.12	6.01****	74.30	86.57	11.66*****
Number of employees:								
Full time	6.50[b]	4.14	9.89	5.77	4.40**	7.79	2.64	7.40***
Part time	2.67[b]	2.23	3.47	2.37	0.909	2.98	1.76	1.66
Business turnover ($):								
0 to 100 000	137[a]	65	30	42	10.30***	90	46	11.44*****
100 001 to 250 000	70[a]	27	20	23	0.17	48	22	2.65
250 001 to 500 000	63[a]	23	16	24	0.41	55	7	6.52***
500 001 to 1 million	33[a]	8	11	14	2.59	27	6	0.66
1 to 2.5 million	35[a]	11	8	16	1.98	30	5	1.97
2.51 to 10 million	30[a]	5	14	11	7.71**	27	3	3.48*
Over 10 million	10[a]	1	7	2	9.13***	9	1	1.10
Sales (%) to members of ethnic group	51.44[b]	60.20	44.19	48.76	7.65*****	47.85	62.60	13.21*****
Purchases (%):								
Within ethnic group	31.29[b]	39.43	26.46	27.40	5.42****	30.35	33.82	0.67
In country of origin	14.81[b]	20.57	12.52	10.99	4.63***	13.30	19.84	3.94**
Export sales (%)	1.63[b]	2.91	0.96	0.85	1.89	1.38	2.48	0.89

Notes:
* p 0.10 ** p 0.05 *** p 0.01 **** p 0.005 ***** p 0.001

investment, and their businesses sold more to the ethnic group and purchased more in the country of origin. The limited number of significant differences allows us to conclude that our first hypothesis was validated for business features, but the partial validation suggests that there is a need to carry out more comparative studies of ethnic businesses.

The overall results on the features of ethnic businesses show that, in practical terms, the assistance programmes they need resemble those offered to any small business operating in the services sector. In addition, the fact that the ethnic entrepreneurs surveyed travelled frequently to their country of origin, and that their businesses purchased a substantial portion of their supplies in the country of origin but exported little, points to an opportunity for governments and the business community to promote the internationalization of the local economy.

Main Problems Faced

The compilation of the answers given to an open question asking the entrepreneurs to list the four main problems they faced at the time of the survey identified 148 specific problems, which could be grouped into eleven categories: financing, marketing, human resources, production, strategic management, general administration, networking and partnerships, institutional and political environment, social environment, economic environment, and miscellaneous other problems (see Table 13.4).

The main categories of problems faced by these businesses when surveyed were: the economic environment (mentioned by 40.7 per cent of respondents), financing (30.8 per cent), marketing (30.0 per cent) and the institutional environment (23.9 per cent). Three other categories of problems were less of a concern: networking (3.1 per cent), the social environment (3.3 per cent) and miscellaneous other problems (3.8 per cent). The predominant problems were in areas where probably ethnic entrepreneurs and businesses require more training. But the main result is that the problems faced by ethnic businesses are not fundamentally different from those faced by any small business.

The test results show several categories of problems where the differences are linked to ethnic origin: financing, human resources, administration, the institutional environment, the social environment, the economic environment, and other types of problems (columns 3 to 8). Chinese businesses were more exposed to problems of administration and social and economic environment. Italian businesses were more exposed to difficulties relating to human resources, the institutional environment and miscellaneous problems. Sikh businesses faced more problems of financing, administration and miscellaneous other problems. These significant differences mean that the second

Table 13.4 Problems faced by businesses at the time of the survey

Type of problem	Frequency of sample	Ethnic origin of respondent				Sex of respondent		
		Chinese	Italian	Sikh	Chi-sq.	Male	Female	Chi-sq.
Financing	130	45	34	51	16.95*****	95	34	0.31
Marketing	127	53	46	28	4.52	90	37	0.01
Human resources	74	23	34	17	7.60**	59	15	2.10
Production	57	24	23	10	1.18	46	11	0.79
Strategic management	61	26	27	8	1.22	44	17	0.14
General administration	47	19	10	18	15.26*****	30	17	0.31
Networking/partnerships	13	7	5	1	0.93	11	2	0.95
Legal and institutional env.	101	34	38	29	11.59****	74	27	0.15
Social env.	14	11	1	2	7.54**	8	6	1.46
Economic env.	172	72	46	54	14.44*****	128	44	0.004
Other problems	16	4	6	6	8.80**	8	7	2.56

Notes:
* p 0.10 ** p 0.05 *** p 0.01 **** p 0.005 ***** p 0.001

hypothesis was not validated as to ethnicity and that there are ethnic-based differences among the problems faced by ethnic businesses.

As to gender, tests revealed no significant differences, indicating that the problems faced are independent of gender, which validates the second hypothesis as to gender.

The problems faced by ethnic enterprises were not different from those faced by any small businesses. Our data suggests that there is no reason to develop new assistance programmes specifically targeted to ethnic businesses. The preponderance, for example, of problems linked to the economic and institutional environment indicates both that it is important for ethnic entrepreneurs to better understand and integrate into the local environment, and that businesses should penetrate non-ethnic markets. This could mean, for example, taking part in strategic analysis sessions to better understand the characteristics, potential and competitive issues in the local market. In addition, greater penetration of the local market could require a greater spread of business locations outside the ethnic neighbourhood. Our analysis of the problems faced by ethnic businesses also indicates that they need to develop their capacity to find financing and manage human resources. The ethnic-based differences observed in problems faced indicates a need for future comparative research on ethnic groups.

Use of Social Capital

We selected seven variables to analyse the use made of social capital by ethnic entrepreneurs: employees from the family and co-ethnic employees, percentage of sales and purchases made within the ethnic group, percentage of initial financing obtained from the family and ethnic group, and involvement of the entrepreneurs in ethnic associations and organizations (see Table 13.5).

The descriptive results (column 2) show that the entrepreneurs relied relatively little on family employees (13.3 per cent). The interpretation of this result is, of course, relative since we do not know the size of each entrepreneur's family. In contrast, over half of the employees were co-ethnic (51.6 per cent). As mentioned above, the percentage of sales (52 per cent) and purchases (31 per cent) made within the ethnic group was significant. The data on financing methods showed that the family and ethnic group played a minor role, providing 11.94 per cent and 14.99 per cent, respectively, of initial start-up financing. At the time of the survey, their respective contributions covered only 3.39 per cent and 0.65 per cent of requirements. This result contradicts previous literature, which emphasizes the important financial role played by the family and the ethnic group. Considering that 46.2 per cent of the entrepreneurs in our sample reported problems in obtaining fi-

Table 13.5 Use of social capital by the entrepreneurs

Variable	Frequency[(a)] Mean[(b)] Sample	Ethnic origin of respondent				Sex of respondent		
		Chinese	Italian	Sikh	Chi-sq. F anova	Male	Female	Chi-sq. F anova
Employees from family								
Full time	0.87[b]	0.49	1.16	0.99	9.53*****	0.91	0.75	0.96
Part time	0.35[b]	0.31	0.45	0.31	1.28	0.33	0.41	0.62
Employees from ethnic group								
Full time	3.23[b]	3.52	2.62	3.49	0.70	3.62	2.02	3.96
Part time	1.50[b]	1.77	1.60	1.10	0.88	1.62	1.14	0.96
Sales to ethnic group (%)	51.44[b]	60.20	44.19	48.76	7.65*****	47.85	62.60	13.21*****
Purchases from ethnic group	31.29[b]	39.43	26.46	27.40	5.42****	30.35	33.82	0.67
Initial financing (%)								
Family	11.94[b]	16.86	9.59	8.67	5.39****	10.71	15.66	3.43*
Friends from ethnic group	14.99[b]	0.00	10.89	19.22	0.63	14.86	15.50	0.002
Current financing (%)								
Family	3.39[b]	7.43	0.15	2.32	9.92*****	2.94	3.79	0.30
Friends from ethnic group	0.65[b]	1.44	0.00	0.46	2.74*	0.35	1.35	2.86*
Membership in ethnic organizations								
Business association	55[a]	28	11	16	6.94**	42	13	0.03
Social club	89[a]	18	38	33	12.87****	71	18	1.19
Professional or trade association	30[a]	13	12	5	3.79	23	7	0.03

Notes:
* p 0.10 ** p 0.05 *** p 0.01 **** p 0.005 ***** p 0.001

nancing, it would seem fairer to state that the low reliance on social capital for financing indicates that many ethnic entrepreneurs find it difficult to obtain financial assistance from their family and ethnic group.

It is also clear that the entrepreneurs were generally not very involved in ethnic organizations. Only 13.03 per cent were members of business associations, 21.09 per cent of social clubs and 7.11 per cent of professional or trade associations. This result, pointing to a relative lack of importance of ethnic organizations, goes against what is often posited in the literature on social capital. Two explanations can be put forward. First, it is possible that the ethnic organizations concerned are not well enough developed to meet the current needs of the entrepreneurs, which is unlikely given that the foreign-born entrepreneurs have been living in Canada on average for over 20 years. The second possibility is that several of the businesses concerned have acquired a degree of autonomy from their ethnic group by reason of their size, and have been able to extend their contact and financing networks outside the ethnic group. This second explanation seems more plausible for Italian entrepreneurs, but less for the Chinese.

The results of the comparison tests (columns 3 to 9) reveal eight significant differences linked to ethnic origin, as to the number of employees from within the family, the percentage of sales and purchases made within the ethnic group, the initial and current financing obtained from the family, and membership in ethnic organizations. Chinese businesses made more sales and purchases within the ethnic group, and obtained more financial assistance at start-up from their families than current financing. Chinese entrepreneurs were also more involved in business associations within their ethnic group. Paradoxically, Chinese entrepreneurs employed the fewest family members, and relied least on financial support from their ethnic group at start-up. Italian businesses employed more family members, and Italian entrepreneurs were more involved in social clubs within the ethnic group. Italian businesses also made the fewest sales and purchases within, and depended the least on financial support from the ethnic group. This result consolidates the finding that Italian entrepreneurs and businesses are more integrated into the host community, in contrast to Chinese entrepreneurs and businesses. Sikh entrepreneurs generally occupy the middle ground. However, Sikh businesses were those that relied the most on start-up financing from their ethnic group, and relied the least on family financing. These significant differences tend to provide partial validation for the third hypothesis as to ethnic-based differences on the use of social capital.

Significant differences appear in gender comparisons: women entrepreneurs are more dependent on the ethnic group and the family; businesses owned by women sell more to the ethnic group, rely more on start-up financing from the family, and rely more on the ethnic group for their current financing needs. This result partially validates the third hypothesis as to gender-based differences in the use of social capital. It also indicates the need to continue empirical testing of the many different hypotheses found in the literature.

CONCLUSION

Our convenience sample of entrepreneurs, from three ethnic groups, had been established in Canada for more than two decades, and English was their main language at work. A significant proportion of them came from an entrepreneurial family. They travelled frequently to their country of origin. Making money was the main reason for starting a business. This finding differs from the findings of most entrepreneurship literature, where the main motivation for starting a business is generally to be independent and to be one's own boss (Filion, 1998). The enterprises surveyed were mainly found in the service, retail sales, restaurant and wholesale sectors. On average, over $157 000 was invested in the business start-up, most of which was provided by the entrepreneur. They had a small number of employees and a small turnover. They generated a high percentage of their sales and purchases from the ethnic group and the country of origin. They did not export much. The analysis of problems faced by ethnic businesses revealed four areas of concern, namely economic environment, financing, marketing and institutional environment, where ethnic entrepreneurs have real training needs similar to those of all other small businesses. All the entrepreneurs relied to a large extent on co-ethnic employees and markets. They did not rely very much on their family and ethnic group for their financing needs, and were generally not very involved in ethnic organizations.

Our research shows significant differences between ethnic groups with regards to the socio-demographic profile of the entrepreneurs, the profile of their businesses, the problems they face and their use of social capital. There were significant differences between the three ethnic groups. Sikhs were younger, better educated, more likely to speak English at work, and travelled less frequently to their country of origin. They started their businesses by tradition, and to be their own boss. Italians had been established in Canada for longer, were older, less educated, more likely to speak English at home and French at work (Montreal), and had more work experience before coming to Canada. Creating their own jobs and making money were the main reasons for starting a business. Chinese entrepreneurs were more recent arrivals, more likely to speak a language other than English or French at work and at home, had less work experience before coming to Canada, travelled more to their country of origin and were less likely than the other groups to have started a business for reasons of tradition, to be their own boss, to make money or to create their own job.

There were also differences in business features between the three groups. The share of the start-up investment provided by the entrepreneur himself or herself was highest among the Chinese. Their firms also had smaller turnovers, sold more to their own ethnic group and purchased more from the ethnic group and in the country of origin. Italian firms had more full-time employees and bigger turnovers. They sold and purchased the least within the ethnic group. Sikh businesses recorded the lowest share of the initial investment provided by the entrepreneur, and the lowest level of purchases in the country of origin. The Chinese entrepreneurs made more co-ethnic sales and purchases, and obtained more financial assistance at start-up and less current financing from their families. They were also more involved in ethnic business associations. The Italian entrepreneurs employed more family members, and were more involved in ethnic social clubs. They also made the fewest co-ethnic sales and purchases, and depended the least on financial support from their ethnic group. The Sikh entrepreneurs relied the most on the ethnic group for start-up financing, but the least on family financing. When analysing business-related problems, we found some significant differences linked to ethnic origin. For instance, Chinese enterprises were more exposed to problems connected with administration and the social and economic environment, whereas Italian businesses were more concerned about human resources, the institutional environment and other miscellaneous problems. The Sikh entrepreneurs faced more problems of financing and administration.

There were less significant gender-based differences. Male entrepreneurs were more likely to speak English and a language other than French at work (Montreal), had less work experience in Canada, travelled less to their country of origin and were more likely to have started a business to make money than their female counterparts. There were also significant gender-based differences when considering business characteristics. Enterprises managed by males had fewer full-time employees but bigger turnovers. Female entrepreneurs made a larger initial investment, sold more to the ethnic group and purchased more in the country of origin. Female entrepreneurs were more dependent on both their ethnic group and their family. They sold more to the ethnic group and relied more on start-up financing from the family, and on the ethnic group to cover current financing needs.

Our findings thus support our first hypothesis that the characteristics of ethnic entrepreneurs and businesses differ by ethnic origin and gender. Our second hypothesis that the problems faced by ethnic businesses are similar, regardless of ethnic origin and gender of the entrepreneur, was not supported. The findings relating to the use of social capital by ethnic entrepreneurs did not support our third hypothesis concerning the important role of ethnic financing and organizations. There appears to be a need to continue empirical validation of these hypotheses and to carry out more in-depth comparative studies. The results show that these entrepreneurs and firms need assistance programmes similar to those available to any small business in the service sector. Moreover, governments and the business community could promote internationalization of local economies by making better use of the entrepreneurs' frequent trips to their countries of origin to increase exports, something they themselves do not do. There is therefore probably no need for specifically targeted programmes. Our research suggests that the entrepreneurial and managerial behaviour of ethnic groups are a product of ethnicity rather than other variables such as location, type of business or sector. However, although our findings shed some light on the start-up and management of ethnic enterprises, more research is needed before it will be possible to develop a solid theoretical model of the ethnic business start-up, development and management process.

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REFERENCES

Aldrich, H.E. and R. Waldinger (1990), 'Ethnicity and entrepreneurship', *Annual Review of Sociology*, **11**, 111–35.

Aldrich, H.E., C. Zimmer and D. McEvoy (1989), 'Continuities in the study of ecological succession: Asian business in three English cities', *Social Forces*, **67** (4), 920–44.

Bates, T. (1994a), 'An analysis of Korean immigrant-owned small business starts-up with comparisons to African-American small businesses and non minority-owned firms', *Urban Affairs Quarterly*, **30** (2), 227–48.

Bates, T. (1994b), 'Social resources generated by group support networks may not be beneficial to Asian immigrant-owned small businesses', *Social Forces*, **72** (3), 671–89.

Bertot, Jocelyne and André Jacob (1991), *Intervenir avec les immigrants et les réfugiés*, Montreal: Éditions du Méridien.

Brenner, Gabrielle, Gérard Célas and Jean-Marie Toulouse (1992a), 'Haitian entrepreneurs in Montreal: new lives, new businesses', Working paper no. 92-09, Montreal Business School, Montreal, Quebec.

Brenner, Gabrielle, Gérard Célas and Jean-Marie Toulouse (1992b), 'New immigrants and new business: the Chinese and the Haitians in Montreal', Working paper no. 92-03, Montreal Business School, Montreal, Quebec.

Brenner, Gabrielle, Charles Ramangalahy, Louis Jacques Filion, Teresa V. Menzies and Raffi T. Amit (2000), 'Problems encountered by ethnic Chinese entrepreneurs: a comparative analysis in three major Canadian cities', Working paper no. 2000-10, Montreal Business School, Montreal, Quebec, in Dirk Deschoolmeester, Daniël De Steur, K. Gillis and T. Schamp (eds), *Entrepreneurship under Difficult Circumstances*, seminar proceedings of the 30th European Small Business Seminar, Ghent, Belgium, 20–22 September 2000, pp. 369–83.

Butler, J.S. and P.G. Greene (1997), 'Ethnic entrepreneurship: the continuous rebirth of American enterprise', in Donald L. Sexton and Raymond W. Smilor (eds), *Entrepreneurship 2000*, Chicago: Upstart, pp. 267–89.

Camarota, Steven A. (2000), *Reconsidering Immigrant Entrepreneurship: An Examination of Self-employment among Natives and the Foreign-born*, Washington, DC: Center for Immigration Studies.

Castaldi, R.M. (1986), 'An analysis of the work roles of CEOs of small firms', *American Journal of Small Business*, **11**(1), 53–64.

Chamard, Régent (1995), *L'entrepreneurship ethnique et les gens d'affaires immigrants*, Conseil des communautés culturelles et de l'immigration, Montreal, Quebec.

Churchill, N. and V.L. Lewis (1983), 'The five stages of small business growth', *Harvard Business Review*, **61** (3), 30–50.

Cobas, J.A. and I. DeOllos (1989), 'Family ties, co-ethnic bond, and ethnic entrepreneurship', *Sociological Perspectives*, **32** (3), 403–11.

Deakins, D. (1999), 'Ethnic minority entrepreneurship', in A. Lindsay (ed.), *Entrepreneurship and Small Firms*, Toronto: McGraw-Hill Publishing Company, 2nd edn, pp. 80–100.

De Lourdes Villar, M. (1994), 'Hindrances to the development of an ethnic economy among Mexican migrants', *Human Organization*, **53** (3), 263–8.

Dennis, William J. Jr. (2000), *Small Business Problems and Priorities*, National Federation of Independent Business (NFIB) Education Foundation, 5th edn, Washington, DC.

Dun & Bradstreet (1987), *The Business Failure Record*, New York: Dun & Bradstreet.

Dollinger, M.J. (1985), 'Environmental contacts and financial performance of small firms', *Journal of Small Business Management*, **23** (1), 24–30.

Engardio, P. and P. Burrows (1997), 'Where immigrants find a melting pot of gold', *Business Week*, No. 3541, p. 123.

Filion, Louis Jacques (1998), 'Entrepreneurship: entrepreneurs and small business owner-managers', in Pierre-André Julien (ed.), *The State of the Art in Small Business and Entrepreneurship*, London: Avebury, pp. 117–49 and 428–40.

Filion, Louis Jacques, Charles Ramangalahy, Gabrielle A. Brenner and Teresa V. Menzies (2001), 'Chinese, Italian, and Sikh ethnic entrepreneurship in Canada: implications for the research agenda, education programs and public policy', Working paper no. 2001–08, Montreal, Quebec: Montreal Business School.

Gaskill, L.A.R., H. Van Auken and R.A. Manning (1993), 'A factor analysis study of the perceived causes of small business failure', *Journal of Small Business Management*, **31** (4), 18–33.

Head, K. and J. Ries (1998), 'Immigration and trade creation: econometric evidence from Canada', *Canadian Journal of Economics*, **31** (1), 47–62.

Huang, X. and A. Brown (1999), 'An analysis and classification of problems in small business', *International Small Business*, **18** (1), 73–85.

Ibrahim A.B. and J.R. Goodwin (1986), 'Perceived causes of success in small business', *American Journal of Small Business*, **41**, 41–50.

Kotkin, Joel (1988), *The Third Century*, New York: Crown.
Kurato, D.F. and R.M. Hodgetts (1989), *Entrepreneurship: A Contemporary Approach*, Chicago, IL: Dryden Press.
Lachman, M.L. and V. Brett (1996), 'Immigration's impact on real estate and retailing', *Chain Store Age*, **72** (10), 68–74.
Lee, J. (1999), 'Retail niche domination among African American, Jewish, and Korean entrepreneurs', *American Behavioral Scientist*, **42** (9), 1398–416.
Light, Ivan and Carolyn Rosenstein (1995), *Race, Ethnicity and Entrepreneurship in Urban America*, New York: Adline de Gruyter.
Light, I., G. Sabagh, M. Bozorgmehr and C. Der-Martirosian (1994), 'Beyond the ethnic enclave economy', *Social Problems*, **41** (1), 65–80.
Lorrain, J., A. Belley and C. Ramangalahy (1994), 'Relation entre le profil de comportement des propriétaires-dirigeants et le stade d'évolution de leur entreprise', *Revue Internationale PME*, **7** (1), 9–34.
Marger, M.N. (1990), 'East Indians in small business: middleman minority or ethnic enclave', *New Community*, **16** (4), 551–9.
Marger, M.N. and C.A. Hoffman (1992), 'Ethnic enterprise in Ontario: immigrant participation in the small business sector', *International Migration Review*, **26** (3), 968–81.
Menzies, T.V., G.A. Brenner and L.J. Filion (2003), 'Social capital, networks and ethnic minority entrepreneurs: transnational entrepreneurship and bootstrap capitalism', in H. Etemad and R.W. Wright (eds), *Globalization and Entrepreneurship: Policy and Strategy Perspectives*, Northampton, MA: Edward Elgar Publishing, pp. 125–51.
Mohammed, R. (1988), *Asian Business in Bradford, West Yorkshire: A Study of Ethnic Entrepreneurship in Retailing, Manufacturing and the Services Industries*, Ann Arbor: University of Bradford, The British Library in association with UMI (University Microfilm International).
Muller, Thomas (1993), *Immigrants and the American City*, New York: New York University Press.
Nee, Victor G. and Brett deBary (1986), *Longtime Californ': A Study of American China Town*, Stanford, CA: Stanford University Press.
Paré, Sylvie (2000), *L'entrepreneurship ethnique à Montréal et à Toronto: étude comparative de deux secteurs des quartiers multiethniques de Côte-des-Neiges et Parkdale*, Working Paper, Immigration et métropoles, www.im.metropolis.net, p. 54.
Putnam, R.D. and J.F. Helliwell (1995), 'Economic growth and social capital in Italy', *Eastern Economic Journal*, **21** (3), 295–307.
Québec Communautés Culturelles et Immigration Québec (1993), *Profil des gens d'affaires néo-québécois en Outaouais*, Quebec: Conseil régional de développement de l'Outaouais.
Rafiq, M. (1992), 'Ethnicity and enterprise: a comparison of Muslim and non-Muslim owned Asian business in Britain', *New Community*, **19** (1), 43–60.
Ram, M. (1994), 'Unraveling social networks in ethnic minority firms', *International Small Business Journal*, **12** (3), 42–53.
Rath, J. and R. Kloosterman (1999), 'Outsider's business: a critical review of research on immigrant entrepreneurship', *International Migration Review*, **34** (3), 1–29.
Ray, D. and A. Momjam (1988), *Comparison of Immigrant Armenian Entrepreneurs in Los Angeles and Immigrant Chinese Entrepreneurs in Calgary*, Alberta: University of Calgary, Faculty of Management.

Razin, E. and A. Langlois (1998), ‘Metropolitan characteristics and entrepreneurship among immigrants and ethnic groups in Canada’, *International Migration Review*, **30** (3), 703–27.

Robichaud, Denis (1999), *L’entrepreneuriat immigrant: Revue de la littérature*, Cahier de recherche no. 99-05, Montreal, Quebec: École des HEC de Montréal.

Saxenian, Annalee (1999), *Silicon Valley’s New Immigrant Entrepreneurs*, San Francisco, CA: Public Policy Institute of California.

Schumpeter, Joseph A. (1934), *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, New York: McGraw-Hill.

Taylor, G.S. and M.R. Banks (1992), ‘Entrepreneurs, small business executives and large business executives’, *Journal of Small Business Management*, **30** (4), 24–39.

Tenenbaum, S. (1986), ‘Immigrants and capital: Jewish loan societies in the United States, 1880–1945’, *American Jewish Historical Society Quarterly Publication*, **126** (1).

Tepstra, D.E. and P.D. Olson (1993), ‘Entrepreneurial start-up and growth: a classification of problems’, *Entrepreneurship, Theory and Practice*, **17** (3), 5–20.

Toulouse, Jean-Marie and Gabrielle Brenner (1988), ‘Immigrant entrepreneurs: in search of a theoretical model’, Working paper no. 88-05-01A, Montreal Business School, Montreal, Quebec.

Tseng, Y. (1995), ‘Beyond little Taipei: the development of Taiwanese immigrant businesses in Los Angeles’, *International Migration Review*, **29** (1), 33–58.

Waldinger, R. (1995), ‘The other side of embeddedness’, *Ethnic and Racial Studies*, **18** (3), 554–80.

Waldinger, Roger, Howard Aldrich, Robin Ward and Associates (1990), *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies*, Newbury Park and London: Sage.

Weber, Max (1930), *The Protestant Ethic and the Spirit of Capitalism*, New York: Charles Scribner & Sons.

Werbner, P. (1999), ‘What colour “success”? Distorting value in studies of ethnic entrepreneurship’, *Sociological Review*, **47** (3), 548–79.

Wong, L.L. (1997), ‘Globalization and transnational migration: a study of recent Chinese capitalist migration from the Asian Pacific to Canada’, *International Sociology*, **12** (3), 329–51.

Wong, L.L. and M. Ng (1998), ‘Chinese immigrant entrepreneurs in Vancouver: a case study of ethnic business development’, *Canadian Ethnic Studies*, **30** (1), 64–85.

Zenner, Walter P. (1991), *Minorities in the Middle: A Cross Cultural Analysis*, Albany: State University of New York Press.

14. A comparative, exploratory investigation into the perceptions of internationalizing firms in Singapore and the UK

Dave Crick and Léo-Paul Dana

INTRODUCTION

A wide body of literature exists on the export behaviour of small and medium-sized enterprises (SMEs). Studies have addressed a number of issues associated with managers' international business practices and arguably, these have largely been from an exporting perspective. These have tended to involve issues such as the following: managers' perceptions of their overseas competitiveness, motives for engaging in international activities, barriers in operating overseas, and export assistance requirements (see, for example, reviews such as Bilkey, 1978; Miesenböck, 1988; Aaby and Slater, 1989). Nevertheless, it might be argued that many studies have been country-specific; indeed, tending to originate in a limited number of countries, noticeably the US. Furthermore, studies have tended to assume that a homogeneous culture exists in particular countries and generalized from the findings. This seems peculiar, given that the economic contribution of certain ethnic groups has been shown to be substantially different than that of others in the same country (Dana, 1995, 1996; Ward, 1991). This observation provides an identified gap in the literature together with a rationale to support a need for researchers to undertake comparative work across countries to establish the generalizability of particular findings.

It is, perhaps, not too difficult to understand why there is a relatively limited body of knowledge pertaining to cross-national studies of this nature. For example, studies need to address a number of cross-cultural methodological issues surrounding emic versus etic factors (Usunier, 1996; Vijver and Leung, 1997). These involve accounting for a whole host of issues ranging from cultural differences among respondents that might affect the phrasing of questions, through to industry-specific factors that might vary across countries, making the standardization of structured survey instruments difficult. Added to this is the need to develop collaborative arrangements with researchers in other countries in order to facilitate the cross-national research process.

This chapter reports on a comparative, exploratory investigation into the perceptions of internationalizing firms in Singapore and the UK. The two countries were chosen since they reflect relatively developed countries in the East and West respectively, but with a variety of sub-cultures existing within them. Additionally, the UK and Singapore have similar legal frameworks for enterprise, since the latter was a colony of the former. Furthermore, even after Singapore's independence, the island continued to be heavily influenced by its mother country. For example, Dana (1987, 1992) addressed the utility of comparing nations with historical ties, such as Singapore and the UK, and observed that until the UK's entry into the EEC, Singapore relied most heavily on the UK for trade. This exploratory study therefore provides a contribution to the knowledge in the area of cross-cultural international entrepreneurial research and builds on the body of literature that exists on the topic of internationalizing firms.

BACKGROUND

A wide body of knowledge exists on the broad issue of entrepreneurship within ethnic minority-owned firms although their activities in overseas markets have received far less attention to date. Three main theories have been put forward in existing studies to explain ethnic entrepreneurship (see Yoon (1991) for a review, and Dana (1997) for a more recent critique): the theory of middleman minorities, ethnic enclave theory and reactive cultural theory.

The theory of middlemen minorities suggests that ethnic enterprise arises out of an orientation towards the country of origin and hostility from a native population. Within this, businesses will rely to some extent at least on suppliers from the 'majority' (usually white in the context of studies) and serve 'minority' customers. Production will tend to rely on finance from ethnic sources and family labour (Bonacich, 1973, 1987). Ethnic enclave theory suggests ethnic enterprise is a self-generating process, insofar as ethnic enterprise can act as a training system for new entrepreneurs through employment in current enterprises, the facilitation of network linkages and a growth in ethnic business institutions. As such, the ethnic enclave that develops can support local institutions and generate a network for informal communication that may lead to market opportunities, and it also potentially provides community role models to encourage entrepreneurship (Aldrich et al., 1989; Bailey and Waldinger, 1991; Waldinger, 1989; Wilson and Portes, 1980).

Reactive cultural theory suggests that ethnic enterprise is a reaction to historic and racialized labour market discrimination. Here, members of the immigrant population are forced to adopt marginal niches in the economy, using factors like sources of rotating credit from the ethnic community to assist them. In turn, this provides a means of upward social mobility (Light, 1972, 1980; Nowikowski, 1984).

In the context of the investigation reported upon in this chapter, it must be recognized that all three theories are incomplete and in some cases lacking in explanatory power. Even so, they do enable the study to be placed in the context of a theoretical background that supports the assertion that cross-national studies should not treat countries as homogeneous, but rather recognize the existence of sub-cultures within them. The theories highlight potential influences on managerial strategy. Specifically, ethnic entrepreneurs may obtain a competitive advantage because of a number of factors. These involve sources of firms' human and financial resources, markets served, effectiveness of ethnic networks and the potential effects discrimination has on strategic decisions.

Ram and Hillin (1994), in a study based in the UK, pointed out that the unwillingness or inability of ethnic minority entrepreneurs to obtain business from outside the local ethnic community is a potential major constraint on business viability in the long term. They suggest that a need exists for firms to 'break out' and tap into 'majority' markets. This argument is extended by Crick and Chaudhry (1996), who point out that 'break-out' might be either within the domestic market or overseas in order to sustain business in the longer term. In terms of cross-national studies, it might be the case that the particular environmental constraints within individual countries might affect minority-owned firms in different ways, thus affecting their ability to 'break out' of local niches.

LITERATURE REVIEW

In reviewing the literature concerning firms' overseas business activities, several issues can be identified that have received a considerable amount of interest in previous studies, particularly from an exporting perspective. Consequently, each are considered in turn, and these involve: (1) managers' perceptions of their overseas competitiveness; (2) motives for engaging in international activities; (3) barriers in operating overseas; and (4) assistance in overcoming the same obstacles.

Competitiveness

A review of the literature suggests that a wide body of knowledge exists on the issue of firms' competitiveness in overseas markets (Styles and Ambler, 1994; Katsikeas et al., 1996; Crick and Bradshaw, 1999). Nevertheless, when considering the issue of competitiveness, it is apparent that a single agreed measurement does not exist; also, there has been an overlap between the measures and sources of the competitiveness. Within the overall 'success' literature, Buckley et al. (1988, 1990) suggest that not only do problems exist at the unit of analysis, that is, in studies at the national, industry and firm levels, but there is also a relationship among a number of factors associated with success. To illustrate this, they suggest that any measure should incorporate not only the performance itself, but also the process by which it was achieved and the potential for future success within the firms. Therefore, both measures and sources of performance are important and these may vary across countries. Indeed, this also links in with other issues such as motives for internationalizing.

Regarding the measures of performance, arguably, two groups of studies can be identified from the existing literature to act as a basis for differentiating between successful and less successful firms. First, an approach has been to identify a set of criteria, from a review of the literature, and use these to distinguish between successful and less successful firms based on subjective cut-off points in the data under investigation (see, for example, Samiee and Walters, 1990; Das, 1994). Crick et al. (1994) suggest that such issues include firms' export ratios, profitability and growth. Unfortunately, such criteria do not determine the objectives of specific managers (Cavusgil and Zou, 1994; Katsikeas et al., 1996) and therefore assumptions about performance are to some extent imposed on the data set.

In the second group of studies, a predetermined group of firms that have been judged as successful by an independent body such as the UK Queen's Award Committee are used as the sampling frame (Cunningham and Spigel, 1971; Michell, 1979; Styles and Ambler, 1994). However, problems exist in establishing the credibility of the selection criteria of the particular award, indeed, whether firms meet all or just part of the overall criteria and therefore on what basis they have been judged to be successful. Additionally, whether particular awards provide a long-term indicator of success (Crick and Bradshaw, 1999). In short, both measures and sources of performance have received attention in existing studies and debate exists in the literature on the merits of approaches that have been taken, suggesting that any approach will be subjective and open to criticism.

Motives for Exporting

Arguably, exporting can be seen as an entrepreneurial activity in terms of risk assessment and opportunity recognition. For example, Denis and Depelteau (1985) suggest that firms internationalize in order to reduce the risk of depending on a domestic market. Various issues have been identified in previous studies as providing motives for firms to engage in overseas activities. Furthermore, these have also been grouped in particular ways in order to classify them under broad headings. For example, using the term ‘change agents’ to categorize various motives for exporting (Bilkey, 1978), these can either be internal or external to the firm (Wiedersheim-Paul et al., 1978), or they can be classified as being either proactive or reactive in nature (Czinkota, 1982).

Using the internal and external classification system, Katsikeas and Piercy (1993) provide a summary of factors that have been found in previous studies to motivate firms to export. Starting with internal motives, these include the accumulation of capital, the ability to use skills, differential firm advantages, available production capacity, accumulated unsold inventory, the availability of personnel, long-run stability of sales and economies resulting from additional orders. Turning now to external, environmental factors affecting firms’ motives for exporting, these include tax incentives, foreign country regulations, the availability of foreign market information, increased domestic competition, export promotion programmes, profit and growth opportunities abroad and unsolicited orders from abroad.

Barriers to Exporting

A review of the literature suggests that previous studies have tended to treat terms such as ‘barriers’, ‘obstacles’ and ‘problems’ as somewhat interchangeable. Even so, classifications have been adopted in which various perceived exporting problems can be categorized (for a recent discussion see, for example, Sharkey et al., 1989; Katsikeas, 1994; Katsikeas and Morgan, 1994; Kaleka and Katsikeas, 1995; Leonidou, 1995; Bell, 1997; Morgan, 1997). Katsikeas and Morgan (1994) identified several broad areas, namely external problems, operational problems, internal problems and informational problems. However, more recent work (Kaleka and Katsikeas, 1995; Morgan, 1997) developed a classification put forward by Leonidou (1995). They termed the areas as follows: internal-domestic problems, internal-foreign problems, external-domestic problems, external-foreign problems, and exporting problems and level of export development.

Internal-domestic problems are issues within the firm, which are experienced in its domestic country base. These include lack of personnel qualified in export marketing activities, poor organization and formalization of firms’ export departments, insufficient production capabilities, lack of managerial time, management emphasis on developing domestic market activities, and aversion to risk.

Internal-foreign problems are those that are within the firm, but are experienced in foreign markets. Examples of these include high transportation costs, transportation difficulties, difficulties in meeting product specifications of overseas customers, providing technical support and after-sales service, payment problems and delays, limited knowledge of market intelligence to research foreign markets and risks and costs in selling abroad.

External-domestic problems are those that arise from the external environment, but are experienced within the domestic market of the firm. Examples involve the complexity of paperwork involved in exporting, the high cost of capital to finance exports, the lack of government assistance in overcoming export barriers and the lack of attractive export incentives, and inadequate promotion programmes provided by the government.

External-foreign problems are those arising from the external environment and experienced in a foreign market. Examples include restrictions imposed by foreign government rules and regulations, lack of information about foreign markets, difficulty in making foreign market contacts including intermediaries, intensity of the competition, language and cultural differences, lack of competitive prices, high value of the domestic currency, and unethical business requirements, such as bribery.

Finally, differences exist between firms at particular stages of export development in relation to both perceived and actual problems, although criticisms exist concerning internationalization theory (Turnbull, 1987). At the very basic level of internationalization stages, Leonidou (1995) found differences between exporters and non-exporters, while Kaleka and Katsikeas (1995) found differences between regular and sporadic exporters.

Assistance Requirements

A number of studies have been undertaken on the broad subject of export assistance, particularly in relation to overcoming some of the previously identified perceived and actual barriers to exporting. Even so, since trade policy is regulated by international bodies such as the WTO and placed within governments' budgetary constraints, there is only so much they can do to assist exporters. Some agencies in particular countries have been perceived as more effective than in others (see publications reviewing particular initiatives and agencies, for example, Hibbert, 1990; Milner, 1990; Seringhaus and Rosson, 1990). Indeed, Elliot and Krasnostein (1988) found that Singaporean firms do internationalize as a result of Singaporean government incentives. However, in comparative studies in line with the investigation reported in this chapter, it is important to recognize that different government assistance will be available to firms in specific countries in order to assist their competitiveness, provide motives for engaging in overseas activities, and help them overcome obstacles.

RESEARCH FOCUS

The review of the literature highlighted that there are a number of factors that have been identified by previous studies as playing a major part in firms' overseas activities, particularly from an export perspective. However, when placed into the background context outlined for this study, it was also identified that a limited amount of knowledge pertains to cross-national studies where the practices of sub-cultures within the population are specifically considered. This identified gap in the literature is addressed in this exploratory investigation, although this is only based on a two-country study. This study involves a comparative, exploratory investigation into the overseas activities within a sample of firms in Singapore and the UK.

This study sought to expand on previous research into the practices of SMEs in overseas markets by offering comparative empirical data from firms in two relatively developed markets in the East and West respectively, each with firms owned and managed by executives from particular sub-cultures. Four issues were specifically investigated in this study after reviewing the literature: (1) managers' perceptions of their overseas competitiveness; (2) motives for engaging in international activities; (3) perceived barriers in operating overseas; and (4) assistance in overcoming the same obstacles. The aim of this study was not to generate and test hypotheses, since the exploratory nature of the cross-cultural research made this difficult to place within a positivistic methodological framework. Instead, the aim was to explore whether differences existed between the sub-cultures within the two countries and, if so, identify reasons to support why this might be the case.

METHOD

A questionnaire was developed after reviewing the literature and subsequent discussions with both managers and academics considered knowledgeable in the field of research. In establishing the appropriate methodological approach towards gathering the data within this investigation, it was originally considered ideal to obtain a matched sample that exhibited firms with varying background characteristics and levels of performance within the two countries. However, it was apparent, based on previous experience by one of the researchers who was located in Singapore, that the identification of 'suitable' firms and more particularly the subsequent facilitation of their responses, would prove difficult. The idea of using a matched sample was therefore abandoned. Instead, it was decided that a more suitable way to proceed would be to gather data from managers of smaller-sized firms[1] using a non-random methodological approach.

International business seminars were provided for managers of smaller-sized firms in Singapore, by one of the authors. Findings of this study relate to 30 participants as the investigation was restricted to smaller, independently owned businesses to avoid potential resource bias. These firms had a common basis for attending, that is, they had limited international business operations and were committed to increasing their overseas activities. Despite some firms having a number of years of overseas business experience, their actual international business activities were nevertheless low. The profile of the seminar suggested it contained an ethnic mix indicative of local managers.[2] Furthermore, participants were involved in a number of different industry sectors and operated in a range of overseas markets. As such, these executives provided a sampling frame that was purposefully diverse in coverage, albeit rather small in overall terms. The study recognized that trade sectoral issues may affect some firms (Boter and Holmquist, 1996), and this was discussed with managers in the qualitative element of the study. Allowing for potential bias using key informants (Phillips, 1981), it was a requirement to complete an anonymous questionnaire as part of the seminar in order to generate a suitable number of responses for later statistical analysis. The seminar was used as a focus group to explore issues in a discursive manner and follow-up personal interviews were also undertaken.[3] Selected characteristics of firms are provided in the Appendix.

The quantitative, comparative UK data were gathered via a similar seminar run in the other researcher's institution. The characteristics of this group were similar to the overall profile described for the Singapore firms. Supplementary qualitative data was gathered in the same manner to that of the firms in Singapore. This enabled the sample conditions to remain somewhat consistent, although certain background characteristics of firms would not be evenly matched. For example, while the percentage of firms employing particular numbers of staff was consistent with the Singapore sample, other issues were not comparable and a summary is detailed in the Appendix. This was, to some extent, unavoidable, due to the types of firms interested in the seminar. In particular, the data indicates differences in the ethnic mixes; this reflects the different proportions of sub-cultures prevalent in the respective countries. Their international experience also differed. This gave rise to some reservations about the sample equivalence and whether the firms were atypical of the intended population. Nevertheless, while the overall sample profiles reflect a problem in the ability to generalize from the results, the approach described must be viewed in the context of the identified difficulties in obtaining samples in cross-national, comparative studies of this nature. The exploratory nature of this investigation must therefore be emphasized.

FINDINGS

In presenting the comparative, quantitative empirical findings within this chapter, the Mann-Whitney test was used as a widely accepted non-parametric analysis technique for relatively small uneven sample sizes (Diamantopoulos and Schlegelmilch, 1997). When interpreting the results, firms' mean responses are detailed for both ethnic groups within the SMEs in Singapore and the UK. The Chi-square result and significance are also provided to establish whether significant statistical differences exist between the groups in relation to the issues under investigation. An asterisk indicates a statistical difference at the 95 per cent level within the respective tables.

It was considered useful to establish whether firms differed in their perceived measures of performance overseas. The findings in Table 14.1 provide a comparison of the groups of firms' perceptions in relation to their performance against objectives regarding four specific issues. Two of the four issues exhibited statistical differences, namely, overseas market share where Singaporean firms believed themselves to have performed better than their UK counterparts, while the reverse was true for overseas profitability. Therefore, some bias was apparent from the results in the investigation in relation to firms not being a matched sample in relation to performance overseas and this should be reflected in generalizations that arise from the study. Indeed, it once again emphasizes the need for the study to be considered as exploratory.

Turning now from the measures of performance to the sources of performance, Table 14.2 summarizes the data in relation to firms' competitiveness in overseas markets. Statistical differences were found to exist in seven of the 28 items of competitiveness. Looking now at the findings in a little more detail, after-sales service, overseas market and marketing knowledge, government assistance received and management commitment were rated lower by the Singaporean firms than for the UK firms. The reverse was true for personal contact with overseas intermediaries, value of currency and network of social contacts (non-business). A number of differences were observed among the ethnic groups, although in overall terms, ethnic Chinese tended to rate most items higher than Asian Indian among the Singapore firms. Interestingly, among the UK firms, the Asian firms tended to rate most items higher than the white-owned firms.

Table 14.1 Firms' perceptions of performance

	Singapore firms			UK firms		
Performance	Asian Chinese	Asian Indian	Asian	White	Chi-square	Sig
Overseas sales volume	3.50	3.38	3.73	3.29	0.903	.825
Overseas sales growth	3.50	3.50	3.93	3.35	2.312	.510
Overseas profitability	2.88	3.25	3.80	4.17	8.394	.039*
Overseas market share	2.63	3.37	1.60	1.71	18.426	.000*

Note: Rating scale: 1 = very badly to 5 = very well
* 0.05

Table 14.2 Firms' perceived competitive advantages/disadvantages in overseas markets

	Singapore firms			UK firms		
Issue	Asian Chinese	Asian Indian	Asian	White	Chi-square	Sig
Language skills	3.00	3.50	3.85	3.41	2.999	.392
After-sales service	2.87	3.12	4.46	4.05	12.324	.006*
Meeting customers' specifications	3.25	3.50	3.92	3.47	2.497	.476
Production method/technology	3.50	3.62	4.20	3.88	4.284	.232
Product quality/control	3.75	3.75	4.21	3.70	2.657	.448
New product development	3.87	3.50	4.13	3.71	3.163	.367
Range of products	3.75	3.50	4.20	3.88	4.497	.213
Personnel experience and training	3.38	3.37	3.73	3.88	2.461	.482
Operating efficiency	4.12	3.71	3.14	3.12	6.502	.090
Importers' distribution network	3.57	3.38	4.20	3.65	3.051	.384
Overseas market/marketing knowledge	3.63	3.25	4.53	4.35	9.636	.022*
Company reputation	4.25	3.62	3.57	3.29	4.883	.181
Promotional efforts	3.13	3.25	3.53	3.00	1.626	.654
Assessment of overseas market developments	2.88	3.50	3.71	3.82	5.167	.160
Personal contact with overseas intermediaries	3.50	3.50	2.53	3.06	8.076	.044*
Proximity to overseas market	3.13	3.57	3.73	4.18	4.547	.208
Product uniqueness/tailored product	3.50	2.88	3.29	3.00	1.246	.742
Price competitiveness	3.63	3.25	4.20	4.06	4.131	.248
Meeting delivery dates	3.25	2.86	2.93	2.94	0.704	.872
Extended credit	3.71	3.43	3.27	3.76	3.025	.388
Negotiation skills	3.50	3.25	2.40	2.29	7.537	.057
Value of currency	3.29	3.38	2.23	2.06	9.288	.026*
Government assistance received	3.50	3.25	4.47	4.31	9.270	.026*
Management commitment	3.63	3.87	4.60	4.25	8.900	.031*
Personal visits to the market	3.12	3.50	4.20	3.82	5.908	.116
Technical sophistication of products	3.50	3.42	3.50	3.68	0.823	.844
Willingness to enter collaborative arrangements	3.12	3.63	2.79	3.12	3.892	.273
Network of social contacts (non-business)	3.50	3.50	3.27	2.49	8.026	.047*

Note: Rating scale: 1 = major disadvantage to 5 = major advantage
* 0.05

Looking now at firms' motives for engaging in overseas sales, the results are found in Table 14.3. Statistical differences were found to exist between the two groups in respect of 11 of the 24 items. Firms in Singapore were clearly more motivated by a number of issues in comparison to the UK firms. These were: competitive pressures, declining domestic sales, economies of scale from additional orders, attractive government incentives, national export promotion programmes, favourable currency movements, new information about sales opportunities overseas, opportunity to increase the number of markets and reduce market-related risk, favourable product regulations in target markets, potential for extra growth resulting from serving overseas markets, and encouragement from contacts in social networks. The reverse was true for encouragement by agents and distributors. A number of differences were observed among the ethnic groups, but these were somewhat mixed and it was difficult to generalize in an overall sense.

Turning to firms' perceived barriers to engaging in overseas sales, the results are detailed in Table 14.4. Nine of the 24 items were found to exhibit statistical differences. Noticeable differences were evident between the groups where those in Singapore rated a number of issues highly. These were: inability to offer competitive prices abroad, inability to offer technical or after-sales service, untrained export staff, keen competition in foreign markets, lack of adequate foreign distribution channels, lack of managerial personnel or time, limited information to locate or analyse foreign markets, red tape in public bodies, and difficulty in obtaining insurance. However, perhaps more important was the relatively low rating in aggregate terms of all the items by the firms in the UK, that is, in comparison to Singapore firms' rating above the mid-point on the rating scale. A number of differences were observed among the ethnic groups, although they were rather mixed and it was again difficult to generalize in overall terms.

Finally, firms' perceptions of their assistance requirements in overcoming the same barriers were compared and the results are detailed in Table 14.5. Ten of the 24 items exhibited statistical differences. Clear differences were again evident between the groups. Singapore firms rated a number of items higher than UK firms. These were: difficult handling of documents or procedures, difficult to locate or obtain adequate representation, imposition of high tariff barriers, inability to offer competitive prices abroad, inability to offer technical or after-sales service, untrained export staff, keen competition in foreign markets, lack of government assistance or incentives, limited information to locate or analyse foreign markets, and red tape in public bodies. A number of differences were observed among the ethnic groups, although it was once again difficult to generalize from the findings.

Table 14.3 *Firms' motives for international activities*

Motive	Asian Chinese	Asian Indian	Asian	White	Chi-square	Sig
	Singapore firms			UK firms		
Competitive pressures	3.63	3.86	1.31	1.41	28.091	.000*
Over-production	2.38	2.57	2.00	1.94	2.207	.531
Declining domestic sales	3.37	2.29	1.62	1.41	16.259	.001*
Excess capacity	2.88	2.33	2.23	2.53	1.840	.606
Saturated domestic market	3.25	3.50	2.08	2.52	7.551	.056
Exclusive information	3.00	3.67	3.62	3.35	3.232	.357
Managerial aspirations	2.38	3.57	3.92	3.18	6.685	.083
Unique products	3.00	3.42	3.71	3.88	4.166	.244
Profit advantage	3.50	4.00	3.61	3.70	0.583	.900
Marketing advantage	3.75	3.86	3.08	3.00	5.365	.147
Historical customer ties	2.37	3.50	2.75	2.35	4.109	.250
Unsolicited orders from overseas	3.13	2.86	3.31	3.35	1.333	.721
Economies of scale from additional orders	4.00	3.66	1.50	1.76	21.233	.000*
Attractive government incentives	3.75	2.71	1.69	1.82	14.433	.002*
National export promotion programmes	3.50	2.57	1.77	2.12	10.052	.018*
Favourable currency movements	4.13	3.16	2.84	2.65	9.717	.021*
New information about sales opportunities overseas	4.12	2.71	2.08	2.12	12.621	.006*
Reduction in tariffs	4.00	2.43	3.23	3.82	7.518	.057
Opportunity to increase number of markets and reduce market-related risk	3.63	4.29	2.50	2.53	9.900	.019*
Favourable product regulations in target markets	3.75	3.13	2.21	2.19	10.482	.015*
Initiation of overseas business by domestic competitors	3.37	3.25	2.42	2.62	4.371	.224
Encouragement by agents/distributors	3.13	3.25	4.47	4.35	13.478	.004*
Potential for extra growth resulting from serving overseas markets	3.63	4.00	1.86	2.41	17.854	.000*
Encouragement from contracts in social networks i.e., non-business	3.25	3.75	3.13	3.53	3.153	.369

Note: Rating scale: 1 = major disadvantage to 5 = major advantage
* 0.05

Table 14.4 Firms' perceived barriers to operating in international markets

	Singapore firms			UK firms		
Barrier	Asian Chinese	Asian Indian	Asian	White	Chi-square	Sig
Different foreign customer attitudes	3.51	2.85	2.50	2.64	3.958	.266
Different product standards/specs	3.50	3.57	2.79	2.53	6.038	.110
Difficult to understand business practices	3.75	2.85	3.07	3.29	2.525	.471
Difficult/slow collection of payments	3.29	2.57	2.85	3.05	1.251	.741
Difficult handling documents/procedures	3.25	3.14	3.14	2.76	0.987	.804
Difficult to locate/obtain representation	3.25	2.86	2.29	2.31	6.694	.082
Existence of language/communication problems	3.13	3.29	2.57	2.47	3.373	.338
High risks/costs in selling abroad	3.38	3.71	2.50	2.41	6.315	.097
Imposition of high tariff barriers	3.37	3.57	2.21	2.41	6.690	.082
Inability to offer competitive prices abroad	3.13	3.00	1.50	2.11	12.866	.005*
Inability to offer technical/after-sales service	3.00	2.85	1.38	1.71	15.855	.001*
Untrained export staff	2.75	3.14	1.46	1.82	14.514	.002*
Insufficient production capacity	3.13	2.86	2.93	2.71	0.802	.849
Keen competition in foreign markets	3.50	3.57	1.86	2.11	16.593	.001*
Lack of adequate foreign distribution channels	3.75	3.14	2.07	2.82	9.718	.021*
Lack of government assistance/incentives	3.12	2.71	2.29	2.50	3.592	.309
Lack of managerial personnel/time	3.63	3.43	1.86	2.65	12.519	.006*
Shortage of capital to finance overseas business	3.25	3.14	2.92	2.41	3.636	.304
Limited information to locate/analyse foreign markets	3.38	3.57	1.86	1.82	18.874	.000*
Transport/high shipping costs	3.50	3.00	2.57	2.71	3.048	.384
Restrictions imposed by foreign rules/regulations	3.63	3.86	2.71	2.82	4.912	.178
Unfavourable exchange rate	3.00	3.57	2.36	2.41	5.637	.131
Red tape in public bodies	3.00	3.00	2.21	1.71	8.968	.030*
Difficulty in obtaining insurance	2.63	2.71	1.79	1.65	9.382	.025*

Note: Rating scale: 1 = none at all to 5 = to a large extent
* 0.05

Table 14.5 *Firms' perceptions of areas in need of assistance*

	Singapore firms		UK firms			
Issue	Asian Chinese	Asian Indian	Asian	White	Chi-square	Sig
Different foreign customer attitudes	3.13	3.43	2.36	2.24	5.521	.137
Different product standards/specs	2.50	3.57	2.43	2.50	4.093	.252
Difficult to understand business practices	3.25	2.57	3.00	2.71	1.370	.713
Difficult/slow collection of payments	3.50	2.85	2.50	2.65	3.958	.266
Difficult handling documents/procedures	3.75	2.86	2.50	2.12	9.550	.023*
Difficult to locate/obtain representation	3.50	3.00	1.92	1.88	12.857	.005*
Existence of language/communication problems	2.75	3.00	2.14	2.35	3.518	.318
High risks/costs of selling abroad	3.38	3.43	2.93	2.59	2.539	.468
Imposition of high tariff barriers	3.12	3.50	1.50	2.47	12.328	.006*
Inability to offer competitive prices abroad	2.75	3.14	1.50	1.71	13.033	.005*
Inability to offer technical/after-sales service	2.50	3.15	1.49	1.65	14.547	.002*
Untrained export staff	2.50	2.86	1.23	1.53	17.368	.001*
Insufficient production capacity	3.00	2.71	1.79	2.29	6.826	.078
Keen competition in foreign markets	2.63	3.43	1.64	1.82	12.677	.005*
Lack of adequate foreign distribution channels	2.88	3.14	2.00	3.06	7.181	.066
Lack of government assistance/incentives	3.25	3.29	1.43	1.76	18.361	.000*
Lack of managerial personnel/time	2.63	3.00	1.54	2.41	7.656	.054
Shortage of capital to finance overseas business	2.88	3.67	2.57	2.47	3.681	.298
Limited information to locate/analyse foreign markets	2.75	3.57	1.71	1.88	11.149	.011*
Transport/high shipping costs	3.25	3.29	2.57	2.88	1.933	.587
Restrictions imposed by foreign rules/regulations	3.50	3.71	2.43	2.65	5.559	.135
Unfavourable exchange rates	3.43	3.29	3.14	2.35	4.153	.245
Red tape in public bodies	3.75	3.57	2.07	1.71	17.108	.001*
Difficulty in obtaining insurance	2.43	2.50	3.31	2.94	3.209	.361

Note: Rating scale: 1 = none at all to 5 = to a large extent
* 0.05

DISCUSSION

The findings from the qualitative element of the study provided some interesting supplementary data to support the statistical findings. Questions asked to respondents explored the themes in the questionnaire and allowed managers to account freely for perceptions in their own words. Due to space limitations in this chapter, the issues are presented in a broad sense since the use of case studies would not be possible.

Firms in Singapore

In Singapore, ethnic Chinese comprise the majority of the people, while the descendants of immigrants from India are a minority, amounting to less than 10 per cent of the population. While the ethnic Chinese are Buddhist, Taoist or Christian, those of Indian descent are either Hindu or Muslim. Interesting similarities and differences exist among these ethnic groups.

Both the ethnic Chinese and Indian communities in Singapore report that they rely heavily on co-ethnics, with whom they share a common language and culture. Respondents from both ethnic origins claimed that internationalization was facilitated by vast networks abroad. We must distinguish, however, between two different types of networks.

The first organized body of Indian businessmen in Singapore dates back to 1924. Its successor, the Singapore Chamber of Commerce and Industry, counted about 600 members in 2001. To encourage investment in India, the Chamber established and manages its own enterprise, Paramewara Holdings Limited.

Similarly, the Chinese Chamber of Commerce and various Chinese clan associations have encouraged investment in China. Our findings support the research reported in Brown (1995), suggesting that networks have been critical to the internationalization of Chinese entrepreneurs.

The case of Indians in Singapore is somewhat different. These respondents typically mentioned ‘social’ networks in Malaysia and in the Indian subcontinent. In contrast, the ethnic-Chinese respondents emphasized ‘business’ networks of overseas associates, who often traced their origins to the same area of China, and who spoke the same dialect.

While the ethnic Chinese and Asian Indians both have ethnic networks, it is important to underline some distinctive differences. Historically, in Singapore, Chinese clan associations were central to the development of business networks, with dialects being the common denominator among members. The Hokkiens are the largest linguistic group in Singapore. They originate in Fujian and speak Minnanhua. Fujian, the province in China with the largest representation in Singapore, is also home to Foochows (speaking Fuzhouhua), Henghuas (speaking Xinghuahua) and Hokchias (speaking Fuquinhua). A smaller group of Cantonese people (speaking Guangzhouhua) and Teochews (speaking Chaozhouhua) came to Singapore from Guang Dong. In addition, Hainanese immigrants (speaking Hainanhua) came from Hainan Island. Hakkas (speaking Kehua) came from Fujian and Guang Dong. In recent years, Singapore's youth has given diminished importance to networking based on dialects.

Among Indian entrepreneurs in Singapore, religion (not dialect) has been the determinant of networks. The Chettiar Temple, for instance, came to be the economic hub, with God Murugan presiding at every business meeting. In contrast to ethnic Chinese respondents in this study (who tended to steer conversations away from the topic of religion), Indian participants tended toward an outward display of religious orthodoxy. The same was found by Saroja (1994).

Given the quantitative finding that Indian respondents reported a higher perceived risk in exporting, than did the ethnic Chinese, participants were asked to elaborate on this. Although both groups claim to rely on networks, it seems that the Chinese networks are more likely to include business partners with equity participation and sharing risks. Respondents of Indian origin explained that they relied on social networks of friends rather than business partners, and friends do not share risk.

Most of the Singaporean firms represented in this study had been involved in international business prior to the 1997 Asian Crisis, and many of these distinguished between the state of affairs before July 1997, and the changes that took place after that date. Entrepreneurs of Indian origin complained that a strong Singapore dollar during the crisis reduced their competitiveness in Malaysia, where the currency tumbled. Several ethnic Chinese entrepreneurs explained that they lost their distribution channels in Indonesia during the racial riots of 1998. Yet most of the ethnic-Chinese respondents who were in business during the crisis claimed that they did reasonably well. They explained that this was possible thanks to their developed markets in the United States, as well as in China and Taiwan (where the crisis had less impact than elsewhere). Some argued that they were hardly affected by the crisis, thanks to their focus on 'markets where Confucianism prevailed', reducing the effects of the crisis.

Some ethnic Chinese respondents in Singapore were keen to discuss the hardships associated with the need for bribery in several countries, including Cambodia, China and Vietnam. Yet, ethnic Chinese and Indian respondents alike explained that they were forced to internationalize their firms in order to survive in Singapore's small and saturated domestic environment.

Firms in the UK

It was evident that the UK firms had achieved three of their performance objectives and their marginal presence in overseas markets accounted for the low rating in respect of their market share. In comparison, overseas sales volume, growth and profitability were all viewed as acceptable given their limited involvement internationally. A cultural issue between respondents related to profitability, whereby white managers were far more likely to discuss this than were Asian managers; therefore, this may account for the statistical differences in this respect. Survey instruments must therefore take special care in the framing of questions relating to profitability when dealing with Asian managers due to a cultural predisposition to avoid answering such issues.

Turning now to the sources of firms' competitiveness in respect of their performance, it was evident that Asian managers were far more likely to take advantage of the use of networks than white managers were. Indeed, this involved both business and non-business networks and particularly in respect of their importers' distribution network. This was evidenced by the types of markets served by the Asian firms, typically East Africa and the Indian subcontinent. This compared to mainly European markets for the white managers. It was also interesting to observe from the discussions, Asian managers' greater likelihood to visit overseas markets, and this sometimes coincided with vacations to see relatives in the markets served.

In terms of motives for exporting, it was evident that both the Asian and white firms were strongly influenced by intermediaries such as agents and distributors, although differences existed in where these were based due to the previously described preferences for particular markets. There was a clear link with historical ties to certain markets through their country of origin. A noticeable difference was observable in the market servicing strategy between the two groups. Whereas Asian firms tended to concentrate on the domestic market, their overseas sales were typically focused on a few key markets. This contrasted with the white firms who also concentrated on the domestic market, but instead spread their overseas sales over a number of markets (typically European) rather than focusing on a few key ones. The poor attitude of both groups of firms in respect of government assistance was of particular interest. A key difference was apparent whereby the Asian managers were noticeably reluctant to try outside assistance and were therefore perhaps not in a position to say how much it might help motivate overseas sales, whereas the white firms would try it but thought it was not of much help.

Turning now to the two groups of firms' perceived barriers in overseas activities, it must be recognized that both groups of managers had relatively little international business experience and therefore their ability to actively comment on obstacles was somewhat restricted. The interviews determined that this had largely affected the quantitative findings, with most being below the mid-point on the rating scale. However, it was established that the value of sterling and its affect on competitiveness was a major concern to both groups of firms. This had largely affected their ratings in respect of the need for assistance, as managers could not specify what help they needed since they were, largely, unaware of what problems needed to be addressed. This was, of course, other than obvious issues such as factors leading to competitiveness like the value of sterling.

Interestingly, however, the two groups in the UK differed on the approach assistance should take. Asian managers were more keen to obtain assistance from their cultural networks such as banks and the like who they believed had a cultural affinity to their operations. This contrasted with the white firms who were not bothered with where assistance was sourced, but rather that it better addressed their needs. For example, more targeted assistance should be offered to inexperienced individual firms as a hand-holding exercise to familiarize them with the mechanics of overseas trade. This had been a major influence on their decision to attend the seminars from which they were drawn.

AVENUES FOR FURTHER RESEARCH

This chapter has reported on a comparative, exploratory investigation into the perceptions of internationalizing firms in Singapore and the UK as a first step towards addressing an identified gap in the literature, namely, the limited amount of knowledge with respect to cross-cultural studies. Specifically, it focused on four issues. First, managers' perceptions of their overseas competitiveness; second, motives for engaging in international activities; third, barriers in operating overseas; and fourth, assistance in overcoming the same obstacles. Analysis using a non-parametric technique due to the small uneven sample sizes established that a number of statistical differences exist between the groups of managers in relation to all four areas under investigation. The findings provide a contribution to the knowledge in the area of cross-cultural international entrepreneurial research, where the issue of sub-culture has been relatively neglected, and builds on the body of literature that exists on the topic of internationalizing firms.

In taking this exploratory study further, a number of avenues are open to researchers. In the first instance, it is important that large-scale surveys are undertaken to ensure that statistical techniques such as LISREL can be employed to enable more sophisticated numerical associations to be found among the data. This said, however, studies might also want to employ a qualitative methodological approach to ascertain the underlying reasons behind the statistical data. This might be undertaken on a longitudinal basis to determine whether attitudes change over time, for example, as barriers are broken down by the harmonization of trade policies and the introduction of technology such as the Internet. Furthermore, investigations might focus more on particular cultures within countries, particularly the managers from the ethnic backgrounds reported upon in this chapter. Finally, cross-national comparisons might be undertaken concerning managers in other countries, and this study provides a basis on which collaborative research may be undertaken between researchers in the East and West.

NOTES

1. There is a large body of knowledge that discusses the definitions and characteristics of SMEs (see, for example, Storey, 1994). This study uses the criterion of <100 employees to categorize SMEs; arguably, this is in line with a number of other studies.
2. The term 'Asian Indian' represents managers originating from the Indian subcontinent in the Singapore firms whereas the term 'Asian' represents the same group in the UK study – the terms are based on cultural norms.
3. Potential bias was noted with the use of an interviewer outside of certain ethnic groups under investigation.

REFERENCES

Aaby, N-E. and S.F. Slater (1989), 'Management influences on export performance: a review of the empirical literature 1978–88', *International Marketing Review*, **6** (4), 7–26.

Aldrich, H., C. Zimmer and D. McEvoy (1989), 'Continuities in the study of ecological succession: Asian businesses in three English cities', *Social Forces*, **67**, 920–44.

Bailey, T. and R. Waldinger (1991), 'Primary, secondary and enclave labor markets: a training systems approach', *American Sociological Review*, **56**, 432–45.

Bell, J. (1997), 'A comparative study of the export problems of small computer software exporters in Finland, Ireland and Norway', *International Business Review*, **6** (6), 585–604.

Bilkey, W.J. (1978), 'An attempted integration of the literature in the export behaviour of firms', *Journal of International Business Studies*, **9** (1), 33–46.

Bonacich, E. (1973), 'A theory of middleman minorities', *American Sociological Review*, **38**, 583–94.

Bonacich, E. (1987), '"Making it" in America: a social evolution of the ethics of immigrant entrepreneurship', *Sociological Perspectives*, **30**, 446–66.

Boter, H. and C. Holmquist (1996), 'Industry characteristics and internationalisation processes in small firms', *Journal of Business Venturing*, **11** (6), 471–87.

Brown, R.A. (ed.) (1995), *Chinese Business Enterprise in Asia*, London: Routledge.

Buckley, P.J., C.L. Pass and K. Prescott (1988), 'Measures of international competitiveness: a critical survey', *Journal of Marketing Management*, **4** (2), 175–200.

Buckley, P.J., C.L. Pass and K. Prescott (1990), 'Measures of international competitiveness: empirical findings from British manufacturing companies', *Journal of Marketing Management*, **6** (1), 1–13.

Cavusgil, T.S. and S. Zou (1994), 'Marketing strategy–performance relationship: an investigation of the empirical link in export market ventures', *Journal of Marketing*, **58**, 1–21.

Crick, D. and R. Bradshaw (1999), 'The standardisation versus adaptation decision of "successful" SMEs: findings from a survey of winners of the Queen's Award for Export', *Journal of Small Business and Enterprise Development*, **6** (2), 191–9.

Crick, D. and S. Chaudhry (1996), 'Export behaviour of Asian and indigenous-owned SMEs in the UK clothing industry: a research note', *International Journal of Entrepreneurial Behaviour and Research*, **2** (1), 77–84.

Crick, D., M. Jones and S. Hart (1994), 'International marketing research activities of UK exporters: an exploratory study', *Journal of Euro Marketing*, **3**, 7–26.

Cunningham, M.T. and R.I. Spigel (1971), 'A study of successful exporting', *British Journal of Marketing*, **5**, 2–12.

Czinkota, M.R. (1982), *Export Development Strategies*, New York: Praeger.

Dana, L. (1987), 'Entrepreneurship and venture creation – an international comparison of five Commonwealth nations', *Frontiers of Entrepreneurship Research*, 573–83.

Dana, L. (1992), 'Entrepreneurship, innovation and change in developing countries', *Entrepreneurship, Innovation and Change*, **1** (2), 231–42.

Dana, L. (1995), 'Entrepreneurship in a remote Sub-Arctic community: Nome, Alaska', *Entrepreneurship: Theory and Practice*, **20** (1), 55–72.

Dana, L. (1996), 'Self-employment in the Canadian Sub-Arctic: an exploratory study', *Canadian Journal of Administrative Sciences*, **13** (1), 65–77.

Dana, L. (1997), 'The origins of self-employment', *Canadian Journal of Administrative Sciences*, **14** (1), 99–104.

Das, M. (1994), 'Successful and unsuccessful exporters from developing countries', *European Journal of Marketing*, **28**, 19–33.

Denis, J.E. and D. Depelteau (1985), 'Market knowledge, diversification and export expansion', *Journal of International Business Studies*, **16** (3), 77–89.

Diamantopoulos, A. and B.B. Schlegelmilch (1997), *Taking the Fear Out of Data Analysis*, London: Dryden.

Elliot, G.R. and J.P. Krasnostein (1998), 'Export attitudes and practices of research and development-based firms manufacturing in Singapore', Proceedings of the 1988 Academy of International Business Southeast Asia Regional Conference – Asia-Pacific Perspectives in International Business, Bangkok, Thailand, B39–B68.

Hibbert, E. (1990), *The Management of International Trade Promotion*, London: Routledge.

Kaleka, A. and C.S. Katsikeas (1995), 'Exporting problems: the relevance of export development', *Journal of Marketing Management*, **11**, 499–515.

Katsikeas, C.S. (1994), 'Perceived export problems and export involvement: the case of Greek exporting manufacturers', *Journal of Global Marketing*, **7** (4), 29–57.

Katsikeas, C.S. and R.E. Morgan (1994), 'Differences in perceptions of exporting problems based on firm size and export market experience', *European Journal of Marketing*, **28** (5), 17–35.

Katsikeas, C.S. and N.F. Piercy (1993), 'Long-term export stimuli and firm characteristics in a European LDC', *Journal of International Marketing*, **1** (3), 23–47.

Katsikeas, C.S., N.F. Piercy and C. Ioannidis (1996), 'Determinants of export performance in a European context', *European Journal of Marketing*, **30**, 6–35.

Leonidou, L.C. (1995), 'Empirical research on export barriers: review assessment and synthesis', *Journal of International Marketing*, **3** (1), 29–43.

Light, I. (1972), *Ethnic Enterprise in America: Business and Welfare among Chinese, Japanese and Blacks*, Berkeley, CA: University of California.

Light, I. (1980), 'Asian enterprise in America: Chinese, Japanese, and Koreans in small business', in S. Cummings (ed.), *Self-Help in Urban America*, Port Washington, NY: Kennikat Press.

Michell, P. (1979), 'Infrastructure and international marketing effectiveness', *Columbia Journal of World Business*, Spring, 91–101.

Miesenböck, K.J. (1988), 'Small businesses and exporting: a literature review', *International Small Business Journal*, **6** (2), 42–61.

Milner, C. (1990), *Export Promotion Strategies*, London: Harvester Wheatsheaf.

Morgan, R.E. (1997), 'Export stimuli and export barriers: evidence from empirical research studies', *European Business Review*, 97 (2), 68–79.

Nowikowski, S.E. (1984), 'Snakes and ladders: Asians in Britain', in R. Ward and R. Jenkins (eds), *Ethnic Communities in Britain*, Cambridge: Cambridge University Press.

Phillips, L.W. (1981), 'Assessing measurement error in key informant reports: a methodological note on organisational analysis in marketing', *Journal of Marketing Research*, **18**, 395–415.

Ram, M. and G. Hillin (1994), 'Achieving "break-out": developing mainstream ethnic minority businesses', *Small Business and Enterprise Development*, **1** (2), 15–21.

Samiee, S. and P.G.P. Walters (1990), 'Influence of firm size on export planning and performance', *Journal of Business Research*, **20**, 235–48.

Saroja, D.D. (1994), 'An Indian family business: traditional strategies for commercial success', in A.R. Walker (ed.), *New Place, Old Ways*, Delhi: Hindustan Publishing.

Seringhaus, R.F.H. and P.J. Rosson (1990), *Government Export Promotion: A Global Perspective*, London: Routledge.

Sharkey, T.W., J.S. Lim and K.I. Lim (1989), 'Export development and perceived export barriers: an empirical analysis of small firms', *Management International Quarterly*, **29** (2), 33–41.

Storey, D.J. (1994), *Understanding the Small Business Sector*, London: Routledge.

Styles, C. and T. Ambler (1994), 'Successful export practice: the UK experience', *International Marketing Review*, **11**, 23–47.

Turnbull, P.W. (1987), 'A challenge to the stages theory of the internationalisation process', in P.J. Rosson and S.D. Reid (eds), *Managing Export Entry and Expansion*, New York: Praeger, pp. 21–40.

Usunier, J-C. (1996), *Marketing Across Cultures*, Hemel Hempstead: Prentice Hall.

Vijver, F.J.R. van de and K. Leung (1997), *Methods of Data Analysis for Cross-Cultural Research*, London: Sage Publications.

Waldinger, R. (1989), 'Structural opportunity or ethnic advantage? Immigrant business development in New York', *International Migration Review*, **23**, 48–72.

Ward, R. (1991), 'Economic development and ethnic business', in J. Curran and R.A. Blackburn (eds), *Paths of Enterprise*, London: Routledge.

Wiedersheim-Paul, F., H.C. Olson and L.S. Welch (1978), 'Pre-export activity: the first steps in internationalisation', *Journal of International Business Studies*, **9** (1), 47–58.

Wilson, K. and A. Portes (1980), 'Immigrant enclaves: an analysis of the labor market experiences of Cubans in Miami', *American Journal of Sociology*, **86**, 295–319.

Yoon, I.J. (1991), 'The changing significance of ethnic and class resources in immigrant businesses: the case of Korean immigrant businesses in Chicago', *International Migration Review*, **25**, 303–31.

APPENDIX: SELECTED CHARACTERISTICS ASSOCIATED WITH THE FIRMS

For how long has your firm been operating internationally?

	% firms' responses			
	< 1 year	1–2 years	3–5 years	>5 years
Singapore firms	10	7	10	73
UK firms	23	10	33	34

How many people did your firm employ last year?

	% firms' responses		
	1–10	11–50	51–99
Singapore firms	3	10	87
UK firms	3	17	80

How would you classify the ethnic origin of the owner of your firm?

	% firms' responses		
	White	Ethnic Chinese	Asian Indian
Singapore firms	0	57	43
UK firms	57	0	43

Note: Certain sub-categories in the questionnaire have been collapsed in this summary table.

15. How entrepreneurial are university alumni? A Scottish and international comparison

Jonathan Levie, Wendy Brown and Laura Galloway

INTRODUCTION

International entrepreneurship is a young field with several sub-fields, including entrepreneurial cross-border activities and 'research comparing domestic entrepreneurial behavior in multiple countries' (McDougall and Oviatt, 2000, p. 903). This chapter aims to contribute to the latter sub-field of comparative entrepreneurship, with a new study comparing new business activity among university alumni with new business activity of national adult populations.

Surveys of university students and of young people in the UK have consistently shown that self-employment or starting and running one's own business is a desirable career choice for almost half of those sampled (Harrison and Hart, 1992; Curran and Blackburn, 1989; Worcester, 2000; MORI, 1998). To what extent are such intentions translated into action? This question is important for the economic development of a country, given the alleged link between entrepreneurship and national prosperity (Reynolds et al., 2000). It is also important for universities, since it has been posited, at least in the UK, that 'too few people with innovative ideas and know-how come out of universities … to start growth businesses' (Department of Trade and Industry, 1998, p. 2.6). It is equally important for entrepreneurship educators, as it could help determine the extent to which entrepreneurship should be taught in universities across faculties, not just in business schools. In this chapter, we regard entrepreneurial activity as the creation of a new business, following the convention of the Global Entrepreneurship Monitor research consortium (Reynolds et al., 2000). In this view, becoming self-employed is an entrepreneurial act, but one who is self-employed and conducting the same business year after year is no longer behaving entrepreneurially. This distinction is important, because until the creation of the Global Entrepreneurship Monitor (GEM) research programme, it was impossible to compare entrepreneurial activity accurately across nations, and self-employment data was used as a proxy. For the same reason, it has, until recently, been impossible to compare the entrepreneurial activity of university alumni to the entrepreneurial activity of the background national population and across nations. With the development of GEM data, however, benchmark data and a proven methodology are now available.

The first GEM report was produced in 1999. At that time it comprised surveys of entrepreneurial activity in ten nations, namely the G7 nations and Denmark, Finland and Israel (Reynolds et al., 1999). In 2000 the number of nations included rose to 23 (including Scotland and Wales), and by 2001, to 29 (including Scotland and Wales). GEM measures the proportion of a population who are either in the active process of starting a business (whether for themselves or for/with their employer), or who own and manage all or part of a business that is less than 3½ years old. This proportion is called the total entrepreneurial activity (TEA) rate for a country (Reynolds et al., 2001a). GEM therefore measures entrepreneurship as new firm creation by individuals, and does not take self-employment as a proxy for entrepreneurship. GEM collects a range of demographic data, enabling analysis and profiling of entrepreneurial activity within national samples as well as providing standardized data with which to compare rates of entrepreneurship between nations.

Despite the problems of definition and comparability that existed prior to GEM, much research has been conducted on the entrepreneurial activity of business school alumni, particularly in the US (for example, Upton et al., 1995), but also in Europe (for example, Kolvereid and Moen, 1997). In the UK, work has been conducted on graduate career intentions (for example, Gibb and Scott, 1984; Scott and Twomey, 1988) and on becoming self-employed or starting a business within five years of leaving university (Rosa, 2001). However, very little is known about the entrepreneurial activities of non-business alumni as a whole. This lack of research is probably partly due to the scarcity of entrepreneurship teaching outside of business faculties (Kauffman Center, 1999; Levie, 1999). An entrepreneurship faculty may have less interest in the destinations of students who have not taken their classes, and therefore not conducted research on them.

This historical lack of interest in the entrepreneurial activity of non-business alumni is changing, however, as the potential benefits of science and technology-based entrepreneurship to society are increasingly recognized. For example, the UK government has stated that ‘scientific and technological knowledge needs to be combined with other forms of expertise, such as knowledge of markets and customer needs, to create innovative new products and services’ (DTI, 1998, p. 2.36). As a result, government in the UK is keen to promote entrepreneurship education amongst students of vocational subjects for ‘scientific knowledge to flow into entrepreneurial start-ups’ (DTI, 2000, p. 26). One initiative that aims to stimulate this is the Science Enterprise Challenge Scheme, in which UK universities competed for government money to fund entrepreneurship education for science and engineering students.

Concern about widening access to entrepreneurship education beyond business schools is not restricted to the UK. In the US, directors of entrepreneurship centres see the entrepreneurship education of non-business students as their major challenge for the twenty-first century (Kauffman Center, 1999). In Europe, several pioneering universities, for example Chalmers University in Sweden, have provided entrepreneurship education for graduate students in engineering over the last few decades, with impressive results in terms of spin-off activity (see, for example, McMullan and Long, 1987).

In summary, this study seeks to compare entrepreneurial activity of university alumni – not just business school alumni – with that of the background adult population and with other national populations. By doing so, we can test current assertions of the contribution of university alumni to the entrepreneurial activity of nations.

HYPOTHESIS GENERATION

We have established that the entrepreneurial activity of university alumni is perceived by government to be important, that, at least in the UK, it is perceived by government to be low, and that it is under-researched. In this section, hypotheses are generated which predict the rate of entrepreneurial activity of university alumni in relation to the general population. The variables considered are graduate status, age, gender, faculty, industry sector and perceived growth prospects. By testing these hypotheses, we should come closer to answering the question posed in the title of this chapter.

Graduate Status

There is conflict in the literature on whether a university education increases one's propensity for entrepreneurship. Houston (1995, p. 72) states that 'statistical comparisons show that, head for head, fewer university graduates start their own businesses than just about any other sector of the population in the UK'. On the other hand, Guzman and Santos (2001, p. 217) hypothesize that 'The more an individual is educated, the greater their possibilities of entrepreneurial success will be'. As mentioned above, our knowledge is clouded by the use of self-employment as a proxy for entrepreneurship in several studies. An example is Cowling (2000, p. 788), who used data on samples of 1000 workers in each European Union state, and found that 'in Belgium, Denmark, Germany and Italy, having a degree level education was found to increase one's probability of self-employment substantially'. However in Greece having a degree reduced the likelihood of self-employment (Cowling, 2000, p. 788). In the UK, the effect of degree-level education was minimal (Cowling, 2000, p. 787).

Reynolds et al. (1999), using a sample of 1000 adults in each of the ten original GEM nations, found a correlation of 0.78 between the proportion of adults attempting to start a business and tertiary enrolment as a percentage of the eligible age group in the national population. This does not necessarily mean that graduates are more likely to become entrepreneurs. It may just mean that nations with a high proportion of graduates are more conducive to entrepreneurship generally. Indeed, Reynolds et al. (1999, p. 27) state: 'All the research that has been done on people who start firms indicates that there is only a modest relationship with educational attainment beyond the level of completed secondary education'. Evidence from eight of the ten nations in their sample (the UK and France were excluded because such data was not available) suggested that on average 5 per cent of graduates were actively trying to start new businesses, compared with 3.8 per cent of the total cross-national sample. In 2001, data from 42 000 GEM respondents in 24 countries suggested that there is no significant difference between the entrepreneurial activity rate of graduates and non-graduates (Reynolds et al., 2001a, p. 16). In their study of entrepreneurial intent, Vesalainen and Pihkala (1999) corroborate this, as they found no correlation between intention to start a business and level of educational attainment.

In Scotland, a sample of 2000 adults conducted as part of the GEM 2000 research consortium suggested greater differences in entrepreneurial activity by educational attainment. University graduates had double the national rate (the national rate includes 15 per cent who are graduates), and women graduates also showed high rates of entrepreneurial activity. Absolute numbers of graduate entrepreneurs were very small, however. The exercise was repeated the following year using data for Scotland from both the 2000 and 2001 samples to increase sample size, and therefore, reliability. The rate of graduate entrepreneurship was only modestly higher than that of the general population, and graduate female entrepreneurship was half the rate of male graduate entrepreneurship (Galloway and Levie, 2002, p. 15). The next step in our research was to take a sufficiently large sample of graduates and employ a methodology that was comparable (and close enough in time) to the national GEM survey. The following hypothesis could then be tested:

> *Hypothesis 1: There is no significant difference in entrepreneurial activity rates between university alumni and the general population.*

Age

The 1999 and 2000 GEM global surveys found that on average, entrepreneurial activity peaks in the 25 to 34 age group, slightly earlier in the US and slightly later in Europe. In Scotland, the Scottish GEM2000 survey suggested that rates peaked at an earlier age group in Scotland than in the UK. This prompted speculation of a generation shift in entrepreneurial activity, possibly driven by the Business Birth Rate Strategy (Scottish Enterprise, 2000), implemented by Scottish Enterprise, the economic development agency for Lowland Scotland. The Business Birth Rate Strategy has prompted expansion of enterprise teaching throughout education in Scotland since 1996.

> *Hypothesis 2: Entrepreneurial activity is significantly higher among younger alumni (under the age of 35) than among older alumni.*

Gender

The 1999 and 2000 GEM global surveys both show that on average, female participation in entrepreneurial activity is about half that of males, although nations with higher entrepreneurial activity have higher female–male participation ratios (Reynolds et al., 1999, 2000). A similar ratio was found for the Scottish GEM2000 survey. However, rates of entrepreneurial activity among male and female graduates were similar in Scotland, and twice the national average. Sample sizes particularly among female graduates were small, and subject to a high degree of sampling error. The exercise was repeated using 2000 and 2001 GEM Scotland data, thus giving a larger and more reliable sample size as the chances of sampling anomalies were reduced. Within this combined sample, female graduates showed a rate of entrepreneurship half that of male graduates, that is, the distinction between male and female graduates in terms of entrepreneurial activity was similar to that for the general population (Galloway and Levie, 2002). We therefore hypothesize gender differences in entrepreneurial activity among alumni to be in line with the global and Scottish average.

> *Hypothesis 3: Entrepreneurial activity is significantly higher among male alumni than their female counterparts.*

Faculty of Origin

Zacharakis et al. (1999, p. 320) have proposed that ‘engineering and other technology graduates have the capability to generate innovations that may be the basis of high growth firms’. On the other hand, business studies alumni might be considered more skilled in business, at least immediately on graduation. Rosa (2001) recently revisited data collected in the 1980s on businesses started by graduates within five years of graduation, and his analysis suggests that neither of these suppositions hold. He found that 'graduates from creative arts are by far the most likely to have started a business, followed by agriculture, medicine and dentistry. Graduates from the languages and arts are also much more likely to start businesses than those from the social and natural sciences'(p. 18). He noted the 'low' (p. 18) proportion of engineers and technology students who started a business. In interpreting this data, it is important to recognize that this study measured the number of recent graduates who had started businesses. Were one to take a large random sample of graduates of all ages, the profile of entrepreneurial activity by faculty of origin might be different. For example, engineers might have brighter employment prospects than creative arts graduates immediately on graduation. They might also find the conditions to start their own business more propitious some time after graduation. In the absence of clear direction from the literature, we hypothesize as follows:

> *Hypothesis 4: There is no difference in the rate of entrepreneurship of Strathclyde alumni by faculty of origin.*

Industry Sector

In his study of graduates, Rosa (2001) found that few graduate businesses were to be found in the technology and manufacturing sectors, and that most graduate businesses were in the service and retail sectors. He did not compare this to the general business population. However, given that universities are most often a country's main source of highly skilled vocational professionals, one might expect that university alumni would produce a higher proportion of technology-based businesses, or at least knowledge-intensive businesses, than the population in general. Another possible driver of difference in distribution by industry sector between graduates and the population in general would be education for the professions, such as medicine, dentistry and law.

> *Hypothesis 5: The distribution by industry sector of entrepreneurial businesses started by alumni is different to that of the general population.*

Perceived Growth Prospects

Does a university education increase one's perception of what is possible in one's chosen career, through greater self-confidence, a stronger skills base or a more powerful social network? Certainly, there is considerable evidence that graduates have greater career prospects and higher ambitions in the traditional employment sense (Harmon and Walker, 2001). Galloway and

Brown (2002) found that ambitions for potential future business amongst current entrepreneurship undergraduate students were encouraging, with 45 per cent claiming to want to start a ‘large’ business. Rosa (2001) found that over 50 per cent of graduates who started a business within five years of graduation employed someone, compared with 30 per cent of all self-employed.

> *Hypothesis 6: Alumnus entrepreneurs have higher growth expectations for their new businesses than the general population.*

METHOD

Given the hypotheses generated above, the method most appropriate to testing these hypotheses would be random samples from populations of university alumni and from appropriate general (national or regional) populations. Given the low rate of new venture creation at the individual level (see below), a suitably large sample is necessary in order to test for statistically significant differences.

Use of the Global Entrepreneurship Monitor (GEM)

In this study, in order to be able to compare the entrepreneurial activity of alumni with that of the general population, GEM measurements and methods were applied to a new sample of university alumni. Specifically, alumni of the University of Strathclyde were used as the sampling frame for this study, the national reference study is the Scottish GEM2000 report (Levie and Steele, 2001), though reference is also made to the Scottish GEM2001 report (Galloway and Levie, 2002), and the international reference study is the Global GEM2000 report (Reynolds et al., 2000).

The University of Strathclyde

Alumni of the University of Strathclyde were chosen for detailed analysis because a representative, random sample of the alumni population could be drawn, because TEA measures were available on the background population (Scotland), and because Strathclyde is a general university with a range of faculties. In addition, entrepreneurship is seen as one of Strathclyde’s core values, and for this reason internal funding was available for the study.

Strathclyde is neither an ‘old’ university nor a very new university. It received its Royal Charter in 1964, but has its origins in Anderson’s Institution, founded in 1796. It is often described as a technological university, but has arts and social science, business and education faculties in addition to engineering and science. It has no medical or dental school but does have an institute of bio-medical sciences. It has a reputation for being practice-oriented, and attracts a relatively high proportion of students from disadvantaged backgrounds. Its motto, adopted by students and staff alike, is 'the place of useful learning'. Strathclyde has around 15 000 full-time students and an estimated 110 000 living alumni. It has one of the largest postgraduate populations in the UK when continuing education and distance learning programmes are included. It had little or no structured education for entrepreneurship until 1996, when the Strathclyde Entrepreneurship Initiative (SEI) was formed to develop and deliver electives in entrepreneurship to students from all faculties. In 2000, SEI was renamed the Hunter Centre for Entrepreneurship in recognition of a £5 million donation for entrepreneurship education by Tom Hunter, an entrepreneurial alumnus of Strathclyde. The Hunter Centre delivered around 1000 class places in 13 different entrepreneurship classes in the academic year 2000/2001.

Alumni of Strathclyde were used as the sampling frame and the reference sample is the representative sample of 2054 Scottish adults who were interviewed as part of a telephone omnibus survey for the GEM consortium in summer 2000. The GEM central coordinating team supplied the Scottish GEM national sample (with appropriate weights) and the global GEM sample.

Alumni are defined as individuals who have registered for a course or programme at Strathclyde and who have subsequently left. This includes graduates and those who left a course or programme before graduating. For the alumni sample, a random sample of 6000 UK residents of the total estimated Strathclyde alumnus population of 110 000 was drawn from the alumni office database. In January 2001, 2021 alumni from this sample were contacted and completed a phone questionnaire which was essentially identical to that used for the Scottish GEM survey. Telephone operatives employed were students of Strathclyde who had previous experience of telephone interviewing, and at least one of the authors was on hand to deal with queries.

Respondents aged under 18 or over 65 were excluded from analysis for this chapter, in line with the national GEM sample analysis, leaving a total of 1954 respondents. The sample appears to be broadly representative of the alumni of the university by age group, gender, and faculty (see descriptive statistics, below). Fifty respondents failed to supply sufficient information to calculate the final measure of entrepreneurial activity, leaving a final sample size of 1904. Data was entered into SPSS files and measures of entrepreneurial activity were calculated following the detailed protocols of the GEM consortium (Reynolds et al., 2001b).

Measure of Entrepreneurial Activity

The GEM consortium uses a measure of 'Total Entrepreneurial Activity' that is calculated as the sum of two measures:

1. The nascent entrepreneurship prevalence rate, that is, the proportion of working-age adults actively involved in the creation of a firm that they would own in whole or in part. Respondents were included if they agreed that they had engaged in any activity to start a firm in the last 12 months, expected to own part or all of the new firm once it became operational, and agreed that the initiative had not paid salaries or wages to anyone, including owner-managers for more than three months.
2. The new firm owner-manager prevalence rate, that is, the proportion of working age adults owning and managing new firms (less than 3½ years old). Respondents were included if they reported managing an operating business, were a sole or part owner, and the business had not paid salaries to anyone, including owners and managers prior to 1997. This would include firms up to 3½ years old by June 2000.

Individuals who were both nascent entrepreneurs and new firm owner-managers were counted only once (randomly assigned to one category or the other).

For the alumni measure, four years instead of 3½ years was used in calculating the new firm owner-manager prevalence rate. Inclusion of an extra six months (the first half of 1997) in the alumni measure of new firm owner-manager prevalence is estimated to have increased the TEA measure by 0.2 per cent (that is, from 4.8 per cent to 5.0 per cent). Since this difference is minimal, given the sampling error of plus or minus one per cent for this sample size, no compensating adjustment was made.

Perceived Growth Propensity

Respondents were asked to state how many people, not counting the owners but including subcontractors, will be working for their business five years from now. This provided a measure of perceived growth propensity.

Industry Sectors

The GEM consortium has developed a ten-category code of industry sector, based on ISIC Revision 3 codes (Reynolds et al., 2001b). Thus the Strathclyde alumni sample can be compared to the 2000 Scottish national sample and the 2000 average for all 23 nations combined. For the alumni survey, two

Table 15.1 Number and proportion of nascent and new businesses classified by industry sector for Strathclyde alumni sample, Scottish national sample, and GEM 23-nation sample

	Nascent businesses		**New businesses**	
Sample	**Number classified**	**% classified**	**Number classified**	**% classified**
Strathclyde alumni sample	36	97.3	62	100.0
Scottish national sample	42	100.0	26	100.0
GEM 23-nation sample	1339	89.4	835	91.2

authors coded each entry separately and any discrepancies were resolved by discussion with the third author, using the detailed ISIC Revision 3 code guide. Table 15.1 shows the number and proportion of nascent and new businesses classified for each sample. Approximately 10 per cent of the 23-nation sample nascent and new businesses could not be classified by industry.

Statistical Analysis

Given the extremely low rate of entrepreneurial activity in the samples, the type of variables used (principally nominal and ordinal, see above) and the reasonable expectation that projected firm size as measured by employment is not normally distributed in the populations, non-parametric statistical techniques such as Chi-square tests and the Mann-Whitney test were chosen in preference to more powerful (but potentially misleading in this case) parametric techniques such as ANOVA or t-tests. Similarly, it was not possible to use binary logistic regression to test for the effect of one variable on entrepreneurial activity while holding other variables constant, because the incidence of entrepreneurial activity was too low to achieve acceptable prediction rates during the regression procedure. Therefore each hypothesis is tested independently. Possible evidence of interaction between independent variables is however discussed.

RESULTS

Descriptive Statistics

In the alumni sample, 55 per cent were males and 44 per cent were females. Fifty-two per cent were under 35 years of age, 41 per cent aged 35–54 and

7.6 per cent aged 55 or over. Twelve per cent were arts or social science alumni, 26 per cent were business alumni (including law, hotel and catering, and information and library studies), 16 per cent were education alumni (including nursing), 20 per cent were engineering or architecture alumni, and 26 per cent were science alumni.

Eighty per cent of respondents were resident in Scotland, with almost all others (18 per cent) resident in England. Entrepreneurial activity rates of Scottish residents and non-Scottish residents in the sample were identical. Sixty-eight per cent of respondents said they were Scottish-born. Their entrepreneurial activity rates were very slightly, but not significantly, below the sample average (4.6 per cent compared with 5.0 per cent). A further 17 per cent said they were born in the 'UK' or 'Britain'. It is possible that some of these were Scottish-born. Respondents were born in a wide variety of countries. Only 2 per cent of the alumni in the sample were born outside Europe, compared with around 13 per cent of the alumni population, due to the restriction of the sample to alumni resident in the UK.

The Scottish sample was weighted before analysis to be representative of the Scottish population by age and gender.

Hypothesis Testing

The results for the five hypotheses are summarized in Table 15.2. The first hypothesis, 'there is no significant difference in entrepreneurial activity rates between university alumni and the general population' is supported by the data. The TEA score for the Scottish national sample (of which 15 per cent are graduates) was 4.03 (± 0.98, 95 per cent confidence limits). In other words, 4 per cent of the Scottish adult population were actively trying to start a new business or were running their own new business at the time of the survey. The TEA score for the Strathclyde alumni sample was 5.04 (± 0.98, 95 per cent confidence limits), suggesting that both populations have similar rates of entrepreneurial activity. The TEA score for Strathclyde alumni is very close to the TEA score for the UK national sample of 5.21 (± 1.18, 95 per cent confidence limits). These measures are not significantly different, given the sample sizes. These figures also refer only to alumni of the University of Strathclyde, which may or may not be representative of the graduate population in Scotland. We are, however, able to estimate the level of entrepreneurial activity of all Scottish graduates by combining the data from GEM Scotland 2000 and 2001 annual surveys. The TEA rate for graduates in this combined sample is 7.38 ± 2.30. There is no significant difference between entrepreneurial alumni of Strathclyde and the GEM Scotland graduate rate of 5.04 ± 0.98, as the two measures overlap when the 95 per cent confidence intervals are taken into account.

Table 15.2 Summary of hypothesis test results

Hypothesis number	TEA scores	Test statistic	p value	Result
1 Graduate status	4.03 ± 0.98 (Scotland) 5.04 ± 0.98 (Strathclyde)	confidence intervals overlap	n.a.	Supported
2 Age	4.1 (Young) 6.2 (Middle-aged) 5.6 (Older)	$\chi^2 = 4.07$	0.131	Not supported
3 Gender	6.7 (Males) 3.0 (Females)	χ^2 (corrected) = 13.076	< 0.001	Supported
4 Faculty of origin	7.3 (Engineering) 6.4 (Business) 5.4 (Arts & Social Sciences) 4.0 (Education) 2.7 (Science)	$\chi^2 = 281.414$	< 0.001	Not supported
5 Industry sector				
nascent businesses	n.a.	$\chi^2 = 7.479$	< 0.05	Supported
new businesses	n.a.	$\chi^2 = 49.726$	< 0.005	Supported
6 Growth expectations				
2+ employees	n.a.	χ^2 (corrected) = 7.921	0.005	Supported
median employees	n.a.	U = 537.5	0.209	Not supported

The second hypothesis, 'entrepreneurial activity is significantly higher among younger alumni (under the age of 35) than among older alumni', is not supported by the data. There was no significant difference in TEA scores between young (under 35 years of age), middle-aged (35–54) and older (55 and over) alumni ($\chi^2 = 4.07$, df = 2, $p = 0.131$). The TEA scores were 4.1, 6.2 and 5.6 respectively, suggesting that entrepreneurship among Strathclyde alumni is more evenly spread across different age groups than in the general population.

The third hypothesis, 'entrepreneurial activity is significantly higher among male alumni than their female counterparts', is supported by the data. In line with Scottish and international GEM data, female Strathclyde alumni are half as likely to engage in entrepreneurial activity with TEA scores of 3.0 compared with 6.7 for males (χ^2 corrected = 13.076, df = 1, $p < 0.001$). When broken down further by age group, differences emerged between males and females. The TEA scores for males were 6.3, 7.5 and 4.8 ($\chi^2 = 1.111$, df = 2,

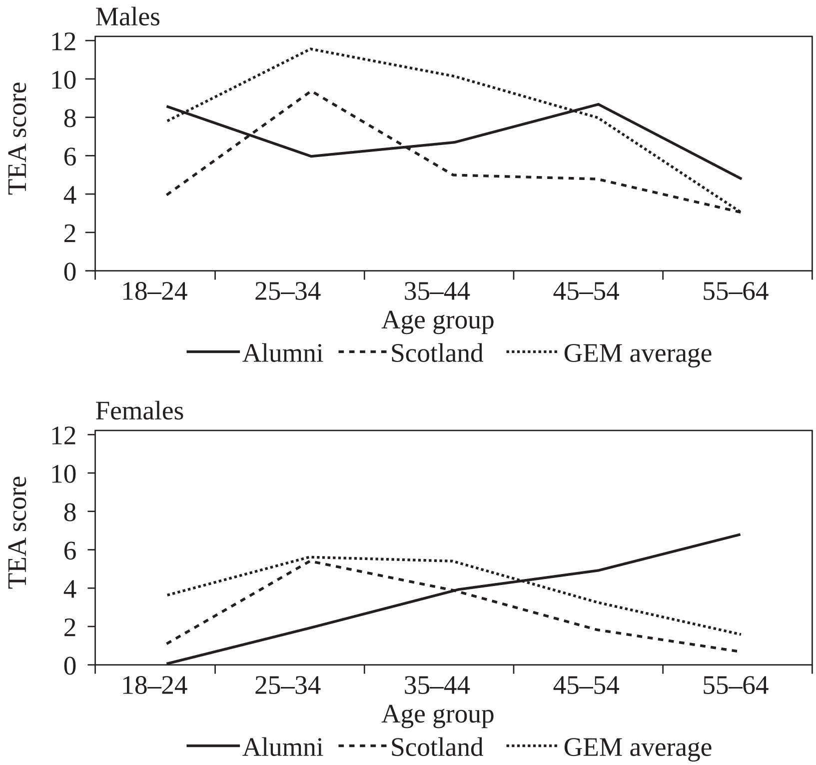

Figure 15.1 TEA scores for males and females by age group

p = 0.574) for the three age groups (under 35, 35–54 and over 54). The TEA scores for females were 1.5, 4.3 and 6.7 ($\chi^2 = 8.217$, df = 2, p = 0.016). The cell for older female entrepreneurs had an expected count of less than five. After collapsing it with the adjacent cell, the TEA scores were 1.5 per cent and 4.7 per cent (χ^2 corrected = 6.169, df = 1, p = 0.013). An examination of 95 per cent confidence intervals revealed a slight overlap between the TEA scores for younger and older females, suggesting that this difference might be an artefact of sampling error. However, the pattern does hold up even when the age groups are further subdivided (see Figure 15.1). This apparent pattern of increasing activity among older female alumni is a very unusual trend in comparison with international GEM data for national populations. Possible reasons for this finding are explored later.

The fourth hypothesis, 'there is no difference in the rate of entrepreneurship of Strathclyde alumni by faculty of origin' is not supported by the data. There were differences between the five faculties in terms of entrepreneurial activity ($\chi^2 = 12.064$, df = 4, p = 0.017). Engineering had the highest TEA score at 7.3 per cent, while science had the lowest at 2.7 per cent. Business had the second highest TEA score of 6.4 per cent, followed by arts and social science on 5.4 per cent and finally education on 4.0 per cent. A Chi-square analysis showed a significant interaction between gender and faculty within the sample (χ^2 = 281.414, df = 4, p < 0.001). Separate analyses for males and females suggested that TEA scores varied significantly across faculties for males ($\chi^2 = 13.94$, df = 4, p = 0.007) but not for females ($\chi^2 = 7.265$, df = 4, p = 0.123). The test for females was unreliable because of small 'expected' counts in two cells. Figure 15.2 shows TEA scores with 95 per cent confidence intervals for males and

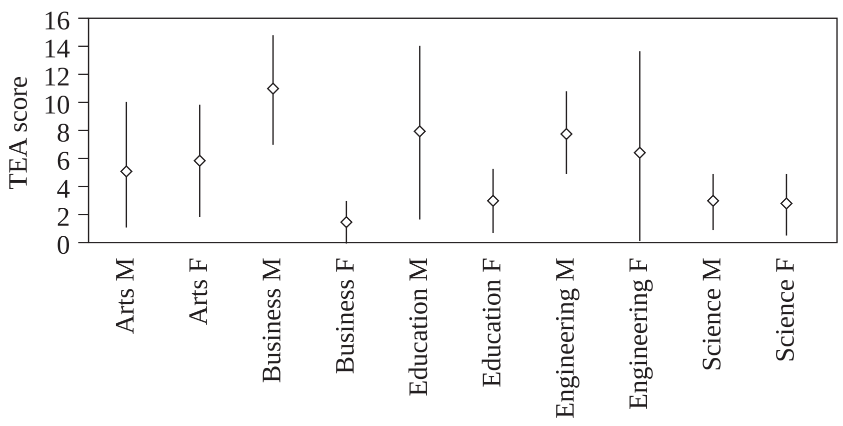

Figure 15.2 TEA scores by gender and faculty, showing 95 per cent confidence intervals

females by faculty. A significant – and large – difference can be seen between male and female business alumni. By contrast, alumni from other faculties showed no significant differences, given the sample size.

The fifth hypothesis, 'the distribution by industry sector of entrepreneurial businesses started by alumni is different to that of the general population', is supported by the data. Figure 15.3 clearly shows a greater tendency on the part of Strathclyde alumni to start businesses in business services. Most of these are advisory, professional consultancies, for example, law, engineering or IT consulting firms. These comprise 42 per cent of Strathclyde alumni nascent businesses and 61 per cent of Strathclyde alumni new businesses, compared with 24 per cent and 22 per cent for the GEM average and 17 per cent and 31 per cent for the Scottish national sample. A Chi-square test for equality of proportions confirmed that there was a statistical difference in proportions of new ($\chi^2 = 7.479$, df = 2, $p < 0.05$) and nascent ($\chi^2 = 49.726$, df = 2, $p < 0.005$) business services businesses among the three samples.

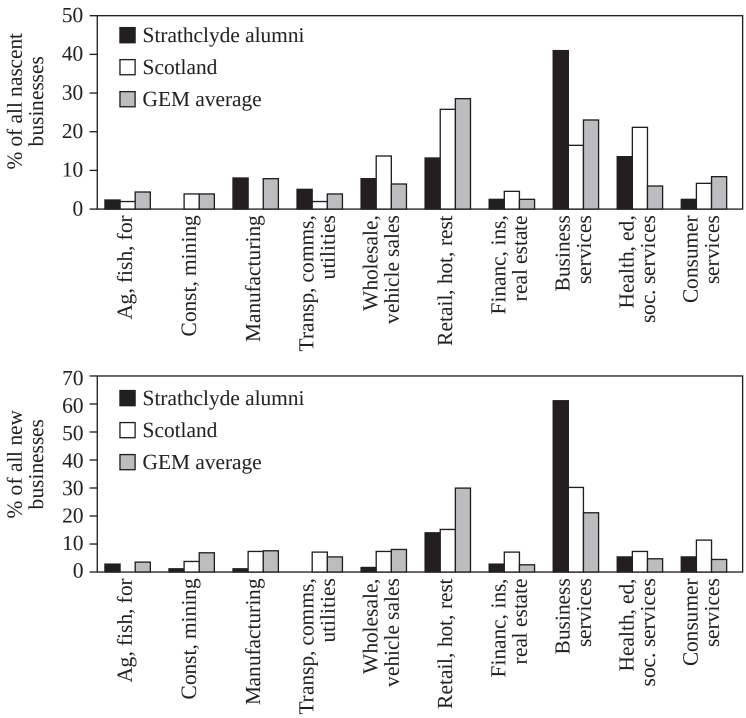

Figure 15.3 Classification of nascent businesses and new businesses by industry sector

The sixth hypothesis, 'Alumnus entrepreneurs have higher growth expectations for their new businesses than the general population', is partially supported by the data. During the launch of the GEM Project, international GEM data on employment projections was only available for nascent entrepreneurs, not new business entrepreneurs. Among Strathclyde nascent entrepreneurs, 86 per cent projected that their nascent business would employ at least two employees other than the owners in five years' time, significantly more than the 55.5 per cent of the Scottish national nascent entrepreneur sample with similar job projections ($\chi^2 = 7.921$ (corrected), df = 1, p = 0.005). However, with increases in projected employee numbers, the two samples gradually converged, as Figure 15.4 demonstrates. These projections of employment are clearly not normally distributed, and as explained in the methodology section, an appropriate test in such circumstances is the Mann-Whitney test of differences. This suggested that there was no overall difference in location of medians in the job projections of Strathclyde nascent entrepreneurs and Scottish nascent entrepreneurs (U = 537.5, p = 0.209 (2-tailed)). Figure 15.4 shows that the average trend in employee projections for all 21 sovereign nations (excluding Scotland and Wales) was extremely close to that for Scotland.

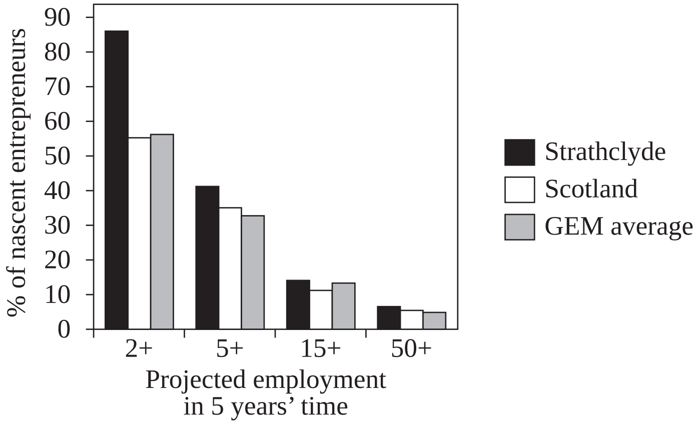

Figure 15.4 Projections by nascent entrepreneurs of employee numbers in five years

DISCUSSION

The results have supported hypotheses 1, 3 and 5, partially supported hypothesis 6, and not supported hypotheses 2 and 4. The findings presented above provide an initial insight into the special contribution that university alumni can make to the entrepreneurial activity of a nation. In the case of Strathclyde alumni, they are engaging in entrepreneurial activity at the same overall rate as the background population (as proposed by hypothesis 1), show the same gender-based differences in activity (hypothesis 3) but contribute disproportionately in certain key sectors (hypothesis 5). Strathclyde alumni are particularly over-represented in business services – largely a knowledge-intensive sector of the economy (Smith, 2000).

Hypothesis 6 was partially supported. Strathclyde alumni who are nascent entrepreneurs are more likely to expect to employ others than Scottish nascent entrepreneurs generally. However, they do not appear to be significantly more ambitious for their businesses (at least in terms of projecting numbers employed) than their peers in the population at large. This contradicts Carter's study of alumni (Carter, 1998). Carter found from her focus groups' respondents that high growth is a common aspiration amongst graduate entrepreneurs. These results do, however, corroborate those of Fletcher (1999) who found in her study of outcomes of the University of Stirling's Graduate Enterprise Programme, that results in terms of high-quality graduate start-ups were disappointing. They also match Rosa's (2001, p. 10) findings that the proportions of recently graduated self-employed with employees and all self-employed with employees, who had over five employees were similar. However, the knowledge-intensive nature of many of the businesses being formed by alumni suggests that the quality of the jobs created and the multiplier effect of these businesses may be particularly high. Further research could investigate this possibility.

The lack of support for hypothesis 2 prompted more detailed examination of the data. The finding, reported in the results section, that entrepreneurial activity increases with age among women alumni is contrary to the international GEM trends and the Scottish national sample. It may reflect very small numbers in individual cells. For example, only four women entrepreneurs aged over 54 were identified in the Strathclyde sample. Theories of 'domestic division of labour' could be used to explain this apparent trend in entrepreneurial behaviour among female alumni (Sydie, 1987). These theories suggest that women delay career decisions until family responsibilities are minimized. Domestic responsibility and perceived social roles may deter some women from starting businesses. The timing of business start-up, motivations for starting and ambitions for their businesses differ, in general, for females and males (Galloway et al., 2002). Recent empirical work has, however, shown that family responsibility and entrepreneurship for women do not necessarily detract from each other, as female entrepreneurs showed no differences in terms of domestic background from females who are not entrepreneurs (Galloway et al., 2002). More work needs to be done in this area, and replication of the sample among other alumnus populations might confirm whether the unusual pattern seen here is typical for women with tertiary-level education.

Females are under-represented in engineering and professional disciplines (engineering, law, architecture), and are over-represented in disciplines that are not traditionally conducive to entrepreneurship (education, nursing, information and library science). This is an obvious, but misleading explanation of low entrepreneurial activity among female alumni. In fact, our data show very low rates of entrepreneurial activity among female business alumni, an area where females are not under-represented. This does not appear to be an artefact of sampling error. Further work on differences between the types of businesses started by males and females in different faculties, and different motivations of male and female graduates with respect to business creation, might throw some light on this issue. Brown and Galloway (2002) found that lack of role models and lack of confidence and skills associated with entrepreneurship and business ownership were the most commonly cited barriers to entrepreneurship for females in their study of entrepreneurial intent amongst students. This is corroborated by findings from GEM Scotland (Galloway and Levie, 2002) and by Walker (2000). Brown and Galloway (2002) argue that by addressing these barrier issues entrepreneurship education can have a positive effect on ambition to entrepreneurship for females.

Hypothesis 4, which stated that there is no difference in entrepreneurial activity among alumni by faculty of origin, was not supported by the data and revealed interesting patterns in entrepreneurial activity that to the authors' knowledge have never been reported before. The small proportion of science alumni both for males and females who enter entrepreneurship is noteworthy, especially as this was not a small sample – in fact, over a quarter of the sample were science alumni. Male science alumni are significantly less entrepreneurial than their business or engineering counterparts. It could be argued that some branches of science-based industry, for example health or food-related products, may have greater barriers to entry for small business owners, for example strong competition, costly research and development, tough regulation and high marketing costs. Yet this is not true of other branches – computer software, for example – and it is known that scientific discoveries fuel commercial innovations. Perhaps careers associated with science in Scotland have not, traditionally, been perceived as having potential for individuals to create enterprises as science has long been seen as the domain of large corporate business. The UK government sees the lack of commercialization of the university science base as an area of concern (DTI, 1998), and investment has been made to increase and encourage science and technology transfer. For example, the Scottish Institute for Enterprise (SIE), an Office of Science and Technology (OST)-funded consortium of Scotland's universities, aims to increase the number of science and technology start-ups and help facilitate and increase the number of university spin-outs (SIE, 2002). In line with this aim, the Hunter Centre has actively recruited science students, and created electives that would appeal to them. Around 15 per cent of the Strathclyde alumni entrepreneurs read science, while approximately 25 per cent of students taking entrepreneurship elective modules are science students, suggesting that this recruitment drive is achieving some success (Galloway and Brown, 2002). Encouragingly also, females from the Science Faculty are well represented on entrepreneurship modules (Brown and Galloway, 2002).

CONCLUSIONS

Using data on University of Strathclyde alumni and international Global Entrepreneurship Monitor data, this study found, as hypothesized, that graduate entrepreneurship rates are not necessarily higher than background entrepreneurship rates. Also as hypothesized, entrepreneurship among graduates maintains the gender imbalance found among most background populations, but businesses started by alumni have a different industry profile to businesses started by entrepreneurs generally. We found partial support for the hypothesis that alumni entrepreneurs have higher growth expectations for their new businesses than the general population. Alumni entrepreneurs were more likely to expect to employ someone but did not expect to employ significantly higher numbers of people overall. Surprisingly, we found that for Strathclyde alumni, rates of business creation by age did not match the typical pattern found by GEM teams throughout the world for national populations. We also discovered some significant differences in new business activity among alumni by faculty of origin, and some apparent faculty–gender interaction effects.

There are various limitations to the value of our study. The Strathclyde research was conducted six months later than the Scottish and other national GEM studies, and this may have affected the business start-up figures. Business start-up data for Scotland collected by Scottish Enterprise, based on openings of new bank accounts, consistently show a small peak in the first quarter of the year (Scottish Enterprise, 2000). This might inflate the Strathclyde nascent entrepreneurship rate, but only by a small fraction. Subsequent samples could be taken at the same time as national GEM data collection to avoid this possible source of bias.

Nearly 20 per cent of respondents to the alumni survey resided outside Scotland. Thus the two samples are not totally comparable in geographic terms. However, GEM data for the UK (see, for example, Levie et al., 1999) suggests that there is no significant difference at current sampling rates between TEA scores in Scotland and the UK. Similarly, TEA score differences between Scottish residents and non-Scottish residents were not significant.

The data from the Strathclyde sample includes results from individuals who have moved on to postgraduate education at another university or who have received pre-Strathclyde degree education at another university. Some also possess higher education from a different institution in a different discipline. This may influence industry sector choice of entrepreneurial alumni, or even their entrepreneurial activity. Further investigation of the data might reveal the effects of multiple degrees on entrepreneurial activity.

This chapter reflects a growing interest in the entrepreneurial activities of non-business alumni, and it has revealed differences in entrepreneurial activity by gender and faculty, as well as different industry sector choices by alumni and the general population. Similar to Rosa (2001), our results caution against a simplistic view that graduate entrepreneurs will produce significantly larger businesses. However, our results do suggest that alumni entrepreneurs are more likely to employ others, and that they may well have a higher multiplier effect on other businesses, due to the higher incidence of specialist consultancy or professional services businesses started by entrepreneurial alumni. Future research will involve further analysis of data within the existing alumni sample. A follow-up qualitative investigation, particularly of those from the alumni sample who are nascent entrepreneurs, would also be useful. This could observe the entrepreneurial process of graduates as they start businesses, and include investigation into motivations, aspirations and intentions for business.

Increases in the availability of entrepreneurship education to university students should increase ambitions and abilities to start enterprises. One study has shown that, in itself, entrepreneurship education has been cited as the main impetus to graduate business start-up (Valera and Prieto, 2001). Indeed as stated, since 1996 students of all faculties and year groups at the University of Strathclyde have had the opportunity to study entrepreneurship during their degree programme, and by 2001, 1000 places were taken in a variety of entrepreneurship modules. Additionally, the Scottish Institute for Enterprise has expanded its remit to provide entrepreneurship education for science, engineering and technology students and increase technology transfer within five universities, to include all 13 Scottish universities.

As attitudes to entrepreneurship change in Scotland, and entrepreneurship education becomes more prevalent in educational institutions at primary, secondary and tertiary level, at the University of Strathclyde we intend to monitor the extent to which both alumni who have taken an entrepreneurship module, and alumni who have not, start businesses throughout their professional lives. Tracking of students, particularly those who take entrepreneurship modules, is also being developed in other Scottish universities. The common aim is to inform and develop university policy on type and delivery of entrepreneurship education for future students. The importance of this lies in the commitment to continue to raise awareness of and improve attitudes to entrepreneurship as a career option, and deliver training and skills development appropriate to both the requirements of future highly educated business owners, and the needs of the enterprise economy.

As a contribution to the international entrepreneurship literature in general and the comparative entrepreneurship literature in particular, this study should be seen as the start of an international programme of research that measures entrepreneurial activity among different university alumni in different nations and their contribution to the entrepreneurial activity of nations. Up to now, progress in this area has been hampered by lack of comparable international data and a focus on business school alumni. The arrival of the Global Entrepreneurship Monitor provides a method and we look forward to working with colleagues from other universities and other nations on this research.

NOTE

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REFERENCES

Brown, W. and L. Galloway (2002), 'Ambition versus action: do males and females exhibit conflicting perspectives of entrepreneurial potential and growth?', paper presented at 25th ISBA National Small Firms Policy and Research Conference: Competing Perspectives of Small Business and Entrepreneurship, Brighton.

Carter, S. (1998), 'Entrepreneurship education: alumni perceptions of the role of higher education institutions', paper presented at 8th Internationalizing Entrepreneurship Education and Training Conference, European Business School, Germany.

Cowling, M. (2000), 'Are entrepreneurs different across countries?', *Applied Economic Letters*, **7** (12), 785–90.

Curran, J. and R. Blackburn (1989), 'Young people and enterprise: a national survey, Kingston Business School', *Occasional Paper Series*, No. 11, November, Kingston Business School.

Department of Trade and Industry (DTI) (1998), *Our Competitive Future: Building the Knowledge Driven Economy*, White Paper, London: HMSO.

Department of Trade and Industry (DTI) (2000), *Excellence and Opportunity – A Science and Innovation Policy for the 21st Century*, London: HMSO.

Fletcher, M. (1999), 'Promoting entrepreneurship as a career option – the graduate enterprise programme', *Journal of European Industrial Training*, **23** (3), 127–39.

Galloway, L. and W. Brown (2002), 'Entrepreneurship education at university as a driver in the creation of high growth firms?', *Education and Training*, **44** (8/9), November.

Galloway, L., W. Brown and P. Arenius (2002), 'Gender-based differences in entrepreneurial behaviour: a comparative examination of Finland and Scotland', *International Journal of Entrepreneurship and Innovation*, **3** (2), 109–20.

Galloway, Laura and Jonathan Levie (2002), *Global Entrepreneurship Monitor Scotland 2001*, Glasgow: Hunter Centre for Entrepreneurship, University of Strathclyde.

Gibb, Allan A. and Michael Scott (1984), *Entrepreneurship and Higher Education: A Study of the Career Aspirations of those in Higher Education and Factors that Shape these with Particular Respect to Self-employment and Small Business*, 2 volumes, Durham: Durham University Business School and Shell UK.

Guzman, J. and F.J. Santos (2001), 'The booster function and the entrepreneurial quality: an application to the province of Seville', *Entrepreneurship and Regional Development*, **13**, 211–28.

Harmon, C. and I. Walker (2001), *The Returns to Education: A Review of the Evidence, Issues and Deficiencies in the Literature*, Research Brief No. 254, Department for Education and Employment: London.

Harrison, R. and I. Hart (1992), 'Encouraging enterprise in Northern Ireland: constraints and opportunities', *Irish Business and Administrative Research*, **13**, 104–16.

Houston, Terry (1995), *Great Scots in Business*, Glasgow: Scottish Enterprise.

Kauffman Center (1999), *The 1999 Conference of University Entrepreneurship Centers: Conference Proceedings*, Kansas City: Kauffman Center for Entrepreneurial Leadership.

Kolvereid, L. and Ø. Moen (1997), 'Entrepreneurship among business graduates: does a major in entrepreneurship make a difference?', *Journal of European Industrial Training*, **21** (4), 154–60.

Levie, Jonathan (1999), *Entrepreneurship Education in Higher Education in England: A Survey*, London: London Business School.

Levie, Jonathan and Laura Steele (Galloway) (2001), *Global Entrepreneurship Monitor Scotland 2000*, Glasgow: Hunter Centre for Entrepreneurship, University of Strathclyde.

Levie, Jonathan, Michael Hay and Paul Reynolds (1999), *Global Entrepreneurship Monitor UK Executive Report*, London: London Business School.

McDougall, P.P. and B.M. Oviatt (2000), 'International entrepreneurship: the intersection of two research paths', *Academy of Management Journal*, **43** (5), 902–8.

McMullan, W.E. and W.A. Long (1987), 'Entrepreneurship education in the nineties', *Journal of Business Venturing*, **2**, 261–75.

MORI (1998), 'The ambitious millennial generation', *British Public Opinion*, **21**, 10.

Reynolds, Paul, Michael Hay and S. Michael Camp (1999), *Global Entrepreneurship Monitor Executive Report*, Kansas City: Kauffman Center for Entrepreneurial Leadership.

Reynolds, Paul, Michael Hay, William D. Bygrave, S. Michael Camp and Erkko Autio (2000), *Global Entrepreneurship Monitor Executive Report*, Kansas City: Kauffman Center for Entrepreneurial Leadership.

Reynolds, Paul, S. Michael Camp, William D. Bygrave, Erkko Autio and Michael Hay (2001a), *Global Entrepreneurship Monitor Executive Report*, Kansas City: Kauffman Center for Entrepreneurial Leadership.

Reynolds, Paul, Andreas Rauch, Paloma Lopez-Garcia and Erkko Autio (2001b), *GEM Data Collection-Analysis Strategies Operations Manual*, London: London Business School.

Rosa, P. (2001), '"Hardly likely to make the Japanese tremble": the business of recently graduated university and college entrepreneurs', University of Stirling, Centre for Entrepreneurship, Working Paper.

Scott, M.G. and D.F. Twomey (1988), 'The long term supply of entrepreneurs: students career aspirations in relation to entrepreneurship', *Journal of Small Business Management*, **26** (4), 5–13.

Scottish Enterprise (2000), *Improving the Business Birth Rate: A Strategy for Scotland*, Glasgow: Scottish Enterprise.

Scottish Institute for Enterprise (SIE) (2002), *Profile*, www.sie.ac.uk

Smith, K. (2000), 'What is the "knowledge economy"? Knowledge-intensive industries and distributed knowledge bases', paper presented to DRUID Summer Conference on The Learning Economy – Firms, Regions and Nation Specific Institutions, 15–17 June.

Sydie, R.A. (1987), *Natural Women, Cultured Men: A Feminist Perspective on Sociological Theory*, Milton Keynes: Open University Press.

Upton, N.B., D.L. Sexton and C. Moore (1995), 'Have we made a difference? An examination of career activity of entrepreneurship majors since 1981', paper presented at the Babson Entrepreneurship Research Conference, Babson College, MA.

Valera, R.V. and J.E.J. Prieto (2001), 'The effect of entrepreneurship education in the universities of Cali', in William D. Bygrave, Erkko Autio, Candida G. Brush, Per Davidsson, Patricia G. Green, Paul D. Reynolds and Harry J. Sapienza (eds), *Frontiers of Entrepreneurship Research 2001*, Wellesley, MA: Babson College, p. 662.

Vesalainen, J. and T. Pihkala (1999), 'Motivation structure and entrepreneurial intentions', in Paul D. Reynolds, William D. Bygrave, Sophie Manigart, Colin M. Mason, G. Dale Meyer, Harry J. Sapienza and Kelly G. Shaver (eds), *Frontiers of Entrepreneurship Research 1999*, Wellesley, MA: Babson College, pp. 105–9.

Walker, E. (2000), 'Women in small business: a current perspective', paper presented at 23rd ISBA National Small Business Policy and Research Conference, Aberdeen.

Worcester, R.M. (2000), *Researching The Future. The Lifestyle Network*, MORI, 6th June http://www.mori.com/pubinfo/tln062k.shtml

Zacharakis, Andrew, Paul Reynolds and William D. Bygrave (1999), *Global Entrepreneurship Monitor: USA Executive Report 1999*, Wellesley, MA: Babson College.

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