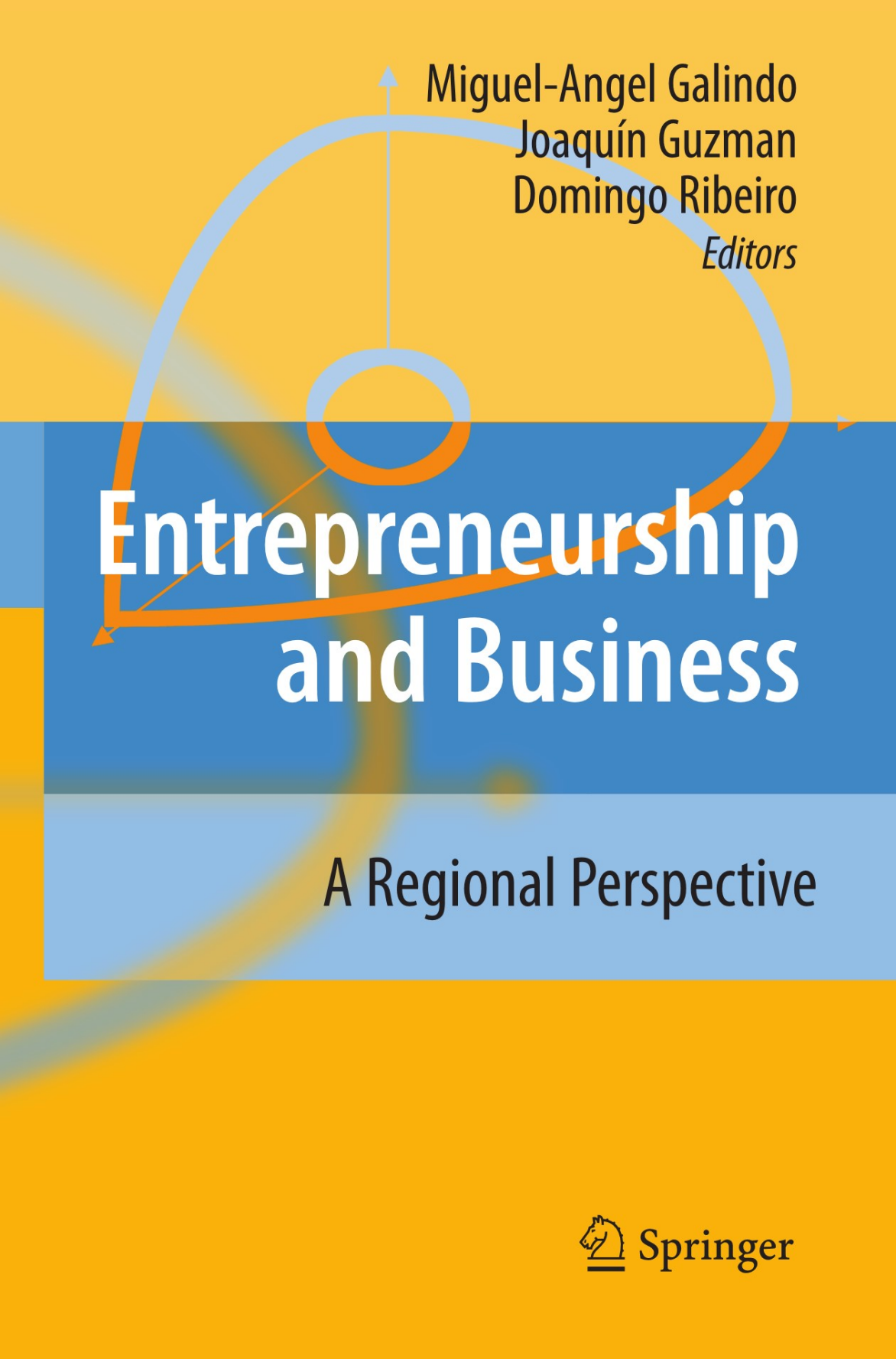




Miguel-Angel Galindo
Joaquín Guzman
Domingo Ribeiro
Editors

Entrepreneurship and Business

A Regional Perspective

 Springer

Entrepreneurship and Business

Miguel-Angel Galindo • Joaquín Guzman
Domingo Ribeiro
Editors

Entrepreneurship and Business

A Regional Perspective



Springer

Prof Dr. Miguel-Angel Galindo
University of Castilla-La Mancha
Facultad de DD.EE.EE.
Plaza de la Universidad, 1
02071 Albacete
Spain
e-mail: mglindo@teleline.es

Prof Dr. Joaquín Guzman
University of Sevilla
Departamento Economía Aplicable I.
Avda. Ramón y Cajal, 1
41018 Sevilla
Spain
e-mail: jjguzman@us.es

Prof Dr. Domingo Ribeiro
University of València
Facultat de Economia
Dep. Dir. De Empresas
AV. De los Narajos s/n
46022 Valencia
Spain
e-mail: domingo.ribeiro@uv.es

ISBN: 978-3-540-70899-5

e-ISBN: 978-3-540-70902-2

Library of Congress Control Number: 2008931703

© 2009 Springer-Verlag Berlin Heidelberg

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable for prosecution under the German Copyright Law.

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Cover design: WMXDesign GmbH, Heidelberg, Germany

Printed on acid-free paper

5 4 3 2 1 0

springer.com

Contents

List of Contributors..... xi

Introduction..... 1
*Miguel-Ángel Galindo Martín, Joaquín Guzman Cuevas
and Domingo Ribeiro Soriano*

Part I Entrepreneurship in the Regional Context..... 11

A General View on Regional Economics..... 13
Paola Savi

1 Introduction..... 13
2 The Birth and Early Development of Regional Economics..... 14
 2.1 The Location of Economic Activity..... 14
 2.2 Regional Economic Development..... 16
3 An Overview on the Last Decades: Recent Research Trends..... 21
 3.1 From Regional Development to Local Development: Local
 Production Systems..... 21
 3.2 Knowledge Spillovers and the Theory of Clusters..... 24
 3.3 Krugman and the New Economic Geography..... 26
 3.4 The Milieu Innovateur..... 27
4 Conclusions..... 28
References..... 29

Issues in Regional Economics: The Economic Thought of Some
Italian Authors of the Past.....33
Cristina Nardi Spiller and Stefano Zamberlan

1 Foreword..... 33
2 Antonio Genovesi’s Contribution: Recommendations
 for the Promotion of Local Development..... 35
3 Fanno’s Analysis of Potential Comparative Advantage..... 40

4	Regional Disequilibria and the Role of the State in Giuseppe Di Nardi's Thought.....	43
5	Final Remarks.....	47
	Acknowledgements.....	48
	References.....	48

Entrepreneurial Structure From a Regional Perspective.....51

Joaquín Guzmán and F. Javier Santos

1	Introduction.....	51
2	Analysis Levels of Entrepreneurship.....	53
3	Entrepreneurship: Entrepreneurial Function and Entrepreneurial Structure.....	54
4	Qualitative Characteristics of an Entrepreneurial Structure.....	55
	4.1 Entrepreneurial Density.....	56
	4.2 The Average Size of Firms.....	56
	4.3 Patrimonial Vulnerability.....	57
	4.4 Dominant Productive Sectors.....	58
	4.5 Functional Dependence.....	60
	4.6 Productive Dependence.....	61
5	The Entrepreneur: Functions and Quality-Based Entrepreneurial Orientation.....	62
	5.1 Main Functions Fulfilled by Entrepreneurs.....	62
	5.2 Quality-Based Entrepreneurial Orientation.....	64
6	Entrepreneurship and Regional Economic Models.....	66
	6.1 Endogenous Development Model and Entrepreneurial Structure.....	66
	6.2 A Regional Entrepreneurial Model.....	68
7	Conclusions.....	70
	References.....	71

Entrepreneurship and Growth: The Need to Combine Micro and Macro Perspectives.....75

Villy Søgaaard

1	Introduction.....	75
2	Entrepreneurship: A Two-Dimensional Concept.....	76
3	Entrepreneurship in Context.....	77
4	Research and Research Lacunae.....	79
5	The Innovative Dimension: A Necessary Déjà Vu.....	83
6	Conclusions.....	89
	References.....	91

**Social Capital and Entrepreneurship in a Regional Context:
The Case of Spanish Regions..... 101**

Mohsen Bahmani-Oskooee, Miguel-Ángel Galindo and M. Teresa Méndez

1 Introduction.....	101
2 Social Capital Definition.....	102
3 Entrepreneurship and Social Capital.....	104
4 Empirical Analysis.....	106
5 Conclusion.....	108
References.....	109

**The Relationship Between Entrepreneurship and Economic
Growth: A Review of Recent Research Achievements..... 113**

Dominiak Piotr and Marek Rekowski

1 Introduction.....	113
2 Entrepreneurship and Economic Growth: Evidence from Empirical Studies.....	114
3 Alternative Approaches to Entrepreneurship's Contents and Measure.....	122
4 Intermediate Linkages and Entrepreneurial Tissue.....	125
References.....	134

Networking and Entrepreneurship in Place..... 137

Bengt Johannisson

1 Organizations Vanish, Places Remain.....	137
2 The Organizing Context as an Arena for Embedded Networking Processes	140
3 Network Analysis as Puzzle-Solving.....	145
4 Reconceptualising the Organizing Context as a Socioeconomic Construct.....	147
5 Some Implications for Research, Practice and Policy.....	154
References.....	158

The Quest for a New Development Policy..... 163

Antonio Vázquez-Barquero

1 Introduction.....	163
2 Social and Territorial Effects of Globalization.....	164
3 The New Development Policy.....	168
3.1 Fostering Firm's Development and Cluster.....	168
3.2 Diffusion of Innovation and Knowledge.....	170

3.3 Building up Infrastructures for Local Development.....	171
3.4 New Governance for Local Development.....	172
4 Diversity of Interpretation.....	174
4.1 The Populist Approach.....	174
4.2 The Human Development Approach.....	176
4.3 The Evolutionary Approach.....	177
5 Endogenous Development an Approach for Action.....	179
References.....	181

Part II Entrepreneurial Perspective of the Business 187

Clusters and Business Innovation..... 187

*Álvaro Cuervo-García, Ángeles Montoro-Sánchez
and Ana María Romero-Martínez*

1 Introduction.....	187
2 Delimiting Clusters: Definition and Characteristics.....	189
2.1 A Brief Trip on Cluster Research.....	189
2.2 What is a Cluster?.....	190
2.3 Cluster Key Factors.....	193
3 Clusters, Productivity and Business Innovation.....	196
3.1 Clusters and the Increase in Productivity.....	196
3.2 Clusters and the Increase in Innovation.....	198
4 Final Discussion.....	201
Acknowledgement.....	205
References.....	205

Entrepreneurial Behaviour in Transition Environments.....211

David Smallbone and Friederike Welter

1 Introduction.....	211
2 A Conceptual Framework to Analyse Entrepreneurial Behaviour.....	212
3 Examples of Entrepreneurial Behaviour.....	214
3.1 Ignoring and Circumventing the Legal Framework: Applying Evasion Strategies.....	214
3.2 Coping with a Deficient Institutional Framework: Financing a Business.....	217
3.3 The Use of Personal Networks and Networking.....	220
4 Conclusions.....	225
References.....	227

**Successful Rural Hosted Accommodation in Western Australia:
Gender Matters..... 229**

Paull Weber and Jack Carlsen

1	Introduction.....	229
2	The Research Conducted.....	230
3	Rural Farming Families.....	231
4	Career Stage and Lifestyle.....	233
5	Gender.....	233
6	Success in Hosted Accommodation.....	235
7	Examining the Gender Differences in the Rural Businesses.....	236
8	Conclusions and Recommendations.....	240
	References.....	243

**Universidad Social Capital and the Competitiveness
of Entrepreneurs: A Review of the Literature and Proposals.....247**

*Mariel Fornoni, Francisco Mas-Verdú, Domingo Ribeiro Soriano
and Salvador Roig Dobón*

1	Introduction.....	247
2	What is Social Capital?.....	248
3	Social Capital, can it Really be Considered a Type of Capital?.....	254
4	Measurement of Social Capital.....	256
5	Social Capital and Competitiveness for Entrepreneurs.....	259
	5.1 Entrepreneurs and Competitiveness.....	259
6	Conclusions.....	265
	References.....	265

**Entrepreneur and Organization: Symbiotic Change
and Transition.....269**

Emeric Solymossy

1	Introduction.....	269
2	Background.....	270
3	Analyzing Growing (Evolving) Organizations.....	270
4	Life-Cycle and Stage Theories.....	271
5	Discussion of Stages and Transitions.....	274
6	The Critical Transition Point.....	274
7	Introduction of Professional Managers.....	276
8	Challenges Faced by Growing Organizations.....	277
9	Process of Achieving Structure.....	279

10 Helping the Entrepreneur's Evolution.....	280
11 Conclusion.....	282
Acknowledgement.....	288
References.....	288
Female Entrepreneurship	291
<i>Nerys Fuller-Love</i>	
1 Introduction.....	291
2 Female Entrepreneurs.....	292
3 Definitions.....	296
4 Characteristics.....	296
5 Economic Context.....	297
6 Finance.....	297
7 Growth.....	299
8 Management Skills.....	301
9 Technology and Innovation.....	302
10 Women in Rural Areas.....	303
11 Networks and Social Capital.....	303
12 Government Policy.....	305
13 Conclusion.....	306
References.....	307

List of Contributors

Paola Savi

Department of Economics
University of Verona
Polo “G. Zanotto”Viale dell’Università, 4
37129 Verona
e-mail: paola.savi@univr.it

Cristina Nardi Spiller

Department of Economics
University of Verona
Polo “G. Zanotto”Viale dell’Università, 4
37129 Verona
e-mail: cristina.spiller@univr.it

Stefano Zamberlan

Department of Economics
University of Verona
Polo “G. Zanotto”Viale dell’Università, 4
37129 Verona
e-mail: stefano.zamberlan@univr.it

Joaquín Guzman

Departament of Applied Economics
University of Sevilla
Avda. Ramón y Cajal, 1
41018 Sevilla
Spain
e-mail: jjguzman@us.es

Francisco J. Santos

Departament of Applied Economics
University of Sevilla
Avda. Ramón y Cajal, 1
41018 Sevilla, Spain
e-mail: fjsantos@us.es

Villy Sogaard

University of Southern Denmark
Niels Bohrs Vej 9 – 10
DK-6700 Esbjerg
Denmark
e-mail: vs@sam.sdu.dk

Mohsen Bahmani-Oskooee, and Wilmeth

Department of Economics
PO Box 413
Bolton Hall, Room 868
University of Wisconsin-Milwaukee
Milwaukee, WI 53201,
USA
e-mail: bahmani@uwm.edu

Miguel-Angel Galindo

Universidad de Castilla-La Mancha
Facultad de DD.EE.EE.
Plaza de la Universidad, 1
02071 Albacete
Spain
e-mail: mglindo@teleline.es

María Teresa Méndez Picazo

Universidad Complutense de Madrid
Ciudad Universitaria
28040 Madrid
Spain
e-mail: Teresa@ucm.es

Piotr Dominiak

Gdansk University of Technology
Faculty of Management and Economics
Narutowicza 11/12
80-952 Gdansk
Poland
e-mail: Piotr.Dominiak@zie.pg.gda.pl

Marek Rekowski

Poznan University of Economics
al. Niepodleglosci 10
60 –967 Poznan,
Poland
e-mail: marek.rekowski@ae.poznan.pl

Bengt Johannison

Växjö University
SE-351 95 Växjö
Sweden
e-mail: bentg.johannisson@vxu.se

Antonio Vazquez Barquero

Universidad Autónoma Madrid
Departamento de Estructura Económica y Economía del Desarrollo
Facultad de Ciencias Economicas y Empresariales
Módulo E-IV/Despacho 205
Campus de Cantoblanco
C/ Fco. Tomás y Valiente 5
28049 Madrid
e-mail: vazquez-barquero@uam.es

Alvaro Cuervo

Angeles Montoro and
Ana María Romero
Universidad Complutense de Madrid
Campus de somosaguas
28223 Pozuelr de Alercoñ.Madrid
e-mail: acvervo@ccee.ucm.es

David Smallbone

Room KH-60 Kenry House
Kingston University
Kingston Hill
Kingston Upon Thames
Surrey
KT2 7LB
e-mail: D.Smallbone@kingston.ac.uk

Friederike Welter

Jönköping International Business School
RUREG
P.O.B. 1026
SE-551 11 JÖNKÖPING,
Sweden

Paul Weber and Jack Carlsen

GPO Box U1987
Perth, Western Australia 6845
Australia
e-mail: P.Weber@curtin.edu.au
e-mail: Jack.Carlsen@cbs.curtin.edu.au

Mariel Fornoni

University of Mar del Plata, Argentina
Funes 3250
Mar del Plata
Buenos Aires
B7602AYJ
Argentina
e-mail: mariel.fornoni@mdp.edu.ar

Francisco Mas-Verdú

Polytechnic University of Valencia
Camino de Vera, s/n
46022 Valencia
Spain
email: fmas@upvnet.upv.es

Domingo Ribeiro

Salvador Roig
University of Valencia
Facultat de Economia
Dep. Dir. De Empresas
Av. De los Narajos s/n
46022 Valencia
Spain
e-mail: domingo.ribeiro@uv.es
e-mail: salvador.roig@uv.es

Emeric Solymossy

Western Illinois University
Department of Management
Quad Cities Campus
3561 60th Street
Moline, IL 61265
USA
e-mail: E-Solymossy@wiu.edu

Nerys Fuller-Love

Aberystwyth University
Old College
King Street
Aberystwyth
Ceredigion
SY23 2AX
United Kingdom
email: nnf@aber.ac.uk

Introduction

Miguel-Ángel Galindo Martín, Joaquín Guzman Cuevas and Domingo Ribeiro Soriano

University of Castilla-La Mancha, Albacete, Spain

University of Sevilla, Sevilla, Spain

University of Valencia, Valencia, Spain

The economic growth and the progress of the nations have been two issues that have worried to the economists during centuries. The classical economics books have developed different theories and considered several factors that could explain those processes. Unfortunately, a single answer has not been obtained and nowadays economists try also to achieve a response to the mechanism of economic growth.

Economic growth has been considered as one of the most relevant economic policy. As it is well known, the validity of an economic policy is measured in terms of economic growth rate. It is supposed that those countries that obtain a higher economic growth rate are designing more efficient economic policies than those that show lower rates. The main corollary to this hypothesis is that the developing countries must follow and copy the economic policies designed by the developed countries.

If we accept this assumption it is then necessary to analyse and determine those factors that are growth-enhancing. Since 1980s several economic growth models have been developed in the specialised literature. And this process has been mainly favoured by two circumstances: First, the use of new econometrician techniques and the improvement of statistical data information of quantitative and qualitative variables. Second, the appearance of the endogenous growth models that have facilitated the introduction of new variables in the production function.

Due to these circumstances different factors have been considered in this kind of analysis. Not only quantitative variables have added (physical capital, technology...) but also qualitative (social capital, governance...)

trying to offer better information about economic growth process and to help to policy maker to design the economic policy measures. However, this effort is not enough. Labor markets are not efficient as it was supposed by the orthodox literature and the economic growth rates obtained by some countries are not sufficient to reduce the unemployment rates or will not be adequate to resolve future problems in that market.

Probably both facts have stimulated the inclusion of new factors in the economic growth analysis. One possibility is to consider the entrepreneurs activity due to the fact that the best way to increase the employment rate and the production is through the entrepreneurs' activity. And "entrepreneurship" is a relevant activity to be considered in this field. It implies, among other things, that someone discovers the possibility to obtain some profits and then decide to invest. However, it is not a new variable. In the economic literature is possible to find several references to this concept.

The main difficulty in the entrepreneurship analysis is its delimitation. There is not a general definition of this concept. Wennekers and Thurik (1999) following the ideas exposed by Herbert and Link (1989), Bull and Willard (1993) and Lumpkin and Dess (1996), define it as the manifested capacity and desire of the individuals to create new business opportunities, that is, new products, new organization forms, new production methods,... and to introduce their ideas in the markets confronting uncertainty and other obstacles, adopting decisions on localization and on the resources use. These decisions could be adopted individually or in networks included or not in institutions.

Following this definition several characteristics can be considered:

1. The definition takes into account the economic agents behavior. For this reason, entrepreneurship doesn't mean an occupation but an activity that considers the different circumstances and aspects of a person.
2. Entrepreneurships must consider uncertainty and several obstacles that are inherent in the business creation process.
3. They must have information or idea about the efficient production processes, as well as new organizational forms. It doesn't mean that they have had to attend special academic courses about management. They must have the idea and they can ask information or advice to experts to create the firm.
4. The entrepreneurs can be also encountered in big firms. In this case, they are named "intrapreneurs" or "corporate preneurs".

And Following to Weber (1978, 1988) we can add, at least, three main characteristics (Swedberg 2000):

- (a) Charisma. Weber considered that the entrepreneurship is a kind of person who gets that other people wants to follow him. However, Weber also recognises that this charisma is not so relevant in the capitalistic society as in the early stages of mankind. In a capitalistic society the main factor for entrepreneurship is to take advantage market opportunities.
- (b) Religious. In his celebrated *The Protestant Ethic and the Spirit of Capitalism* Weber considered that certain form of religion that he called “ascetic Protestantism”, favoured the development a positive attitude towards moneymaking which facilitated the change in attitude towards the entrepreneur.
- (c) Bureaucracy. In some writings, Weber also counterposed entrepreneur to bureaucrat. From his point of view, a society more rationalized bureaucracy becomes more relevant, both within enterprises and within the state. And the entrepreneur not only is the person who can keep the bureaucrat in his place, but also has better knowledge of the firm.

In the history of economic thought different approaches on the entrepreneurship concept have been considered. The most relevants have been summarised in Table 1.

Table 1. Main characteristics of the entrepreneur according to main authors.

The entrepreneur...	Main authors
Assume risks	Cantillon, Cole, Hawley, Knight, Mill, Mises, San Bernardino de Siena, Shackle and Thtinen
Contributes financial resources	Böhm-Bawerk, Mises, Pigou and Smith
Innovator	Bentham, Schmoller, Schumpeter, Shackle, Sombart, Thtinen and Weber
Takes decisions	Cantillon, Cole, Keynes, Marshall, Menger, Mises, Schultz, A. Walker, F. Walker and Wieser
Sector's leader	Marshall, Jenofonte, Saint-Simon, Say, Schumpeter, Sombart, A. Walker, F. Walker, Weber and Wieser
Manages or supervises	Marshall, Menger, Mill and Say
Organizes and coordinates the economic resources	Clark, Coase, Davenport, San Bernardino de Siena, Say, Schumpeter, Sombart, Weber and Wieser
Firm owner	Hawley, Pigou, Quesnay and Wieser
Uses the production factors	Keynes, A. Walker, F. Walker and Wieser
Trades	Bentham
Allocates resources	Cantillon and Schultz

Sources: Herbert and Link (1982), Nijkamp (2000) and Galindo and Mendez (2008)

One relevant aspect to be considered in the analysis of entrepreneurship is to consider its behavior in a regional context. And this the main goal of the book. To achieve it 15 articles have been included in it, grouped in two parts. The first one analyses the entrepreneurship in a regional context and the second one analyses the entrepreneurial perspective of the context.

The first part of the book includes nine articles, considering two broad perspectives of the entrepreneurship: historical and studying the relationship between different factors, policies... and entrepreneurship.

The historical point view is analysed in the first two chapters. In chapter “A General View on Regional Economics”, a general view of the main stages of the regional economics is developed. Paola Savi highlights some main approaches on regional economies since its birth, mid 1950s, stating that W. Isard is one of the original contributors, and the foundation of the Regional Science Association. The first regional economists were mainly interested in studies of localization of economic activity and in organise the studies coherently. From this moment, the paper traces the main ideas of the more recent theory of industrial clusters develops by C. Porter, the new economic geography proposed by Krugman and the concepts of the Milieu innovator by the research group “Gremi”.

Chapter “Issues in Regional Economics: The Economic Thought of Some Italian Authors of the Past” considers the contribution of Italian scholars. Cristina Nardi Spiller and Stefano Zamberlan state that several Italian authors of the eighteenth century wrote several works analysing the economic conditions of their regions trying to formulate measures to improve the economy and to stimulate economic and social reforms. In this sense, specific attention has been paid to backward areas, specially the Italian Mezzogiorno, the dual gap and the role of human resources in a regional dimension, among others.

The contrast between different levels of entrepreneurship – micro, meso and macro – is also taken into account in the chapter “Entrepreneurial Structure from a Regional Perspective” developed by Joaquin Guzmán and Francisco Javier Santos. In particular, the profile of entrepreneurial structure, based on an endogenous development approach (macro perspective), is analysed as a big factor which may help to explain its impact on economic growth. Different qualitative characteristics, which shape the entrepreneurial tissue in the regional context, are analysed such as entrepreneurial density, the average size of firms, patrimonial vulnerability, dominant productive sectors, functional dependence and productive dependence.

The following three chapters consider the relationship between entrepreneurship and economic growth, considering different aspects. Starting from the approach of the Lisbon Agenda, which is related to the key role of

entrepreneurship in economic competitiveness, in chapter “Entrepreneurship and Growth: The Need to Combine Micro and Macro Perspectives” Villy Sogaard develops a theoretical and critical analysis of the economic process between the allocation of entrepreneurial resources (as well as the policies that support it) and the macroeconomic results – in terms of growth, employment, etc. Throughout this process there may be possible interactions among different variables of entrepreneurship at the microeconomic level – start up and several kinds of innovation. In this sense, it is necessary to delve into this micro and macro analysis in order to obtain a clear view of entrepreneurship in the regional context.

The relationship between social capital and entrepreneurship and their effects on economic growth is analysed in chapter “Social Capital and Entrepreneurship in a Regional Context: The Case of Spanish Regions” by Mohsen Bahmani-Oskooee, Miguel-Ángel Galindo and María Teresa Mendez. In this paper, different social capital definitions are considered and the relationship between this capital and entrepreneurship is analysed from a theoretical point of view. An empirical analysis is developed for the Spanish regions case, concluding that entrepreneurship is a relevant factor enhancing economic growth and social capital would also show a positive effect on economic growth in an indirect way.

The relationship between entrepreneurship and economic growth is also addressed in chapter “The Relationship Between Entrepreneurship and Economic Growth: A Review of Recent Research Achievements”. However, unlike in chapter “Entrepreneurship and Growth: The Need to Combine Micro and Macro Perspectives”, Piotr Dominiak and Marek Rekowski make a review of empirical research achievement from the last 10 years. Throughout this review different entrepreneurship measures are analysed (such as self employment rate, TEA index, start up rate and so on) in relation to different economic growth measures (i.e., GDP per capita, employment, productivity growth, etc.) Due to the lack of unanimous empirical findings, the authors provide an explanatory model of the impact of entrepreneurship on economic growth, including culture and institutional conditions among other factors.

In chapter “Networking and Entrepreneurship in Place”, Bengt Johansson focuses on the concepts of networking and entrepreneurship from a territorial perspective. In this sense, entrepreneurship is presented not as a conventional-individual process, but as a spatial networked phenomenon, where different characteristics of the so-called “organising context” are considered as an arena for embedded networking. This has great consequences on business activity, institutions and local culture. Based on a conceptual and methodological approach, the chapter also addresses some

practical implications for local/regional business initiatives (not only individual but collective as well) and public policy.

The first group of articles included in this book concludes with chapter “The Quest for a New Development Policy” considering the main aspects of the new development policy that emerges from the globalization process. Antonio Vazquez states that the new development policy has an analytical and theoretical logic. An endogenous development model has been elaborated and the policies designed following this model consider that local initiatives obey a territorial approach of development, considering the capital accumulation and the growth processes in a territory. And institutions and culture play an important role to support the necessary productive transformations and the economic and social progress.

The second group of chapters analyse the business perspective of the entrepreneurial activity. In chapter “Clusters and Business Innovation”, Alvaro Cuervo, Angeles Montoro and Ana María Romero analyze the relationship between clusters and business innovation. Up until the 1990s, clusters and the geographical location of the firm were not given the attention they deserved until their strategic and economic importance were fully recognized. Since that time, however, much has been written on clusters and their impact on business and on the economy in general, with studies on the role of cluster in both developed and less economically developed countries. In the latter case, clusters are proposed as a tool for increasing the competitiveness of those countries and their firms. For these authors, clusters serve three main purposes: they increase competitiveness among small and medium-sized firms; they galvanize industries that have become outdated (institutions such as the OECD, the World Bank, UNCTAD and the European Commission advocate the use of clusters as a tool to aid economic development); and they help to increase the level of innovation in firms, mainly accelerating the process via the diffusion of knowledge amongst firms. Consequently, these authors propose that the emergence of clusters is the result of an attempt to improve relations between firms and their productivity.

In chapter “Entrepreneurial Behaviour in Transition Environments”, David Smallbone and Friederike Welter analyze the business world of those countries undergoing economic transition, such as those that previously belonged to the Union of Soviet Socialist Republics. Their analysis clearly shows that, for a business to function correctly in a non-ideal geographical location, it is necessary to work with very short-term goals; in other words, to make the best of a difficult situation by whatever means available

Paul Weber and Jack Carlsen in chapter “Successful Rural Hosted Accommodation in Western Australia: Gender Matters”, include the results of a study carried out on rural tourism in Western Australia, where the large majority of lodgings of this kind are farms that have turned their hand to this type of business. A marked drop in earnings for farmers in this region has meant that they have had to look for alternative sources of income. One option was to emigrate, while others decided to enter the hotel industry. Therein lay a means of increasing income without being obliged to abandon property that had, in many cases, been in the family for generations. The most surprising fact brought to light by this study was how farmers and their families have adapted to their new roles. Even in modern society, there still appear to be preferences and stereotypes when it comes to sharing out tasks, as regards gender. The study shows that this line of business is neither lucrative nor satisfactory for workers, particularly in the case of women. Despite the apparent incongruous nature of this adaptation to the hotel industry, it appears to be a practice that continues to grow.

In chapter “Social Capital and the Competitiveness of Entrepreneurs: A Review of the Literature and Proposals”, Mariel Fornoni, Francisco Mas-Verdu, Domingo Ribeiro and Salvador Roig study the links between social capital and business competitiveness. In recent years, the concept of social capital has received a good deal of attention from contributors to business literature. The theory of social capital is based on the idea that social networks constitute an essential source for establishing a profitable business. These networks allow business leaders to expand their field of activity and become more efficient. Consequently, social capital can lead to professional success by increasing the power and status of the leader. The key question to ask is: how can social capital become a useful tool for the business leader? The answer lies in demonstrating how their own networks can provide the value and competitiveness that leaders look for in their business projects. It can be concluded that the possession of social capital is important for generating advantages that allow the leader to give shape to ideas and projects.

In chapter “Entrepreneur and Organization: Symbiotic Change and Transition”, Emeric Solymossy analyzes the figure of the leader in the firm and his or her effect on its progress and evolution. There currently exists a sizeable amount of scientific analysis that looks at how and why businesses grow. However, very few of these studies focus on the reasons why a firm must first evolve in order to become a large multi-national firm from what was originally an extremely limited business. Firms emerge day after day and undergo changes, though not all of them are capable

of reaching a successful conclusion. Analysts suggest that more than half of firms diminish in size or fold in the first year of activity. Therefore, the large majority of firms remain as small businesses. This inability to grow is normally attributed to a lack of capacity to respond satisfactorily to critical situations on the part of the management. The main reason for this often lies in a lack of experience. Solymosy states that the growth of a business usually presents new challenges both for employees and employer. Growth requires evolution and change from the perspective both of the responsibility of management and in the very structure of the firm.

In the final chapter “Female Entrepreneurship”, Nerys Fuller-Love explains the increased interest in the role of women in the creation of new firms in recent years. She stresses the recognition of the positive impact of women on new firm creation, and consequently, on the economy. This author states that women are confronted with a larger number of obstacles than men when attempting to start up a business, particularly when attempting to gather together the necessary resources, markets and venture capital. The main reason for encountering these difficulties is that many women come out with qualifications in business studies but few choose to study science and technology. In many cases, this hinders their attempts to find capital for their business idea, as, especially venture capital, is mostly aimed at research into new technology. Statistically, Fuller-Love claims that it is a proven fact that women tend to start up businesses devoted to the health and beauty sector. She also claims that most men begin with the self-belief that they have the necessary qualities and knowledge to manage their business, while many women do not. It is important for women to lose their fear of failure and for them to believe in their capabilities, as they represent an increasingly important part of the business world.

References

- Bull I, Willard GE (1993) Towards a theory of entrepreneurship. *Journal of Business Venturing*, 8: 183–195.
- Galindo MA, Mendez MT (2008) Emprendedores y objetivos de política económica. *Información Comercial Española* n. 841, March–April: 29–40.
- Herbert RF, Link AN (1982) *The entrepreneur* praeger, New York.
- Herbert RF, Link AN (1989) In search of meaning of entrepreneurship. *Small Business Economics* 1: 39–49.
- Lumpkin GT, Dess GG (1996) Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 21: 135–172.

- Nijkamp P (2000) Entrepreneurship in a modern network economy. Research Memorandum 2000-42. Vrije Universiteit, Amsterdam.
- Swedberg R (2000) The social science view of entrepreneurship. In: Swedberg R (ed) Entrepreneurship. The Social Science View. Oxford University Press, Oxford.
- Weber M (1978) Economy and Society. University of California Press, Berkeley.
- Weber M (1988) The Protestant Ethics and the Spirit of Capitalism. Peter Smith, Publisher Inc. Gloucester, MA.
- Wennekers ARM, Thurik AR (1999) Linking entrepreneurship and economic growth. Small Business Economics 13: 27–55.

Part I Entrepreneurship in the Regional Context

A General View on Regional Economics

Paola Savi

Faculty of Economics, University of Verona, Verona, Italy

1 Introduction

Regional economics is a relatively new discipline: its birth, in fact, goes back to the mid 1950s. Two dates are fundamental: 1954, the year when the Regional Science Association was founded; and 1956, the year when W. Isard's volume *Location and Space-Economy* was published in America.

The need to include space in economic reasoning had already been recognised by a number of economists, such as von Thünen (1826), Weber (1909) and Lösch (1940), and by geographers such as Christaller (1933), who, with his Central place theory offered a fundamental contribution to the analysis of the structure of urban systems, by way of an abstract, deductive method derived from general economics. However, only in the 1950s and 1960s, thanks to the works and commitment of Isard (1956) and other scholars, did spatial economics begin to construct its own theoretical and methodological background, defining conceptual categories, fields of analysis and operating tools.

During that first phase, the discipline acquired a new autonomous scientific dimension. Subsequently, regional economics followed an evolutionary path from the rapid development of the 1970s and 1980s to the proliferation of themes and methodological approaches seen in the current phase. This depends in part on the fact that the boundaries between disciplines are increasingly less well-defined and rigid: as a result, there has been an increase in 'fertilisations' and the transfer of concepts and methodologies, not only between related disciplines (such as economic geography or territorial planning as regards regional economics) but also between different scientific fields (the social and physical sciences).

This paper aims to give a brief overview of the principal stages along this evolutionary path, highlighting some significant theoretical contributions and the lines of thought which have contributed most to the success of regional economics.

2 The Birth and Early Development of Regional Economics

2.1 The Location of Economic Activity

During the 1950s and 1960s, regional economics laid its theoretical foundations, taking inspiration from a number of economic theories, which were critically revised and adapted to a regional scale. The first regional economists focused their attention on the studies of location of economic activity conducted from the nineteenth and the first half of the twentieth centuries. They strived to organise the studies coherently, departing from their underlying economic principles and methodological similarities.

The models of production location, after establishing a set of preliminary axioms (i.e., assumptions simplifying the complexity of reality) through a process of logical-deductive reasoning, arrived at general theorems capable of explaining the spatial organisation of economic activity. Since distance, expressed economically by the cost of transport, was the only variable in the simplified economic landscape, the aim of location was to minimise total transport costs.

Before the birth of regional economics, the abstractness of these conceptual frameworks was attenuated partially by the subsequent elaborations of the theoreticians of spatial analysis themselves. According to Weber, for example, certain factors – which he identified in the cost of labour and economies of agglomeration – could deviate firms from the optimum location calculated on the basis of transport costs. The importance of this contribution is only too obvious: economies of agglomeration were destined to become one of the founding principles of the various disciplines which, from different angles, were to analyse the spatial dimension of economic phenomena. Urban and regional economics, economic geography and territorial economics would all use this conceptual category to explain the geographical concentration of economic activity and its spatio-temporal implications, such as uneven regional development or local development.

In relation to the analysis of urban networks, on the other hand, Lösch (1940) postulated a framework of centres and market areas which was

more realistic than Christaller's rigid architecture, by changing the size and orientation of the hexagons. This spatial organisation of urban centres made it possible not only to minimise transport costs, but also to make the highest number of purchases locally, thereby satisfying the principle of least effort (Lloyd and Dicken 1972). Even the distribution of urban functions between different centres followed a less abstract hierarchical scheme than Christaller's: towns of the same size could have a different endowment of services – as is the case in the real world.

Isard, the founder of regional economics, elaborated on the work of the spatial economists in an attempt to formulate a general theory of location. Taking a neoclassical approach, location became part of the regional economic problem, namely the pursuit of equilibrium conditions in the economic system. Isard nevertheless toned down the most abstract assumptions and the least realistic conclusions of the previous theories; he also attempted to link the problem of location with that of regional development, highlighting the underlying spatial relationships. There was ample treatment of economies of agglomeration in Isard's thought: he perceived the ultimate objective of a general theory of location to be the formulation of principles capable of explaining the spatial complexities which influence the location of economic activities. Isard believed that the partial theories of his predecessors – which contemplated only special cases – failed to achieve this objective.

Isard highlighted a number of weaknesses in the theories of location, such as the paradox in Lösch's model: the assumption of a uniform distribution of the population buying goods and services conflicted with the geographical concentration in central places. He tried to resolve this contradiction by modifying Lösch's abstract landscape: the decrease in the size of the hexagons as the distance between the bigger centres diminished made it possible to take into account the concentration of the population and of economic functions.

The best known and most innovative part of Isard's theory, however, was the method employed in his substitution analysis, thanks to which the problem of optimum location became more analytical and more complex than in Weber's approach, which nevertheless constituted Isard's starting point. In his various formulations, Isard progressively abandoned some of the more abstract axioms of Weber's conceptual framework, such as the assumption of a homogeneous space; conversely certain spatial irregularities, such as the presence of points of accessibility determined by the confluence of one or more communication routes, became capable of attracting the location of firms.

Weber's model nevertheless remained a fundamental reference point for subsequent studies on production location. Other authors, as well as Isard,

reformulated the German spatial economist's model, introducing innovations to make it more applicable to real situations. Smith (1966), for example, with his space-cost curve method introduced the concept of satisfactory location, to be found in an area rather than in a point of minimum transport cost. Not only Weber but locational theory in general, during the 1970s and the 1980s, developed a massive series of theoretical and empirical studies which extended the field of analysis from the location of production activity to residential mobility and household location, public facility location and spatial equilibrium analysis (Nijkamp 1986). At the same time, there was a progress in mathematical formalisation and modelling, thanks to developments in technologies for the analysis and representation of territorial phenomena.

2.2 Regional Economic Development

In the 1950s and 1960s the rise of Fordism and the intensity of the processes of urbanisation highlighted marked territorial disparities in the processes of economic development, both on a regional and a global scale. In this perspective, regional economists concentrated their analysis mainly on the problems of uneven economic growth and spatial disparities, the dynamics of territorial systems, the diffusion of economic phenomena at a regional scale and regional policy. Between the second half of the 1950s and the first half of the 1960s, reflections on the territorial determinants of development led to the formation of a vast theoretical corpus on regional economic development. At the same time, regional economics took on an operational dimension and constituted the theoretical basis for territorial planning and regional policies which developed rapidly in many advanced countries, in the wave of popularity of Keynesian principles following the Second World War.

Within the field of regional development we can identify main areas of research, theories and models, including growth poles, cumulative causation, core-periphery, the export base and the import region model.

Perroux (1950, 1955), who departed from Schumpeter's reflections on the revolutionary nature of innovation and the non-linearity of economic development, assumed from the start that space is not homogeneous. Economic growth does not take place simultaneously and in the same way everywhere, but is concentrated in certain points in space, known as growth poles, which can be identified by the presence of dominant industries. The polarising effect on the territory of the driving industry depends on the extent to which these industries boosts the demand for goods, stimulates export flows towards domestic and international markets, creates jobs and

promotes growth in related industrial and service activities. Although the theory of growth poles made implicit reference to spatial dynamics, some scholars observed that, in reality, the input–output relations which Perroux used to describe development processes lacked a well-defined spatial dimension (Capello 2004). It was Boudeville (1968) who ‘added’ a spatial dimension to Perroux’s argument, explaining the importance of geographical concentration and of the urban contest, which allowed the driving industry to generate a growth pole.

It is evident that the theory of growth poles shifted analysis from a microeconomic perspective, which considered the locational behaviour of single firms, to a macroeconomic dimension which examined the spatial effects of location. Hence attention focused on the dynamics of growth and the configuration of urban and regional spaces; in this context, spatial external economies of agglomeration were fundamental in explaining the geographical concentration of economic activities. The growth pole itself generates spatial disparities, above all in territorial contexts in which no firms are capable of generating driving forces.

Growth pole theory influenced territorial planning in a number of ways after the Second World War, and inspired a model of exogenous intervention for lagging areas, both in economically advanced countries (the Italian Mezzogiorno, France and Spain) and developing countries. We should observe that many of the experiments failed as a result of the determinism implicit in the model itself.

The cumulative causation models had numerous points of contact with Perroux’s growth pole. According to Myrdal (1957), the economic benefits generated by external economies of agglomeration, which in turn produced further advantages, led in the short term to the geographical concentration of growth and a higher level of regional income. The origin of the process of cumulative causation, according to Myrdal, lay in the special conditions which determined an initial advantage for economic development in central regions. None of the models explained why concentration and hence growth originated in a particular place; however they were useful for explaining growth subsequent to, rather than the reasons for, the initial location. Myrdal himself suggested that the process was the result of a ‘historical accident’.

Myrdal also attempted to explain how other regions – the peripheral regions – came to be involved in the growth processes of the core regions. In classical equilibrium theory, growth phenomena are transmitted from core to peripheral regions by spread effects resulting in the levelling out of territorial disparities. In reality, observed from different angles, spread effects could produce negative consequences for the peripheral regions. Myrdal was rather sceptical about the ability of spread effects to compensate for backwash effects through the workings of market forces alone.

Indeed, he argued that regional policies were necessary to adjust growth differentials.

Despite being linked conceptually to the previous theories, core-periphery models such as Friedmann's (1966), offered a more accurate analysis of the relationship between economic development and territorial organisation, with a special focus on urban hierarchies and the role of urban centres in the processes of economic development. Space was no longer organised in terms of poles or points of growth, but rather into a well-organised system of interconnected urban centres (connected by flows of population, goods, services, capital and technology). According to Friedmann, it was not countries in generic terms that constituted the driving force of the economy: the core areas were the cities within advanced countries, in contrast to lagging peripheries, which were subordinate to the core despite being subject to functional transformation over time. So the concept of urban network returned, although no longer following Christaller's logic. The result was nevertheless a geographical model of uneven development.

Reynaud (1984), on the basis of how relationships were established between people, goods, capital and information in the core and the periphery, and how they developed over time, identified various types of core and periphery. These included states of rapid growth in the core, which produced a state of economic dominance and hypertrophy in the core, in contrast to a state of subordination, decline or simply economic exploitation in the periphery. When the core reached a given stage of development, diseconomies emerged; the advantages arising from the concentration and centralisation of economic activities were counterbalanced by congestion and the high cost of building space. The consequence could be centrifugal flows, of capital rather than men, towards distant peripheries, where low technology, labour intensive industries were transferred.

The lagging area which benefited in this way became a dominated periphery, while the core which transferred a part of its capital to the dominated periphery grew in economic power as it retained the headquarters and the nerve-centre of industry. Thus the core became a hypercore, or a higher level centre, which, under improved conditions, coordinated, stimulated and directed, optimising resources *in situ* rather than attracting them to the core. Investment in the periphery, in other words, was not a sign of weakness but rather an index of renewed vitality and expansionism. Reynaud's model nevertheless did not exclude the possibility that endogenous growth processes, which were independent of the dynamics of the centre, could originate in the periphery.

A further group of theories developed between the 1950s and 1960s were the export base theories, which perceived growth in demand and per capita income as the determinants of regional economic development.

Income became the synthetic indicator with which to represent and describe disparities in regional development and growth processes. Leaving their differences aside, these theories were grounded on Keynesian macroeconomics, and in particular macroeconomic models of income and domestic growth, the multiplier and input–output analysis. From a macroeconomic dimension, these models and their analytical tools were adapted and applied at a regional scale.

Among the most important theoretical models was the export base theory, the simplest model of regional income from which many empirical analyses on regional multipliers derived. From the original intuitions of Hoyt who, departing from the distinction between employment in the basic and non-basic sectors, devised a model explaining the spatial and functional growth of the city which also included the concept of urban multiplier, subsequent formulations restored export base theory to the Keynesian framework and adapted to regional analysis.

In its simplest version, developed from North's (1955) stadial model, export base theory assumed that the development of a region was guided by export demand, thanks to the multiplier effects of export growth on regional income. Later formulations, on the other hand, recognised that several causes, and not only an external change in exports, could produce variations in regional income: public investments or expenditure, private investments, changes in the marginal propensity to consume or the marginal tax rate (Richardson 1969). Further developments, rather than simply considering two regions, placed the theory in an interregional context and assumed that exports from one region – and hence the multiplier effect on income – depended on income produced in other regions (Capello 2004).

In the 1970s and 1980s, dynamic versions of the model were formulated (Richardson 1978) which resolved the problem of the relationship between employment in the service sector and total employment, held constant in the early models: in reality employment in the service sector could grow independently of the trend in the basic sector.

The advantage of the economic base models was that they shed light on certain crucial factors of regional growth, such as trade and specialisation in production. Although the recognised importance of specialisation in production linked up with the theories of local development which became popular in the 1980s, economic base models departed from an essentially exogenous standpoint. The growth of the regions was exclusively the result of external factors: regional specialisations were formed due to export growth. This observation leads us to reflect that in economic base models, there was no territorial dimension to development processes: the region was presented as a space internally homogeneous, in contrast to the external space or other regions whose diversity was not defined. In other words,

there was no analysis of the specificities, of the endogenous resources, of the productive relations, of the historical processes of the regions which was so typically found in literature on local development.

Another limit was the failure of economic base models to consider the disaggregation of sectors, which was significant given that for each specialisation sector, the multiplier effects of exports on income varied. This was due to the fact that the demand for intermediate goods generated by the production of export goods was directed towards internal producers, or, conversely, led to higher imports in other sectors. Furthermore, the models assumed that there were no obstacles to the expansion of supply: in the face of an increase in external demand, the system was endowed with the internal resources required to increase productive capacity, thanks to idle factors of production, and productive capacity which was unutilised or could be expanded at zero cost (Capello 2004).

The use of the export base model for long-term forecasts was limited by its implicit assumption of the stability of the multipliers. In fact, in the long-term, along the growth path there are likely to be processes of diversification in production in the local economy which produce import substitution effects and which are incompatible with the assumption of a constant multiplier. In the long-term, changes in the specialisation of an area are likely, in favour of more modern, advanced sectors with higher added value, since the region will probably acquire the ability to transfer resources from declining to emerging sectors. In other words, structural change, one of the most interesting aspects of dynamic analysis, is excluded (Capello 2004).

From the point of view of empirical analysis, various methods for distinguishing between base and non-base sectors have been proposed, including the location quotient (Hildebrand and Mace 1950) and the minimum requirements approach (Ullman and Dacey 1960). The possibility of estimating the base sector, in turn, served as a starting point for the regional multiplier: Archibald (1967) directly estimated the propensity to purchase goods locally, while Allen (1969) considered the inverse of leakages on the GDP of a region as a proxy of the regional multiplier.

Input–output analysis has been used to estimate the impact of a rise in demand in a given sector on production in a single sector of the local economy and on total production. In this sense, export base models can be considered input–output models with only two sectors.

The Harrod–Domar model (Harrod 1939; Domar 1957), took a different approach: also adapted to a regional scale, this model highlighted how regional dynamics could be sustained even by capital or productive investments from other regions, which would boost local production and income. It differed from export base models in so far as it assumed a longterm rationale.

3 An Overview on the Last Decades: Recent Research Trends

3.1 From Regional Development to Local Development: Local Production Systems

Since the mid 1970s, many advanced economies have registered economic and demographic growth in regions which only a few decades earlier had been considered peripheral in relation to the core urban-industrial agglomerations. At the same time, these agglomerations have undergone processes of demographic decline and deindustrialisation, followed by a shift towards extreme forms of tertiarisation. This is exemplified by the case of Italy: growth has been seen in the North-east and Centre, thanks to a network of small and medium-sized firms specialising in the production of traditional manufactured goods which are organised into local production systems.

The emergence of territorial configurations differing from the forms dominant during the Golden Age of Fordism, and which were not contemplated by traditional theories, prompted many scholars to revise the theories and models used up to that time to interpret and describe the dynamics of urban and regional spaces. The process of revision was gradual: initially the phenomenon of peripheral growth was interpreted as a consequence of transformations at the core, and of the restructuring of large enterprises. It was thought that development spread due to the decentralisation of certain functions from the core to the periphery of the economic and territorial systems of industrialised countries. Models inspired by product life cycle theory are an example: these include Berry's filtering down theory, van den Berg's (1982) urban lifecycle model, as well as studies on the decentralisation of production and subcontracting.

The principal limit of these analyses was that they overestimated the role of exogenous factors in territorial dynamics, relegating to a secondary role the function played by specific, irreproducible components in each territory, later defined 'endogenous development factors' in literature on local development. In subsequent theoretical developments, recognition of the plurality of territorial configurations resulted in the abandoning of single and dualistic models (such as core-periphery, large advanced enterprise versus small backward enterprise models).

It was above all the work of Piore and Sabel (1984) which contributed to the recognition of the autonomous role played by small enterprises in the processes of territorial development. The two authors argued that the success of small enterprises signalled a transition from mass to flexible production, perceived not only as two different systems for the technical

and economic organisation of production, but also as two opposing systems of regulation. Piore and Sabel's analysis provided a point of convergence for a series of later studies conducted in a number of advanced countries, and stimulated a great deal of further research, contributing to the creation of a broad theoretical corpus, which today constitutes the literature on local development.

The guiding assumption was that economic and territorial development was the result of interaction between global phenomena operating at the level of the world economic, social and technological system (showing a tendency towards standardisation), and the specific development potential of individual sites. Today this is the dominant theoretical approach: the interaction of a single or a distinctive phenomenon with more general phenomena produces individual economic regions, and constitutes the dynamic framework within which development opportunities for peripheral regions are placed or have been placed. Development no longer follows a single path, but rather a plurality of sectoral and organisational paths. The concept of space as an abstract or geometrical entity loses its significance, and the concept of territory, perceived as a set of non-transferable (socio-economic, infrastructural and economic) resources, become central. The territory offers a favourable environment for enterprises and agents, who mobilise the resources to foster competitiveness and territorial development. Even territorial planning changes direction, as a result of the involvement of local resources and the leading role played by local actors.

The analyses and theorizations of Italian local development in the 1980s and 1990s, in particular of industrial districts and local production systems in general, belong to this school of thought. The principal theorizations on industrial districts are by Becattini (Becattini 1987, 1989, 1998, 2000a,b; Becattini et al., 1991, 2001) and his school. In Italy, this theme is very popular within the context of territorial studies, since industrial clusters are typical of the economic and territorial structure of this country. Industrial districts are a characteristic of the widespread urbanisation and industrialisation in the north-east and centre, although they were also to be found in regions with concentrated territorial structures such as the north-west. In many cases, the districts originated from ancient proto-industrial or craft specialisations in the relevant areas. Industrial districts specialised mainly in sectors in which Italy gained a competitive advantage after the Second World War: fashion (clothing, footwear, leather goods, and jewellery), household goods (furniture, tiles, taps), and mechanics.

Becattini rediscovered Marshall's model of industrial district, and in particular the concept of external economies, highlighting how the functioning of the district depends on social relations between producers which

form outside production plants but within the territory itself. Specialisation and the division of labour within a limited territorial area create a number of advantages in terms of lower costs and higher efficiency of production thanks to the creation of external economies of localization: the development of complementary activities in the manufacturing sector (the specialised machinery sector); the accumulation, replication and circulation of knowledge within the districts (Marshall's 'industrial atmosphere'); the production and spread of innovation generated by a mix of cooperation and competition; and the development of service activities, a labour market and specialised transport infrastructures. By shifting the focus from the enterprise as an isolated subject, to the environment in which it operates and which determines its living conditions, Becattini introduced a new unit of analysis intermediate the single economic agent and the market, namely the local production system.

Studies on industrial districts focused mainly on the analysis of relations between firms (Albertini and Pilotti 1996; Varaldo 1997), the causes leading to the formation of districts, the actors (private or institutional) operating within the districts, the criteria and methodology used in spatial identification, and the possibility of identifying districts in regions outside the original area (the Italian Mezzogiorno, for example) (Viesti 2000). Developments in the analysis of districts led to their description as an example of a more general category, the autopoietic or self-organized local system (Corò and Rullani 1998). The functioning of districts was grounded on the dynamic relationship between strong integration and internal cohesion, based on productive, social, and institutional relationships on the one hand, and external openness, for example export flows on the other. The distinctive feature of this form of territorial organisation lay in the fact that it originated and had always functioned without an organiser and decision-maker, rather like an orchestra without a conductor.

The more recent studies are prompted above all by the transformations observed in industrial districts during the process of globalisation, the most evident and problematic aspects of which includes delocalisation of production to countries with a low cost of labour, and increasing competition from emerging countries (Cesaroni 2003; Mistri 2006; Visconti 2002). Districts are no longer Becattini's compact territorial system, but rather 'exploded system' with its nerve-centre in the original area and production offshoots located in more or less distant places. In this context, numerous themes lent themselves to empirical and theoretical analysis: possible destructuring and the future of the districts, the replicability of the model in other territorial contexts, the role of local institutions, industrial policy and the evolution of regulations governing districts.

3.2 Knowledge Spillovers and the Theory of Clusters

In the 1980s there was renewed interest in the part of Marshall's theory relating to dynamic efficiency and the role of knowledge spillovers within districts. This followed recognition of the importance of scientific and technological knowledge in the processes of economic and territorial development on the one hand, and of the role of geographical proximity in facilitating contacts between economic agents, who constitute the basis for exchanges of knowledge inputs which are crucial to innovation, on the other hand.

The relationship between knowledge, innovation and geographical concentration was picked up by the theory of clusters. Industrial clusters, which present numerous analogies with industrial districts, can be defined as a territorial concentration of competitive and highly interdependent companies. Their distinctive features are their value chains or segments of value chains, their production networks and the relationships between companies. Also belonging to the cluster are all the local institutions and organisations which interact with local companies and define the socio-economic context, such as universities, research centres, local cultural peculiarities, and the relationships of trust between companies.

The phenomenon of clusters has been treated extensively in economic and territorial literature; however the most important theoretical contribution remains M. Porter's formalisation of the concept within his more general theory of competitive advantage. In *The Competitive Advantage of Nations* (1990), Porter formulated a theory based on domestic, regional and local competitiveness, in which clusters play a fundamental role. The competitive advantage depends essentially on the ability of enterprises to outsource functions to achieve a different type of competitive advantage for each activity or function, in a relationship with the territory exemplified by the diamond concept. Porter's argument departed from the assumption that a country's competitiveness does not depend, as had been thought for a long time, on a set of natural resources or particular political-economic conditions (wage levels, exchange rates, protectionist regimes, etc.) but rather on the dynamism of companies within it; in turn this dynamism depends on specific and non-replicable factors found in the territory which operate in synergy,¹ upon which firms exert a progressively increasing influence through their relations with other firms.

In the light of the operating mechanisms described in his first work, Porter explored the concept of cluster and its relationship with the problem

¹ As it is known, these are: the conditions of the factors of production, the conditions of demand, the presence of related and support sectors, the strategies and structure of the firms.

of economic development in further depth in his subsequent writings. Clusters were defined as a geographical concentration of closely interconnected enterprises and institutions which compete and cooperate among themselves in a given sector. The analogy with industrial districts is evident, of which, in many ways, clusters represented an evolution. It is important to emphasise however that the institutional element was an integral part of clusters.

The observations on the geographical scale of clusters were also new with respect to industrial districts, and in many ways, they explained the evolution of industrial districts as they appear today. Clusters may arise on different geographical scales: what is important is not so much the spatial proximity of the local actors as the relations between economic and institutional actors, which can subsist whatever the physical distance between them. In fact clusters should capture the complementarities, the spillovers of technologies, competences, information, marketing, and consumer needs which interest both enterprises and industries transversally, in other words all those aspects which are crucial for the definition of collective actions and the support of intervention policies at a local level.

Another significant contribution to cluster theory came from Maskell (2001), who attempted to explain the origins and growth of clusters by focusing principally on the process of knowledge creation. Considering that globalisation has rendered ubiquitous many factors of production which are decisive for competitiveness, Maskell highlighted how the most dynamic enterprises have strived to develop their ability to learn and create knowledge more rapidly than their competitors, rather than resorting to delocalisation. This explains the observation that the creation of knowledge, and consequently economic growth, are not insensitive to the spatial organisation of economic activity: on the contrary they are strongly conditioned by it, as demonstrated by the tendency towards concentration of many innovative activities.

Maskell's analysis shed light on the mechanisms that foster knowledge creation, which are thought to derive from a trade-off between the two dimensions along which the cluster is organised: the horizontal dimension, organised according to the principle of variation, and the vertical dimension, organised according to the principle of specialisation. Knowledge creation can only be assured simultaneously along both dimensions by a constant increase in the number of firms. This is a crucial aspect for the future development of clusters: only if the firms in the cluster exploit the benefits of learning along both dimensions is an effective improvement in economic performance possible. An increase in the number of firms, which may

come about as a result of relocation, the birth of new entrepreneurial activities or spin-offs, therefore becomes essential for the economic growth of the cluster.

Other authors have discussed the contribution of clusters to economic growth. The theory of endogenous growth (Grossman and Helpman 1991; Romer 1994) focused on the premise that accumulated knowledge leads to productive applications and hence economic growth. This perspective rekindled the interest of researchers in relation to the role of geography in knowledge creation, spillovers and the development of production. Grossman and Helpman argued that spillovers generate a cumulative process of knowledge creation, and since this process develops at a geographical level, it should explain the existence of variations in the rate of economic growth between regions.

3.3 Krugman and the New Economic Geography

Krugman (1991a,b) and the New Economic Geography offered a fundamental contribution to the explanation of the spatial concentration of economic activities. By focusing on two crucial aspects of spatial economics – the existence of agglomeration economies and the factors which determine the location of firms – the phenomenon of geographical concentration was interpreted in terms of the interaction between centrifugal and centripetal forces, by means of a model centred on increasing returns, transport costs and migratory movements.

Increasing returns have an impact on the tendency to concentrate activities in space, since they guarantee the profitability of a possible relocation and an increase in profitability following expansion of the local market; transport costs push firms towards locations close to large market outlets; migratory movements influence both the employment pool of an area and the size of the local market, which in turn influence potential profit opportunities, thereby encouraging agglomeration. Spatial agglomeration of productive activities creates cumulative conditions for growth in production, in a process which can be stopped only by the intervention of conflicting external factors.

Krugman argued that the cumulative mechanism lies in the increasing size of the market: the entry of new firms in a new local market attracts new workers and new population, enlarging the local market, expanding potential profit and compensating for the reduction in profits suffered by local firms as a result of increased local competition; in turn, the increased size of the local market fosters the entry of new firms, in a virtuous circle of agglomeration and development.

3.4 The Milieu Innovateur

Within the context of studies on the relationship between technical innovation and the territory, the Groupe de Recherche Européen sur le Milieu Innovateur (Gremi) identified a number of conceptual categories – the milieu innovateur and the réseau d'innovation – which contribute further to our understanding of the role of endogenous factors in local development (Maillat et al., 1993).

In contrast with the functional vision of technological progress, the milieu innovateur approach assigned a leading role to the territory and its different combinations of resources in the creation and development of innovative firms: innovation does not pre-exist in the relevant milieu, it is the milieu which serves as an incubator for innovation (Maillat et al., 1993). The process of innovation should therefore be interpreted as a learning process based on specific resources which are integrated into each production process. The territorial context in which the firms operate is no longer a limitation but rather a strategic variable with the process of innovation itself.

The research conducted systematically since the mid 1980s by Gremi on numerous European regions has led to the identification of certain territorial components capable of explaining the genesis and development of processes of innovation. Aydalot (Aydalot 1986; Aydalot and Keeble 1988) distinguished between three different categories of environmental factors, on the basis of the type of innovation produced.

In its less complex forms, innovation is produced by internal knowledge within firms, and therefore integrated into production. In this case, territorial factors consist of the local industrial fabric: the density of firms, interindustrial relations, specialisation in production, the knowledge and know-how within the local system, the degree of external dependence, and the importance of research and development at a local level. These characteristics are generally found in old industrial regions which still function in a complex way with a fabric of small and medium sized firms specialising in innovative sectors (such as mechanics) and strong collective organisation.

Innovation may also be generated by specialised units within firms which are detached from the production process. In this case, the territorial factors are above all attraction factors: transport and communication infrastructures, apparatus for training human capital, and the environmental quality of life. Finally, the third type of innovation is produced by knowledge generated outside the firm, in research laboratories and universities, and subsequently integrated into the firm itself. This is the case in which synergy factors become important: research infrastructures, exchanges between firms, the presence of venture capital, and incubators of innovation.

The role played by certain local actors is of considerable importance: collectively, they organise and promote the development of the economic milieu in which they operate. These include large firms, collective institutions, financial institutions, spontaneous associations, trade unions and trade associations. Their actions are crucial, at a local level, for spreading knowledge of new technology, fostering a local spirit of innovation and for making capital available to fund processes of innovation.

According to Gremi, the milieu can be defined as a series of relations which form in a geographical area in which a production system, technical knowledge and a set of actors interact. Entrepreneurial spirit, organisational practices, ways of using new technology, approaches to the market and the external environment, the accumulation of knowledge enabling control of production processes and the creation of new technologies all form an integral part of the milieu: they are the specific and uniform features which contribute to its identification. The milieu thus takes on an immaterial meaning, in the sense that it becomes a process of continuous perception and learning.

4 Conclusions

From the first analysis of Isard, regional economics has followed a long and complex path, with more or less intense periods of growth inside it, and culminated in the current phase, which is characterized from a plurality of theoretical and methodological contributions. At the same time the application and diffusion of the new information technologies has enlarged the power of analysis and representation of the discipline itself, allowing new developments especially in modelling. The current age, marked from strong economic, social and technological changes that draw also on the territory, opens further perspectives for empiric and theoretical analysis, not only for regional economics but also for territorial sciences in general.

A first investigation ambit regards the relationship between globalization and territorial changes, with special reference to the role of the territorial dimension in the production processes. The geographical fragmentation of production and the diffusion of the ICT create, in fact, a 'virtual' territory, organizing on the model of 'network' instead of spatial closeness. As a result, location indifference seems to weaken the function of the territorial factors on which regional economies of small and medium-sized enterprises built and reproduced over time their competitive advantage. On the theoretical level this obliges to reconsider the power of explanation and the coherence of some traditional conceptual

categories of regional science, first of all that of local production systems and of industrial districts.

Another path of research, only partially explored by the social sciences, leads to the analysis of the relationships between regional economics and other scientific ambits in order to identify common conceptual categories. The theory of the complex systems, derived from physics and biology, has been introduced in the social sciences to explain the dynamics of systems – of economic, space or social nature – even though its concepts and operating capacity remain largely to be explored. Among the properties of the complex systems, self-organization seems to be the most interesting for the spatial ambit not only to explain the dynamics of territorial systems – at different geographical scales from regional to local – but also to implement policies and planning.

References

- Albertini S, Pilotti L (1996) *Reti di reti* (in Italian). Cedam, Padova
- Allen KJ (1969) The regional multiplier: some problems in estimation. In: Cullingworth JB, Orr SC (eds) *Regional and urban studies: a social science approach*. Allen & Unwin, London, pp. 80–96
- Archibald G (1967) Regional multiplier effects in the United Kingdom. *Oxford Economic Papers* 19: 22–45
- Aydalot Ph (1986) *Milieux Innovateurs en Europe* (in French). Gremi, Paris
- Aydalot Ph, Keeble D (1988) *High technology industry and innovative environments: the european experience*. Routledge-Gremi, London
- Becattini G (1987) *Mercato e forze locali. Il distretto industriale* (in Italian). Il Mulino, Bologna
- Becattini G (1989) *Modelli locali di sviluppo* (in Italian). Il Mulino, Bologna
- Becattini G (1998) *Distretti industriali e made in Italy*. Bollati Boringhieri, Torino
- Becattini G (2000a) *Dal distretto industriale allo sviluppo locale* (in Italian). Bollati Boringhieri, Torino
- Becattini G (2000b) *Il distretto industriale* (in Italian). Rosenberg & Sellier, Torino
- Becattini G, Pyke F, Sengenberger W (1991) *Distretti industriali e cooperazione tra imprese in Italia* (in Italian). Banca Toscana, Firenze
- Becattini G, Bellandi M, Dei Ottati G (2001) *Il caleidoscopio dello sviluppo locale* (in Italian). Rosenberg & Sellier, Torino
- Boudeville JR (1968) *L'Espace et le pôle de croissance* (in French). Presses Universitaires de France, Paris
- Capello R (2004) *Economia regionale* (in Italian). Il Mulino, Bologna
- Cesaroni F (2003) *Distretti industriali e distretti tecnologici* (in Italian). Angeli, Milano

- Christaller W (1933) *Die Zentralen Orte in Suddeutschland* (in Deuch). Wissenschaftliche Buchgesellschaft, Darmstadt
- Corò G, Rullani E (1998) *Percorsi locali di internazionalizzazione: competenze e auto-organizzazione nei distretti industriali del Nord-Est* (in Italian). Angeli, Milano
- Domar ED (1957) *Essays in the theory of economic growth*. Oxford University Press, London
- Friedmann J (1966) *Regional development policy: a case study of Venezuela*. MIT, Cambridge
- Grossman G, Helpman E (1991) *Innovation and growth in the global economy*. MIT, Cambridge
- Harrod RF (1939) An essay in dynamic theory. *Economic Journal* 49 (193): 14–33
- Hildebrand G, Mace A (1950) The employment multiplier in an expanding industrial market: Los Angeles County, 1940–74. *Review of Economics and Statistics* 32(3): 241–249
- Isard W (1956) *Location and space-economy*. MIT, Cambridge
- Krugman P (1991a) *Geography and trade*. MIT, Cambridge
- Krugman P (1991b) Increasing returns and economic geography. *Journal of Political Economy* 99(3): 484–499
- Lloyd P, Dicken P (1972) *Location in space*. Harper and Row, New York
- Lösch A (1954/1940) *The economics of location*. Yale University Press, New Haven (or ed *Die Räumliche Ordnung der Wirtschaft*, Fischer, Jena)
- Maillat D, Quévit M, Senn L (1993) *Réseaux d'innovation et milieux innovateurs* (in French). Gremi-Edes, Neuchâtel
- Maskell P (2001) Knowledge creation and diffusion in geographical clusters. *International Journal of Innovation Management* 5(2): 213–237
- Mistri M (2006) *Il distretto industriale italiano tra cognizione e istituzioni* (in Italian). Carocci, Roma
- Myrdal G (1957) *Economic theory and under-developed regions*. Duckworth, London
- Nijkamp P (1986) *Handbook of regional and urban economics*. North-Holland, Amsterdam
- North D (1955) Location theory and regional economic growth. *Journal of Political Economy* 63: 243–258
- Perroux F (1950) Economic space: theory and applications. *The Quarterly Journal of Economics* 64(1): 89–104
- Perroux F (1955) Note sur la notion de pôle de croissance. *Economie Appliquée* 7(1–2): 307–320
- Piore M, Sabel CF (1984) *The second industrial divide: possibilities for prosperities*. Basic Books, New York
- Porter M (1990) *The competitive advantage of nations*. Macmillan, London
- Reynaud A (1984) *Disuguaglianze regionali e giustizia socio-spaziale* (in Italian), Unicopli, Milano
- Romer P (1994) Perspectives on growth theory. *Journal of Economic Perspectives* 8(1): 45–54
- Richardson H (1969) *Regional economics*. World University-Redwood Press, Trowbridge

-
- Richardson, H (1978) *Regional and urban economics*. Penguin, Harmondsworth
- Smith DM (1966) A theoretical framework for geographical studies of industrial location. *Economic Geography* 42: 95–113
- Ullman E, Dacey M (1960) The minimum requirements approach to the urban economic base. *Papers and Proceedings of the Regional Science Association* 6: 175–194
- van den Berg L (1982) *Urban Europe. a study of growth and decline*. Pergamon, Oxford
- Varaldo R (1997) *Il distretto industriale tra logiche d'impresa e logiche di sistema* (in Italian). Angeli, Milano
- Viesti G (2000) *Mezzogiorno dei distretti* (in Italian). Meridiana, Corigliano Calabro
- Visconti F (2002) *Il governo dei distretti industriali: strategie, strutture e ruoli* (in Italian). Egea, Milano
- von Thünen JH (1933/1826) *Der Isolierte Staat in Beziehung auf Landwirtschaft und Nationalökonomie* (in Deutsch). Fischer, Jena (or ed Puthes, Hamburg)
- Weber A (1929/1909) *The Theory of the Location of Industries*. Chicago University Press, Chicago (or ed *Über der Standort der Industrien*. Möhr, Tübingen)

Issues in Regional Economics: The Economic Thought of Some Italian Authors of the Past

Cristina Nardi Spiller¹ and Stefano Zamberlan²

¹Faculty of Law, University of Verona, Verona, Italy and Faculty of Humanities, University of Verona, Verona, Italy

²Faculty of Economics, University of Verona, Verona, Italy

1 Foreword

Discussion of territorial gaps is of special relevance in regional economics. This explains the stimulus to investigate and identify the economic factors which govern the spatial distribution of economic activity, the attention to the analysis of the processes of territorial development, and the commitment to propose adequate measures to resolve – or at least alleviate – existing difficulties.

In this context, research may focus on crucial issues such as price formation, the level of production, growth and economic development, the employment trend and the distribution of income. What emerges from analysis is the centrality of the choice of location of firms, the lack of homogeneity in the spatial distribution of productive activities, possibilities for the migration of manpower, and the emergence or intensification of territorial disparities. These are problems which signal – more or less evident – differences in income or employment. Observed already in the distant past, these problems exist in many economies, whatever their stage of economic transformation.

In this view, it is interesting to examine specific situations. In order to attempt to formulate interpretations, with the aim of proposing possible solutions. As D'Alauro (1975) points out, albeit in a brief survey, most interpretations of regional theories can be extended to groups of several

regions, to state-regions and to regions which are representative of states. Nevertheless, some approaches adapt better than others to the critical interpretation of given situations (such as backward areas), or offer a more incisive analysis of the evolutionary process which affects the whole system, while providing potential explanatory links.

The region, conceived in its literal sense as a territory in which an organic bond exists between the community and the natural environment, may also be perceived – though inaccurately – as an area which, in a certain sense, stands out from the rest of the territory. However, the concept of region is analysed first according to a general scientific paradigm, and only subsequently according to an economic disciplinary paradigm. It cannot evade the influence of social context, so it is essential to view, within the particular historical setting, both the evolution of analytical study and the development of society.

The conjunction between scientific investigation and the remarkable interest in the environment in which we live was perceived strictly by Italian authors of the past, even the distant past: in this sense they differ from their more accredited British colleagues. In effect, the contributions produced during the ‘golden age’ of Italian economics¹ are significant, and demonstrate an explicit tendency to indicate paths designed to alleviate local problems. Thus contributions emerged from three Italian Schools of thought: the Scuola Toscana, the Scuola Lombardo-Veneta and the Scuola Napolitana. Those from the Scuola Napolitana are particularly worthy of further examination. In view of the ideas they expressed and their interesting projections on the territory. Here, however, we limit ourselves to the significant contribution of Genovesi.

In economic gaps, the qualitative element most responsible for territorial disparities is the efficacy of production. In this context, there is an immediate reference to the theory of comparative costs of Ricardo (1817), in which specialisation is fundamental. The efficacy of production is generally related to the elements which characterise the economy: natural resources, climate, and type of labour force.

However, by limiting commercial relations between countries (areas) only to the moment when gaps arise, this approach leaves a considerable operational void. It can nevertheless be salvaged by restoring relations which encompass every phase of international or interregional trade: from vertical to horizontal, following the distinct modalities in which the various types of trade progress in a complementary fashion, and result in well-defined productive facilities. Fanno’s dynamic version of the theory of

¹ See Bousquet (1960, *Deuxième Partie*); Griziotti Kretschmann (1954, Chaps. XIX and XX) and Molesti (1966, Chap. I; 2003, pp. 11–32).

comparative costs extends this approach, and is capable of following, over time and in space, the evolutionary process which, through trade, creates a strict interdependence between areas at differing stages of development.

On the other hand, the phenomenon of dualism within national borders generated unique forms of analysis. So Italy's 'Southern Problem', despite arousing considerable interest as early as the end of the nineteenth century and the first decade of the twentieth, regained particular vigour after the Second World War, becoming the focus of even greater attention after the fall of the Berlin Wall.² The differences which emerged forcefully at the time of the unification of Italy, and exploded after 1950, signalled a remarkable, enduring disparity between advanced and backward areas, to the extent that this situation came to be known universally as 'the Italian regional gap'.

In this paper we intend to examine the economic thought of a number of Italian scholars whose contributions, despite originating in distinct historical periods, testify to the value of approaches which are sensitive to local situations, and reveal the scholars' tenacity in seeking feasible proposals. Firstly we focus our attention on the general issues facing a state-region; subsequently we examine the critical elements concerning relations between different economic systems (regions). Finally, we concentrate our analysis on disparities within the same economy.

The underlying message intends to stir consciences, so that measures directed at the depressed areas are effectively capable of producing a recovery in output and employment. The strategies, in the form of adequate support upon which to base the driving force of economic dynamics, should thus aim to eliminate existing differences. Therefore measures must prevent further deterioration in existing imbalances present in backward regions, remove any potential obstacles to clear-sighted intervention by the central authorities, while maintaining the overriding objective of abolishing all forms of waste.

2 Antonio Genovesi's Contribution: Recommendations for the Promotion of Local Development

The spread of the Enlightenment, the decline of mercantilist ideas and the rise of Physiocracy characterised the mid-eighteenth century, a time when complex theoretical approaches were forming and developing, leading to

² It was precisely German reunification which refocused attention on dualistic economies. See Nardi Spiller and Pizzini (2003).

the identification of the Italian Schools of Thought: the Scuola Napoletana, Scuola Toscana and Scuola Lombardo-Veneta.³

The crucial element which linked all the Schools was their analysis of the relevant regional situation. Indeed, each scholar investigated the economic conditions of his own region, proposing structural improvements and socio-economic reforms, as well as offering original theoretical explanations; not infrequently, these were the precursors of the analyses conducted later by the Classical and Neo-Classical Schools.

The dramatic regional situation afflicting the Kingdom of Naples in particular stirred consciences and urged more sensitive souls to try to identify a solution.⁴ The Scuola Napoletana stood out in particular for the originality of its contributions, which drew attention to aspects of disconcerting topical relevance. In this paper we refer specifically to the work of Antonio Genovesi,⁵ a distinguished proponent of this current of thought, precisely because of the references of a regional character which emerge from his work. His theoretical and applied work proved wide-ranging and of fundamental importance; thanks to the depth of his knowledge and his extensive language skills,⁶ he was able to investigate the work of a wealth of scholars.

In the Italian Mezzogiorno between 1749 and 1789, the regional situation was dramatic: agriculture was in a deplorable state, credit was in short supply, and commercial movements were scarce. Vast dominions belonged to large landowners or to the Church. Manufacturing was floundering, and trade was slack. The price of wheat was controlled and the wages of agricultural workers were below subsistence level.

In this desolating situation, Genovesi championed radical reforms, endeavouring to rouse the interest of the people in the economic and political

³ The features common to the writings of authors from these Schools are their special attention to local situations, and the promotion of agriculture to stimulate collective wealth. Furthermore, they showed special interest in the running of public administration, with the aim of achieving more efficient operating results. The Scuola Napoletana included scholars like Genovesi, Filangieri, Galiani, Palmieri and Fuoco. From the Scuola Toscana, the approach of Bandini stands out in particular, and from the Scuola Lombardo-Veneta the contributions of Beccaria, Verri and Ortes. We have already discussed these authors in Nardi Spiller (1991, 2001, 2005).

⁴ See De Luca (1968) and Massafara (1984).

⁵ Antonio Genovesi (Castiglione, Salerno 1713 – Napoli 1769) was ordained in 1737. A pupil of Giambattista Vico, after teaching Metaphysics at the University of Naples, he took the chair of Commerce and Mechanics, the first chair in Economics in Europe, instituted and funded by the Tuscan Bartolomeo Intieri.

⁶ He was an expert on the Greek and Latin authors, as well as Esprit, Jarrich, Montesquieu, Hobbes, Hume, Law and Shaftesbury and others. On Genovesi's thought see Nardi Spiller (2001, 2006).

problems. By virtue of his specialist training, he perceived the need to ground his analysis on the data and information available, in the light of physical and historical events. Hence he took an organic approach, which was corroborated by evidence. It reflected regional experience, was backed up by quantitative data on the physical resources and the principal economic indicators, and was evaluated in the light of the socio-political situation.⁷

In his analysis, Genovesi went as far as to postulate two separate stages of development. In the first stage, a country can emerge from poverty thanks to improvements in agriculture, due to subsequent population growth.⁸ In the second, more advanced stage, social wellbeing and economic force, which can be achieved even on an international scale, are made possible by the increase in manufacturing as a 'second source of a nation's comforts and powers' and the flourishing of trade, the 'third source' of wellbeing.⁹

In effect, although Genovesi deemed the population to be the power and the principal wealth of an economy, he linked the demographic trend to the capacity to support households of the productive activities responsible for generating wealth. Therefore the population level was strictly related to the quantity of land available for agriculture, and the dynamics of manufacturing and commercial activities, which needed to grow in synergy.¹⁰

In Genovesi's vision, given the considerable problems experienced by agriculture, the development of manufacturing¹¹ could represent a valuable source of wealth. It is however a bidirectional relationship: just as flourishing agricultural activity could lead to a prosperous manufacturing sector, so the decline of manufacturing activity could bring down agriculture with it and suppress population growth. Indeed, it is thanks to an industrious manufacturing sector that an economy is able to satisfy the needs of the

⁷ See Pii (1979, pp. 334–343), who emphasises the influence of Montesquieu on the Neapolitan author. On the organic approach of eighteenth century Italian authors see Molesti (2006).

⁸ In this contest, Genovesi went beyond the pessimistic Malthusian vision since, generally speaking, he did not fear population growth. In fact, countries with colonies and those surrounded by sea had nothing to fear, since the former could fall back on colonisation and the latter could encourage navigation and trade. Only states which did not possess colonies, or which were not surrounded by sea needed to take preventive action (such as celibacy) or repressive action (such as wars) to balance production with the potential food supply. For further analysis see Genovesi (1766, Tomo X, p. 128).

⁹ Cf. Genovesi (1766, Tomo X, pp. 30–44).

¹⁰ Cf. Genovesi (1766, Tomo X, p. 75).

¹¹ Cf. Genovesi (1766, Tomo X, p. 79).

community,¹² permitting growth and a consequent increase in the demand for raw materials and food.¹³

Genovesi's vision of luxury is of singular importance. Despite condemning exorbitant luxury, Genovesi did not consider it an inhibiting factor per se. Indeed he perceived luxury as a potential means by which to multiply states of dissatisfaction and to encourage progress, provided that such progress were fuelled by domestic production, otherwise it would result in dangerous outflows of currency – benefiting only other economies. This embryonic idea led to the Keynesian principle of effective demand. Conversely, Genovesi was distressed by waste, which he considered a path towards further vices.¹⁴

Trade, analysed in its various forms and through its various channels of distribution, captured Genovesi's attention in so far as it represented as a route towards territorial expansion. Indeed, he believed that commercial movements should not be obstructed, and that the state should only regulate tariffs and customs duties.¹⁵ On the domestic market, when barriers have fallen, trade relations are free to develop and become organized. Already in this vision there is evidence of careful consideration of local development.

If Genovesi was substantially a mercantilist and protectionist in terms of manufacturing – he considered it impossible to preserve and consolidate manufacturing without adequate tariff protection¹⁶ – he was a free trader in agriculture. On the other hand, the problem of food production, which was so alarming at that time in the south of Italy, should not be restricted. He effectively distanced himself from the most orthodox forms of mercantilism,¹⁷ observing that a state may be content not only with limited riches of gold and silver and gems, but also with nothing (Genovesi 1766, *Opuscoli*, Tomo IX, *Ragionamenti intorno all'uso delle grandi ricchezze per riguardo all'umana felicità*, p. 267).

Genovesi considered a negative trade balance to be detrimental, and believed that every nation should depend as little as possible on others. He explicitly urged nations to develop manufacturing activities using raw

¹² The distinction made by Genovesi includes primary needs, comforts, secondary needs and finally pleasures. To each type of satisfaction corresponds a type of art: the primitive arts, the art of comfort and the art of luxury. See Genovesi (1765, Tomo VIII, Chap. I, pp. 270–274).

¹³ Cf. Genovesi (1766, p. 89).

¹⁴ See Genovesi (1765, Tomo VII, Chap. X, pp. 222–273) and Genovesi (1766, pp. 129–130).

¹⁵ On trade in particular see Genovesi (1766, pp. 44 ff.); Genovesi (1765, Tomo VII, Chap. XIII, p. 322).

¹⁶ Cf. Genovesi (1766, p. 83).

¹⁷ As Fusco very rightly points out, (1988, pp. 615–616), Genovesi's scheme goes back to the 'new mercantilism', since the vision is mainly projected on the Neapolitan situation.

materials of which the territory had an abundant supply, and to sell the products where there was a shortage, or where the supply of raw materials was insufficient to allow manufacturing.¹⁸ From these considerations emerged the pivotal argument underlying the theory of comparative costs, later revised by Fanno as we analyse below.

Genovesi viewed the labour force, which originates from the population, as the powerhouse of the economy. Man has a natural bent for hard work and sacrifice, which induces him to work in order to survive. Hence work should first be defined in a moral rather than in an economic sense.

Genovesi was particularly attentive to the problems afflicting his region on a daily basis, and was fully aware that only by elevating the individual would it be possible to face and even overcome crucial difficulties. In fact, he was conscious that culture is the vital instrument with which to civilize peoples: his vision was a precursor to Romagnosi's approach (1832): not only had Genovesi already perceived as much in his 'threefold perfection' (moral, economic and political), culture also became the essential condition for attaining ever higher levels of global economic development.

In his various writings, Genovesi underlined the role of learning, long before the widespread recognition of the need for public education programmes in national orders, of which the prime objective was the achievement of progress and the happiness of the people. Identification of the role of culture as a driving force behind economic development was undoubtedly significant, and even more so in the light of the subdued interest in the theme demonstrated by the relevant institutions even in later times.¹⁹ Nevertheless, it was necessary for knowledge (Genovesi entrusted education even to the laity), or what in modern terms we would define 'training human capital',²⁰ to go hand in hand with the sound acquisition of ethical principles.

In Genovesi's vision, the civilizing of the people brought an improvement in economic conditions, hard work being the fruit of a 'civil and domestic education', to which the apparatus of government and the family contributed. Indeed Genovesi considered that the difference between a barbarian and a civil society lay in the ignorance of the former and the

¹⁸ On this point cf. Genovesi (1766, p. 79).

¹⁹ On the importance of education cf. Genovesi (1765, Tomo VII, Chap. VI, pp. 160–169; 1766, pp. 231–304).

²⁰ With specific reference to the contribution of Genovesi, Perrotta (1995, p. 89) underlines how, in the Neapolitan author's vision, by linking the evolution of social consumption with that of social work, the two processes become interdependent. The interpretation of economic progress as a driving force of civil progress, with a reciprocal relationship of cause and reinforcement, which leads us to identify accumulation in the growth of human social capital, follows on from here.

knowledge of the latter. An ignorant people was at the mercy of its own needs, while amongst knowledgeable people, use of intellect and 'human brains' became an invaluable device for higher quality and better organised work.²¹

In order to ensure a more reliable model, competences were to be certified by particular Schools which attested to the unique knowledge of the acquired 'art'. Here we can infer a close relationship between vocational training and the territory. Genovesi's combination of education and vocational training demonstrates how the two are strictly complementary: man not only becomes the vehicle for development, but may also be conditioned by development itself.

3 Fanno's Analysis of Potential Comparative Advantage

Trade, a central issue in the question of development, concerns both theoretical and practical aspects. International relations, as well as determining flows of goods and capital, and promoting international investment, could also be a suitable way to mitigate population growth through emigration. In past experience, colonisation represented a potential outlet for rising demographic pressure, as Genovesi, Ortes and Verri observe. After all, economies could have traded excess factors of production with those in short supply: however due to inherent difficulties at that time, this was not feasible, so it was more immediate to contemplate the exchange of goods.

In effect, a function of international trade is to restore equilibrium in the distribution of factors of production, so that each area is endowed with the combination of factors corresponding to its stage of development. Here, the theory of comparative costs demonstrates its validity when the availability of factors in varying proportions in different countries is reflected in prices, and hence in distinct production costs.

Comparative costs expressed as days of labour thus become potential monetary costs, that is to say marginal monetary costs, and, according to the theory of perfect competition, prices. No longer constant, comparative costs become equivalent to average unit prices. Recourse to the Ricardian principle of comparative costs to explain colonialism, an innovative approach adopted by Fanno²² in 1906, can be justified in the light

²¹ Cf. Pii (1979, p. 342).

²² Marco Fanno (Conegliano Veneto-Treviso 1878 – Padova 1965), having been driven away from teaching at the University of Padua by racial laws, achieved international fame thanks to his studies on colonisation, on money and on business cycles.

of its adaptation to a dynamic interpretation of foreign trade in general, and more specifically to trade between the mother country and the colonies, since movements of two classes of goods (manufactured goods against agricultural and mineral products) can be considered trade in two goods.²³

The classical model was thus adopted by Fanno, who however made some substantial changes. The immobility of factors of production changed from absolute to relative (though their mobility was lower than that of goods and services), to the extent that the transfer of men and capital was often a *necessary preparatory condition* for trade in goods and services (Fanno 1952, p. 18, author's own italics).

Gaps, previously considered stable over time, became variable in the new version, explaining the emphasis on potential comparative advantage, the dynamic element in the approach. Given the change in the availability of factors, the cost of the traded good changed. This cost, no longer measured in days of labour, was the outcome of a set of quantitative and qualitative factors which intervened in the dynamics of production. As a result, the relative mobility of factors of production transformed potential gaps into actual gaps, stimulating a process of structural transformation, with subsequent changes in the difference in comparative costs.

The innovative aspect Fanno introduced was dynamization, which, going beyond the classical assumption of gaps which were stable over time, examined their origins and their potential evolution (Manfredini Gasparetto 1987, p. 7).

The dynamic version of the theory of comparative costs was well suited to explaining trade between distinct areas. Trade, which was not confined to periods of wide gaps in the Ricardian interpretation, encompassed every stage of international trade, both in quality and positive and negative quantities. This made it possible to investigate interdependences between the long-term development process and the structure of trade. The assumption of a favourable gap, which was analysed as it emerged and as it evolved, was linked on the domestic side to structural motivations, and on the external side to demand. This extension of the approach was significant: its application involved trade between developing countries²⁴ and more developed economies. This explains the decision to expand activities

²³ Trade was feasible even for more than two goods. This case was examined by Marshall (1923, pp. 323–324), and resolved by Graham (1923) and Fanno (1924). Fanno was well aware of the influence of transport costs on the volume of trade and the power of commercial penetration exerted by gaps in comparative costs (Fanno 1952, p. 38).

²⁴ The dynamic version of the theory of comparative costs denied all forms of specialisation unless there were sufficiently wide gaps in comparative costs. Therefore excluding its possible application to developing countries didn't not seem reasonable, as Manfredini observes (1972, p. 22).

linked to local conditions and resources. Here, the relative mobility of factors of production, an adaptation of Ricardian immobility, explained the historical state of trade relations between the mother country and the colonies.

Fanno (1952) grounded his analysis on cases in which specialisation and hence trade were advantageous. After all, it was not specialisation which impoverished economically dependent areas, but rather the insistence on production which was no longer competitive and countered the original advantage. This explained the renewed importance of the theory of comparative costs, which was capable of interpreting the dynamics of the principal economic phenomena, namely unequal distribution of resources and the resulting imbalance in the distribution of income. Each favourable or unfavourable position was transitory – whereas its respective duration was not.

The variability of gaps is the key to understanding the developmental stages of each area or nation: from primary to secondary economy and subsequent transformations. Within this operational framework, and in relation to decisions which concern the entire nation the choice of a free trade or a protectionist policy depends simply on the size of the differences in comparative costs, which, when they level off, exclude the possibility of specialisation and hence of trade, calling for protectionism or rather a differentiated policy of protection for emerging industries (Manfredini Gasparetto 1987, p. 54).

The intense dynamics of change to which many economies are subject²⁵ gives rise to a succession of equilibria and disequilibria, causing economic fluctuations around an upward trend in progressive economies.²⁶

From Fanno's perspective, the approach based on the theory of comparative costs and integrated into the theory of development, or even the general theory of state economic planning became the theory of international trade,²⁷ in which colonisation constituted a special case. Indeed, while colonisation could reflect the needs of a given stage of development, this was no longer the case when colonisation could be replaced by free trade.

The dynamic version of the theory of comparative costs was strikingly realistic, and became the guiding principle of the development process,

²⁵ Development and population growth have a decisive impact on the evolution of the composition of demand, according to Engel's law. Cf. Manfredini (1979, p. 68).

²⁶ By progressive economy, Fanno (1947) means an economy in which output and income tend to grow at a rate which, for ease of analysis, is assumed constant. On Fanno's cyclical model, see Nardi Spiller (1993).

²⁷ Recourse to the principle of comparative advantage as a suitable mechanism for interpreting the realization of international trade can be found, among others, in Leontieff (1966) and Tinbergen (1967).

not only for economies striving to enter the international economic circuit, but also for regions wishing to become part of the domestic economy before entering the world market, hopefully in an authoritative manner.

At a regional level, Fanno's emphasis on the relationship of interdependence between less developed, more backward areas and more advanced areas, expressed a fundamental precept: the need to pursue ever closer and more interdependent forms of cooperation.²⁸

The model is still of significant validity, even though its application and full implementation is disrupted by artificially accelerated development processes, and by the deviant behaviour of the inside agents (Manfredini 1972, p. 99).

Nevertheless, it captures the essential features of dynamics, which are of prime importance in the various stages of structural transformation affecting the country in question. Other approaches which focus analysis on only one central factor (technological gaps, economies of scale, factors in different quantities and qualities, transport costs, etc.) are surpassed by the dynamic hypothesis which, by emphasising the difference in the content of labour, automatically explains the different cost of the goods. This links up with the development of the interpretation of the contribution of human capital.

We nevertheless believe that a development strategy which takes regional vocations into account, while essential in the short term, is even more essential in the longer term, and becomes an inescapable criterion of political strategy.

4 Regional Disequilibria and the Role of the State in Giuseppe Di Nardi's Thought

Private enterprise, the importance of which has already been underlined by Say (1803), de Saint-Simon (1821–1822), Marshall (1890), aims to achieve the highest possible yields from the factors employed by the rational structuring of production. In turn, the policy makers play a significant role in modern economies, given the importance of public services and strategies relating to social and economic aspects of the nation, which are fundamental in generating and safeguarding national income. The state therefore absolves an important function in production, not only as a producer of goods and services, but also in its capacity to influence output decisions, by means of legislation, regulation, fiscal pressure and subsidies. In this way, it can change the behaviour of private firms, even radically.

²⁸ Cf. Manfredini (1982, p. 83).

Di Nardi²⁹ focussed on this relationship, and exploited also Einaudi's contributions, highlighting as early as 1942³⁰ – and subsequently underlining in his writings – the relevance of the state as a crucial productive input. In effect, the function of the state in economic processes is constant where intervention is designed to maintaining social cohesion, but becomes variable if state intervention is in the form of support. The dynamics of the economy 'impose' this role on policy makers, and policy decisions should derive not from arbitrary political judgements but rather from the effective needs of society, one of main issues being unemployment.

From Di Nardi's viewpoint (of Keynesian origin) it follows that policy makers should take concrete action to ensure full employment, which cannot be achieved by spontaneous market forces, and cannot be maintained autonomously, as cyclical fluctuations effectively demonstrate.³¹ If the construction of public works envisaged as a way to obtain electoral consensus cannot be justified, it is nevertheless a central instrument of economic stability. State intervention should not only consist of direct measures, but should play an integrative role to ensure that full employment is reached.

This explains the dual importance of support in state intervention: to alleviate states of economic inequality and to attempt to remove existing forms of unequal spatial distribution of economic resources (as in the case of dualistic economies³²), the crucial aim being to limit income disparities at a nation level. Manoeuvring public expenditure becomes crucial to the achievement of such complex objectives, and its effects spread thanks to the multiplier principle. The results of state intervention should always be evaluated in the light of the advantages and the yields which can be obtained³³ at both a local and a national level.

When the autonomous variation of any one component of aggregate demand triggers, through the multiplier, an expansion in output and hence in employment, it is also true that the increase in the level of production

²⁹ Giuseppe Di Nardi (Spinazzola-Bari 1911 – Roma 1992) contributed to the theory of monopoly, oligopoly, and general equilibrium. He dedicated special attention to the price system, and developed an approach to the mixed economy in which he underlined the propulsive and regulatory action of policy makers.

³⁰ This theme was treated in greater depth by Di Nardi (1952, Chap. 2; 1956). See also Papi (1956).

³¹ Di Nardi's approach, which referred specifically to economic fluctuations, is analysed thoroughly in Nardi Spiller (2007).

³² The data about the Italian gap have discussed in Tagliacarne (1963–1970); Istituto G. Tagliacarne (1965, 1970–1975, 1980–1990, 1991–1999); Svimez (2000–2007) and in Felice (2007).

³³ The relevance of the cost effectiveness of public expenditure is very effectively treated in the pioneering analysis of Jevons (1888).

induces a rise in related investment, which contributes to further income growth, explaining the importance of the acceleration coefficient. Interaction between the accelerator and the multiplier undoubtedly increases income significantly, but in a dualistic situation it is essential to consider whether the increase benefits disadvantaged areas or whether, on the contrary, it is directed towards advanced areas, thus producing results which differ from expectations and from the decisions taken.

In fact, programme of economic development implemented in backward regions will not only benefit these regions if the proposed measures extend to the developed areas. There is therefore a hidden danger, which should not to be underestimated. The expansionary measure could well go beyond the established ambit, exceed its presumed scope and 'overflow' into other channels. Intervention therefore may benefit areas which, by their very nature, do not require additional intervention, and may even give rise to a series of dysfunctions, while the zones which were originally the designated recipients of appropriate measures are faced with a shortfall in the benefits initially anticipated.

State intervention should not be implemented in the normal course of gradual changes in situations. The industrial world is constantly subjected to numerous stimuli: phenomena of conversion or restructuring caused by price dynamics, technological progress, the creation of separate goods, the discovery and exploitation of new sources of – strategic or non-strategic – raw materials. Substantially, the natural progression in the dynamism of modern industry does not call for specific measures.

The situation changes radically if the problems acquire social relevance when they explode onto the scene, resulting in a rapid fall in the production of goods for which the market contracts, and bottlenecks in the sectors in which there is a growing demand. The adjustment times are conditioned by the rigidity of the factors available (Di Nardi 1960, p. 239), so that regional differences may originate or be accentuated, with adverse consequences for both production and consumption (Graziani 1969, p. 46). As a result, certain areas or entire regions may to be labelled as 'depressed' or 'backward'. Various types of state intervention may be planned, and should always be based on the principle of cost efficiency. Measures may include concessions to reduce the cost of investment, special credit facilities, a reduction in the tax burden, the creation of external economies, or training and retraining of human capital.³⁴

³⁴ Specific attention is given to the implementation of policy measures aimed at creating new activities in Di Nardi (1960, pp. 240–265).

We do not entirely agree with the emphasis on the process of industrialisation which captured the attention of Di Nardi,³⁵ even though it reflects a vision which was widely held at that time. In fact we believe that the original vocation of a specific region should be given overriding priority, so as not to violate its intrinsic socio-economic fabric. Thus for the Italian Mezzogiorno, a targeted strategy should give priority to the agricultural, environmental, cultural and artistic, and tourist structures, and should establish industrial activities which are strictly coherent with these sectors. The construction of expensive and deplorable ‘cathedrals in the desert’ or unproductive (certainly not in the Keynesian sense!) structural apparatus should be avoided.

On the other hand, Di Nardi’s reasoning is entirely convincing when, thanks to the introduction of a distinction between investments with immediate or deferred returns,³⁶ he lays the foundations for a shrewd investment policy. In effect, investments with immediate returns generate rapid growth in productive capacity, while those with deferred returns, despite increasing the capital stock, do not result in an instant rise in the productive capacity of the system.

The government authority is therefore bound, after clearly defining the problem, to take the necessary action to remove any obstacles to potentially coordinated and harmonious development.³⁷ This is an arduous task: as well as making a reliable evaluation in the first place, the intervention may not result in the desired development, and might even cause marked imbalances. For example, the onset of inflationary dynamics³⁸ may induce domestic firms to relocate in order to benefit from the lower cost of labour or lower costs in the strictest sense. Firms may also want to take advantage of a less changeable, less oppressing tax system and avoid from the succession of traps and snares which prevent enterprise.³⁹

³⁵ When Di Nardi (1977, p. 329) referred to ‘the myth of generalised development’, he meant the power of governments, international organisation, and programmers in general, to eliminate dualistic development through industrial expansion, modifying the economic structures dominated by the primary sector as a result.

³⁶ Investments with immediate returns produce instant growth in productive capacity, while those with delayed returns, despite increasing the capital stock, do not give rise to an instant increase in the productive capacity of the system.

³⁷ As Di Nardi (1957, p. 74) pointed out, balanced development represented a utopian state which cannot be achieved, either at a political or a private level. Nevertheless, it constituted an ideal to strive for, when support was given to economic activity developed in advance by certain productive sectors of the economy, to encourage the absorption of temporary excess production.

³⁸ See the essay by Di Nardi (1970) which is still very meaningful.

³⁹ We have already expressed our views on this problematic issue, which may lead to remarkable forms of localisation competition in Nardi Spiller (2004).

Nevertheless, the existence of socio-economic gaps is likely to lead to regionalism, which may appear in two forms: a manifestation of the ideological principle, or an expression of political reality. In the latter case, extreme territorial claims may be advanced, often with counterproductive results. In turn, there may be special appeals for internal protectionism, a decisive force in the formation of local self-government. This was harshly criticised by Di Nardi (1967, p. 289), both as tangible evidence of the failure of national unity, and in so far as this type of administration would take the nation back to its earlier state. Today, the effects of local autonomy would not be limited to the domestic context, but would spread to European community level, where which national sovereignties – a tangible regulation mechanism – are destined to play a progressively limited role.

5 Final Remarks

The contribution of Italian scholars outlined here reveals a specific interest in the investigation of real phenomena in a given historical period, within the context of the development process.

Already the Italian authors of the eighteenth century, who could be identified by their School, strived to study economic conditions in their regions, in order to formulate measures which would produce economic improvements and stimulate economic and social reforms. There were many pioneering theoretical contributions: the role of the division of labour in Beccaria, the theory of the value of producer goods and the discrepancy between demographic trends and resources in Ortes, the production of wealth in Genovesi and his striking emphasis on training the individual.

Similarly Fanno, who goes back to the traditional framework of comparative costs, felt the need to adhere to reality. Ricardo's approach – the pivot of international trade as a plausible explanation for the take-off of certain areas – assumes a limited temporal dimension, which is resolved in Fanno's version. This theory, which is rendered dynamic by the variability of the disparities, explains structural transformations at every stage of development, while respecting interdependences with development in other regions.

In the context of theories of economic development, specific attention has been dedicated to backward areas, the most striking example of which is the Italian Mezzogiorno. The dualistic gap is analysed also by Di Nardi who, despite going back to the Keynesian scheme, highlights with great clarity its potentially limited efficacy and waste of resources.

An underlying theme emerges from this complex analytical framework, which links the various contributions: the centrality of the human factor, within a distinctive regional dimension. The role of human resources takes priority over that of material resources, and the importance of forming an ethical conscience is crucial: these are fundamental aspects which, by driving the system, go beyond the automatisms of theoretical principles.

Acknowledgements

Research made possible by a grant from the University of Verona. Although the work is the result of joint discussion and formulation, C. Nardi Spiller wrote paragraphs 1, 3, 4, 5 and S. Zamberlan paragraph 2.

References

- Bousquet GH (1960) *Esquisse d'une Histoire de la Science Economique en Italie: Des Origines à Francesco Ferrara*. Rivière, Paris
- D'Alauro O (1975) *Il regionalismo e la teoria economica*. In *La teoria economica di fronte al sistema delle regioni*. Giuffrè, Milan: 11–35
- De Luca M (1968) *Gli economisti napoletani del Settecento e la politica dello sviluppo*. Morano, Napoli
- Di Nardi G (1942) 'Del concetto dello Stato fattore di produzione e delle sue relazioni con il teorema della esclusione del risparmio dall'imposta', *Giornale degli Economisti*, July–August vol 82: 206–29
- Di Nardi G (1952) *Economia dell'industria*, second edition (1955). Cacucci, Bari
- Di Nardi G (1956) *Dello Stato fattore di produzione*. In *Studi in memoria di Rodolfo Benini*. Università degli Studi di Bari, Facoltà di Economia e Commercio, Bari: 91–101
- Di Nardi G (1957) *Sviluppo bilanciato e credito all'esportazione*. In Di Nardi G (ed), *L'economia a una svolta critica*, fourth volume, *Il dualismo nello sviluppo*. Giuffrè, Milan (1985): 73–85
- Di Nardi G (1960) *I mezzi di intervento per la creazione di nuove attività*. In Di Nardi G (ed), *L'economia a una svolta critica*, fourth volume, *Il dualismo nello sviluppo*. Giuffrè, Milan (1985): 231–265
- Di Nardi G (1967) *Lo sviluppo equilibrato delle regioni*. In Di Nardi G (ed), *L'economia a una svolta critica*, fourth volume, *Il dualismo nello sviluppo*. Giuffrè, Milan (1985): 287–315
- Di Nardi G (1970) 'Le politiche monetarie e creditizie in un sistema duale', *Rivista di Politica Economica*, Anno LX–III Serie July: 795–819
- Di Nardi G (1977) *Il mito dello sviluppo generalizzato*. In Di Nardi G (ed), *L'economia a una svolta critica*, fourth volume, *Il dualismo nello sviluppo*. Giuffrè, Milan (1985): 317–339

- Fanno M (1906) *L'espansione commerciale e coloniale degli Stati Moderni*. Bocca, Turin
- Fanno M (1924) 'Punti controversi della teoria dei dazi doganali', *Giornale degli Economisti*, vol 64 January–February: 69–77
- Fanno M (1947) *La teoria delle fluttuazioni economiche*, Second edition corrected and widened by the author. UTET, Turin (1956)
- Fanno M (1952) *La teoria economica della colonizzazione*. Einaudi, Turin
- Felice E (2007) *Divari regionali e intervento pubblico. Per una rilettura dello sviluppo in Italia*. Il Mulino/Ricerca, Bologna
- Fusco AM (1988) 'Il mercantilismo «rinnovato» di Antonio Genovesi', *Rivista di Politica Economica*, vol 78 May: 603–616
- Genovesi A (1765) *Lezioni di Economia civile*. In Custodi P (ed), *Scrittori classici italiani di economia politica*. Destefanis, Milan (1804), Tomo VII, VII and Tomo IX: 7–228
- Genovesi A (1766) *Opuscoli*. In Custodi P (ed), *Scrittori classici italiani di economia politica*. Destefanis, Milan (1804), Tomo IX: 229–559 and Tomo X
- Graham FD (1923) 'The Theory of International Values Re-examined', *The Quarterly Journal of Economics*, vol 37 November: 54–86
- Graziani A (1969) *Lo sviluppo di un'economia aperta*. In Graziani A et al. (ed), *Lo sviluppo di un'economia aperta*, cap. IV. ESI, Napoli: 28–51
- Griziotti Kretschmann J (1954) *Storia delle dottrine economiche*. UTET, Turin
- Istituto G Tagliacarne (1965) *I conti provinciali e regionali*. Roma
- Istituto G Tagliacarne, *Il reddito prodotto nelle province italiane (anni 1970–1975)*. Roma
- Istituto G Tagliacarne, *Il reddito prodotto in Italia – Un'analisi a livello provinciale (anni 1980–1990)*. Roma
- Istituto G Tagliacarne, *Il reddito prodotto in Italia – Un'analisi a livello provinciale (anni 1991–1999)*. Roma
- Jevons HS (1888) *Teoria dell'economia politica ed altri scritti economici*. Preface by Amoroso L, translated by Fubini R, Argenti C. UTET, Turin (1947)
- Leontieff W (1966) *Input–Output Economics*. Oxford University Press, New York
- Manfredini ML (1972) 'Il vantaggio comparato potenziale e la dottrina dell'aiuto esterno allo sviluppo', *Annali*, Facoltà di Economia e Commercio, Università di Padova, Serie I, vol V, 1972: 4–104
- Manfredini ML (1979) 'International Trade: Towards a Dynamic Theory of Potential Comparative Advantage', *Rivista Internazionale di Scienze Economiche e Commerciali*, vol XXVI(1): 64–72
- Manfredini ML (1982) 'Une Théorie Dynamique des Coûts Comparatifs', *Economie Appliquée*, vol XXXV(1–2): 71–88
- Manfredini Gasparetto ML (1987), *Il commercio internazionale secondo la teoria dinamizzata dei costi comparati*. Cedam, Padua
- Marshall A (1890) *Principi di economia*, translated by Campolongo A. UTET, Turin (1959)
- Marshall A (1923) *Money, Credit and Commerce*. Macmillan, London
- Massafara A (1984) *Campagne e territori nel Mezzogiorno fra Settecento e Ottocento*. Dedalo, Bari

- Molesti R (1966) *La teoria del valore nelle dottrine economiche*. Giuffrè, Milan
- Molesti R (2003) *Studi sul pensiero economico moderno*. Franco Angeli, Milan
- Molesti R (2006) *Economisti veneti del Settecento*. Franco Angeli, Milan
- Nardi Spiller C (1991) 'La Théorie Economique et la Stratégie Politique de Genovesi, Galiani, Bandini, Beccaria, Verri et Ortes', *Rivista Internazionale di Scienze Economiche e Commerciali*, Anno XXXVIII(4): 369–383
- Nardi Spiller C (1993) 'Une Analyse Interprétative du Modèle Cyclique de Fanno', *Rivista Internazionale di Scienze Economiche e Commerciali*, Anno XL(5): 397–410
- Nardi Spiller C (2001) 'Il Genovesi meno noto delle «Lettere Accademiche»', *Nuova Economia e Storia*, Anno VII(3): 87–105
- Nardi Spiller C (2004) *Il ruolo dell'apparato istituzionale quale forma di competitività da localizzazione: una indicazione nell'ambito della teoria del commercio internazionale*. In Baranzini M, Filippi E, Savi P, Tondini G, (eds), *Analisi economica e società civile*. Cedam, Padua: 591–601
- Nardi Spiller C (2005) 'Felicità e benessere nel pensiero di Beccaria e Verri', *Etica ed Economia*, VI(2): 101–117
- Nardi Spiller C (2006) 'L'ingegno umano motore di sviluppo economico in Antonio Genovesi', *Storia del Pensiero Economico*, III(2): 65–80
- Nardi Spiller C (2007) *Cyclical Fluctuations, Inflation and the Role of the Monetary Authorities in Giuseppe Di Nardi Writings*. Franco Angeli, Milan: 213–327
- Nardi Spiller C, Pizzini E (2003) *Dinamica dei prezzi nella Germania riunificata: impatti sul meccanismo europeo*. In Nardi Spiller C, Savio G (eds) *Dalla Comunità Economica Europea verso l'Unione Europea: problemi e prospettive per il futuro*, vol 7. Cedam, Padua: 101–118
- Papi GU (1956) *Teoria della condotta economica dello Stato*. Giuffrè, Milan
- Perrotta C (1995) *Il contributo di Genovesi alla teoria illuminista dello sviluppo*. In Roncaglia A (ed) *Alle origini del pensiero economico in Italia*, vol I: *Moneta e sviluppo negli economisti napoletani dei secoli XVII–XVIII*. Il Mulino, Bologna: 73–96
- Pii E (1979) *Le origini dell'economia «civile» in A. Genovesi*. In *Scienze dell'uomo e scienze della società nel Settecento*. Leo S Olschki Editore, Florence: 334–343
- Ricardo D (1817) *Principi dell'economia politica e delle imposte con altri saggi sull'agricoltura e la moneta*, edited by Fubini R, Campolongo A. UTET, Turin (1954)
- Romagnosi G (1832) *Dell'indole e dei fattori dell'incivilimento con esempio del suo risorgimento in Italia*. Guasti, Prato (1835)
- Saint-Simon CH comte de Rouvroy (1821–1822) *Du Système Industriel*. In Saint-Simon CH comte de Rouvroy, *Oeuvres de C.H. de Saint Simon*, 6 vol. Anthropos, Paris (1966)
- Say JB (1803) *Trattato dell'economia politica*. UTET, Turin (1854)
- Svimez, *Annual report from 2000 to 2007, Rapporto Svimez sull'economia del Mezzogiorno*. Bologna, Il Mulino from 2000 to 2007
- Tagliacarne G (1963–1970) 'I conti provinciali e regionali', *Moneta e Credito*, 1963–1970
- Tinbergen J (1967) *Sviluppo e pianificazione*. Il Saggiatore, Milan

Entrepreneurial Structure From a Regional Perspective

Joaquin Guzmán¹ and Francisco J. Santos²

¹ Faculty of Economics, University of Sevilla, Spain

² Faculty of Economics, University of Sevilla, Spain

1 Introduction

In the 1950s, economists began to be concerned with the factors involved in economic growth. Abramovitz, Solow and Swan were probably the first authors who analyzed the causes of the increase of the GDP in an economy, with regards to the aggregate production function. According to their theory, the factors which determine the growth process on the supply side were basically two: work and capital. On the demand side, the goods produced are destined to be used by three basic variables: consumption, saving, and investment.

These approaches have a neoclassic and symmetric character and are based upon Klein's approach, the so-called "aggregation problem in production function" (Klein 1946). They were created on the basis of a given technological level and, therefore, did not consider technological changes as a variable to be taken into account. Logically, the lack of realism of this original neoclassical approach provoked some criticism, which even Robert Solow admitted in his speech at the official ceremony when receiving the Nobel Prize for Economics.

Certainly, the lack of consideration of technological advance was a serious weakness in the original neoclassical model. It was understood that the technological variable was something which fell outside the field of economic activity, that is, this variable was imposed from a context outside the strictly economic sphere. That is the reason why the neoclassical models of that period are usually called "exogenous," as opposed to the "endogenous" economic growth models which have been developed since the 1980s.

As a result of the lack of consideration of the technological factor within “exogenous” models, and also in an effort to combat the increasing problem of unemployment on an international scale, new theoretical growth models were developed in the 1980s and 1990s. These attempted to incorporate technology, not as a given variable, but rather as an internal factor of the system (Romer 1994). On the other hand, they have also, directly or indirectly, taken the Schumpeterian approach of innovation into consideration as the basis of the technological process. This fact has led to new concepts, such as human capital, research and development, technological change, etc., being incorporated (Durlauf and Quah 1999). All these concepts, in the end, constitute different derivations of what is now known as “knowledge”.

As was mentioned earlier, the neoclassical economic growth models are symmetric, and fundamentally pursue a balance between the components of the supply side and those of the demand side. They are based upon the assumption that the economic agents are absolutely rational, which means that they are profit-maximizing and dispose of perfect information related to the market. Given this approach of a very simplified formalized balance, the neoclassical viewpoint does not leave room for other variables. Yet, these seem important in order to explain the growth process of the economy, such as the role of institutions and of firms (Felipe 2006).

Certainly, in order to explain the economic growth phenomenon, it seems necessary to take into consideration the degree of corruption, the work of institutions, of democracy, and of enterprises. These factors are, in the end, the creators of wealth in any market economy. If this is so for any economy, especially in the context of a particular country, the entrepreneurial factor takes on a special relevance at the regional level. This is because the work of the political and social institutions is usually homogenous within the limits of a specific country. Therefore, in order to explain regional economic growth within a generic and homogeneous framework of institutional and political conditions, it is necessary to analyse the components of the entrepreneurial factor.

Different aspects, such as uncertainty, new ideas and entrepreneurial initiatives, are elements of the entrepreneurial factor. They did not have room in the traditional approach (Wennekers and Thurik 1999), and have only begun to be taken into account in the analysis of economic growth in the last few years.

2 Analysis Levels of Entrepreneurship

When considering the entrepreneurial factor, it is necessary to distinguish between three categories in the analysis: micro, meso, and macro (Table 1).

Table 1. Entrepreneurship levels of analysis

Level of analysis	Predominant interest
Micro	Individual
Meso	Firm
Macro	Economy

In the first level, micro, the main objective pertains to the personal framework of the entrepreneur. The theories developed at this level aim at the maximization of the economic profit of the entrepreneur. This is the case, for example, in the following theories: the theory of personal profit developed, among others, by Cantillon and Max Weber; the entrepreneurial risk theory of F. Knight; and different psychological theories focusing on the optimization of entrepreneurial behaviour.

Next, at the meso level, the analysis is concerned with the objective of the firm, rather than the entrepreneur's personal interest. This field of analysis is broader than the first one. It embraces, among others, the theory of transaction costs; the networking theory; the theory of firm incubation; and all the management branches, such as financing and investment theories, human resources theories, organization and production theories, marketing theories, accounting theories and so on. All of these theories form a set of specialties which make up the essential content of business schools. While embracing the personal interest of the entrepreneur, they also pursue the profitability, maintenance and growth of the enterprise which, in the end, affect not only the individual interest of the firm's owner, but also that of all the stakeholders (executives, employees, suppliers, clients and all types of institutions related to the firm in question).

In addition to the personal and entrepreneurial objectives pursued by the micro and meso levels, the macro level focuses on benefiting the whole economic system. This macro approach includes, of course, the entrepreneur's and company's interests, but the main purpose of the analysis is the development of the economy in which the productive unit is located. It is in this aggregate economic framework, therefore, that the main objective of this chapter will lie, and, while its relationship to the micro and meso levels is very close, the fundamental concern will be placed upon

questions such as what entrepreneurial activity should be like in order to optimize economic growth.

3 Entrepreneurship: Entrepreneurial Function and Entrepreneurial Structure

In all economic growth processes, there is a mechanism which traditional theory assumes to be automatic: saving – productive investment – economic growth (Fig. 1). Nevertheless, this mechanism, which is divided into two phases and leads to the transformation of the financial resources into economic growth, is not completely automatic for any time or place. This lack of automation may be explained by two fundamental reasons:

- There are not always entrepreneurial agents who can, know or want to convert the available savings into productive investment.
- Not all productive investment actions contribute to the economic growth process in the same proportion.

Based on these reasons, one can distinguish two components within the entrepreneurial factor (entrepreneurship): (a) The entrepreneur (referring to the entrepreneurial function) and (b) the enterprise (referring to the entrepreneurial tissue or structure). As is shown in Fig. 1, each one of these components is projected, respectively, over each phases of the saving – investment – growth mechanism.

Therefore, from a regional perspective, the macro analysis of the entrepreneurial factor should be concerned, on the one hand, with how the entrepreneurial tissue needs to be structured, so that ultimately the regional

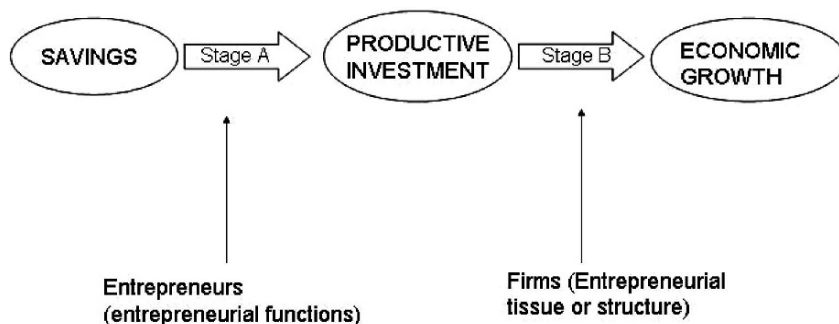


Fig. 1. Real economic growth process

economy achieves the highest possible growth rates. On the other hand, since the entrepreneurial organization is a result of the entrepreneurial figure and entrepreneurial capacities present different profiles within different geographic frameworks, it is necessary to qualitatively analyse the functions developed by the entrepreneur. Based on this factor it is possible to point out the different degrees of dynamism and entrepreneurial culture which may affect the growth of the regional economy.

In the two following sections, the qualitative characteristics of the entrepreneurial structure and the main elements which form the entrepreneurial function are analysed separately, from a growth-focussed point of view.

4 Qualitative Characteristics of an Entrepreneurial Structure

From the perspective of the modern theories of endogenous growth, it is possible to argue that each firm contributes to economic growth in different proportions. Not all productive units contribute to improving the economic competitiveness of a territory to the same degree. This is due to the fact that, for example, different economic sectors have neither the same growth rate, nor the same drag potential, nor the same capacity to create employment or higher levels of added value.

From a strictly endogenous point of view, that is, from “inside” the productive system, the technological/innovative variable is not the only one which may explain the “macro” behaviour of firms. In addition to the technological base and innovative behaviour, it is possible to point out other variables, such as the level of education of the executives, the degree of profitability, the degree of collaboration, the degree of exportation and the output quality. These all undoubtedly help to explain the level of competitiveness of a region or territory.

Nonetheless, these variables are fundamentally placed in the “meso-economic” level, and its analysis pursues a specific interest for the firm, although it may also have, indirectly, some consequences for the common interest of the regional economy. Logically, although variables, such as innovation, education, collaboration, quality, export, etc. do in fact contribute to the growth of the economy as a whole, they depend exclusively on management decisions, that is, on the “meso” level. On the other hand, it is possible within the same macroeconomic context to find a firm whose degree of innovation, for example, is very high, but is counteracted by the low degree of innovation of another firm.

These entrepreneurial variables constitute fundamental elements of management approaches, but, at the same time, they are enmeshed in a series of structural characteristics of the entrepreneurial tissue that, in the end, determine and shape the causal relation between entrepreneurial action and macroeconomic results. Specifically, the same amount of investment may, given different structural qualities of the entrepreneurial tissue, lead to very different consequences in regional economic growth. Among the qualitative characteristics which shape entrepreneurial structure, it is possible to at least distinguish the following:

4.1 Entrepreneurial Density

One of the first variables that explain strengths or weaknesses of regional productive tissue is the number of firms located in this region. Theoretically, the higher the number of firms with respect to the total population is, the higher the probability the production of goods and services (regional GDP) will achieve a higher level. This simultaneously leads to higher levels in employment, investment, export, etc. The entrepreneurial density therefore constitutes the basic variable -necessary but insufficient- needed to create a competitive entrepreneurial tissue in any economy, not only at the regional level, but also at the national level.

There are a lot of national and regional economies – i.e., those of southern Europe, as well as those of underdeveloped areas – in which entrepreneurial density with respect to population is high but, in which the entrepreneurial structure also has a high degree of atomization. This causes a high percentage of very small firms whose creation is due more to a motivation of “necessity” – i.e., unemployment – than to a motivation of “opportunity”. Logically, these small firms only contribute to economic growth to a very low extent and, in many cases, belong to the informal sector of the economy.

4.2 The Average Size of Firms

Firm size has been, and continues to be, an element of disagreement with regards to some fundamental aspects, such as the capacity for innovation, for exportation, for the generic creation of employment, etc. Traditionally, there has been some agreement, or even unanimity, upon the opinion that big firms, altogether, are the ones that make the most contributions to economic dynamism and its different aspects: added value, innovation, employment, etc. An example of this can be found in the famous British

Bolton Report from the 1960s. However, since the economic crisis of the 1970s different researches have emerged on the increasing role of SMEs in the economic growth process (Birch 1979; Storey 1988).

Nonetheless, although it is, of course, true that the assumption of the increasing role of SMEs is, to a great extent, made by current empirical economic research, the following considerations are also correct:

First, it is clear that big companies in any economy will play a dominant role in international trade, in the level of production, as well as in the R+D+I field. It is no coincidence that the great majority of the biggest multinational companies, dominant in the biggest markets, belong to the most advanced economies, such as the USA, Japan or the main countries of the European Union.

Furthermore, in spite of SMEs playing an important and even increasing role in the economic growth process and in the creation of employment, it is necessary to distinguish between the SMEs themselves and the micro-enterprises and self-employment. As was mentioned earlier, these kinds of very small firms, are created, to a great extent, by a motivation of “necessity” – a term used by the Global Entrepreneurship Monitor (GEM) – that is, merely for the purposes of survival or as life means, with little intention of promoting an increase of entrepreneurial organization in terms of employment, increase of assets, internationalization, etc.

Therefore, it is necessary to highlight that the most advanced countries and regions are characterized by an entrepreneurial tissue, which has not only a high proportion of big companies, but also a dense presence of authentic SMEs – those with at least ten employees, according to most extensive statistical sources. By contrast, the underdeveloped economies, both in the regional and national field, usually show a high degree of entrepreneurial atomization which is reflected more in the context of micro-enterprises and self-employment than in the framework of SMEs.

4.3 Patrimonial Vulnerability

In the empirical analysis of the entrepreneurial tissue of a particular region, it is common to confuse the concept of “enterprise” with “establishment”, “factory”, or even with “filial” or “branch”. Aside from legal effects, the distinction of these concepts related to the productive unit may have important economic consequences.

In particular, “patrimonial vulnerability” refers to the firm’s ownership and its geographic location. The patrimonial ownership leads to control and the making of fundamental decisions in the firm. Therefore, an entrepreneurial tissue with high patrimonial vulnerability has a high degree

of external investment penetration. This fact always has positive effects upon economic growth and the creation of employment, especially when internal investment has serious weaknesses. But, at the same time, it also creates a proportionally higher degree of vulnerability especially when there is little autochthonous productive tissue.

In the current context of globalization, the lack of control in fundamental and strategic entrepreneurial decision making represents an obvious risk for a particular regional economy, because it is well known that the geographic location of productive investment may easily be changed. Obviously, the regional economies whose economic growth and job creation depend to a great extent on external investment – following a “top-down” economic growth model instead of an endogenous “bottom-up” model – are at a higher risk of delocalization. This fact is more characteristic of the developing economies which lack their own, solid productive apparatus.

4.4 Dominant Productive Sectors

In the production process of goods and services, many sectors and sub-sectors of activity take part and contribute, to different degrees, to the growth of regional economies. From this point of view, it is possible to point out some ideas which, in spite of being to some extent known, possess an economic relevance which deserves further consideration.

First, the industrial activities are usually the ones which require the highest technological level, the highest degree of specialization, the greatest amount of investment upon fixed capital and have the greatest need for productive equipment. In most cases, the traditional services activities “accompany” the central production process by way of transport, machinery maintenance, rendering of information, cleaning and hygiene in the factory, restaurant, personal care, etc. Moreover, in most cases the service activities are usually also located in the final steps of the production chain, that is, very close to consumption. Service activities are often located in stages, such as distribution, advertising, wholesale trade, retail trade, technical assistance, and so on.

Given this, it becomes clear that, except in specific cases, the stage of transformation in the production process (industrial activity) forms the central process of the value-adding mechanism, while traditional services play a largely “auxiliary” role whose economic value – in trade – is usually even dependent upon industrial value determined through fixed percentage margins.

The relevance of industrial activity is much more visible in the macro-economic context characterized by mature and traditional sectors. With the emergence of modern “knowledge economics”, some particular activities, such as software creation, design or specialized technological consulting, are acquiring an increasing importance. Nonetheless, it is also necessary to stress that these highly specialized services generally do not fulfil an objective in and of themselves, but are, rather, activities associated with the creation of highly sophisticated products and/or with an innovative presence in the market.

Furthermore, it is necessary to consider the contribution of the productive sector to regional economic growth, which, both directly and indirectly affects other sectors linked to the production chain. The input–output analysis shows that industrial activities generally have the greatest pull and push factor and therefore their multiplier effect upon the whole productive system is bigger than that of the service sector. This phenomenon is explained not only by the greater proximity of service activities – in most cases – with regards to final demand, but also by the higher degree of complexity of industrial activities which require larger amounts of inputs (raw material and/or intermediate goods) and the assistance of a greater number of support services, both of advanced and traditional character.

Thus, developed regions are characterized by the presence of a strong industrial tissue. In spite of this, there has recently been a clear tendency towards favouring the third (service) sector of the economy, as a result of the increasing role of “knowledge” in the modern economy, which does not reduce the importance of industry.

The industry must, of course, increase its innovation and its productivity and, therefore, needs advanced technological services. As a result of the impact of technology and advanced services, it is possible to classify the industrial activity into at least three categories: (a) subsectors of advanced technology – i.e., aerospace, computing, semi conductors, communications, electronic products, pharmaceuticals, etc. (b) subsectors of mid-level technology – i.e., chemicals, plastics, aluminium, etc. and (c) subsectors of basic technology – i.e., textiles, food, paper, wood, steel, etc. However, this does not mean that the importance of industry is reduced within the productive tissue as a whole. It is not a coincidence that the developed economies – i.e., the USA, Japan, Germany, etc. – are precisely those which possess the biggest industrial activity, possess the biggest industrial multinational companies, and are commonly called “industrial economies”.

4.5 Functional Dependence

Another variable to be taken into consideration regarding the qualitative profile of the entrepreneurial structure is the firm's role within the productive process. What is here called "functional dependence" is a concept closely related to value chain approaches (Porter 1985; Gereffi 1994), to "value stream" (Womach and Jone 1996) or to the old French concept of "filière". Nevertheless, in contrast to these analytical approaches, the so-called "functional dependence" has as its main objective neither the analysis of governance or domain relationships among firms, nor the links among activity sectors belonging to input–output analysis.

The "functional dependence" belongs to the territorial analysis framework. The Economic literature has thus far only considered the hypothesis that there is a higher degree of interrelation between SMEs and suppliers or clients in the some geographic context than there is between big companies and the said suppliers or clients (Florio 1996). However, it is also possible that SMEs in underdeveloped regions specialize in finding markets for the products of larger firms. From this perspective, it is possible to distinguish, therefore, two types of firms (Guzmán et al., 2006):

1. The so-called "market-maker" firms, located predominantly developing regions.
2. The so-called "product-maker" firms, located predominantly in the developed regions.

From an empirical point of view, given detailed information of each firm's purchase and sale flows to local, regional, national and international markets, it is possible to calculate the relationship between the territorial origins of the inputs with respect to the territorial destination of the outputs.

Thus, a maximum value in the "functional dependence" index for a particular company would mean that all purchases come from the international market and all sales go to the local market. By contrast, a minimum value in the "functional dependence" index would mean that all inputs are acquired in the local market and all outputs are made for international export.

The most illustrative example of "market-maker" firms can be found in activities of specific services, such as drinks distribution, office materials, pharmaceuticals, etc; of car concessionary, and machinery; of clothing franchise, food, and so on. Nevertheless, it is possible that there is functional dependence, to a greater or lesser extent, in other activity sectors, such as wholesale trade, retail trade, repair work or even industrial activities, because there are firms which are specialised in creating labels,

packaging, or specific design, in order to introduce a big company's products in the regional or local market.

Logically, when the functional dependence of a particular region achieves a high degree with respect to other surrounding regional economies, this represents a weakness in its entrepreneurial tissue which affects its economic growth and/or employment.

4.6 Productive Dependence

In an important report issued by the OECD in the 1990s, the new business opportunities for SMEs are highlighted as a result of the big companies' tendency towards downsizing and outsourcing (OECD 1996). These tendencies certainly present new business opportunities for SMEs, because these could take advantage of a part of the business that was earlier exploited by big companies. Nonetheless, this positive aspect for SMEs clearly belongs in the "meso" level of analysis, which is concerned with what may be advantageous to a particular entrepreneurial interest, but not necessarily to the whole entrepreneurial tissue.

From the perspective of the "macro" level of analysis, the relationship between SMEs and big companies may have other readings. In this line of analysis, the concept of "productive dependence" is related to the level of concentration which is presented by a firm with respect to the number of suppliers, on the one hand, and with respect to the number of clients on the other.

A maximum value in the "productive dependence" index with respect to suppliers means that all the inputs of the firm come from only one supplier. On the other hand, a maximum value of "productive dependence" with respect to clients means that all of a firm's sales are going to only one client. This would be the case of a firm which works exclusively for another one under a subcontract.

Logically, an excessive "productive dependence" with respect to clients or suppliers implies a high degree of risk for a given company, because a large amount of its output depends on somebody else's decisions, or circumstances beyond its control. In many cases, a high "productive dependence" may not only weaken the firm's negotiating power, but may even put the firm's survival in danger.

But beyond the particular interest of a given firm, from a "macro" level, an excessive "productive dependence" represents a weakness in the entrepreneurial tissue. An extended "productive dependence" index would mean that there are a great number of firms – probably very small – whose growth,

or even survival, depends strongly on the decisions and policies made by one or a few big companies.

5 The Entrepreneur: Functions and Quality-Based Entrepreneurial Orientation

The profile of entrepreneurial tissue is determined, in the end, by the profile of its entrepreneurs. The entrepreneurial agent is not only the one who creates a firm with his/her ideas and means, but also the one who directs it, manages it and keeps it alive.

Agreement has not yet been reached on the economic definition of an entrepreneur. Indeed, for the entrepreneurship specialists, the famous sentence of Kilby is quite illustrative: he compares the entrepreneur with a Heffalump (a big animal), “*All who claim to have caught sight of him report that he is enormous, but they disagree on his particularities*” (Kilby 1971).

5.1 Main Functions Fulfilled by Entrepreneurs

Economic thinking has preferred to work with the theoretical stereotype of the entrepreneur as a rational utilitarian agent, and most academic thinking has tended to presume that this is reality. Authors who have adopted a more objective empirical approach to the analysis of entrepreneurial functions – such as Cantillon, Say, Schumpeter, and Knight (Hebert and Link 1989) – have been the exceptions to this general attitude, rather than the norm. On occasions, these alternative views on the entrepreneur’s role have been augmented by the offerings of various social sciences – such as Weber’s (1969) sociological contribution, Sombart’s (1993) historical perspective, and McClelland’s (1961) psychological approach. Unfortunately, each of these approaches, though valuable in itself, has been developed without considering the others. As a result, a wide variety of extant notions coexist about the functions of the entrepreneur in promoting entrepreneurial success (Hebert and Link 1989; Wennekers and Thurik 1999).

Even so, several efforts have been made in the last twenty years to reach a synthesis (Hebert and Link. 1989; Wennekers and Thurik 1999). Nevertheless, a quick survey of each of the main theories reveals some fundamental components of the entrepreneurial function that can be synthesised with a view to developing a taxonomy of the concept of entrepreneurship.

In short, these fundamental components can be summarised as follows (Guzmán 1994): *capitalist or financial function*, carried out by the entrepreneur when supplying capital to the enterprise; the *managerial function*, consisting on direction, organization, negotiation, or controlling the operations of the venture; and the *booster function*, (Fig. 2) which implies the adoption of a series of essential initiatives not only to initiate the enterprise, but also to help it survive market forces and achieve expansion.

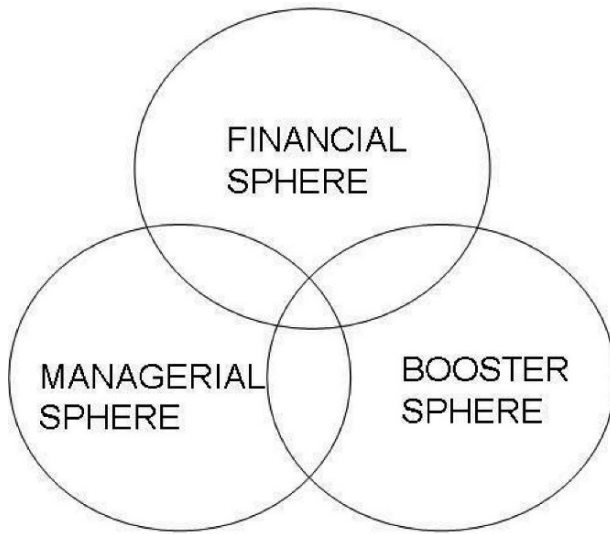


Fig. 2. The entrepreneurial functions or spheres (Guzmán 1994)

Contrary to the managerial and financial functions, the booster one has a markedly *dynamic character* and it is very difficult to formalize. Its result does not depend on the application of certain technical knowledge about management, however complex it may be (this corresponds to the managerial function). Rather, it depends on the qualities – both psychological and sociological – of the entrepreneur, who should decide the basic initiatives to undertake within the business, such as, for example: to develop a new innovative project, to look for new profit opportunities in the market or to stay alert about possible demand changes. As it will be pointed out later, the performance of the booster function would be the consequence of the cognitive creative process in which some scholars nowadays are focusing on to explain how the process of opportunity recognition and new venture creation is carried out by potential entrepreneurs and by consolidated entrepreneurs (Kirzner 1997; Shane 2000).

In this way, it is necessary to distinguish between the two great sub-functions that, in our opinion, compose the booster function (Guzmán 1994):

- The “promoter sub-function” which entrepreneurs carry out when they create a new business. Therefore, it clearly concerns those “potential entrepreneurs” that have not still created a venture but present a high propensity to do it.
- The “energizer sub-function” which entrepreneurs carry out during the life or existence of the enterprises, promoting their development or, at least, keeping them alive. Thus, this sub-function directly concerns the work of “active or existing entrepreneurs”.

5.2 Quality-Based Entrepreneurial Orientation

Focusing our attention on the existing entrepreneurs, energiser sub-function is manifest in the presence of certain qualities. The literature refers to these qualities as “entrepreneurial orientation” (Lumpkin and Dess 1996). This kind of qualities can not be confused in whatever case with those of management quality (which refers to activities of the managerial function and, therefore, routine functions), but rather it refers to the initiatives and behaviours of entrepreneurs to energize their businesses.

Among the elements which configure “entrepreneurial quality”, the three most relevant are need of independence, entrepreneurial motivation and energizer behaviours (Guzmán and Santos 2001). The first one is probably the most clear psychological feature of an entrepreneur and was firstly alluded by Collins and Moore (1964). The second one is the most important cognitive feature of entrepreneur because picks up the set of factors that influence the performance of a given behaviour in a specific situation (Krueger 2003). Among different taxonomies of motivations, the one which differentiates the intrinsic/extrinsic type is very interesting. An intrinsic entrepreneurial motivation means that the entrepreneur’s activity is developed not to win an economic reward, but by the interest and pleasure of carrying it out (vocation, need for personal development) and the extrinsic entrepreneurial motivation means the opposite.

Both elements exert an influence on the energiser behaviours which are the external and more visible factors defining the entrepreneurial quality. In fact, the performance of these energizer behaviours shows the quality-based level of entrepreneurial orientation because they drive entrepreneur actions to improve or not the performance of the business. These behaviours lead us to this kind of entrepreneurs (Santos and Liñán 2007):

- *Ambitious (as opposed to conformist)*, which can be understood as the need of the entrepreneur to develop the business through different investments in new production resources (fixed assets or manpower), through taking risks and showing competitive aggressiveness (Davidsson 1991; Lumpkin and Dess 1996).
- *Innovative (as opposed to routine)*, which can be understood in a wide sense as Schumpeter's five new combinations, that is to say, as creativity (Schumpeter 1944). Innovation reflects an entrepreneur's tendency to engage in new ideas, novelty and creative processes such as technological or product-market innovations.
- *Proactive (as opposed to reactive or passive)*, which refers to a behaviour aimed at anticipating and acting on future needs through taking different dynamic initiatives in an effort to energize the business (Lumpkin and Dess 1996). This behaviour would be the opposite of passiveness, that is, indifference to leading in the market. Some specific behaviours, such as investing in the training of employees, putting into practice, long-term planning of activities or being alert to new opportunities are a way to identify proactiveness.
- *Cooperative (as opposed to individualistic)*, which can be understood as the behaviour of search for contacts with other people, entrepreneurs or not, and different organizations with the intention of reinforcing the competitive position of the firm in the market and reach a higher degree of flexibility and growth. The behaviour of cooperation could be both formal, through agreements with other businesses or economic agents in the same or related activity sectors, and informal, through personal social networks which are very important as much in the pre-start up stage of the business as in that of business start-up and ongoing business stages (Curran et al., 1993; Johannisson 1995). An important source of this behaviour is social capital in the form of trust, reciprocity, shared values and bridging contacts.

As a consequence of the aforementioned four behaviours and whenever the personal and environmental factors do not impose severe constraints, the firm should theoretically have a good performance. This performance can be measured through the growth in turnovers, number of employees or fixed assets (Davidsson et al., 2006).

Evidently, every entrepreneur will not achieve the same performance. Each one will score a different mark in each of the different energiser behaviours. Only a few will get a significative growth of their firms. However, the greater the number of entrepreneurs achieving a significative growth of their firms, the more growth their regional economies will reach

in terms of income level and economic development. In this way, as said in Sect. 3 of this chapter, the quality level of the entrepreneurial orientation determines, in the end, the kind of firm regarding its performance and, only after, the kind of regional economic growth regarding its income level.

6 Entrepreneurship and Regional Economic Models

As it is well known, the literature in regional economics has been aiming in recent years the focus on endogenous development theory as opposed to the top-down development theory which dominated the scientific debate until the crises of the 1970s (Vazquez 2002). This new focus in regional economics puts its emphasis on solving the problem of regional development disequilibria, not in the lack of capital or manpower mobility between regions but rather in the lack of internationalization, innovation and entrepreneurial capacity. That is to say, emphasis is mainly put on intangible endogenous resources of a territory, among which the function of the entrepreneur is one of the most important.

6.1 Endogenous Development Model and Entrepreneurial Structure

Following the empirical evidence which is available, the theory of endogenous development poses an important change in very different locations and productive sectors of the world economy: the evolution from the Fordist model of production towards the flexible specialization model. This new production model is complex and diverse, as the evolution of the world economy from the eighties is. In fact, under the common denominator of the competence-cooperation binomial, the flexible specialization model used to end up as different kinds of local productive systems, from networks of indigenous SMEs to groups of large enterprises, either local or exogenous to the territory.

Regarding this, the literature about industrial districts, local systems of firms and clusters has stressed the role of linkages and cooperation between firms within an area (Pyke et al., 1992; Markusen 1996; Porter 1998). This literature has also paid attention to the local production models organised around large enterprises, pointing out the importance of linkages between large firms and indigenous SMEs that perform as their suppliers.

In this sense, an example of typology about the different composition of local productive systems is that pointed out by Markusen (1996). Specifically, Markusen identifies five local productive systems: Marshallian industrial district, the Italian variant of Industrial District, hub and spoke district, industrial satellite platform and State-anchored industrial district. This typology has been elaborated following several criteria, among which are highlighted: firm size breakdown, kind of industrial linkages (functional and productive), entrepreneurial networks, innovative capacities and production organization.

Nevertheless, there is also a wide literature which mainly centres its attention on the kind of prevalent firms in different territories, with different local productive systems and with different levels of development (Hardy 1998; Bellandi 2001; Audretsch 2003). Usually, those prevalent firms are defined according to several variables, such as size, links with the territory (either productive or functional) or productive specialization. One of the most novel is that which points out the following firm models (Romero and Santos 2006):

1. The 'domestic' firm is the production unit whose activity, as a result of the nature of the productive process and/or the business strategies developed, is limited to a regional area regarding its sales, as well as its input purchases.
2. The 'dependent' SME is the small or medium-sized firm whose suppliers are mainly situated outside the region, and whose production is sold basically in the regional market.
3. The 'exporting' SME is the small or medium-sized firm whose production is principally sold in external markets, but whose main suppliers are situated in the region where it is located.
4. The 'extravert' SME is the small or medium-sized enterprise whose activity is orientated towards external markets, with regards to the sale of its products as well as the purchase of its inputs.
5. The large 'propelling' firm is the corporation which has intense backward linkages with regional suppliers, but is essentially orientated towards external markets regarding its sales.
6. The large 'enclave' firm is the corporation whose main suppliers are located outside the region and commercializes its products basically in external markets.
7. The large 'market-orientated' firm is the corporation whose location is explained by its proximity to the market, whereas its main suppliers are situated mainly outside the region.

As previously mentioned in Sect. 4, where the main features of an entrepreneurial structure were posed, both the consideration of different local productive systems and that of different models of firms allow us to detect some strengths and weaknesses of an economy, and to approach, in some way, the “quality” of entrepreneurial structure (Guzmán et al., 2000; Santos 2004; Romero and Santos 2006).

6.2 A Regional Entrepreneurial Model

Nevertheless, in spite of the importance attributed to entrepreneurs in endogenous development models no reference of the former within the latter is found. In fact, we consider there are a full lack of linkages among the different quality entrepreneurial orientation levels and the typology of entrepreneurial structures, local productive systems or models of firms. Territorial analyses should include the entrepreneurial quality levels as an important explicative variable. In this way, a regional entrepreneurial model could be built.

In fact, taking into account the quality degree of an entrepreneurial orientation and the kinds of entrepreneurial structures, the following general hypothesis can be inferred: the higher the quality of the entrepreneurial orientation is, both the higher the quality of the entrepreneurial structure of the region is and then the higher the economic growth of the region is.

To establish the quality level of the entrepreneurial orientation, the constructs mentioned in previous Sect. 5.2 can be used. Nevertheless, to establish the quality level of an entrepreneurial structure (Table 2), these three different options could be used: the features of a local productive system, a typology of firms according to different territorial criteria or the specific features explained in Sect. 4 of this chapter.

In this sense, the latter seems to be more appropriate for the purpose of the chapter. The reason why is that all the variables mentioned then (firm density, firm size, dominant productive sector, productive and functional dependence and patrimonial dependence) shape the qualitative profile of the entrepreneurial structure and it is important to take them into consideration when looking at macro-economic effects on employment creation, economic growth and development. Every variable represents a different analytical approach with respect to the entrepreneurial tissue. However, it is also true that it is possible there could be whole or partial overlaps among these analytical factors. This is the case, for instance, of the majority of car concessionaries which have, at the same time, the profile of a microenterprise and of traditional services, and have high functional and high productive dependence on the supplier side.

Table 2. Qualitative features of an entrepreneurial structure

Variable	Underdeveloped regions	Developed regions
Firm density	Low	High
Firm size	Self-employed Microenterprises	SMEs and large firms
Dominant productive sectors	Traditional services	High-tech industries and knowledge-based services
Patrimonial vulnerability (large firms)	High	Low
Functional dependence	High	Low
Productive dependence	High	Low

From a comparative viewpoint, it cannot be inferred from the latter that an important number of firms with these negatives “parameters” can coexist in the economically developed regions. The difference regarding the underdeveloped regions, where a generalized profile of weak points occurs, is that, in addition to these kinds of firms, large firms and genuine industrial SMEs with a high degree of ownership, functional and productive dependence could be found.

As can be seen in Fig. 3, each quality level of entrepreneurial orientation exert an influence on a specific entrepreneurial structure; that is to say, the level of entrepreneurial orientation becomes an important explicative variable of the economic growth because it becomes one of the main features of an entrepreneurial structure.

In the model, two extreme possibilities can be found:

- The first is a combination of a high quality entrepreneurial orientation level (which corresponds to entrepreneurs with high levels of ambitious, proactive, innovative and cooperative behaviours) with the entrepreneurial structure of a developed region. This will be the case of the richest regions of European Union, such as northern Italy, southern Germany or the southeast of England.
- The second is a combination of low quality entrepreneurial orientation (which corresponds to entrepreneurs with high levels of conformist, reactive, routine and individualistic behaviours) with the entrepreneurial structure of a underdeveloped region. This will be the case of a great part of countries of central and eastern Europe such as Poland, the Czech Republic or Hungary.

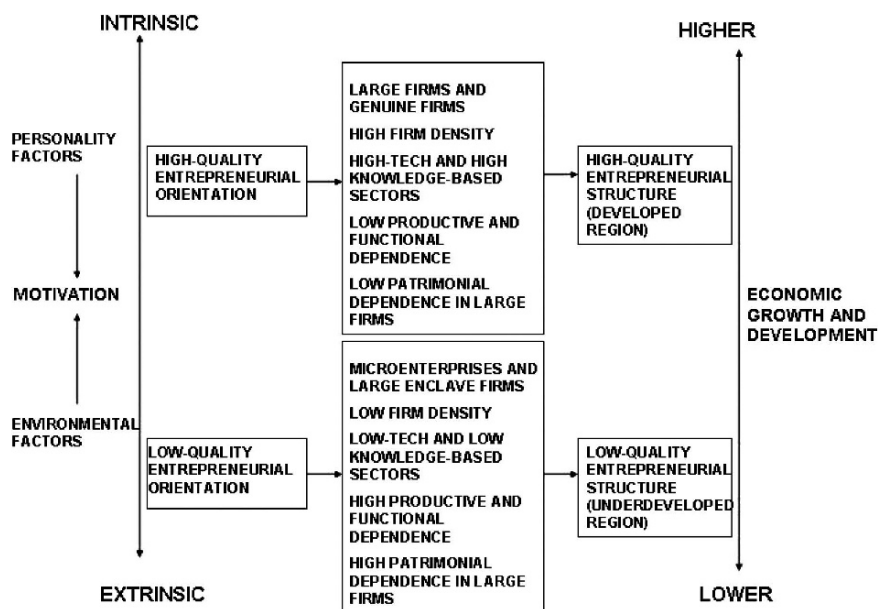


Fig. 3. A regional entrepreneurial model

Between these two extreme possibilities, there are a wide range of different cases. In fact, it is possible to find regions with features of both configurations, depending on the different productive activities, regional history or institutional organization. For instance, most of the Spanish regions, especially in the centre and the south, are characterized by a mix of both high and low quality entrepreneurial structure. Nevertheless, probably Ireland, which is considered as a unique region within the European Union due to its small size and population, is the most ambiguous case because different levels of quality in the entrepreneurial structure coexist. On the one hand, some areas, such as that surrounding Dublin, have an entrepreneurial structure corresponding to a rich region and others, such as the western area, have an entrepreneurial structure of an under-developed region.

7 Conclusions

In this chapter, the importance of the entrepreneurship approach to regional economic development has been pointed out. Depending on the level of analysis, either micro, meso or macro, the predominant interest of entrepreneurship is respectively in the entrepreneur, the firm or the economy as

a whole. Nevertheless, from a regional perspective, the macro analysis of the entrepreneurial factor should be concerned with how the entrepreneurial tissue needs to be structured in order for the regional economy to achieve the highest possible growth rates. On the other hand, since the entrepreneurial organization is a result of the entrepreneurial figure and entrepreneurial capacities present different profiles within different geographic frameworks, it is necessary to qualitatively analyse the functions developed by the entrepreneur.

As was explained, only the endogenous development models allow regional economics to consider both the quality of the entrepreneur's function (entrepreneurial orientation) and the quality of the entrepreneurial structure as important factors exerting an influence on the economic development of a territory. In fact, several typologies of firms or regional productive systems refer to different characteristics of the entrepreneurial structure and the quality of the entrepreneurial functions.

In addition to some traditional characteristics of an entrepreneurial structure such as firm size, firm density and predominant productive sector, three different entrepreneurial dependences have also been pointed out in this chapter: productive, functional and patrimonial. These three dependences are very important to establish the degree of the quality of the entrepreneurial structure of a region because, as reality shows, the more developed regions have more autonomous firms, independently of the influence that, of course, the foreign investment has in this age of globalization.

Finally, it is important to stress that the quality of the entrepreneurial orientation is a factor which has been considered outstanding to influence the main characteristics of the entrepreneurial structure. In addition to other factors, such as the wage level, the tax level or the formation of manpower, entrepreneurial behaviours which show ambition, creativity, proactiveness and cooperation can help to develop more autonomous firms and to attract foreign investment in non-traditional sectors. This would be a way for the quality of the entrepreneurial structure to be improved.

References

- Audretsch DB (ed.) (2003). SMEs in the age of globalization. Edward Elgar, Cheltenham
- Bellandi M (2001) Local development and embedded large firms. *Entrepreneurship and Regional Development* 13: 189–210
- Birch DL (1979) The job generation process, MIT Program on Neighbourhood and Regional Change, Cambridge (Mass)

- Collins OF, Moore DG (1964) *The enterprising man*. State University Press, East Lansing, MI
- Curran J, Jarvis R, Blackburn RA, Blach S (1993) Networks and small firms: constructs, methodological strategies and some findings. *International Small Business Journal* 11: 13–25
- Davidsson P (1991) Continued entrepreneurship: ability, need and opportunity as determinants of small firm growth. *Journal of Business Venturing* 6: 405–429
- Davidsson P, Wiklund J, Delmar F (2006) *Entrepreneurship and the growth of firms*. Edwar Elgar, London
- Durlauf D, Quah D (1999) The new empirics of economic growth. In: Taylor J, Woodford M (eds) *Handbook of macroeconomics*. North-Holland, Amsterdam, pp. 235–308
- Felipe J (2006) A decade af debate about the sources of growth in East Asia. How much do we know about why some countries grow faster than others?, *Estudios de Economia Aplicada* 24: 181–220
- Florio M (1996) Large firms, entrepreneurship and regional development policy; ‘growth poles’ in the Mezzogiorno over 40 years. *Entrepreneurship and Regional Development* 3: 263–295
- Gereffi G (1994) The organization of buyer-driven global commodity chains: how US retailers shape overseas production networks, In: Gereffi G, Kornzeniewicz M (eds) *Commodity chains and global capitalism*. Preager, London, pp. 95–122
- Guzmán J (1994) Towards a taxonomy of entrepreneurial theories. *International Small Business Journal* 12: 77–88
- Guzmán J, Santos FJ (2001) The booster function and the entrepreneurial quality: an application to the province of Seville. *Entrepreneurship and Regional Development* 13: 211–228
- Guzmán J, Santos FJ, Romero I, Liñán F (2000) Las PYMES y la calidad del tejido productivo andaluz. *Boletín Económico de Andalucía* 27/28: 43–56
- Guzmán J, Santos FJ, Romero I, Cáceres RF (2006) Realidad empresarial y desarrollo económico en la provincia de Sevilla. *Mergablum*, Sevilla
- Hardy J (1998) Cathedral in the desert?. *Transnationals, corporate strategy and locality in Wroclaw*. *Regional Studies* 32: 639–652
- Hebert RF, Link A (1989) In search of the meaning of entrepreneurship. *Small Business Economics* 1: 39–49
- Johannisson B (1995) Paradigms and entrepreneurial networks: Some methodological challenges. *Entrepreneurship and Regional Development* 7: 215–231
- Kilby P (1971) *Hunting the heffalump: entrepreneurship and economic development*. The Free Press, New York
- Kirzner I (1997) Entrepreneurial discovery and the competitive market process: an Austrian approach. *Journal of Economic Literature* 35: 60–85
- Klein L (1946) Remarks on the theory of aggregation. *Econometrica* 14: 303–312
- Krueger N (2003) The cognitive psychology of entrepreneurship. In: Acs ZA, Audretsch DD (eds.) *Handbook of entrepreneurship research: An interdisciplinary survey and introduction*. Kluwer, London, pp. 105–140

- Lumpkin GT, Dess GG. (1996) Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 21: 135–172
- Markusen A (1996) Sticky places in slippery spaces: a typology of industrial districts. *Economic Geography* 72: 293–313
- McClelland DC (1961) *The achieving society*. The Free Press, London
- OECD (1996) *Science, technology and industry Outlook*. OECD, Paris
- Pyke F, Becattini G, Sergenberger W (1992) *Los distritos industriales y las pequeñas empresas*. Vol I. *Distritos industriales y cooperación interempresarial en Italia*. Ministerio de Trabajo y Seguridad Social, Madrid
- Porter M (1985) *Competitive advantage: creating and sustaining superior performance*. The Free Press. New York
- Porter M (1998) *On competition*. Harvard Business School Publishing, Boston
- Romer PM (1994) The origins of endogenous growth. *Journal of Political Economy* 8: 3–22
- Romero I, Santos FJ (2006) Dimensión empresarial, encadenamientos productivos y calidad del tejido empresarial: un análisis de la industria en Andalucía. *Revista de Estudios Regionales*, 76: 107–134
- Santos FJ (2004) Convergencia, desarrollo y empresarialidad en el proceso de globalización económica: *Revista de Economía Mundial* 10/11: 171–202
- Santos FJ, Liñán F (2007) Measuring entrepreneurial quality in southern Europe. *International Entrepreneurship and Management Journal* 3: 87–107
- Schumpeter JA (1944) *Teoría del desenvolvimiento económico* (first published in German in 1911). Fondo de Cultura Económica, Mexico
- Shane S (2000) Prior knowledge and the discovery of entrepreneurial opportunities. *Organizations Science* 11: 448–469
- Sombart W (1993) *El burgués* (1st Published in German in 1913). Alianza, Madrid
- Storey D J (1988) The role of small and medium-sized enterprises in Europe job creation. In: Giaotzi M, Nijkam P, Storey DJ (eds): *Small and medium-sized enterprises and regional development*. Routledge, London, pp. 140–160
- Vázquez A (2002) *Endogenous development. Networking, innovation, institutions and cities*. Routledge, London
- Weber M (1969). *La ética protestante y el espíritu del capitalismo*. (first published in German in 1904). Ediciones Península, Barcelona
- Wennekers S, Thurik R (1999) Linking entrepreneurship and economic growth. *Small Business Economics* 13: 27–55
- Womack J, Jones D (1996) *Lean thinking: banish waste and create wealth in your corporation*. Simon Schuster, New York

Entrepreneurship and Growth: The Need to Combine Micro and Macro Perspectives

Villy Søgaard

University of Southern Denmark, Neils Bohrs ves 9–10 DK-6700 Esbjerg,
Denmark, vs@sam.sdu.dk

*I wish to thank my colleague, Gunnar Svendsen, for helpful comments
to an earlier version of this chapter.*

1 Introduction

In March 2000 the Lisbon Agenda was formulated with the aim of making the EU the world's most competitive economy by the year 2010. Entrepreneurship was granted a prominent role in realising this strategy: "If Europe is to become the world's most competitive economic area, it is also important to ... create a more favourable climate for entrepreneurship."¹ More recently, the European Commission has launched an ambitious strategy to support entrepreneurship by "changing the way society looks at entrepreneurs", encouraging "more people to become entrepreneurs", "enabling SMEs and entrepreneurs to remain competitive", "improving the flow of finance to SMEs and entrepreneurs" and "creating a more SME-friendly regulatory and administrative frame-work"(Commission of The European Communities 2003).

Similar policies have been adopted by most countries over the past decades, which has spawned a great deal of academic research concerning entrepreneurship and small businesses. It is far from clear, however, what the role of entrepreneurship should be vis-à-vis other drivers of economic

¹ <http://europa.eu/seadplus/leg/en/cha/c10241.htm> accessed 22 February 2007.

development: how policy measures aimed at supporting entrepreneurship at micro level feed into the realization of macro policy objectives such as that of the Lisbon Agenda – and what types of research are needed to answer these overarching questions. The aim of the present contribution is to provide a framework for discussing them.

This chapter is structured around the underlying premise that, from a long-term perspective, the allocation and exploitation of society's innovative resources is more important than the optimum allocation of its productive resources at a given technology. Thus, Sect. 1 sets the scene by defining the concept of entrepreneurship, emphasizing the innovative dimension of this concept. Against this background, Sect. 2 goes on to place entrepreneurship in a wider policy context. This section offers a framework for formulating and linking key policy relevant research questions. It is argued that, as part of a growth strategy, entrepreneurship should be seen in the context of alternative and complementary drivers of economic development. Section 3 provides a brief review of relevant research, which suggests that serious lacunae exist when it comes to linking entrepreneurship and other drivers of economic change. Section 4 presents a simple model experiment to illustrate the potential of strengthening the institutional framework for innovation as a lever of entrepreneurship. Finally, Sect. 5 concludes.

2 Entrepreneurship: A Two-Dimensional Concept

The entrepreneurship literature abounds with definitions of entrepreneurship, and entire papers have been devoted to sorting out the differences between them (see e.g., Gartner (2001) for an interesting overview). It is customary to include the definitions put forward by classical writers like Jean-Baptiste Say (1816) according to whom the entrepreneur “unites all means of production and ... finds in the value of the products ... the reestablishment of the entire capital he employs, and the value of the wages, the interest, and rent which he pays, as well as profits belonging to himself.” Another standard reference, of course, is Schumpeter (1934), who defined the entrepreneur by his capacity to “carry out new combinations”. Schumpeter pointed out that such new combinations could “take several forms”, i.e., a new good, a new quality of an existing good, a new process, a new geographical market, a new source of supply, etc. With this definition Schumpeter sought to cover the broadest possible range of innovations, not just market innovations (as in Kirzner's (1979) *arbitrageur* view of the entrepreneur).

Some writers have tended to identify entrepreneurship with the formation of new enterprises. This was the case, for example, in Howard Gartner's more recent (1988) definition of entrepreneurship as the creation of new organizations.

For the purposes of this contribution, I shall combine the start-up and innovation dimensions and define entrepreneurship as the creation of a new enterprise centred on a novel process, product or service. Moreover, for reasons that will become clear shortly I wish to exclude intrapreneurship from this definition.

As indicated by Table 1 below, the element of new firm formation serves to distinguish between entrepreneurship and (other forms of) business innovation. Although difficult to operationalize, the innovative element is important from the point of view of distinguishing between entrepreneurship and self-employment within well-established industries. Finally, intrapreneurship implies that a new (innovative) firm is founded by an already existing enterprise. Arguably, intrapreneurship should be seen as a special form of entrepreneurship. A term such as independent entrepreneurship could then be coined to cover the formation of new innovative enterprises by individuals or groups of individuals. The main reason for sticking to the more narrow definition (apart from terminological convenience) is that intrapreneurship involves problems and possibilities of its own. The process of new firm formation by an already existing company differs in important respects from the creation of a new venture "from scratch", as it were.

Table 1. Drivers of economic revitalization

	New firm formation	No new firm formation
Innovation	Entrepreneurship Intrapreneurship	Business innovation
No innovation	Start-ups	

3 Entrepreneurship in Context

How would, or should, policy-makers, eager to stimulate economic growth and development and armed with the above definition and classification, consider the role of entrepreneurship? What sort of research questions would they want (us) to ask? Three types of question naturally arise. We may call them input, interaction, and output questions respectively (cf. Figure 1 below).

Input questions are concerned with how to stimulate (or how to avoid inhibiting) entrepreneurship, intrapreneurship, business innovation, and start-ups. Such questions are addressed by the (often some-what myopic) impact

analyses focusing on the capacity of various policy measures to actually stimulate whatever driver(s) it targets. A broad range of different policy measures have been designed for these purposes and one would expect policy makers to be keenly interested in studies exploring their impact and efficiency.

As mentioned in the Introduction, the European Commission's strategy to support entrepreneurship focuses on changing the way society looks at entrepreneurs, encouraging more people to become entrepreneurs, enabling SMEs and entrepreneurs to remain competitive, improving the flow of finance to SMEs and entrepreneurs and creating a more SME-friendly regulatory and administrative framework. For example, although an element of creativity is included in the Commission's definition of entrepreneurship, the section on measuring entrepreneurship is unilaterally concerned with incentives to self-employment. Thus, the main emphasis is implicitly placed on the new-firm formation dimension.

Interaction questions are concerned first with allocating resources and attention among the drivers of economic renewal and revitalization. Furthermore, interesting policy issues pertain to the interaction between them. For example, inventors may come up with great ideas which they cannot – or do not wish to – commercialize themselves. At the same time, they may be

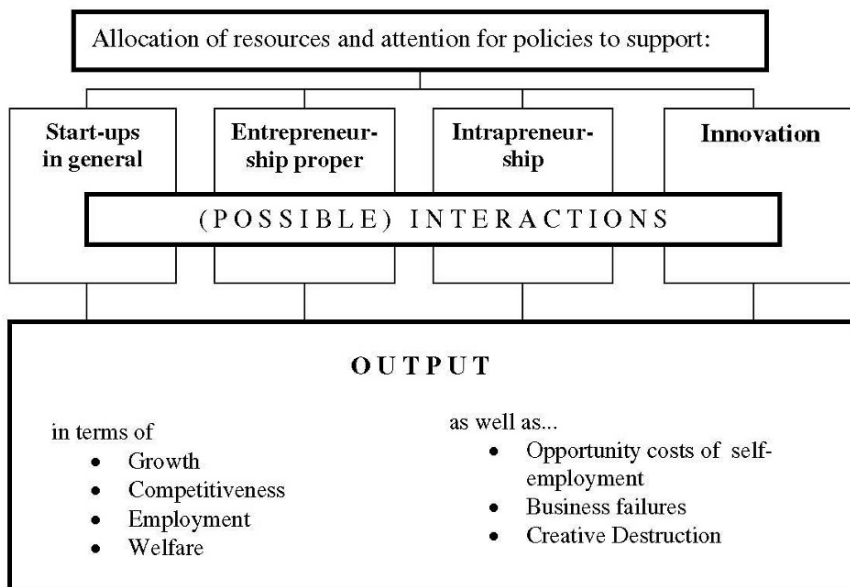


Fig. 1. The policy context of entrepreneurship

reluctant to pass on these ideas to established firms with the technological skills, marketing knowledge and management competencies to realize them for fear of having their ideas “stolen”. Transaction costs are high in these markets.

Finally, *output questions* concern the impact of entrepreneurship or innovation on long-term growth, national competitiveness, employment, or similar policy objectives.

4 Research and Research Lacunae

There are quite a few examples of the first type of research, especially if impact studies by ministries and other public agencies are included. For example, a study from Scotland (Scottish Enterprise 2000) appeared to show that the so-called business birth rate strategy had largely failed to raise the level of start-up activity, which has been consistently below the UK average. Interestingly, a comprehensive analysis by Teasdale and McVey (2001) concluded that the most likely explanations for this were to be found in macro economic conditions (such as interest, business confidence, etc.). This finding significantly modifies the “independent variable” perspective of entrepreneurship to which we shall return below. An equally critical assessment of policies to support entrepreneurship in Australia can be found in Parker (2000). For a more comprehensive study, covering ten countries, see Stevenson and Lundström (2001).

It is hard to find studies explicitly addressing the discussion of where or when to prefer the support for one over the other. As far back as 1956, John Kenneth Galbraith believed that

“There is no more pleasant fiction than that technical change is the product of the matchless ingenuity of the small man forced by competition to employ his wits to better his neighbour. Unhappily it is a fiction. Technical development has long since become the preserve of the scientist and the engineer. Most of the cheap and simple inventions have, to put it bluntly, been made.”

(Galbraith 1956 p. 86)

In the 1980s Sidney Winter argued that one had to recognize the co-existence of two completely different technological regimes. He made a distinction between entrepreneurial and routinized regimes, pointing out that

“An entrepreneurial regime is one that is favourable to innovative entry and unfavourable to innovative activity by established firms;

a routinized regime is one in which the conditions are the other way round.”

(Winter 1984 p.297).

A deep and rather concrete understanding of both the growth potential and the lines of demarcation separating these broadly defined regimes seems necessary to make a rational decision as to what and how to support (e.g., in order to realize the Lisbon Agenda). Needless to say, there are huge variations within each regime. The entrepreneur of the entrepreneurial regime may be a specialized supplier of components for one or a few large customers within the routinized regime; he may have started up within the express-mail industry, or produce take-away soup. He may also have established his business within an upcoming sector, which will gradually become part of the routinized regime with entry barriers high enough to block the entry of new entrants. The evolution of the Danish windmill industry is an obvious case in point (see e.g., Raghu and Karnøe 2003). The many new firms established in the early stages of the “ICT Kondratieff wave” (as well as within bio-technology) are other examples.

Perhaps one of the main obstacles to efficient policy making in this area is the complexity of the elements constituting an entrepreneurial opportunity. As mentioned in the Introduction, the European Commission aims at fostering entrepreneurial spirit, or a culture recognizing the value of self-employment. Similar objectives can be found in the policies of many member countries, and it may well have some effect. Thus, an analysis of regional employment growth in Denmark during 1980–1993 suggested that within this period growth was highly correlated with new firm formation, which in turn could be related to rates of self-employment for 1980 (Søgaaard 1997). However, while the absence of such a culture may inhibit entrepreneurship, its presence is but one of several contextual factors that may or may not facilitate the formation of new and innovative firms. Other factors include managerial and technological competencies, an institutional framework offering financial opportunities, IPR protection, etc. Some researchers (Venkataraman 1997; or Shane 2000) have emphasized the role of prior knowledge (both tacit and explicit) in discovering entrepreneurial opportunities. The point here is that a number of factors must be present at the same time for the opportunity to materialize.

The lucky combination of technological skills, market knowledge, managerial competence, and funding underpinning the successful new venture is a rare combination. More often than not one or more elements are either absent or too fragile to allow the new enterprise to succeed. As Westhead and Birley observed in a study of business failures in the UK,

“the majority of new firms are doomed to death in their formative years” (Westhead and Birley 1994, p. 56).

Transaction costs are high in the market for product-, process- or business ideas, however, and the obstacles to transferring such new ideas to others for professional refinement and commercialization may well be the true culprit behind many failed business ventures. Conversely, the highly successful entrepreneurs studied by Sarasvathy (2001) were skilled in committing external stakeholders and mobilising their complementary resources in the entrepreneurial process. In conclusion, whilst there is a great deal of literature on networking, on the creation of virtual or imaginary organizations, etc., there is a dearth of literature on the ‘interaction problems’ of Fig. 1 – especially when it comes to the choice between realizing a business opportunity oneself and having it passed on to others.

As concerns the ‘output side’, however, i.e., the number of jobs or new firms created, a great deal of research has been made. In fact, it could be argued that the current focus on entrepreneurship and small businesses was spurred by studies such as that of Birch (1979), who found that no less than 2/3 of new (net) jobs in the US between 1969 and 1976 were created in small firms with less than 20 employees. Subsequent research has modified this picture in various ways. Studies from other countries (and other periods) have produced less impressive results, and their validity has been challenged on methodological grounds, e.g., by Davis et al. (1996). The objections raised by Davis and associates were focused on purely statistical problems, however,² and the practical significance of these criticisms was largely rejected by Davidson et al. (1998).

However, implicit in much of this research – and certainly in the way it has been interpreted – has been an additive understanding of job creation, largely ignoring the ways in which job creation in some firms relate to the creation or destruction of jobs in others (cf. e.g., The Commission of the European Communities 2003 p. 9). From the perspective of mainstream economic theory one would expect the activities of small as well as large companies to have multiplier effects throughout the economy. Conversely, the outsourcing of activities to smaller, more specialized and hence more efficient small firms could have both negative and positive net employment effects. Yet, these systems effects are frequently overlooked, not just in policy documents but in the research literature on this subject as well (Søgaard 2006).

The fallacy of composition inherent in the additive approach is more than simply an academic problem. As we shall see below, there are very

² The so-called size distribution fallacy, confusion of gross and net job creation; and the regression-to-the-mean bias.

strong reasons why macro economic implications of entrepreneurship – e.g., in terms of aggregate employment – cannot be estimated simply by the amount of employment within new, small or entrepreneurial firms. Even gazelles are part of a larger ecosystem and policies ignoring this will inevitably be misguided.

Cross-regional or-national studies relating self-employment or entrepreneurship to growth at regional or national level are less vulnerable to this line of criticism. Quite a few such studies have been made at regional level over the years (see e.g., Hart and Harvey 1995), but the most systematic studies at macro level are probably those of Dutch researchers Carree, van Stel, Thurik and Wennekers (e.g., Carree, et al., 2002; Carree and Thurik 2003, 2006).

Their research suggests that an optimum level of business ownership exists from the point of view of generating economic growth. While most countries have less than the optimum level of self-employment, there seems to be “decreasing returns to scale”, as it were. This presumably reflects the alternative costs of self-employment. Even in terms of generating new jobs, some are probably more productive as employees than as self-employed.

The optimum level of self-employment is not stable over time, however. As Carree and Thurik observed, “from about 1870 to 1970 the corporate laboratories affiliated with large manufacturing firms have been increasingly responsible for commercial R&D” (Carree and Thurik 2003 p. 457). This trend has subsequently been reversed, however. The tendency towards ever larger firms began to change in the 1970s, which has often been seen as a response to the relative growth of the service sector in the most advanced economies. Also, as indicated above, this trend reversal may be related to the early stages of the so-called ICT Kondratieff wave. A more comprehensive discussion of this issue is beyond the scope of the present contribution. Yet, a deeper understanding of the forces and mechanisms seems needed to assess the likely future role of entrepreneurship.

At the theoretical level some contributions have been made to integrate innovation and entrepreneurship into macro economic (endogenous) growth theory. For example, the work of Aghion and Howitt (1997) established how creative destruction might discourage investments in R&D by depressing expected monopoly rents. It would be wrong to claim, however, that the dynamics of entrepreneurship and innovation have now been organically integrated into the new growth theory.

Needless to say, the overview of entrepreneurship research presented in this section is far from exhaustive. Nevertheless, it does suggest a number of tentative conclusions.

First, there is relatively little research to support the overall 'allocation' dimension of Fig. 1. We are not in a position to say what policy mix would be most favourable from the point of view of stimulating economic growth. Secondly, a fair amount of research has been done on what might be called direct policy impact (i.e., the impact of various policy measures on entrepreneurship, new firm formation etc.). Thirdly, the interactions – or possible interactions – between the four drivers of Fig. 1 do not seem to have been studied very carefully. Finally, there is some research on the 'output side', (i.e., on the impact of the drivers mentioned on overall economic performance), but it has been carried out at a rather high level of abstraction and tends to treat entrepreneurship as a single, independent variable.

These shortcomings may be explained by the fact that, with few notable exceptions, the fields of entrepreneurship research, innovation research, and economics seem to have been living quite separate lives. Broadly speaking, entrepreneurship research has been micro oriented, drawing on a variety of social science disciplines (including psychology), whereas the approach of mainstream economics is systems oriented and (mono-) disciplinary. Both innovation and entrepreneurship research have generally been multidisciplinary. The sharp divisions between these strands of research obviously constitutes a problem in the present context. First of all, understanding the linkages between entrepreneurship and economic growth is an obvious precondition for informing policy-making. Hence, the task of establishing these linkages at theoretical level is potentially one of great practical significance. It is no small task, however. In fact, it is an endeavour to which one could – and definitely should – devote an entire research programme. The main aim of the present contribution is to identify the major gaps between these disparate approaches and suggest possible ways of bridging them.

5 The Innovative Dimension: A Necessary *Déjà Vu*

As revealed by the brief overview of the previous section, we still have a long way to go to integrate the very different approaches to the study of entrepreneurship and growth in an organic and coherent way. The received orthodoxy of mainstream economics has always been focusing on the optimum allocation of productive resources by the operation of the Invisible Hand of the market.

As pointed out above, from a long-term perspective, the optimum allocation of society's *productive* resources is a matter of comparative

indifference relative to the optimum allocation of its *innovative* resources. Conventional economics has been aware of this for many years, and as Kamien and Schwartz observed, “few ... economists maintain that perfect competition efficiently allocates resources for technical change.” (Kamien and Schwartz 1975 p. 2). The reason for this problem is to be found in the public goods nature of new product and process knowledge, of course.³

Yet, perhaps due to the difficulties of estimating the scope of this problem, little is known as to how far we may be from the optimum allocation and exploitation of society’s innovative resources. It may be instructive, therefore, to present a simulated version of the problem to provide some background for considering the extent to which one would expect a market economy to reward its innovators and entrepreneurs from the point of view of microeconomic theory. I shall try to illustrate this issue using numerical examples, based on a simple Cournot model of competition. The mathematics underlying these examples is set out in the Appendix at the end of this chapter.

Ideally, one would want to integrate the micro approach into a truly macro economic context, examining its implications for aggregate income, investments, consumption, and so on. Carree and Thurik (2003) offer a suggestive illustration of how this might be done. The purely micro economic approach has been chosen here, however, to focus on the crucial innovative resource allocation issue.

The simulation exercise presented below illustrates a story in four “chapters”, which are believed to reflect a typical real-world development. In the first “chapter”, a new market is created and the innovator enjoys a monopoly in the production of a new good. This happy situation does not last, however. After a while the competition comes in, emulating the innovator’s costs of production – but not his initial expenditure on innovation. To keep things simple imitation costs are ignored.

In the second “chapter” of this story, one member of the oligopoly develops a process improvement reducing either variable or fixed production costs. Adam Smith observed, in *The Wealth of Nations*, that with ‘wise management’ a dyer might profit from a trade secret for many years and even leave it as a legacy to his posterity (Smith 1978 p. 163). This is hardly possible today. Empirical studies conducted by Mansfield in the early 1980s (Mansfield et al., 1981; Mansfield 1985) showed that even

³ Contrary to what the public goods perspective might suggest, centrally planned economies have not fared any better in terms of generating innovation and economic renewal. On the contrary. (For a vivid description of the problems of the “lack of productive interaction between science and industry” in the Soviet Union, see Castells (2000, p. 32)).

process knowledge was often disseminated to competitors in a matter of a few years.

In the third “chapter”, a new product is launched which is a substitute for the existing product. Again, the innovator may or may not enjoy a monopoly. The underlying assumption is that prospective returns to the innovator are likely to fall somewhere in the interval between the monopoly and the oligopolistic competition extremes.

In this simple, Marshallian model, the potential welfare gain, ΔW , from innovation amounts to:

$\Delta W = (\text{Potential change in}) \text{ consumer surplus}^4 + \text{profits} - \text{innovation expenses}$

One would expect the rational regulator, attempting to provide appropriate incentives to innovate, to approximate as closely as possible the *golden rule* that innovators should benefit from innovation whenever the potential net gain is positive and vice versa. It is useful, therefore, to consider innovation expenses in relation to gross benefits (i.e., consumer surpluses plus profits). Unfortunately, consumer surpluses cannot be observed in real life. It is exceedingly difficult, therefore, to assess how close or how far the economy is from applying this “golden rule” in practice. Hence the relevancy of the simulation exercise.

To begin with, let us consider the golden rule in relation to the entrepreneur monopolist. Let the demand curve be given by $P = 100 - 1.5 \times Q$ and assume that no competitors enter the market. For fixed costs $C = 100$, variable unit costs $c = 10$, and innovation expenses amounting to 20% of the (gross) potential innovation benefit, Fig. 2 below illustrates who gains and who loses, depending on the market situation.

In the monopoly situation of Fig. 2, the entrepreneur realises just over half (51%) of the potential social gain, while consumers realise some 41%, and the (modest) deadweight loss makes up the rest. The golden rule clearly doesn’t apply. Even if a monopoly position could be guaranteed, innovation expenses above some 61% of total gross benefit would ruin the innovator in this particular market. This percentage is inversely related to the size of the market.

Competitors do tend to enter profitable markets, however, and the number of competitors depends on the slope of the demand curve. In this

⁴ The consumer surplus measures the difference between the maximum price the consumer would be willing to pay for each unit of a particular good and the price actually paid. When summed over all units, the consumer surplus indicates the welfare gain attributable to each good.

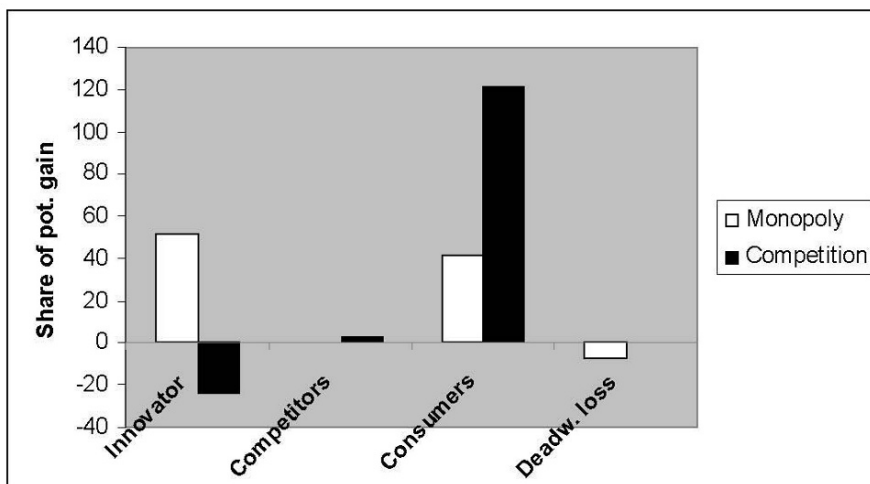


Fig. 2. Gains and losses in the creation of a new market

particular example there is room for no more than six competitors including the innovator. Unlike the innovator, competitors are not burdened by innovation expenses, and comparing the black columns for the innovator and his competitors suggests that innovator may well be driven to the wall.

Now, turn to the second oligopoly model. A symmetric oligopoly has been established here, and an innovation reducing *variable* unit costs (thus increasing returns to scale) is suggested (from 10 to 2). In the 'monopoly' situation one member of the oligopoly has developed the innovation and is the only one to apply it. A new symmetric oligopoly emerges as the innovation is leaked to competitors. As above, innovation expenses are assumed to make up 20% of gross potential gain – and even with a guaranteed monopoly the innovator would lose if these expenses were to exceed 50%.

As shown in Fig. 3, consumers may actually lose from this cost saving innovation in the 'monopoly' case. The technological monopoly allows the innovator to capture market shares, which results in one competitor leaving the market. As a result of this concentration, the market price increases above its pre-innovation level. Again, once the innovation is imitated by competitors, the innovator loses in all cases.

Alternatively, consider the implications of *reducing fixed cost* (thereby decreasing returns to scale) by changing the cost structure from $C = 100$ to $C = 40$, while retaining variable costs at $c = 10$. In Fig. 4, neither competitors nor consumers are affected by this change as long as the innovator keeps the innovation to himself. However, the realized share of potential benefits from the innovation is small, in the best of cases a mere 7%. As before, innovation expenses have been preset at 20% of

total gross benefits. Expenses above 26% would cause the innovator to lose money even in the 'monopoly' situation.

In this case, when the innovation is leaked to competitors, this may have a strong impact on industry structure, allowing more entrants and increasing competition. Even in the best of cases this is harmful to the profits of

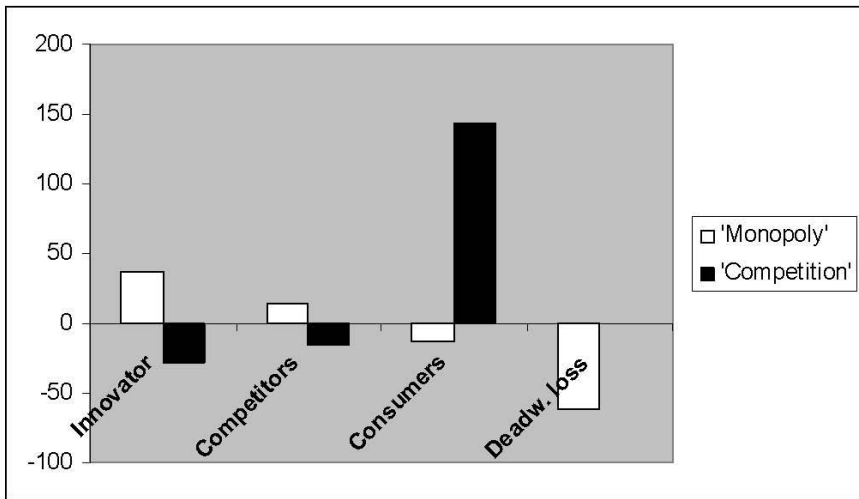


Fig. 3. Gains and losses from an innovation reducing variable costs in an established market

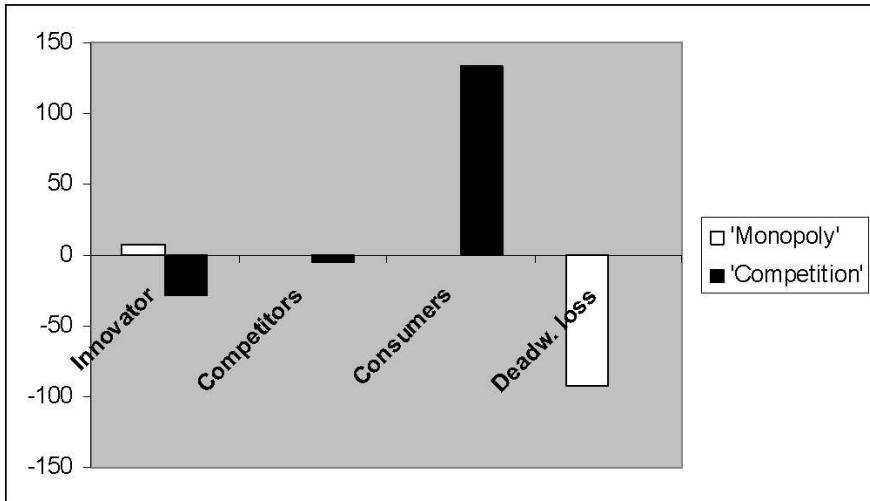


Fig. 4. Gains and losses from an innovation reducing fixed costs in an established market

both the innovator and his competitors, and the real beneficiaries are the consumers.

If total costs are assumed to reflect the number of jobs within the industry, both cost saving innovations will tend to reduce employment within this sector. Finally, in the fourth “chapter” of this short history, a new and superior product is introduced. Suppose the two markets are related in such a way that

$$P_x = a - kZ - bX$$

while

$$P_z = u - kX - vZ$$

Further, suppose the new product is superior to X (i.e., $u > a$) and an imperfect substitute for X. More specifically, let $a = 100$, $u = 150$, $b = v = 1.5$ and $k = 1$. For simplicity, production costs are assumed to be the same for X and Z ($C = 100$, $c = 10$). Innovation expenses amount to 20% of the maximum gross benefit (addition to consumer surpluses and profits). Note that the costs of oligopolistic excess capacity are considered socially necessary.

Figure 5 below shows who benefits from the innovation. In the left-hand column, the entrepreneur (the Z-producer) enjoys a monopoly in the production of Z, whereas in the right-hand column, competitors have entered the market.

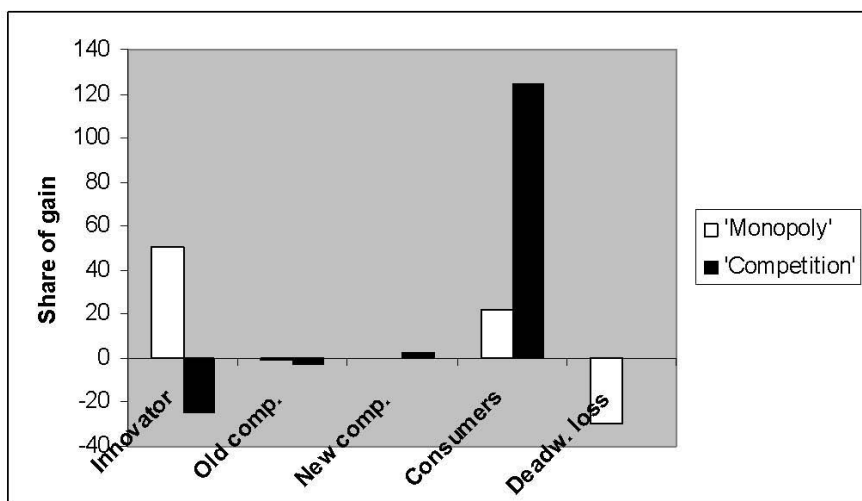


Fig. 5. Gains and losses from introducing a superior product

It is assumed here that innovation expenses amount to 20% of gross benefits. In the monopoly situation, the entrepreneur will be rewarded, as long as innovation expenses are below 60% of gross innovation benefits. Although the losses befalling 'old' competitors (producing the original X good) are relatively modest, they do suffice in this example to reduce their numbers 6 to 3.⁵

The case illustrated in Fig. 5 is particularly pertinent to the development of information goods. If the protection of the " X " good effectively prevents the innovation of the " Z " good, intellectual property rights designed to promote innovation may actually have the opposite effect. This argument has been made in the context of software development, where the ability to use existing software as an input in the development of new versions is crucial. The problem applies more generally, however.

The results of the exercise should be treated with caution, of course. It is obvious, for example, that a Bertrand model of oligopoly would yield different results. Also, the theoretically more appropriate use of compensating variation rather than Marshallian consumer surpluses would make a (small) difference. A number of factors may serve to mitigate the innovation disincentives revealed by the exercise. For example, the research on absorptive capacity and innovation spillovers suggests that these may reinforce the incentives of established firms to invest in R&D. Also, imitation costs are likely to be non-negligible. But then again, the impact of uncertainty and enforcement costs, of strategic patenting, etc. have not been taken into account. Such costs may be quite substantial. For example, according to Harbaugh and Khemka (2000, p.5), "A September 1999 check by the Business Software Alliance (BSA) found over two million websites worldwide that offered, linked to, or discussed pirated software under the standard term "warez". Similarly, the BSA recently found more than 368,000 web pages that offered "patches" or "crackz" to defeat copy protection measures". The reverse side of these compliance problems is to be found in the heavy enforcement costs associated with detecting and responding to infringement.

6 Conclusions

Against the backdrop of the Lisbon Agenda, this contribution has questioned the dominant discourse linking entrepreneurship and growth. Starting from the premise that the long-term allocation and exploitation of

⁵ In contrast, if the new product were a complement, X producers might gain significantly.

society's innovative resources is more important than the optimum allocation of its productive resources at a given technology, three tentative conclusions may be drawn.

First, it appears that greater emphasis should be placed on the innovative (rather than the start-up) dimension of entrepreneurship. It is by no means clear how and to what extent entrepreneurship with little or no innovative content is thought to contribute to overall growth. Despite statistics showing high failure rates for newly established enterprises, we don't know to what extent new firms actually create their own demand and to what extent they succumb or survive at the expense of incumbent firms.

Secondly, as far as more innovative forms of entrepreneurship are concerned, the simple simulation experiment suggests that the link between entrepreneurship and employment depends crucially on the nature of the innovation on which it is centred. While the creation of a totally new market or the introduction of a complementary product may indeed add to total activity, entrepreneurship based on cost saving innovations may actually reduce overall employment, at least in the short to medium term. Hence, it should be clear from the above that treating entrepreneurship as a single independent variable, practically synonymous with the concept of self-employment, is unsatisfactory. The types and significance of the innovation on which the new firms are based should be taken into account, and so should the alternative costs of starting up these new ventures.

Thirdly, as part of a growth strategy, entrepreneurship should be seen in the context of alternative and complementary drivers of economic development. A brief review of relevant research suggests that serious lacunae exist when it comes to linking entrepreneurship and other drivers of economic change.

Fourthly, if the proposition that long-term competitiveness depends on the optimum allocation of *innovative* resources is valid, the exercise suggests that the second-best forms of appropriation governing innovation incentives may be a far cry from meeting the standards of the "golden rule". This calls for an *innovative* revision of the IPR regime, especially perhaps in relation to new information technology. The simple micro-economics suggest that in a competitive environment, too many innovative entrepreneurs are likely to fail as a result of appropriability problems. In principle, even socially highly desirable innovations may bankrupt their creators on this account. Apart from some anecdotal evidence we don't know how often this happens, but Sarasvathy's finding that successful entrepreneurs tended to stick to the "principle of affordable loss" is quite consistent with the lessons of the theoretical model.

In sum, there seems to be a serious need to adopt a more holistic basis for informing and assessing policies to stimulate entrepreneurship and a shift of focus in favour of the innovation dimension of this important phenomenon.

References

- Acs ZJ, Carlson B, Karlsson C (1999) The linkages among entrepreneurship, SMEs and the macro economy. In: Acs ZJ, Carlson B and Karlsson C (eds) *Entrepreneurship, Small & Medium Sized Enterprises and the Macroeconomy*. Cambridge University Press, Cambridge pp. 3–42
- Aghion P, Howitt P (1992) A Model of Growth Through Creative Destruction. *Econometrica* 60: 323–351
- Baretto H (1989) *The Entrepreneur in Microeconomic Theory: Disappearance and Explanation*. Routledge, London
- Baumol W (1968) Entrepreneurship in Economic Theory. *American Economic Review* 58: 64–71
- Birch DL (1979) The job generation process. Final Report to The Economic Development Administration. Cambridge, MA: MIT program on neighbourhood and regional change, MIT, Massachusetts, USA
- Carree M, Thurik R (2003) The impact of entrepreneurship on growth In: Acs ZJ, Audretsch DB (eds), *Handbook of Entrepreneurship Research*. Kluwer Boston/Dordrecht, pp. 437–471
- Carree M, von Stel A, Thurik R and Wennekers S (2002) Economic Development and Business Ownership: An Analysis Using Data of 23 OECD Countries in the Period 1976–1996. *Small Business Economics* 19: 271–290
- Castells M (2000) *The Information Age: Economy, Society and Culture. End of Millenium*. Second Edition, Blackwell, Padstow, Cornwall, UK
- Commission of The European Communities (2003) Green Paper. Entrepreneurship in Europe. Available at http://europa.eu.int/eurlex/en/com/gpr/2003/com2003_0027en01.pdf. Accessed March 4, 2007
- Commission of The European Communities (2004) Action Plan: The European Agenda for Entrepreneurship. Communication from The Commission to The Council, The European Parliament, The European Economic and Social Committee and The Committee of the Regions. Available at: http://europa.eu.int/eur-lex/en/com/enc/2004/com2004_0070en01.pdf Accessed March 4, 2007
- Davidson P, Lindmark L, Olsson C (1998) The Extent of Overestimation of Small Firm Job Creation – An Empirical Examination of the Regression Bias. *Small Business Economics* 11: 87–100
- Davis SJ, Haltiwanger J, Schuh S (1996) Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts. *Small Business Economics* 8: 297–315

- Galbraith JK (1956) *American Capitalism. The Concept of Countervailing Power*. The Riverside Press, Cambridge, MA
- Gartner WB (1988) "Who Is an Entrepreneur?" Is the Wrong Question. *American J Small Business* 12(4): 11–32
- Gartner WB (2001) Is There an Elephant in Entrepreneurship? Blind Assumptions in Theory Development. *Entrepreneurship Theory and Practice* 25(4): 27–39
- Gibb AA (2000) SME Policy, Academic Research and the Growth of Ignorance, Mythical Concepts, Myths and Assumptions. *International Small Business Journal* 18 (3): 13–35
- Harbaugh R, Khemka R (2000), Does Copyright Enforcement Encourage Piracy? SSRN Working Paper Series. Claremont McKenna College
- Hart M, Harvey H (1995) Job Generation and New and Small Firms. Some Evidence from the Late 1980s. *Small Business Economics* 7: 97–109
- Herrero-Rada S (2005) The Green Paper on Entrepreneurship. The Entrepreneurship Action Plan. *Local Economy* 20 (1): 98–103
- Kamien MI, Schwartz NL (1975) Market Structures and Innovation: A survey. *Journal of Economic Literature* 13 (1): 1–37
- Kirzner I (1979), *Perception, Opportunity, and Profit*, University of Chicago Press Chicago,
- Mansfield E (1985) How Rapidly does New Industrial Technology Leak Out? The *J Industrial Economics* XXXIV (2) December 1985: 217–223
- Mansfield E, Schwartz M, Wagner S (1981) Imitation Costs and Patents: An Empirical Study. *The Economic Journal* 91: 907–918
- OECD (2002) Policy Benchmarks for Fostering Firm Creation and Entrepreneurship. Paris. DSTI/IND (2002) p. 13
- Parker R (2000) Small is Not Necessarily Beautiful: An Evaluation of Policy Support for Small and Medium-Sized Enterprises in Australia. *Australian Journal of Political Science* 35 (2): 239–253
- Raghu G, Karnøe P (2003) Bricolage Versus Breakthrough: Distributed and Embedded Agency in Technology Entrepreneurship. *Research Policy* 32: 277–300
- Sarasvathy SD (2001) Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* 26 (2): 243–288
- Say J-B (1816) *England and the English People*, 2nd edition (1816), by Richter J. London: Sherwood, Neely & Jones. Translation of Say J-B (1815) *De l'Angleterre et des Anglais*, Paris: Arthur Bertrand
- Schreyer P (1996) SME's and Employment Creation. Overview of Selected Quantitative Studies in OECD Member Countries. Paris. France. OECD
- Schumpeter J (1934) *The Theory of Economic Development*, published in German (1912), Harvard University Press, Harvard, MA
- Shane S (2000) Prior Knowledge And the Discovery of Entrepreneurial Opportunities. *Organization Science* 11 (4): 448–469

- Smith A (1978) *The Wealth of Nations*. Edited by Andrew Skinner. Penguin Press Suffolk
- Søgaard V (1997) *Fra landbrugssamfund til boligområde*. [From Rural Community to Residential Area]. Nordvækstkommunernes landdistriktprojekt. Delrapport 1. Sydjysk Universitetsforlag. Esbjerg. Denmark.
- Søgaard V (2006) Micro-macro paradoxes of entrepreneurship. Paper presented at the ESU conference in Hämeenlinna, Finland, August 2006
- Stevenson L, Lundström A (2001) *Patterns and Trends in Entrepreneurship/SME Policy and Practice in Ten Economies*. The Swedish Foundation for Small Business Research. Stockholm Sweden
- Teasdale P, McVey B (2001) *Scottish Economic Report 2001*. Available at <http://www.scotland.gov.uk/Resource/Doc/158287/00042861.pdf>
- Venkataraman S (1997) The Distinctive Domain of Entrepreneurship Research. *Advances in Entrepreneurship, Firm Emergence and Growth* 3: 119–138 JAI, Greenwich, CT
- Wennekers S, Thurik R (1999) Linking Entrepreneurship and Economic Growth. *Small Business Economics* 13(1): 27–56
- Westhead P, Birley S (1994) Environments for Business De-Registrations in the UK; 1987–1990, *Entrepreneurship and Regional Development* 6 (1): 29–62
- Winter S (1984) Schumpeterian Competition in Alternative Technological Regimes, *J Economic Behavior and Organization* 5, September–December, 1984: 287–320

Appendix

The Mathematics of the Oligopoly Model

Suppose there are N competitors in an industry. With identical cost structures, fixed costs C and total variable cost $c \cdot x$, each produces a quantity x . Hence, the total quantity produced by all players is

$$X = Nx \quad (1)$$

The price obtained in the market place is given by

$$P = a - bX \quad (2)$$

If producer i treats the production decisions of all competitors as given (a Cournot oligopoly), (2) may be rewritten as

$$P = \left(a - b \sum x_j \right) - bx_i \quad (3)$$

Producer i 's production decision will be made to maximize his profits

$$\pi_i(x_i) = Px_i - C_i - c_i x_i \quad (4)$$

Substituting (3) into (4) yields

$$\pi_i(x_i) = x_i \left(a - b \sum_{j \neq i} x_j \right) - bx_i^2 - C_i - c_i x_i \quad (5)$$

Differentiating with respect to x_i gives

$$\pi_i(x_i) = \left(a - b \sum_{j \neq i} x_j \right) - c_i - 2bx_i \quad (6)$$

It follows from the first-order condition that profits are maximised for

$$x_i = \frac{a - b \sum_{j \neq i} x_j - c_i}{2b} \quad (7)$$

which gives the reaction function of producer i .

The Standard Cournot Oligopoly

Due to the symmetry between firms, we can assume that they will end up producing exactly identical quantities, i.e., $x_i = x_j$. This implies that

$$x_i = \frac{a - c}{b(N + 1)} \quad (8)$$

Substituting this into (2) gives

$$P = \frac{a + cN}{N + 1} \quad (9)$$

which allows us to calculate profits as a function of N . Reorganizing (4) one obtains

$$\pi = (P - c)x - C \quad (10)$$

Note, first that

$$P - c = \frac{a - c}{N + 1} \quad (11)$$

Hence, substituting (8) into (10) one has

$$\pi = \frac{(a - c)^2}{b(N + 1)^2} - C \quad (12)$$

For profits to be non-negative, this implies that

$$N \leq \sqrt{\frac{(a - c)^2}{bC}} - 1 \quad (13)$$

or, alternatively, that C must not exceed

$$C \leq \frac{(a - c)^2}{(N + 1)^2 b} \quad (14)$$

These results allow us to analyse the impact of an innovation reducing the fixed costs either of one member of the oligopoly (i.e., the innovator) or of all members.

Impact of a Variable Cost Saving Innovation

Suppose instead that the innovator, i , manages to reduce variable costs. First, consider (6) (reproduced as (15)) from the point of view of one of i 's competitors.

$$x_i = \frac{a - b \sum_{j \neq i} x_j - c_i}{2b} \quad (15)$$

If the oligopoly is asymmetric, any competitor j will wish to produce

$$x_j = \frac{a - b(x_i + (N-2)x_j) - c_j}{2b} \quad (16)$$

Rearranging (16) allows us find x_j as a function of x_i .

$$x_j = \frac{a - bx_i - c_j}{bN} \quad (17)$$

Substituting this result into (15) enables us to find x_i as a function of N , c_j and c_i .

$$x_i = \frac{a + (N-1)c_j - Nc_i}{b(N+1)} \quad (18)$$

The production of the innovator's competitors can now be found by substituting the result of (18) into (17), which gives

$$x_j = \frac{a - 2c_j + c_i}{b(N+1)} \quad (19)$$

Knowing x_i and x_j allows us to find the market price, P

$$P = \frac{a + (N-1)c_j + c_i}{N+1} \quad (20)$$

It follows that the profits of the innovator's competitors may be squeezed by a (variable) cost saving innovation. The profits of any competitor, j , will be

$$\pi_j = \frac{(a - 2c_j + c_i)^2}{(N+1)^2 b} - C_j \quad (21)$$

For competitors' profits to be non-negative, this implies that

$$N \leq \sqrt{\frac{(a - 2c_j + c_i)^2}{bC_j}} - 1 \quad (22)$$

Introducing a Substitute or Complement

It is relatively easy to extend this model to include the introduction of a new product, the quantity of which is denoted by Z .

The demand function of (2) above may be adjusted to

$$P_x = (a_1 - kZ) - bX \quad (23)$$

and by symmetry we have

$$P_z = (u - kX) - vZ \quad (24)$$

To justify these demand schedules theoretically one might invoke a parabolic utility function and assume buyers to equate price and marginal utility. Note that $k = 0$ implies that the two products are completely independent, whereas for $k = b = v$ the two products are perfect substitutes. Negative values of k describe the situation when the two products are complementary.

The pre-innovation situation may be analysed as in the symmetric oligopoly case ((8)–(14)).

Suppose the new product is introduced by a new entrant, an entrepreneur, challenging incumbent firms. For any number, M , of producers of Z , each producer will want to produce

$$z = \frac{u - kX - c_z}{v(M + 1)} \quad (25)$$

Similarly, each of the $N=N_x$ producers of x will wish to produce

$$x = \frac{a - kZ - c_x}{b(N + 1)} \quad (26)$$

It follows that

$$Z = \frac{bM(N + 1)(u - c_z) - kMN(a - c_x)}{v(M + 1) \cdot b(N + 1) + MNk^2} \quad (27)$$

and by symmetry

$$X = \frac{vN(M+1)(a-c_x) - kMN(u-c_z)}{v(M+1) \cdot b(N+1) + MNk^2} \quad (28)$$

As long as the innovator enjoys a monopoly, $M = 1$. By analogy with (13), we can find the corresponding N value (i.e., the number of x producers) as

$$N \leq \sqrt{\frac{(a - kZ - c_x)^2}{b \cdot C_x}} - 1 \quad (29)$$

Based on this value of N we can then go on to find new values of X and Z (using (27) and (28)) and proceed to find N , X , and Z iteratively.

A similar procedure can be employed to determine the situation when new competitors enter the z market.

$$M \leq \sqrt{\frac{(u - kX - c_z)^2}{v \cdot C_z}} - 1 \quad (30)$$

The two types of iteration are illustrated in Table 2 below.

Table 2. Iterative determination of M and N , X and Z

Innovator monopoly ($M = 1$)	Competition in the z market
For $Z = 0$, find N (29)	1. For the monopoly value of Z , find N (29)
Insert this in (27) to find a new value for Z	2. Use (28) to find X
Use this in (29) to see if N changes	3. Insert X into (30) to find a fresh value of M
Return to 2 above and continue until N stabilizes	4. Insert this into (27) to find Z
	5. Find N from (29)
	6. Return to 2 above and continue until M and N remain unchanged

The resulting M and N values are inserted into (27) and (28) to find the relevant X and Z values, to calculate profits and consumer surpluses and examine the implications of launching the new product.

Finally, the consumer surplus is found as

$$\begin{aligned} CS(X^*, Y^*) &= \int_0^{X^*} P(X, 0) dX + \int_0^{Z^*} P(X^*, Z) dZ \\ &= aX^* + uZ^* - kX^*Z^* - 0.5(bX^{*2} + uZ^{*2}) \end{aligned} \quad (31)$$

Social Capital and Entrepreneurship in a Regional Context: The Case of Spanish Regions

Mohsen Bahmani-Oskooee,¹ Miguel-Ángel Galindo² and M. Teresa Méndez³

¹The Center for Research on International Economics and the Department of Economics, The University of Wisconsin-Milwaukee, Milwaukee, WI, USA

²University of Castilla-La Mancha, Albacete, Spain

³University Complutense of Madrid, Madrid, Spain

1 Introduction

In the history of economic analysis different variables have been considered to explain the progress of the nations. Traditionally mainly quantitative variables have been considered. During the twentieth century with the introduction of the endogenous growth models and the improvement of the statistical methods and data information, the qualitative variables have been quantified. Examples include: democracy, corruption, rule of law, social capital and entrepreneurship. Such variables now have their quantitative measures that are used in analyzing many economic issues.

Social capital it is not a new concept. The name “social capital” was formulated by Hanifan (1920) in the first decades of twentieth century. Earlier economists have also considered the concept of social capital. For instance, in Adam Smith’s (1776) writings it is possible to find references to this concept and its effects on productivity and economic growth. Alfred Marshall (1890), among others is also another example to be considered. Social capital is produced and contained by in social relations; it is not resided in material objects possessed by individuals. It is a result of behaviour

strategies pursued consciously or unconsciously by individuals trying to obtain present and/or future advantages (Bourdieu 1986).

On the other hand, entrepreneurship activity is a way to increase the employment rate and the production. It implies, among other things, that someone discovers the possibility to obtain some profits and then decide to invest. However, it is not a new variable. In the economic literature it is possible to find several references to this concept.

Therefore, entrepreneurship has positive effects on economic growth. For this reason it is interesting to determine the factors that are entrepreneurship enhancing. Several have been considered, especially related to public policies and economic behavior. However, social capital could have a relevant role in the process, because the existence of established organizations can actively encourage the pursuit and development of new activities. And social capital plays a relevant role in this encouragement, facilitating sometimes the necessarily resources to create a new business.

The main goal of this chapter is to analyse the relationship between social capital and entrepreneurship. In section two we will consider the definition and characteristics of social capital. In section three we will analyse the relationship between social capital and entrepreneurship. In section four we will develop an empirical analysis for the case of the Spanish regions. Next section we will consider the main conclusions.

2 Social Capital Definition

Social capital concept has been mainly developed by sociologists and economists who have recently introduced it in their analysis. Recently, this concept has been introduced in the economic growth analysis (for a broad analysis of this concept, see Fornoni et al., 2008).

Different definitions of social capital have been considered in the literature. This conceptual vagueness has had two main consequences. First, it has facilitated its use among the social studies. Second, it has been an impediment to the empirical and theoretical social capital research. For example, Coleman (1990) highlights the social structure of the entities and their ability to facilitate some activities of the individuals; Narayan and Prichett (2000) consider economic effects and the strengthen of the linkages among individuals; Burt (1992) highlights the contacts among individuals and the possibility of using other kind of capital; Portes (1998) considers the capacity of individuals to use scarce resources and attributes to their membership in networks. Putnam (1993) distinguishes between the linking relationships among dissimilar individuals that would be

positive to the society and the exclusive relations that would be negative for economic growth. Finally, Woolcock and Narayan (2000) defines social capital as ‘the norms and networks that enable people to act collectively’, reflecting both the individualistic and communal notions of social capital.

In general terms, following Durlauf and Fafchamps (2005, pp. 1643–1645) three main groups of definitions can be distinguished:

1. Definitions that emphasize the beneficial capital social effects on social aggregates. In this group, Coleman’s (1990) and Putnam et al’s (1993) definitions could be included. Putnam et al.’s definition stresses specific informal forms of social organization, including trust, norms and networks. Coleman (1988) defines three different forms of social capital: (1) obligations, expectations and trust-worthiness of social relationships; (2) informational channels; and (3) norms and effective sanctions.
2. Definitions that consider social capital in terms of relations or interdependence between individuals. In this group, Putnam’s (2000), Ostrom’s (1990) and Bowles and Gintis’s (2002) definitions could be included, among others.
3. Some definitions s social capital. Fukuyama’s (1995) definition would be included iconsider only certain shared norms and values that must be regarded an this group.

According to Bourdieu (1986, p. 249) the volume of social capital in a society depends on the extent of network connections to be mobilized and the volume of capital possessed by the individuals in the network. Therefore, the main distinguishing characteristic of social capital from other institutional relationships is that it is the result of investment strategies focusing on establishing and maintaining networks. And this investment could create new relationships and/or transform the existing ones. So, the accumulation of social capital depends on a continuous exchange within a social relationship.

Considering the second group, a general definition would be that social capital includes social networks and lager norms related to such networks that creates value in individuals (Putnam and Goss 2003, p. 14). So, in this concept not only institutions are considered, but also economic agents’ behaviour in the society, taking into account the cooperation among them. In this sense, different elements and values must be included such as, honesty, mutual agreements... that enhance productivity and finally economic growth. Then social capital implies an increase in trust and cooperation among individuals leading to a more prosperous society, facilitating human transmission, and the acceptance and assimilation of new technologies. In many occasions, it also helps families to transfer financial

resources to their members and obtain in this way funds to finance their knowledge and acquisition of their investments (Fukuyama 1995; Putnam 1993; Woolcock 2002; Woolcock and Narayan 2000). Therefore, if this definition is accepted, social capital has indirect effects on economic growth, because it implies the introduction of an adequate legal structure (Chhibber 2000, pp. 299–306).

The social capital concept is difficult to measure because it is a very ambiguous concept. There are very few data on it that make empirical research difficult. One possibility is to consider the behavior of some social institutions, such as family, political associations.... In the case of regional data, sometimes it is quite difficult to obtain this information. For this reason, usually data on families and the use of technologies that facilitates the connection among individuals are used.

Finally, it is interesting to take into account that some economists, for example Arrow (2000) and Solow (2000), consider that social capital is not a relevant factor and it can be included in a broad concept of human capital. However, other authors consider that social capital is different from other forms of capital. In this sense, Robison et al. (2002) state that the main difference is that social capital exists in a social relationship. In contrast, human capital use to reside in the individual alone, but doesn't mean that human capital creation is not collective.

3 Entrepreneurship and Social Capital

Recently, economic growth literature has emphasized not only quantitative factors but also qualitative factors. The improvement of empirical data has favoured this possibility and entrepreneurship is one of the factors included in the analysis. Entrepreneurship activity has positive effect on economic growth because the existence of a group of persons that must be interested to assume risk using their funds to generate new firms and business is necessary. However, it is also necessary to take into account the indirect effect showed by Holcombe (1998). From his point of view, the behaviour of a certain entrepreneurship not only enhances other entrepreneurs to follow his/her example but also creates new opportunities that could be explored by a third person.

Obviously, it is necessary to have an adequate environment or climate to facilitate the activities. In this sense, “rule of law”, the private property protection, level of liberty, trade agreements, among others, are necessary requisites to create such environment (Harper 1998; North 1994; Bahmani-Oskooee and Nasir 2002). Additional factor such as an adequate social capital

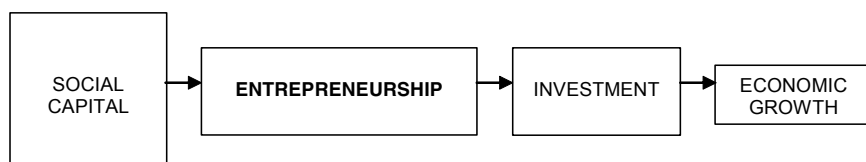


Fig. 1. Social capital, entrepreneurship and economic growth

is also necessary to enhance entrepreneurship activity that would have positive effects on investment and economic growth, as shown in Fig. 1.

In general, the literature has considered that the importance of social capital in the entrepreneurship field has been attributed to the fact that they provide resources, access to resources or emotional support (Birley 1985; Lin 2001). In this sense, the relevance is due to the fact that entrepreneurship is linked to innovation and competitive advantage. Therefore, not only public policy initiatives that encourage new business are necessary but also the existence of established organizations that actively encourage the pursuit and development of new activities. And social capital plays a relevant role in this encouragement, facilitating sometimes the necessarily resources to create a new business.

In this sense, two direct benefits are obtained from social capital to entrepreneurs: resources and information. Individuals can obtain financial resources from parents and other family members. These resources are cheaper than those obtained in financial institutions, facilitating the investment process. Also individuals could obtain formation and education financed by families. This formation improvement is also important to develop businesses because it facilitates not only the assimilation and introduction of technological advances but also confronts to modifications in the economic environment in a more effective way. However, the formation could also have a negative effect from the workers point of view. An educational improvement could increase wages and, as it has previously been stated, to discourage the entrepreneur activity, preferring to be wage-earnings instead of entrepreneurs. Social capital facilitates the access to information which it is also a relevant factor of entrepreneurial opportunities, enhancing the relevance, and quality of the information (Adler and Kwon 2002; Burt 1992; Shane and Venkataraman 2000).

An additional effect could be added, that is the creation of a favourable entrepreneur environment that from a historical perspectives, has sometimes not existed. Some literature, economic and non economic, has showed entrepreneur as an individual that is only profit seeking, acting in his own self interest. He/she only tries to achieve his/her personal profit not being

interested about the consequences of his/her activity on the rest of economic agents. In such adverse environment it is quite difficult to provide incentive to the entrepreneurial activity. As Solomon (2002) states, entrepreneurs need to use their ingenious to develop their task and doesn't mean that they lie or try to take advantage of other people.

All at all, there several channels through which the relationship between entrepreneurship and social capital could be considered. Entrepreneurship is inextricably linked to innovation and competitive advantage. The importance of entrepreneurship is evidenced not only in public policy initiatives that encourage new business development but also within established organizations that actively encourage the development and pursuit of new opportunities. Therefore a positive relationship between social capital and entrepreneurship is expected and in an indirect way it would also enhance economic growth.

4 Empirical Analysis

In this section we try engage in an empirical analysis of the relationship between social capital and entrepreneurship for the case of Spanish regions using data over the 2000–2004 period.

Two equations are estimated:

$$E_{it} = \beta_0 + \beta_1 SC_{it} + \mu, \quad (1)$$

$$y_{it} = \beta_2 + \beta_3 PI_{it} + \beta_4 I_{it} + \beta_5 E_{it} + \beta_6 KHU_{it} + \mu. \quad (2)$$

Equation (1) shows the relationship between social capital (SC) and entrepreneurship (E). As we explained in the previous section, we expect an estimate of β_1 to be positive.

Equation (2) is a growth equation where y denotes the GDP, PI the public investment, I the private investment, E entrepreneurship activity and KHU the human capital. The expected signs of estimated coefficients are positive for all variables, except PI. In this case, some authors argue that fiscal policy has negative effect on private investment and therefore, on economic growth, due to crowding-out effect (e.g., Alesina and Rodrick 1994; Bertola 1993; Perotti 1993; Persson and Tabellini 1994, among others). However, other studies (Bénabou 1996a,b; Bourguignon and Verdier 2000), conclude that a redistributive policy will have positive effects on investment through different ways: increasing public investment (Saint-Paul and Verdier 1993) or reducing credit markets imperfections or liquidity restrictions that affects negatively the investment in physical and human capitals

(Aghion and Bolton 1992; Banarjee and Newman 1993; Galor and Joseph 1993; Perotti 1993; Piketty 1997).

The main problem is how to measure entrepreneurship and social capital. In the case of the former, we use the number of business created in the region. The information given by the TEA index (Total Entrepreneurship Activity) created by GEM (Global Entrepreneurship Monitor) is the best source which provides the data. However, we do not have the index for all the regions and for all the period. For this reason we have decided to use number of firms in each region as an alternative measure.

On the social capital, we do not have regional information. In empirical studies, social capital is typically measured by either the number or intensity of linkages between economic actors; or as the general level of 'trust', or as the extent of civil society (Durlauf 2002). Following this possibility we have decided to build an indicator considering one of the most relevant social institution, the family and the possibility of the connection among individuals. For this reason we have constructed a social capital proxy variable as the sum of marriages and the use of internet.

For each model the variables are used at their level first and for each year. Each model is estimated by Ordinary Least Squares method for each year using cross-sectional data, i.e., 17 observations from each region. Then the data pooled across the regions over time and the models are re-estimated using all 85 observations from 17 regions over the period 2000–2004. The results are reported in Tables 1 and 2.

Table 1. Estimates of (1)

Year	Coefficient estimates of constant	Coefficient estimates SC	Adj. R ²	N
2000	10,194.3 (0.71)	11.20 ^a (13.4)	0.91	17
2001	12,637.3 (0.86)	11.61 ^a (13.2)	0.91	17
2002	10,227.9 (0.69)	11.90 ^a (13.7)	0.92	17
2003	11,210.7 (0.72)	12.22 ^a (13.5)	0.92	17
2004	11,077.0 (0.72)	12.54 ^a (14.4)	0.92	17
Pooled	10,969.7 ^b (1.68)	11.91 ^a (31.4)	0.92	85

Number inside the parentheses are the absolute value of the t-ratios
^a and ^b significance at the 5% and 10% level respectively, *N* number of observations used in each regression

Source: Instituto Nacional de Estadística.

Clearly Table 1 reveals that the social capital carries its expected positive coefficient that is highly significant in all models. Therefore, improvements in social capital will have positive effects on entrepreneurship.

Table 2 also shows that the estimated coefficients all follow our theoretical expectations, except in the case of the human capital. Clearly, entrepreneurship has a positive and significant impact on economic growth. The results from both tables lead us to conclude that social capital would enhance economic growth through its effects on entrepreneurship.

Table 2. Coefficient estimates of (2)

Year	Constant	I	IP	KHU	E	Adj. R ²	N
2000	-1,722,593 (1.03)	3,014.6 ^a (4.53)	-133.2 (0.38)	-2.032 (0.36)	94.80 ^a (2.49)	0.99	17
2001	14,101.8 (1.15)	2,290.4 ^a (6.73)	-11,634.9 ^a (3.94)	2.131 (0.92)	170.27 ^a (6.31)	0.99	17
2002	1,246,599 (0.88)	2,513.4 ^a (7.15)	-9,085.2 ^a (3.12)	1.5919 (0.62)	158.39 ^a (5.65)	0.99	17
2003	1,273,263 (0.78)	2,653.9 ^a (5.69)	-10,334 ^a (3.48)	3.2707 (1.21)	151.53 ^a (3.96)	0.99	17
2004	417,084 (0.27)	2,447.3 ^a (6.91)	-9,302.4 ^a (3.92)	7.5173 ^a (3.02)	108.97 ^a (2.71)	0.99	17
Pooled	-2,267,635 ^a (3.36)	2,861.5 ^a (13.9)	-426.6 ^a (2.54)	-0.0038 (0.003)	96.88 ^a (5.83)	0.99	85

Number inside the parentheses are the absolute value of the t-ratios

^asignificance at the usual 5% level, *N* number of observations used in each regression

Source: Instituto Nacional de Estadística.

5 Conclusion

In this chapter we have analysed the relationship between social capital and entrepreneurship. Social capital facilitates to entrepreneurs the information and the resources that are cheaper than those provided by financial institutions. These resources are required so that they can develop and support their activities. In this sense, entrepreneurship is inextricably linked to innovation and competitive advantage. The importance of entrepreneurship is evidenced not only in public policy initiatives that encourage new business development but also within established organizations that actively encourage the development and pursuit of new opportunities. Therefore, a positive relationship is expected between the two factors.

Furthermore, as entrepreneurship is regarded an important factor enhancing economic growth, social capital would also show a positive effect on economic growth in an indirect way. To test these hypotheses, we engaged in an empirical study by drawing data from 17 Spanish regions over the 2000–2004 period. The results obtained confirm the two main hypotheses that increased social capital boosts entrepreneurship. In turn, increased entrepreneurship stimulates economic growth.

References

- Adler P, Kwon S (2002) Social capital: Prospects for a new concept. *Academy of Management Review* 27: 17–40
- Aghion P, Bolton P (1992) Distribution and growth in models of imperfect capital markets. *European Economic Review* 36: 603–611
- Alesina A, Rodrick D (1994) Distributive politics and economic growth. *Quarterly Journal of Economics* 436: 465–490
- Arrow KJ (2000) Observations on social capital. In: Dasgupta P, Serageldin I (eds) *Social capital. A multifaceted perspective*. The World Bank, Washington
- Bahmani-Oskooee M, Nasir ABM (2002) Corruption, law and order, bureaucracy and real exchange rate. *Economic Development and Cultural Change* 50: 1021–1028
- Banarjee, AV, Newman, AF (1993) Occupational choice and the process of development. *Journal of Political Economy* 101: 274–298
- Bénabou R (1996a) Unequal societies (NBER Working Paper 5583)
- Bénabou R (1996b) Inequality and growth. *NBER Macroeconomic Annual* 1996, MIT, Cambridge, 11–74
- Bertola G (1993) Market structure and income distribution in endogenous growth models. *American Economic Review* 83: 1184–1199
- Birley S (1985) The role of networks in the entrepreneurial process. *Journal of Business Venturing* 1: 107–117
- Bourdieu P (1986) The forms of capital. In: Richardson, JG (ed) *Handbook of theory and research for the sociology of education*. Greenwood, New York
- Bourguignon F, Verdier T (2000) Oligarchy, democracy, inequality, and growth. *Journal of Development Economics* 62: 285–313
- Bowles S, Gintis H (2002) Social capital and community governance. *The Economic Journal* 112: 419–436
- Burt R (1992) *Structural holes: The social structure of competition*. Harvard University Press, Cambridge
- Chhibber A (2000) Social capital, the state and development outcomes. In: Dasgupta P, Serageldin I (eds) *Social capital. A multifaceted perspective*. The World Bank, Washington

- Coleman JS (1988) Social capital in the creation of human capital. *American Journal of Sociology* 94: 95–121
- Coleman JS (1990) *Foundations of social theory*. Harvard University Press, Cambridge
- Durlauf S (2002) On the empirics of social capital. *Economic Journal* 112(483): 459–479
- Durlauf SN, Fafchamps M (2005) Social capital. In: Aghion P, Durlauf SN (eds) *Handbook of Economic Growth*, vol 1B. Elsevier North-Holland, Amsterdam
- Fornoni M, Mas-Verdú F, Ribeiro D, Roig S (2008) Social capital and the competitiveness of the entrepreneurs: A review of the literature and proposals. In: Galindo MA, Guzmán J, Ribeiro D (eds) *Entrepreneurship and business in a regional perspective*. Springer, Heidelberg (this volume)
- Fukuyama F (1995) *Trust: Social virtues and the creation of prosperity*. The Free Press, New York
- Galor O, Joseph Z (1993) Income distribution and macroeconomics. *Review of Economic Studies* 60(1): 35–52
- Hanifan LJ (1920) *The community center*. Silver Burdett, Boston
- Harper DA (1998) Institutional conditions for entrepreneurship. In: Boettke PJ, Kirzner IM, Rizzo MJ (eds) *Advances in Austrian economics*, vol 5. JAI, Connecticut
- Holcombe R (1998) Entrepreneurship and economic growth. *The Quarterly Journal of Austrian Economics* 1: 45–62
- Lin N (2001) Building a network theory of social capital. In: Lin N, Cook K, Burt RS (eds) *Social capital. Theory and research*. Aldine De Gruyter, New York
- Marshall A (1890) *Principles of economics*. Thommes Continuum, Oxford
- Narayan D, Prichett L (2000) Social capital: Evidence and implications. In: Dasgupta P, Stiglitz J (eds) *Social capital. A multifaceted perspective*. The World Bank, Washington
- North DC (1994) Economic performance through time. *The American Economic Review* 84: 359–368
- Ostrom E (1990) *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press, New York
- Perotti R (1993) Political equilibrium, income distribution and growth. *Review of Economic Studies* 60: 755–776
- Persson T, Tabellini G (1994) Is inequality harmful for growth? *American Economic Review* 84: 600–621
- Piketty T (1997) The dynamics of wealth distribution and the interest rate with credit rationing. *Review of Economic Studies* 64(2): 173–189
- Portes A (1998) Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* 24: 1–24
- Putnam RD (1993) The prosperous community. *American Prospect* 13: 35–42
- Putnam RD (2000) *Bowling alone*. Simon and Schuster, New York
- Putnam RD, Goss, K (2003) Introducción (in Spanish). In: Putnam, RD (ed) *El declive del capital social*. Galaxia Gutenberg, Barcelona
- Putnam RD, Leonardi R, Nanetti R (1993) *Making democracy work: Civic traditions in Modern Italy*. Princeton University Press, Princeton

- Robison L, Schmid A, Siles M (2002) Is social capital really capital? Review of Social Economy 60 (1): 1–21
- Saint-Paul G, Verdier T (1993) Education, democracy and growth. Journal of Development Economics 42 (2): 399–407
- Shane S, Venkataraman S (2000) The promise of entrepreneurship as a field of research. Academy of Management Review 25 (1): 217–226
- Smith A (1776) An inquiry into the nature and causes of the wealth of nations. Campbell, RH and Skinner, AS (eds). Oxford University Press, Oxford, 1976
- Solomon RC (2002) Business ethics and virtue. In: Frederick, RE (ed) A Companion to Business Ethics. Basil Blackwell, Oxford
- Solow R (2000) Notes on social capital and economic performance. In: Dasgupta P, Serageldin I (eds) Social capital: A multifaceted perspective. The World Bank, Washington
- Woolcock M (2002) Social capital in theory and practice: where do we stand?. In: Isham J Kelly T, Ramaswamy S (eds) Social capital and economic development. Edward Elgar, Aldershot
- Woolcock M, Narayan D (2000) Social capital: implications for development theory, research, and policy. World Bank Research Observer, Washington

The Relationship Between Entrepreneurship and Economic Growth: A Review of Recent Research Achievements

Dominiak Piotr¹ and Marek Rekowski²

¹Gdansk University of Technology, Gdansk, Poland

²The Poznan University of Economics, Poznan, Poland

1 Introduction

The emergence of endogenous growth models has attributed to entrepreneurship the role of one of the most important factors deciding about economic development dynamics. Research has been concentrated on the regional aspects of economic growth. Theoretical hypothesis about the relationship between entrepreneurship and economic growth had to be supported by economic reality. In consequence many empirical studies have been realized, mostly during last 10 years. Two main questions have been the object of empirical verification – has entrepreneurship a positive impact on economic development and if so, how strong is it and is the level of entrepreneurship dependent on the level of economic growth.

Any kind of empirical verification, independently of how sophisticated the verification method is, should find and use concrete measures of the analysed phenomena. In the case of economic growth the problem is simple. There are commonly accepted growth measures – GDP or GDP per capita. Also international comparisons are not difficult because of the standardization of GDP statistics. Economic development is also considered from the employment perspective. Entrepreneurial activity, attributed mostly to the SMEs, is supposed to have a positive impact on employment. To find a viable employment measure is not a complicated task, despite of some differences in employment and unemployment statistics between countries.

The main problem is related to defining and measuring entrepreneurship. In general researchers agree that entrepreneurship has a complex meaning – entrepreneurship is multidimensional phenomenon. According to the theoretical background the accent is concentrated on one of essential characteristics of entrepreneurship. For some entrepreneurship is the equivalent of innovative behaviour of entrepreneurs, for others it is the attitude related to risk taking or to opportunities search. Irrespective of definition the question arises how to measure entrepreneurship and evaluate its impact on economic growth. In the majority of empirical studies in this field the entrepreneurship measures are simple and unidimensional. Usually these are new venture or start-up rates. Sometimes entrepreneurship is expressed by self-employment and, occasionally, by innovation indices.

By means of these simple entrepreneurship measures researchers attempt to evaluate the direct impact of entrepreneurship on national or regional economic growth, expressed in terms of GDP, or on economic development, expressed in terms of employment.

The use of start-up or self-employment rates as the most common entrepreneurship measure has some fundamental causes which arise from the SME's paradigm.

This paradigm is a consequence of observation of the economies of developed countries in the 1980s and 1990s. The rapid expansion of small enterprises during these years has created a widespread conviction that small, new ventures are the most important source of entrepreneurship and as a dynamic and innovative factor, they contribute directly to economic growth. Fortunately at the same time theoretical models of endogenous growth, with entrepreneurship one of their essential variables explaining the creation of economic welfare, have been put forward.

Although some earlier empirical studies do attempt to evaluate the direction and strength of entrepreneurship's impact on economic growth, we focus our attention on more recent studies, namely those from the last decade.

2 Entrepreneurship and Economic Growth: Evidence from Empirical Studies

There are many recent empirical analyses concerning the impact of entrepreneurship on economic development. Economic growth is analysed at national, regional and industry level. Several measures of economic development are used – GDP per capita, employment or productivity growth. Entrepreneurship is measured either by self-employment rates or by different indices of new firm formation (Table 1).

Self-employment is an expression of entrepreneurship because a person instead of becoming an employee decides to undertake his own economic activity. The self-employment preference is often treated as the expression of independence. This is also one of the most important characteristics of an entrepreneur. In models linking economic growth with entrepreneurship, the preference to work as self-employed is one of the variables influencing entrepreneurial activity and impacting national or regional economic development (Guzman and Santos 2001).

The relationship between self-employment and the level of economic development for OECD countries are exhaustively analysed by Knuth (2006) and Carree et al. (2002).

Using OECD data on the percentage shares of non-agricultural self-employment for the period 1973–1998, Knuth analyses the changes in self-employment over the period and their impact on employment and economic growth. According to the change in the share of self-employment it is possible to distinguish four groups of countries. Countries with a relatively low and decreasing share, from 10% to 7% (USA, Denmark, France), countries with a low, but increasing share, from 5% to 10% (Sweden, Finland, Germany, Netherlands), countries with medium shares, between 10% and 15%, either increasing (Belgium, Ireland, UK) or decreasing (Japan) and countries with a high and growing share, over 15% (Portugal, Spain).

There is no clear relationship between the share of self-employment and the general employment or unemployment situation. In some countries the impact of growing self-employment is positive. However, in countries with the lowest self-employment shares (USA, Denmark), the unemployment rates are low as well.

The study results do not confirm the hypothesis about the positive impact of entrepreneurship (self-employment) on the level of economic development. The relationship between the rate of self-employment and GDP per capita is rather negative. Countries with relatively low long-term self-employment rates have reached high GDP per capita levels. In Germany, France, USA, Denmark, Sweden, Norway, Netherlands and Finland the self-employment rates have not exceeded 10% level during the last two or three decades. At the same time their GDP per capita reaches the highest level among developed countries, between 20,000 and 35,000 USD at constant prices. This statement is even more striking for countries like Denmark, USA or France where a constant decrease in the rate of self-employment, especially from the 1980s, can be observed. On the other hand, in countries like Portugal, Spain and Italy where self-employment rates show a clear growing tendency and reach high levels of between 15% and 25%, the GDP per capita are lowest, between 10,000 and 20,000 USD at constant prices.

Table 1. Influence of entrepreneurship on economic growth

Entrepreneurship measure	Economic growth measure	Influence characteristic	Spatial and time range	Authors
Self-employment ^a	GDP per capita	Negative relationship; countries with relatively low and/or decreasing self-employment rates demonstrate the greatest GDP per capita	OECD countries 1973–1998	Knuth (2006)
Ownership or self-employment rate ^b	GDP per capita	Rate of business ownership influences economic growth through deviations from the equilibrium rate, too much or too few business owners can lead to a growth penalty	OECD countries 1976–1996	Carree et al. (2002)
TEA – Total Entrepreneurship Activity ^c	GDP per capita	TEA impact on economic growth depends on its level. For highly developed countries the impact is positive and for developing countries is negative. There is a minimum GDP per capita level beyond which increase of TEA rates positively influences on economic growth	36 countries 1999–2003	Van Stel et al. (2005)
Annual net entry of domestic and foreign producers and number of major innovations ^d	Productivity growth	Impact of domestic entry and innovations is positive. The largest and relatively stable impact is that of innovations. More modest and diminishing over time is the impact of domestic entry. The smallest impact is due to foreign based entry	79 industries in the U.K. 1976–1979	Geroski (1998)
Entrepreneurship capital ^e – start-up rate	Labour productivity	Positive, immediate impact but not a persistent one; long-term impact is found as statistically insignificant	372 West-German districts 1989 and 1992	Audretsch and Kielbach (2005)
New business creation start-ups	Employment	Positive impact of new firms on employment is particularly strong during first two years, afterwards the balance is reversed and net job growth become negative	US 1990, 1993, 1996	Acs and Armington (2004)

(Continued)

Start-up rate	Employment growth	Impact depending upon the period – the start-up rate has no signification impact for the 1980s but for the 1990s the impact is positive and significant	74 German regions 1980s and 1990s	Audretsch and Fritsch (2002)
New firm formation	Employment	Either a positive or negative impact depending upon the period	326 West-German districts	Fritsch and Mueller (2004)
Self-employment	Employment	Self-employment may have a positive impact on total employment. However this effect starts to operate with a lag	Swedish regions 1976–1995	Fölster (2000)

^a Percentage share of non-agricultural self-employment in total employment

^b Number of business owners (excluding agriculture) as a part of the labour force

^c TEA Total Entrepreneurship Activity rate is the percentage of adult population that is either starting a new capital or is the owner/manager of young business

^d Entrepreneurship proxies are: the annual market penetration by new domestic producers and by foreign producers and the count of major innovations

^e Entrepreneurship capital means the capacity of a society to generate new firms = number of start-ups per 1,000 of population

Carree et al., hypothesize an “equilibrium relationship between the rate of business ownership and per capita income that is U-shaped”. There is a tendency of the business ownership rate to decline and afterwards start to rise again. It means that there is a level of economic development with a minimum business ownership rate.

The results from empirical analysis for 23 OECD countries in the period 1976–1996 indicate that economies with a business ownership rate below the equilibrium may benefit from an increase in new start-ups. When the level of business ownership is above the equilibrium rate, it may cause some difficulties for the growth of new, small firms.

In general “The rate of business ownership is found to influence economic growth through deviations from the equilibrium rate.... As a consequence, economies can have both too few or too many business owners and both situations can lead to a growth penalty” (p. 285).

The authors conclude that the study results should be interpreted with caution. The interpretation of business ownership is difficult and unclear. In particular, the levels of business ownership do not take into account qualitative differences between high-tech and traditional start-ups. On the other hand, the business ownership or self-employment indices have only a quantitative character, without reflecting the quality of ownership.

Looking at the qualitative aspect of entrepreneurship it is necessary to analyse two types of self-employment and creation of new firms. It is important whether a self-employed person or business owner employs only himself or also employs other people, thus creating new jobs. The first type of entrepreneurs sell their labour in exchange for some remuneration comparable to a wage but under different legal conditions. Of course their situation is different from that of being an employee, because their activity is more independent and more risky. The impact of one-person firms on economic growth and the regional or national labour market situation is very limited. The second group of self-employed people, those employing other persons, has a very important influence on economic growth. They are real entrepreneurs as they take not only their own risk but also give some guarantee and risk protection for employed people. Their own activity, and the activity of the people they employ, multiply regional and national product and reduce social tensions by lowering unemployment.

As commented by Knuth this distinction leads to quite different conclusions. Since 1994 in Germany the number of self-employed persons employing other people remains at relatively stable level of 1,800,000. During the same period the number of self-employed without employees has increased from 1,400,000 in 1994 to almost 2,000,000 in 2003. Especially after 2001 the rate of growth became very high, mainly because government policy supported new start-ups by low taxation during up to three years of their activity. However, according to the analysis made by Bundesregirung in 2006, a large part of these entrepreneurs lack any clear and concrete business plan. It is quite probable that they have started their own business by opportunism or by accident. In consequence many of them will never become real entrepreneurs and after some time they will return to the statistics as unemployed jobseekers. The entrepreneurial effects of self-employment on economic growth depend on the quality of starting-up entrepreneurs, and on whether they employ other people or only themselves. Even the growing number of self-employed persons employing only themselves does not exert much on employment and income growth. Many costly policy measures, utilised in order to stimulate self-employment and thus decrease unemployment and increase economic growth, demonstrate limited effectiveness. The policy instruments should be concentrated on those self-employed persons who create jobs for others, that are on real entrepreneurs.

Another commonly used entrepreneurship measure is new venture or start-up rates. Unfortunately, empirical studies do not provide a clear and explicit proof of the positive impact of start-ups on economic and employment growth. This impact may be either negative or positive, it may be

different in the short and long-term, it may change its character depending on the level and/or stage of economic development of a country or region.

Van Stel et al. (2005) measure entrepreneurship by the TEA – Total Entrepreneurship Activity rate which is the percentage share of nascent entrepreneurs and business owners of young firms in the total adult population. Their study covers 36 countries during the period 1999–2003. The find conclusion from the study is that similar TEA rates have a rather positive and stronger impact on economic growth (GDP per capita) in developed countries. This impact becomes weaker in transition economies (Hungary, Poland, Slovenia, and China) and in developing countries the effects of TEA on economic growth is negative (Argentina, Brasil, Mexico, Thailand, and South Africa).

There is a minimum GDP per capita level beyond which an increase in start-ups and young businesses positively influences economic growth.

Support for the hypothesis of a minimum level of GDP per capita beyond which entrepreneurship's impact on regional economic growth becomes positive is offered by Martinez (2005). Analysing Spanish regions during the period 1998–2002 he found the minimum GDP per capita level to be 16,076 euros.

In explaining the negative impact of entrepreneurship on economic growth in developing countries, the authors point to the absence of large companies in these countries. However, the mere inflow of large firms will not positively influence the expansion of entrepreneurship in developing countries if it is not supported and accompanied by an adequate level of human capital quality. It is the quality of entrepreneurship which is as important as the quantity of new start-ups. In many countries and regions it is even more important.

In another study of 79 industries in the U.K. in the period 1976–1979, Geroski (1998) proves that the impact of domestic entry (new domestic producers) on productivity growth is positive, though diminishing over time. However, it is innovation that plays the most important role in stimulating productivity growth. Its effect is considerably greater than that of domestic entry. It seems that at an industry level an innovation index is a better entrepreneurship proxy than new firms entering.

Quite a large number of studies analyse the influence of start-ups on employment growth or on labour productivity. In some cases there is an attempt to consider entrepreneurship in a wider sense. Audretsch and Kielbach (2005) introduce the category of entrepreneurship capital and examine how this capital effects labour productivity in West-German regions during the period 1989 and 1992. Entrepreneurship capital is the society's capacity to generate entrepreneurial activity. A high level of

entrepreneurship capital stimulates regional economic growth. However, in spite of an attempt to consider entrepreneurship as a complex phenomenon, when measuring it they rely on a simple start-ups rate (the number of start-ups in the region relative to its population). An interesting and valuable contribution is the authors' distinction between urban and rural regions as well as between start-ups in all industries, in high-technology activities and ICT industries. The final conclusion from the analysis is that:

“the estimates for our general measure of entrepreneurship capital being statistically insignificant, we cannot find a long-term impact here. Apparently general entrepreneurship capital has a positive immediate impact on labour productivity but not a persistent one” (p. 467)

On the other hand, there is a significant and positive impact of R+D and high-tech ICT activities on the regional growth of labour productivity in West Germany. This impact is four times greater in urban, densely populated, areas as compared to rural areas.

Similar conclusions on the impact of start-ups on employment over time can be found in Acs and Armington study (2004). They analyzed U.S. firms in the years 1990, 1993, 1996. The main conclusion is that only firms less than 2-years-old account for all net job growth and those older firms, on average, lost employment. The positive impact of new firms on employment is particularly strong during the first two years of their activity. Afterwards the job creation rate decreases with a firm age and may even become negative. In this respect it is not a firm's size which is so much important for economic growth. It is the age of firms that are important for promoting growth and productivity. At the same time the study proves that human capital, measured here as the proportion of high school degrees per adult population, is very important for employment growth. The greater the proportion of the region's adults with a high-school degree, the higher the employment growth. The role of the quality factor in entrepreneurship is proved once more.

Two other studies on the relationship between new firm formation and economic development expressed in terms of employment growth demonstrate the role of the period when both phenomena take place and are analyzed.

Audretsch and Fritsch (2002) classify German regions according to the existence of four growth regimes (routinized technological regime, entrepreneurial regime, revolving door regime and downsizing regime) and analyse how entrepreneurship, measured by start-up rates, influences economic development, measured by employment growth rates, during the 1980s and 1990s.

The routinized regime is dominated by stable, large firms and the role of small, start-ups enterprises is unimportant and the probability of their survival and growth is low. By contrast, in the region with entrepreneurial regime the new, small firms play a more important role and in some industries they have the innovative advantage. Regional growth is mainly due to the new start-ups. However, the structure of enterprises is less stable. Under the revolving door regime a region has a relatively high rate of start-ups but because of their low innovativeness the regional growth is rather slow. In regions with a downsizing regime there is little start-up activity, large firms show a downward tendency and the general economic activity in the region is declining.

According to the results from an empirical study, the start-up rate has no statistically significant impact on employment growth for the 1980s. For the 1990s the relationship is positive and significant – regions with higher start-up rates exhibit higher employment growth. This is because the German economy has shifted more toward an entrepreneurial regime. However, the long-term impact of high start-ups is stronger than the short run effect. The final conclusion from the study is that there should be a differentiated approach to regional growth and development policy “... some regions achieve relatively high growth rates by concentrating on established, large enterprises, other regions achieve the same goal by focusing on new firm start-ups and more turbulent enterprise structure”, and further “Regions that have attained a high growth level tend to follow this path for a longer period.... Small firms and new firm start-ups may not be necessary for regional growth in the short-run, but perhaps they are the seeds of future growth and are of central importance for long run economic development” (pp. 121, 122).

Fritsch and Mueller (2004) also relate new firm formation to the lagged economic development in Germany. The main conclusion from their study is that new firm formation can have either a positive or negative impact on employment growth, depending upon the period of analysis. The impact of entrepreneurship on economic development depends on the period over which the effects take place and is measured. Van Stel and Storey find the same kind of relationship for the UK – in some periods the relationship is positive but in other cases is negative.

Summing-up four studies on the link between new firm formation (entrepreneurship measure) and economic development, expressed as employment change (in case of studies for the US 1991–1999 and the UK 1980–1998) or productivity (gross value added for Germany 1984–1992 and value added per employee for Sweden 1975–1999) Acs and Storey (2004) write:

“In summary, there is evidence in some countries of a link between increases in new firm formation and subsequent economic development. However, this link does not emerge in all studies. The non-appearance of a link may reflect measurement errors on key variables. It could also reflect omitted variables bias. But it may also be because of real differences between countries or the periods studied. The knowledge base, therefore, remains incomplete” (p. 874)

3 Alternative Approaches to Entrepreneurship’s Contents and Measure

Research on the relationship between entrepreneurship and economic growth always makes reference to the theoretical models of endogenous growth (Romer 1986, 1990; Schmitz 1989). In Romer’s model it is the knowledge or the stock of human capital that determinates the rate of growth, together with capital, labour and technology. For Schmitz it is imitation, the process of transferring and implementing a new technology, which promotes growth. Entrepreneurship is the imitation activity by which technology diffuses. It is up to entrepreneurs to imitate and implement knowledge. Entrepreneurs create knowledge in a learning-by-imitating or learning-by-implementing way. These entrepreneurial, endogenous forces have a universal character. However, neither Romer nor Schmitz associate entrepreneurship with a specific form and size of economic activity. Economic growth may come from entrepreneurial activity realized by small, medium and large firms, by new start-ups and established companies.

The alternative approaches to entrepreneurship do not accept the SME’s paradigm. In these approaches the size or age of firm does not matter, though the new, small firms have their place here. The empirical studies where an alternative approach to entrepreneurship is used are often realized at industry level.

For High (2004) entrepreneurship is a complex activity which is composed by imitation and arbitrage processes. Imitators, and not only innovators, contribute to economic growth. Searching for profit opportunities created by innovators, the imitators allocate resources from less to more effective use. The imitators diffuse the new combinations of productions factors over industry, thus increasing productivity.

In the diffusion processes not only the core innovation counts. There are many incremental innovations which influence, through their cumulative effect, long-term economic development. Output growth is a result not only of capital and labour inputs but also of so-called TFP – total factor

productivity. The TFP is an expression of entrepreneurship. Technical change is not exogenous. Output changes are also the result of individuals and organizations looking for economic profits through innovation:

“Because the entrepreneur has the motive and means to induce change, we are justified in regarding him/her as an endogenous source of technical change and as working hypothesis, regarding TFP as a measure of its magnitude” (p. 55)

High applies Haberger’s definition of TFP which means “real cost reduction”. It is the value of industrial output multiplied by the change in TFP. If for instance the output of the automotive industry is 10 billion USD in 2000 and TFP increases by 20% over 5 years, then the value of real cost reduction equals to $10 \times 0.2 = 2$ billion for the period 2000–2005.

Cost reductions are the result of entrepreneurs’ activity in the face of uncertainty. This entrepreneurial activity is called EVA by High – entrepreneurial value added. Evaluations of the EVA for American industry during the period 1990–1999 show some important disproportions between branches.

Electronic and electric equipment, industrial machinery and equipment, transport equipment and motor vehicles and equipment industries are the most entrepreneurial ones. These industries have created the biggest EVA values. Almost 90% of the EVA comes from these four industries. There are also industries with low level of entrepreneurship, industries which are the EVA losers, such as tobacco products, lumber and wood products, printing and publishing.

The concentration of entrepreneurial gains in a small number of industries determines the entrepreneurship concentration at regional level. That is why Delaware state with the highest EVA per capita (1,400 USD) added ten times the entrepreneurial value of New Mexico (130 USD per capita). The difference is mainly due to Delaware having the highest concentration of electronics and industrial equipment industries.

The entrepreneurial value added is a rather simple measure of entrepreneurship and its impact on industrial output. However, it is an alternative approach to entrepreneurship phenomenon taking into account its complexity. It is also important to place entrepreneurship in the context of a concrete economic activity, for instance at industry level.

The industry organisation and its spatial location may also explain a lot of entrepreneurial activity at different size levels and the role of small, medium and large firms in generating industry growth.

The semiconductor industry and the famous Silicon Valley phenomenon is a very common and classical example in favour of linking entrepreneurship, especially innovation, with small, new ventures. However, when

entering deeply into the technological and spatial organization of this industry, quite a different entrepreneurial picture arises (McCann and Arita 2004).

Semiconductor production is organized in different firms, different locations and different stages. There are three productions stages: the silicon chip design stage where CAD (computer-aided design) is used, the wafer stage where the silicon wafers, produced by specialist chemical firms, are subjected to lithography and the final stage of wafer assembly.

Small firms are mostly involved in the first stage of production and tend to be concentrated in such a places like Silicon Valley. However, the semiconductor industry is composed mainly of large, vertically integrated firms which carry out the first two or even all three stages of production. These large firms produce the majority of innovations as well as the majority of output and employment within the semiconductor industry:

“Clusters of small firms are only really possible when the capital costs of individual investments are actually low, and can be founded by individual borrowing or venture capital funds. The costs of financing some of stage one semiconductor design activities are actually not so great, thereby allowing for the development of small firms in locations such as Silicon Valley. On the other hand, many of these activities are extremely costly to underwrite in which case they are internalised within the large firms. These structural and organisational responses are therefore driven primarily by costs and funding issues and not by vague notions of informational spillovers”. (p. 248)

This structural characteristic of the semiconductor industry can be found in many other industries. Entrepreneurship is a continuous process and takes place in all stages of the production process, whether organized in small or large firms:

“Strict interpretations of entrepreneurship, which focus solely on the development of small firms and spin-off firms, must be expanded to include the dynamic and innovative role of large corporations, and the relationship among firm size, inter – firm relations, innovation and local regional development”. (p. 248)

Entrepreneurship is not only start-up or self-employment activity. Nor does entrepreneurship impact directly on national or regional development.

Entrepreneurship is present at all levels and at any moment of entrepreneurial activity and decision-making within a given economic, social, spatial, institutional and organizational structure.

This structure is composed of different agents which create a kind of entrepreneurial tissue. The new, small firms are the natural, endogenous

component of this tissue but their impact on regional or national economic growth is indirect, transmitted through interrelations with other components of the tissue.

4 Intermediate Linkages and Entrepreneurial Tissue

Survey of theoretical and empirical studies shows clearly that the influence of entrepreneurship on economic growth is not direct. It is exerted through a variety of intermediate linkages.

Our model approach to the entrepreneurship-economic growth relation originates from the approach presented by Wennekers and Thurik (1999) (Fig. 1).

In spite of many advantages, this model leaves excessive room for enlarging and developing the intermediate transmission channels of the entrepreneurship's impact on economic growth. We presume that our proposal will prove to be useful in the analysis of the entrepreneurship economic growth relations on regional and national level, as well as for comparative studies on these levels.

The first approach (Fig. 2) is a very general illustration of the conception. It covers basic interactions, the order of particular elements, the main direction of influence. It does not take into consideration the existing feedbacks or linkages omitting the order (e.g., the influence of the environment on the entrepreneur or on intermediate linkages). The environment is very broadly

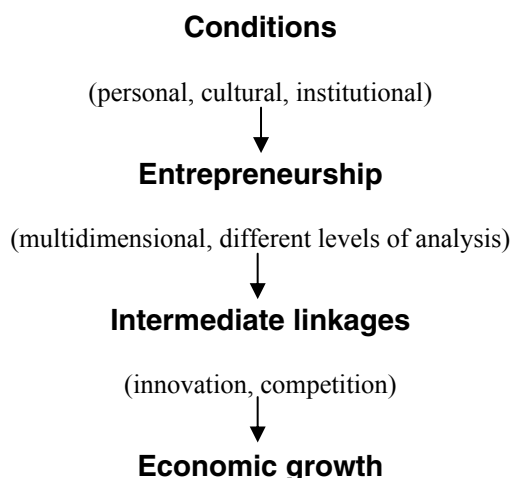


Fig. 1. Preliminary framework. Source: Wennekers and Thurik (1999)

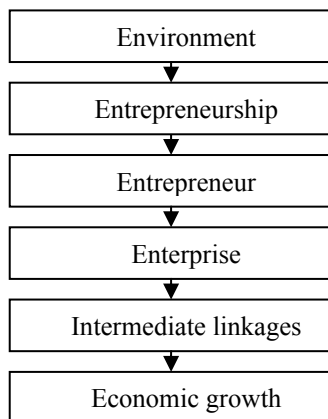


Fig. 2. Model of the entrepreneurship-economic growth relation. Secondary framework. Source: Dominiak (2005) p. 85

understood as a composition of economic, social, political, legal and cultural factors. It determines the character and dynamics of entrepreneurship. Accepting the broad definition of entrepreneurship frames given by Wennekers and Thurik, the model emphasizes the elementary truth that entrepreneurship is exposed and revealed entirely through people: individuals or teams. However, an entrepreneurial team cannot be composed of non-entrepreneurial units only. At the same time, a man (entrepreneur) may realize his entrepreneurial functions only within a frame of a specific organization (enterprise). It might be either a small (even one-person) or large enterprise. However, one cannot be an entrepreneur without an enterprise. The characteristics of a company are certainly of crucial importance for entrepreneurs' behaviour as these create better or worse conditions for their activities. Different effects of entrepreneurial activities are transferred via intermediate linkages which are vehicles of micro and mezzo outcomes to the macro level.

By introducing an entrepreneur and a company into the analysis, we assume that entrepreneurship influences economic growth mainly (but not exclusively) through the SME sector. In these enterprises the role of the entrepreneur, performing usually the function of owner/manager, has a direct influence on their functioning and growth. As a consequence, it also has an influence on the strength of intermediate linkages and, finally, on the growth of regional and national economy.

This second approach is not fundamentally different from the one presented by Wennekers and Thurik. Differences occur when we try to determine what each part of the model contains (Fig. 3).

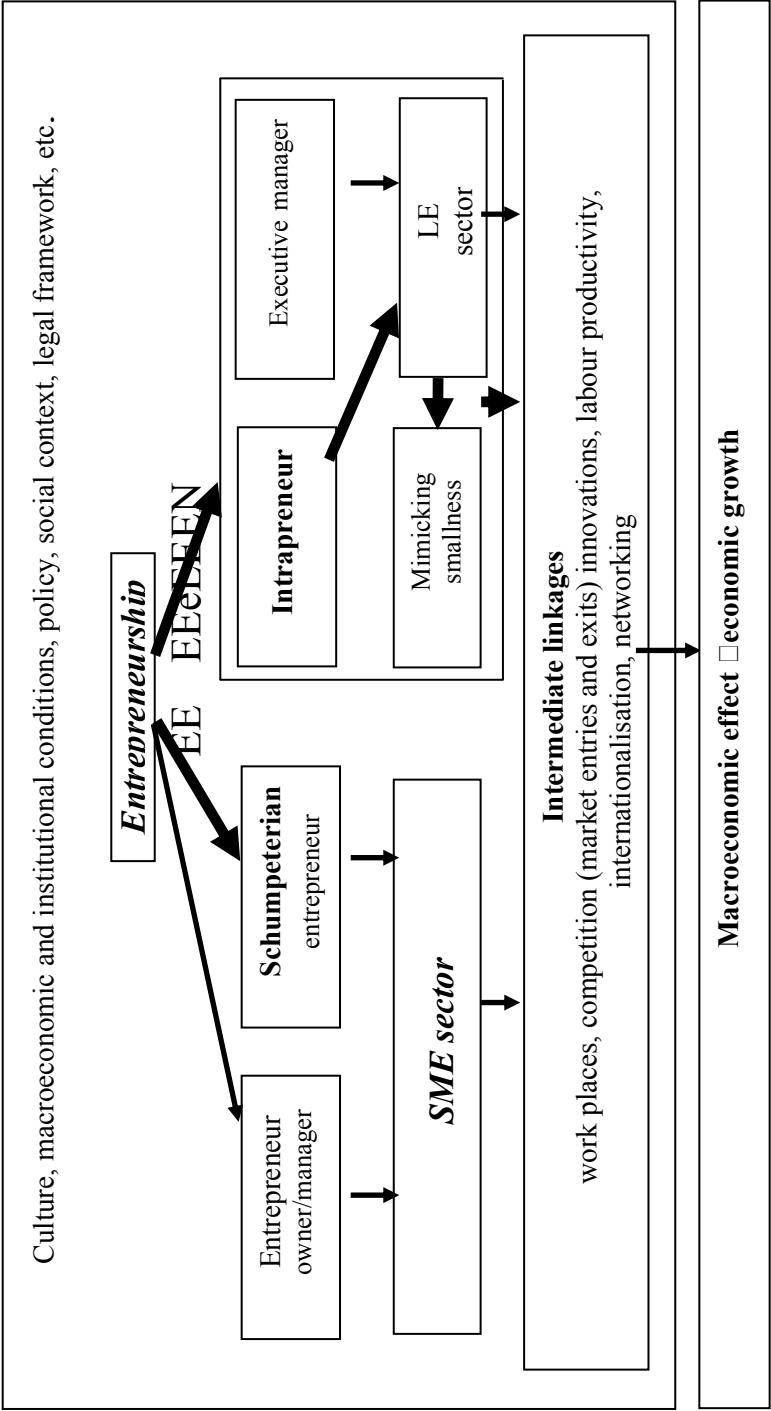


Fig. 3. Model of entrepreneurship-economic growth relations (*bolder arrows* denote stronger relations). Source: P. Dominiak (2005, p. 86)

The environment is depicted very broadly. It covers some general aspects of a society's culture, including ideology, macroeconomic and institutional determinants; policies (not only economic), social context (income and property disparities, regional diversity, the scope of exclusions, social security, etc.), legal frames (mainly, but not exclusively, determining the scope and rules of economic game). This "very broad environment" has an influence on everything that happens in economy. It shapes people's behavior and attitudes, their systems of values, etc., and also determines entrepreneurship as cultural, social and economic phenomena. "...Entrepreneurship is by necessity rooted in culture, it is entirely shaped by culture and in its most basic dimension it comes down to interpreting and shaping culture" – as D. Lavoie said (1991, p. 45). According to Boulding "... the success of economic institutions depends to a great extent on the character of culture in which they are settled, not on the character of these institutions"(1952). The importance of culture and institutions for economic growth is also quoted by Landes in his fundamental work "The Wealth and Poverty of Nations" (1993).

Emphasizing the role of cultural factors in this model does not mean assigning them dominating significance. However, we believe that they play a primary role in relation to others, although their influence is often underestimated. The influence of other environment factors is much better recognized and described.

Economic, legal, institutional and political factors define the economic structure, including inter alia relations between SME and LE sectors. Fuller (2003), while reflecting upon the future of small businesses, posed several crucial questions. Some of them consider these social, cultural and institutional contexts. They are essential for the understanding of regional differences in SMEs' development. Fuller stressed that small business is personal and hence, in societies where personal relationships in business transactions are important, small business units will thrive. Other questions were related to: the personal commitment of business owners to the solutions of its customers' problems and needs; consumers' attitudes to the brands (iconic symbols) and to the personality of the individuals that create the service; the importance of their personal control of work and careers; the choice between direct investments of savings in the activities of the people the investors know and in institutional funds. The structure of answers to these questions may explain the differences in the structure of firms across regions and societies.

Some of these factors have also a direct influence on those intermediate linkages, through which the activity of people and companies brings about macroeconomic effects.

The narrow environment in the model is the “culture” of entrepreneurship. By relating it to the concept of Economic Entrepreneurship Capital (Audretsch and Monsen 2007), we acknowledge the latter one as broader, covering also elements such as variety, competition, and selection. The culture of entrepreneurship grows out of general culture and is its integral part. “...in some particular situations entrepreneurship creates its own culture. Developing this culture is a vital thing *inter alia* due to the fact that it contrasts with the culture of bureaucracy, penetrating mature private and public organizations” (Hawkins 1991). It is very characteristic that the authors of the book quoted here, i.e., “Culture of entrepreneurship” (Berger 1991), did not attempt to define this culture. They prove, on the basis of the output of general and economic history, sociology, anthropology, demography, and other social sciences that such a culture, as a part of general culture, exists and has a great significance. This research helps to understand why some countries or societies developed faster than others. Why resources considered by economists as the source of growth are used effectively in one place (crude oil in Norway), but not so in another (crude oil in Nigeria). Why some deal with resource scarcity better (Japan, Thailand, South Korea), while for others it is an insurmountable barrier (some African countries).

Douhan and Henrekson (2007) point out that entrepreneurship adapts itself to the realities resulting from the politically determined institutional frames. If those frames are improperly constructed, then entrepreneurship, instead of being the propeller of economic growth, might be focused on unproductive and destructive actions. Therefore, it may be added that these negative actions, in certain institutional frames, will strongly depend on the shaped culture of entrepreneurship and, at the same time, those institutional frames will have an influence on its character and development.

The significance of institutions for the influence and character of entrepreneurship was previously strongly highlighted by Baumol (1990): “The rules of the game that determine the relative payoffs to different entrepreneurial activities do change dramatically from one time and place to another. ... Entrepreneurial behavior changes direction from one economy to another in a manner that corresponds to the variations in the rules of the game. ... The allocation of entrepreneurship between productive and unproductive activities, though by no means the only pertinent influence,

can have a profound effect on the innovativeness of the economy and the degree of dissemination of its technological discoveries” (pp. 899, 909).

The above quoted Fuller (2003, p. 319) wrote: “Will societal regulation allow us the freedom to decide about our own work and enable us to exchange our efforts in flexible ways? Unregulated economies lead to crime and monopoly, so forms of ‘regulated freedom’ are necessary”.

From the point of view of the present analysis, an important aspect of entrepreneurship culture is its influence on: the self-employment rate (division into firm owners and hired workers); proportions between entrepreneurs–innovators and owners/managers (Wennekers and Thurik 1999); the level of competences of those two groups, ability to learn, capability and eagerness to cooperate; attitude towards risk and bankruptcy, etc. All those phenomena and processes are shaped also by many other factors, e.g., relations of savings to income reached by the self-employed, level of transactional costs, etc.

A part of general culture, not identical with the culture of entrepreneurship, is the enterprise culture. This concerns mainly large enterprises. In small and medium enterprises it is rather a direct derivative of entrepreneurship culture, brought into the company by its owner.

In large enterprises, the situation looks different. The internal culture is partially a spontaneous creation, and partially is artificially built by their management. It does not mean that enterprise culture is built in isolation from a general culture. It is worthwhile to mention here commonly known comparisons of Japanese and American companies, of Nordic and Mediterranean, of Russian and West European. One of the best examples of a close relation between enterprise culture and general culture is the Japanese system *kaizen*: “...it is at the same time a culturally-conditioned system (eliminating the barrier between organizational culture and the culture of its environment), undoubtedly difficult to implement in cultures other than the Japanese, but definitely impossible for partial application” (Kwiatkowski 2000, p. 85).

There are no doubts that the culture of a large enterprise is a specific, very diverse area. Unfortunately, in the majority of publications on enterprise culture the terms “entrepreneurship” or “intrapreneurship” are avoided and hardly ever mentioned. Of course, one might consider that enterprise culture is a result of entrepreneurship culture and bureaucracy culture. In contemporary multinational corporations there is also a mixture of morals, habits, traditions of multinational management and personnel. Enterprises more and more often try to form a homogenous, standardized culture, distinguishing them from other similar companies. At the same time, they aim at making this culture favourable for the effectiveness of their activities, increasing their competitiveness, and building a positive company image.

Enterprise culture determines inter alia the area in which entrepreneurial actions are possible. It divides the inner scene into managers and intrapreneurs. In this field it shapes its philosophy of action, choice of strategy, dynamism, innovativeness, and ability to undertake risk.

The trends in management such as lean management, re-engineering, decentralization of decisions, selection of profit centers, outsourcing, etc., aim at de-bureaucratization of large enterprises, making them more active, flexible and dynamic, that is – entrepreneurial. Therefore, there can be observed a growing level of acceptance for intrapreneurs, who usually cannot be included in stiff structures and procedural paths. The eagerness to follow the actions of individual entrepreneurs is becoming more explicit, as well as the intention to create a greater space and possibilities for such behavior. It is called *mimicking smallness* (Wennekers and Thurik 1999) – imitating small companies. At the beginning of the nineties, J. Welch, the then President of General Electric, in his speech said: “Think small! What we are constantly trying to do is to instill the spirit of a small company and speed (of reaction – authors’ note) of a small company within the frames of a large corporation” (Naisbitt 1995, p. 11). And J. Naisbitt, the author of inter alia “Megatrends”, adds: “We are making our business units smaller and smaller, because we want to globalize our economies more effectively” (Naisbitt 1995, p. 11).

Intermediate linkages allow to evaluate in which way the SME sector and also the LE sector contribute to economic growth.

From the point of view of a very traditional approach to economic growth, i.e., by taking into consideration the direct growth factors, one can value this influence by stimulating employment growth and labour productivity. Such an approach is justifiable, but insufficient.

Probably the most often mentioned vehicle through which entrepreneurship actuates economic growth is the number of start-ups or rate of births. The literature on population ecology emphasizes that every new company represents a certain unique approach towards economic activity. And heterogeneity, in contrast to homogeneity, exerts a positive influence on economic growth (Observatory 2004, pp. 14–15).

Continuous entries and exits from the market, characteristic of SME sector, foster competition, actuate economy, indicate the mechanism of selection. It is assumed that every new firm (especially when it is created in the place of the old one) is better with respect to some aspects than those which were liquidated. At the same time, it is due to those entries and exits the economy becomes more diverse. Not including these processes (entries and exits), or underestimating them would be a mistake. They have an influence either on changes in employment or labour productivity. One also has to take into consideration the character of market competition.

Where price competition dominates (and this takes place more often on the markets of homogenous rather than heterogeneous products), the attractiveness of entry is smaller (Sutton 1991) since the expected level of profits is low.

As far as labour productivity is concerned, its growth is mainly the result of introducing innovations, which should be treated as extremely important intermediate linkages.

Internationalization of activity is, in turn, the indication of entering new markets, and leaving – traditional for SME – localness. Export is in many economies a leading force of growth. Finally, network connections, which allow to break barriers connected with small size and not reaching economies of scale. Networks, of various types and character, are becoming an important element of the economic landscape in the field of activity of SME sector. Hence, the growing interest of researchers from all over the world in networks. From the theory of economics (Perry 1999), through management (Porter 1998), to anthropology, cultural sciences, sociology, etc. (Fukuyama 2000).

The list of intermediate linkages mentioned above is not complete. It covers the ones most often mentioned in the literature, although particular authors usually mention only those linkages which – for some reason – are most crucial for them. Therefore, it is difficult to assume that there may occur one, complete and commonly accepted list of intermediate linkages. For example Acs (1996) and Audretsch and Monsen (2007) emphasize the role of SMEs as a source of innovation, stimulus for the evolution of economic structures, creator of new work places and also as an “entrepreneurial agent of change”.

The entrepreneurial tissue is another approach to the relationship between entrepreneurship and economic growth which takes into account the complexity of interrelations among all kind of economic agents.

The concept of entrepreneurial tissue and its empirical verification was presented by Guzman and Santos (2006) using the example of Seville province in Spain.

The entrepreneurial tissue is a complete approach to entrepreneurship, containing both quantitative and qualitative factors which determine entrepreneurial activity and its effectiveness. In the Guzman and Santos model, there are five quantitative characteristics of the entrepreneurial tissue of a region: size of enterprise, density, sectorial structure, geographical structure at regional level and penetration of external capital. The qualitative elements of the tissue are: firms' property location, functional and production dependence, quality of human capital, cooperation capacity, innovation and development capacity and quality of management.

Each of the quantitative and qualitative factors may influence regional development either positively or negatively.

The domination of micro and small enterprises in the region creates some positive characteristics (flexibility in adapting to the changing market conditions) but also some negative ones (reduced propensity to export and innovativeness). Large firms have much greater possibilities to cover fixed costs, to spread risk and to invest in R&D.

The sectorial structure is important for backward and forward interrelations between economic sectors which – through intermediate linkages and effects – influence economic growth. In general, manufacturing firms generate far more interrelations than services. Industrial production is more complex than that of services and creates more outsourcing activities. For industry it matters whether firms possess a high, medium or low technological level and for services – whether they are traditional or knowledge based.

Geographical structure determines different entrepreneurship zones of similar properties. A region may have a strong center–periphery configuration of economic activity or it may have a more atomistic structure.

External investments, both national and foreign, constitute a very important development factor. The participation of external capital at regional level is often more important in large firms. In small ones, on the other hand, local capital tends to dominate.

Qualitative elements of entrepreneurial tissue are as essential as quantitative ones. However, for many qualitative characteristics of entrepreneurship there are no official statistics. In order to obtain the qualitative data it is necessary to organize a survey of a representative sample of enterprises.

The property location of firms is one of the qualitative elements of regional tissue. When a firm's headquarters is located outside the region some strategic decisions may be inconsistent with the region's interest. The regional economy is more secure when firms' decision centres are located within the region.

Functional dependence or independence is another qualitative factor. It refers to a firm's position within the production chain. A large number of distribution firms selling products originating from outside the region indicate that the regional market is mainly a place for external enterprises. This kind of tissue has serious consequences for value added and employment creation in the region.

Another type of dependence is related to the production process. The number of input suppliers or output buyers may be small and concentrated or large and dispersed. Strong productive dependence from suppliers or clients leads to higher risk and firms' vulnerability. The level of

production dependence is higher in small firms, their development and even existence depends largely on the policy of superior firms. The entrepreneurial tissue is weaker when a region is dominated by small firms with high production dependence.

The capacity for cooperation and innovation is another aspect of the quality of entrepreneurial tissue. The more cooperation linkage a firm has the better market position it holds and the more information about suppliers and clients it gets. Innovation activity is essential for the competitiveness and development of the regional tissue.

The quality of human capital and the quality of management exerts an influence on entrepreneurial tissue. Abilities, experience and education all determine the quality level of the human capital which enters the production process as an input and determines management quality.

Statistical analysis of quantitative elements along with qualitative ones, evaluated on the basis of a survey among 400 enterprises, shows that the low level of GDP per capita in the Seville region is due to the weakness of its entrepreneurial tissue.

This weak tissue is the result of the relatively high dependence of regional enterprises on the external economy, both national and international. In the first place there is property dependence. The decision and property centres of large firms are located outside the region. The functional and production dependence is also strong. Many Sevillian firms concentrate their purchases and sales in other Spanish or foreign regions, as well as on a limited number of suppliers and clients. The Seville region is above all a market for products originating from other regions. Nevertheless, in recent years the Sevillian economy has achieved a high income and employment growth. However, this development is mainly due to large firms, especially from modern sectors. The contribution of SMEs and micro enterprises has been less important. Thus, the general economic growth of the region has been created by industries and services with a high level of functional and production dependence. This feature of the entrepreneurial tissue makes the long-term economic development of Seville region fragile.

References

- Acs ZJ (1996) Small firm and economic growth. In: Admiraal PH, Acs Z, Carlsson B, Thurik R (Ed.) *Small business in modern economy*. Blackwell, Oxford
- Acs ZJ, Armington C (2004) Employment growth and entrepreneurial activity in cities. *Regional Studies* 38(8): 911–927

- Acs ZJ, Storey D (2004) Introduction: Entrepreneurship and economic development. *Regional Studies* 38(8): 871–877
- Audretsch D, Fritsch M (2002) Growth regimes over time and space. *Regional Studies* 36(2): 113–124
- Audretsch D, Kielbach M (2005) Entrepreneurship capital and regional growth. *The Annals of Regional Science* 39: 457–469
- Audretsch D, Monsen E (2007) Entrepreneurship capital: A regional, organizational, team and individual phenomenon. Discussion Papers on Entrepreneurship, Growth and Public Policy. Max Planck Institute of Economics
- Baumol W (1990) Entrepreneurship: Productive, unproductive, and destructive. *Journal of Political Economy* 98(5): 893–921
- Berger B (Ed.) (1991) Culture of entrepreneurship. ICS, San Francisco
- Boulding KE (1952) Beyond economics. *Harvard Business Review* 30(3): 33–44
- Carree MA, van Stel AJ, Wennekers S (2002) Economic development and business ownership: An analysis using data of 23 OECD countries in the period 1976–1996. *Small Business Economics* 19: 271–290
- Dominiak P (2005) SMEs sector in contemporary economy (in Polish). WN PWN, Warsaw
- Douhan R, Henrekson M (2007) The political economy of entrepreneurship: An introduction. Working Papers No 688 Research Institute of Industrial Economics
- Fölster S (2000) Do entrepreneurs create jobs. *Small Business Economics* 14(2): 137–148
- Fritsch M, Mueller P (2004) Effects of new business formation on regional development over time. *Regional Studies* 38(8): 961–975
- Fukuyama F (2000) The great disruption. Profile Books, London
- Fuller T (2003) If you wanted to know the future of small business what questions would you ask? *Future* 35(4): 305–322
- Geroski A (1998) Entry, innovation and productivity growth. *Review of Economics and Statistics* 71(4): 572–578
- Guzman J, Santos J (2001) The booster function and the entrepreneurial quality: An application to the province of Seville. *Entrepreneurship and Regional Development* 13: 211–228
- Guzman J, Santos J (2006) Realidad Empresarial y Desarrollo Economico en la Provincia de Sevilla. Mergablum Edicion y Comunicacion S.L., Sevilla
- Hawkins RB (1991) Introductory word. In: Berger B (Ed.) Culture of entrepreneurship. ICS, San Francisco
- High J (2004) The roles of entrepreneurship in economic growth: Toward a theory of total factor productivity. In: De Groot H, Nijkamp P, Stough R (Eds.) Economic development. A spatial perspective. Edward Elgar, Cheltenham, 46–77
- Knuth M (2006) Self-employment and the labour market in Germany. In: Kopycinska D (Ed.) Entrepreneurship in economy. University of Szczecin, Microeconomic Department, Monograph 2: 158–166
- Kwiatkowski S (2000) Przedsiębiorczosc intelektualna. WN PWN, Warsaw

- Lavoie D (1994) *Odkrywanie i postrzeganie szansy gospodarczej: kultura a Kierznerowski model przedsiębiorczości*, Oficyna Literatów "Rój", Warszawa
- Landes DS (1993) *The wealth and poverty of nations. Why some are so rich and some so poor*. W.W. Norton, New York
- Martinez J (2005) Equilibrium entrepreneurship rate, economic development and growth. Evidence from Spanish regions. *Entrepreneurship and Regional Development* 19: 145–161
- McCann P, Arita T (2004) Industrial clusters and regional development: A transaction costs perspective on semiconductor industry. In: De Groot H, Nijkamp P, Stough R (Eds.) *Economic development. A spatial perspective*. Edward Elgar, Cheltenham, 225–251
- Naisbitt J (1995) *Megatrends*. Warner, New York
- Observatory of European SMEs 2003 (2004) No 7
- Perry M (1999) *Small firms and network economics*. Routledge, London
- Porter ME (1998) *On competition*. Harvard business review book. Harvard Business School, Boston
- Romer P (1986) Increasing returns and long-run growth. *Journal of Political Economy* 94: 1002–1037
- Romer P (1990) Endogenous technological change. *Journal of Political Economy* 98(5): 71–102
- Schmitz J (1989) Imitation, entrepreneurship and long-run growth. *Journal of Political Economy* 97(3): 721–739
- Sutton J (1991) *Sunk costs and market structure: price competition, advertising, and the evolution of concentration*. MIT, Cambridge
- Van Stel AJ, Carree MA, Thurik AR (2005) The effect of entrepreneurial activity on national economic growth. *Small Business Economics* 24: 311–321
- Wennekers S, Thurik R (1999) Linking entrepreneurship and economic growth. *Small Business Economics* 13(1): 27–55
- Wennekers S, van Stel AJ, Thurik AR, Reynolds PD (2005) Nascent entrepreneurship and the level of economic development. *Small Business Economics* 24: 293–309

Networking and Entrepreneurship in Place

Bengt Johannisson

Växjö University, Växjö, Sweden

1 Organizations Vanish, Places Remain

Any discourse on networking and entrepreneurship must be positioned in the ongoing debate on each concept. Over the last decades network analysis has turned from a statistical technique for mapping complex social structures to a way of inquiring into the general interrelatedness and social embedding of economic activity. Networks as a resource have in the academic discourse changed from something that disadvantaged people need as a support structure to a generic mode to increase the competitive strength and flexibility of firms and organizations by way of collaboration. Now at the beginning of the new millennium networks as antecedents and containers of social capital are a special concern and networking as process is given priority in scientific inquiries (Parkhe et al., 2006). Entrepreneurship, in contrast, has changed from being associated with economic change, incremental due to alertness in the market place or radical as an outcome of technological innovation, to creative organizing, as much associated with social as with economic change, cf. e.g., Hjorth et al. (2003); Katz and Steyaert (2004). This perspective on (creative) organizing reflects a relational view, i.e., man's more concern for what happens between people and organizations than inside them.

The two phenomena residing behind the notions of 'network(ing)' and 'entrepreneurship' are now both well established in academic and public discourses on economic and social development on the organizational as well as on the local, regional, national and international levels. In the context of the European Union, for example, support programmes concerning

entrepreneurship as both economic and social activity are common. In Sweden the major agency for industrial development associates entrepreneurship with social and cultural activity as much as with economic, with respect to ends as well as means. Joining forces in networks, often addressed as 'partnerships', as a generic mode for creating development is taken for granted in almost any policy area, in Sweden as well as in the European Union.

In the local/regional setting there are some forerunners to the contemporary general and solid interest for networking and entrepreneurship. Gnosjö is a successful industrial district in southern Sweden, well-known for its entrepreneurial spirit. In the 1990s it made the region the economically most successful region in Sweden. Research that begun in the 1970s ascribed this accomplishment to the well-documented dense personal networking between the many owner-managers of the local firms (Johannisson 1983). About at the same time Italian researchers studying similar phenomena produced more qualitative images of industrial districts as providers of a social and institutional embedding of small-scale business activities. In this way they qualified Marshall's narration of co-opetition as an elusive phenomenon that only could be found 'in the air'. Compare for example Becattini (1990). These accounts, in combination with the fact that contemporary research on spatial development uses images, such as 'learning regions' (e.g., Maskell and Malmberg 1999) and localised clusters, that take collaboration tied to place for granted, urge further inquiry into the interface between network(ing) and entrepreneurship.

While most contemporary researchers agree upon that entrepreneurship is about creative organising of people and resources according to opportunity, scholars differ with respect to how opportunities are identified/constructed and how rationally the venturing process is pursued. While for example Shane and Venkataraman (2000) and Shane (2003) argue that opportunities are around only to be identified and exploited by alert individuals, other scholars such as Sarasvathy (2001) argue that what subsequently becomes institutionalised as a new firm is the outcome of an experimental enactment process. Larson and Starr (1993) as well as Johannisson (2000b) perceive the venture as sedimented out of the personal networking of its initiator. Dyadic personal relationships originating in mutual sympathy, are based on shared values and become emotionally charged. Individual ties as well as the network as a whole evolve over time. This networked image of business creation invites to an understanding of the entrepreneurial career as a set of overlapping ventures that are integrated by way of a slowly emerging personal network. Considering that most entrepreneurs build geographically concentrated networks (Johannisson 2000b), the dynamics

of the proposed view of entrepreneuring become closely associated with place. At the same time the 'personal community' of relations wherein every individual exists (Wellman 1982) becomes increasingly global. Networking materialises the idea of a glocal (business) world.

In entrepreneurship research in general (cf., e.g., Hjorth et al., 2003; Steyaert 1997) as well in (entrepreneurial) networking in particular (cf., e.g., Johannisson 2000b; Hoang and Antoncic 2003; Parkhe et al., 2006) there is a call for research that studies relating and networking as processes. Although there are some attempts to qualitatively map how relationships evolve in entrepreneurial settings (compare, for example, Hite 2005; Larson 1992), there is a general lack of reflexivity as regards the ontologically and epistemologically foundations for process studies. Chia (1995) proposes an 'ontology of becoming' for studying organised activity. Adopting such a worldview means that ongoing change is taken for granted. This provides an appropriate context for inquiry into entrepreneurship and networks as phenomena associated with emergence. Within such a worldview, ongoing dialogue/relating produce 'reality' as socially negotiated construction. Such a relational understanding of the world has previously been used for theorising in organisation studies in general (cf., e.g., Weick 1995) and in entrepreneurship research in particular (cf., e.g., Gartner et al., 1992; Hjorth et al., 2003; Steyaert 1997).

A relational view as reflecting an ontology of becoming offers an appropriate basis for the conceptualisation and associated design of empirical inquiry into entrepreneurship as a networked and spatial phenomenon. Structuring different approaches to the study of organizations Morgan (1980) suggests that alternative conceptualizations, models, which are possible within a certain paradigm rather should be addressed as 'metaphors'. This proposition underlines that theories are as much imaginative constructions as outcomes of analytical reasoning. What appears as the best way of making sense out of a phenomenon then becomes dependent on the worldview of the researcher that reflects more or less explicitly stated ontological and epistemological assumptions, blended with preferences that are produced by the personal career of the researcher. The chosen metaphor or conceptual frame in turn decides what kind of empirical investigations may be designed and executed. Again there is no straight road to go and consequently Morgan addresses this search for a methodology as 'puzzle-solving'. The puzzle obviously becomes especially challenging when creative processes are studied. Van de Ven and Poole (2005) provide an ontologically and epistemologically well-founded model of alternative ways for researching change in existing organisations but entrepreneurial processes obviously is about original change.

The research challenge that is taken on here thus is to conceptually and empirically illustrate how entrepreneurship may be presented as a spatial networked phenomenon. In the next section the notion of 'organising context' is introduced as a metaphorical construct that recognizes the socially embedded, fluid character of localized business activity. In Sect. 3 a methodology for researching the embedded business community as a relational construct is proposed. Empirical imprints of this modeling of networking processes are in Sect. 4 used as a basis for further conceptualization of the locality as a domicile for collective entrepreneurship. The final section reflects upon the reported modeling and methodological puzzle-solving and, besides suggestions for further research, comments briefly on the implications for practice, public policy as well as individual and collective local initiatives.

2 The Organizing Context as an Arena for Embedded Networking Processes

Considering entrepreneurship as a basis for community development means that the relational diversity of a locality is acknowledged. This includes spontaneous personal relating which means that other faculties than human rational thought, such as emotions and intuition, are recognised as means for human projecting. Mutual commitments and the spontaneity and immediacy that accompany personal relating empower people to try out emerging ideas on others in a permissive atmosphere that encourages learning. Thus, if a local community is approached as a relational space that recognises transaction 'benefits' (and thus not just costs) the different sources of variety, and as a result its potential as an arena for entrepreneurial processes become visible. Individual initiatives are encouraged to unfold into collective endeavours that use the social embeddedness offered by the local setting as a take-off for global venturing. Ascribing the locality a potentiality of this kind is not new but is reflected in different conceptualizations, from industrial district to 'innovative milieux' and 'Triple Helices'. These metaphorical constructs however all have a bias towards production/resource management and (technological) innovation. There is, however, a need for a concept that pays due attention to entrepreneurship as creative organizing and social projecting. Therefore the notion of the locality as an 'organising context' (OC) (for venturing processes) is introduced. A number of features are ascribed to an OC:

1. The OC is an interactively enacted shared reality, which, being historically and culturally embedded, manifests and reforms itself by way of face-to-face exchange. As much as the members of the OC

participate in everyday local life they gain the overview needed to trade upon the variety of opportunities and resources that the OC produce as a collective.

2. In the OC the physical, social and mental spaces that the members of the OC occupy to a significant extent coincide, cf. Hernes (2003). This means that the OC appears as a refuge for reproduced local values and behavioural patterns as well as a translator of external influences into refined local knowledge and practices. The outcome is a multiple and evolving collective identity and elaborate community of practice (Wenger 1998).
3. The OC offers its members 'ontological security' (Giddens 1991), that is a sense of meaning. The self-confidence thus created opens up 'potential spaces' (Winnicott 1971) that the OC member can use to acknowledge her/his own creativity and practice playfulness.
4. The OC has a potential for self-organising, which means that its ability to deal with challenges is secret, hidden in the very interaction between its members as 'loosely coupled', i.e., both autonomous and interdependent. Casual encounters and spontaneous (inter)action craft the unique, ever emerging, development path of the OC.
5. In the OC the languages of public discourse and concrete action do not call for interpretation, thus rooting the context deeply in everyday local life. Visionary ideas are paralleled with concrete measures that promote resolute (inter)action. Cf. Eccles and Nohria (1992).
6. In the OC different forms of control, such as premise control, action control and output control co-exist. Historically sedimented values and norms qualify premise control, while physical, technological and social proximities build action control and facilitates output control.
7. As Fig. 1 below illustrates, the environment of the OC as identified by its members is collectively 'enacted' (Weick 1995; cf. also Smircich and Stubbart 1985) as much as the OC itself. The boundaries between the OC and its environment are kept fuzzy and vary according to what issue is being dealt with.
8. The OC makes obvious that entrepreneurship is a genuinely collective phenomenon – it is their very social embeddedness that grants both individual firms and groups of localised firm success.
9. The OC offers a take-off arena for generic 'glocal' strategies which combine global and local (inter)action and reflection.

The OC should not just be perceived as an 'arena' that its members use as a casual meeting-place or where policy makers may try out different measures. Using the vocabulary proposed by Brunsson and Sahlin-Andersson (2000) the organising context appears as a fully-fledged (spatial)



Fig. 1. The organising context – The focal arena for (inter)action, learning and control. Source: Johannisson et al. (2002), Fig. 1, p. 299

organisation with goals, structure and identity. The goals of the organizing context, though, are integrated in shared norms rather than stated explicitly, its structure organic and networked rather than formal and hierarchical, and its identity embedded in local stories rather than publicly stated. Local economic development will in this perspective be enacted in places where local knowledge is shared, acknowledged and used for generic social creativity, i.e., not just for organising within the market but traveling between the different spheres of society.

A core concept in creating a vocabulary that can depict the relational processes making the organizing context thus is the notion of ‘personal network(ing)’. Such relating practiced by business people means social and business concerns combine already in individual ties thereby producing identity, legitimacy and (social) resources (Johannisson 2000b). Where dense personal networking prevails the overall local business network becomes infused with shared values and mutual concerns originating in a shared local history. A collective identity and uniqueness is crafted that is difficult to imitate and therefore creates regional competitiveness (Maskell et al., 1998; Maskell and Malmberg 1999; Storper 1995).

A vocabulary associated with embeddedness is needed in order to untangle the different layers of social embeddedness, from that reflected in personal ties to the interplay between economic and social forces in the locality at large. As Fig. 2 proposes it is, first, important to differentiate between what is here addressed as substantive or systemic embeddedness. The former notion of embeddedness represents the contents and the latter the structure of the social embeddedness of economic activity. Substantive embeddedness means that the origin of and base for exchange are not just calculative but ideological and/or genuine as well (Sjöstrand 1992).

Embeddedness	First order Inter-firm networking	Second order Firm /Institution networking	Third order Holistic networking
Descriptions	Business to business	Firm to social/economic institutions	Links between small firms through institutions
• Systemic (Economic)	• Commercial relations	• Business acquiring services, joint projects	• Indirect potential business exchange through interacting economic and social institutions
• Substantive (Social)	• Personal business relations	• Business leaders as association members	

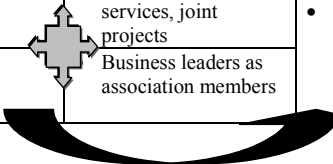


Fig. 2. Alternative images of social and institutional embeddedness. Source: Johannisson et al. (2002), Table 1, p. 301

Cf. also Zukin and DiMaggio (1990) who elaborate on the nature of economic activity and the cultural and societal frameworks in which firms act. Larson (1992) and Uzzi (1996) use trust as the generic mechanism of (social) embeddedness in vertical supplier networks.

Systemic embeddedness refers to the overall fabric of relations that links economic and further agents in, e.g., a local/regional cluster. Such embeddedness puts the individual actors in different positions, some more central, some more marginal, in the overall network. A favourable position usually means that many other actors in the network need the favoured actor to become (or remain) connected. Typically entrepreneurs look for positions that make them bridge such 'structural holes' in relevant networks (Burt 1992; Gulati and Gargulio 1999). Granovetter (1985) is explicitly concerned with what we here address as systemic embeddedness and he then differentiates between relational and structural embeddedness. 'Relational' embeddedness to his mind refers to the ties individuals have to other agents (i.e., what can be addressed as 'egocentric' networks, cf., e.g., Johannisson 2000b), while 'structural' embeddedness indicates the aggregate impact on the subject of all, direct and indirect, such relations in the context concerned. Rowel et al. (2000) found, partially confirming Uzzi (1997), that structural embeddedness, i.e., indirect interdependencies, increases access to resources in existing direct linkages but not to further opportunities.

Research into inter-organisational fields states that institutionalisation explains similarities across organisations (DiMaggio and Powell 1983). Institutions bring rules of the game to and reduce uncertainty as regards economic exchange (North 1990). Institutional influence may be formal or informal and concern the business system as well as the distant

surroundings. With Halinen and Törnroos (1998) we recognise that besides business-to-business networks, linkages with economic institutions and social associations become increasingly important, providing supplementary resources as well as legitimacy.

Institutional embeddedness builds collective entrepreneurial capabilities by developing, producing and marketing goods, services and knowledge (Johannisson 2000b; Rowel et al., 2000; Van de Ven 1993). Interconnected ties indicate that firms may share meeting points with other actors in networks created by economic and social associations (Galaskiewicz et al., 1985). A unique feature of localised networks of firms is, thus, their embeddedness in a setting that also accommodates economic and social institutions (Araujo and Easton 1996; Becattini 1988). This statement invites to indirect networking, where such institutions bridge between firms which otherwise may have remained disconnected in the business system. This kind of networking, and the associated notion of institutional embeddedness, is thus proposed to use the unique features of a territorial context for business activity.

Local business community are presumably mainly inhabited by small family businesses where the owner-manager epitomises her/his firm. This suggests that the business leader dominates the external relations of the firm and that the individual and the firm levels of analysis can be collapsed into one (Johannisson 2000b). Using our definitions of 'substantive' and 'systemic' embeddedness we identify three layers of networking: first-order embeddedness (firm to firm relations), second-order embeddedness (firm relations to social and economic institutions) and third-order embeddedness (firm indirectly being related through social and economic institutions). The latter networking we address as 'holistic' since it includes ties that can only be considered by studying the locality, the organizing context, as an entirety, including both business-persons/firms and economic/social institutions, both direct and indirect relations.

It is important to underline that the overly positive image of embeddedness, and its implications from the point of view of the individual firm, is an outcome of our focus on embeddedness as an organisational phenomenon that benefits entrepreneurship. However, as pointed out by Granovetter (1985) embeddedness means that agents may easily become exploited by those who misuse their trust. Also, embeddedness means strong social control and that opportunistic behaviour travels fast. The community that embeddedness creates may not only contain resourcing relations but distributing as well: you are expected to share your wellbeing. Too strong local ties may create a lock-in which may turn out to be disastrous to the business community (Grabher 1993). The integration of firms and

(economic) institutions also cause tensions that may be either beneficial or detrimental to both individual firms and the context at large. As indicated, the discourse on industrial discourse presents co-opetition, that is local collaboration as well as competition, is a constructive tension since it keeps the local firms alert when confronting global competitors. Different values and action rationales of firms and institutions may, though, generate a potentially damaging tension that erodes the spontaneous networking between the firms themselves may be eroded (Johannisson 2000a).

3 Network Analysis as Puzzle-Solving

The understanding of reality as genuinely relational, made evident in the notion of the organising context, obviously adopts (social) constructionism as a basic paradigmatic view and pays due attention to emergence. Qualitative approaches, including narratives and interactive research, i.e., close-up studies, then are needed in order to catch the fine-grained creative processes which craft emerging business ventures and the organizing context as a socioeconomic setting. The need for using quantitative techniques however remains since these provide legitimacy in academia as well as in different communities of practice. Graph-analytical approaches can be used to map the complexity of contextual networking and comparative-static analysis of patterns of relationships to indicate change over time. Before such a methodology is elaborated the complexity, and thus potentiality, that is ascribed the organising context as a relational construct has to be illustrated.

It is easy to underestimate the dissimilarity between a relational stance and a view where populations of firms are considered as unrelated, isolates, and collectively thus only appear as agglomerates where averages of firm variables are used to map the whole population. A clear-cut example will illustrate this difference in terms of complexity and variety. Imagine a set of 73 persons/firms whose actions have to be coordinated. Given a span of control of subordinates/maximum number of subcontractors of eight, a three-tier hierarchical structure containing 72 asymmetric relations will suffice to bring about a (hierarchical) order that is capable to carry out routine operations in an organisation or production system. However, if self-organising creative processes, which call for variety, are going to be instigated, no a priori order should be accepted. This means that the potentiality of any horizontal, vertical or lateral relation is recognised. Variety then dramatically increases since 73 people may, building the completely networked organisation/business community, theoretically create

2,628 ($73 \times (73-1)/2$) symmetric, that is reciprocated, dyadic relations. There is no need for further comments on the difference in terms of complexity (and potential dynamics) between 73 totally disconnected agents on an 'ideal' (neoclassical) market, a hierarchy made out of 72 unidirected order channels and a community of 2,628 exchange relationships.

The complexity of a relational approach multiplies when the varying contents of each potential relationship between firms or between firms and institutions according to the model according to the model in Fig. 2 are considered. The Appendix presents the operationalisations of network strands which have been used for mapping a socially embedded, local cluster of firms when investigating different Swedish business-communities. See Johannisson et al. (2002). In order to measure firstorder embeddedness the local firm leaders got a complete list of the local firms and were asked to indicate relations to each other firm and its leader on nine different strands/kinds of relations. The business network data thus provides information on directed, asymmetric ties. In order to measure second and third order embeddedness the businesspersons were asked to mark established relations on lists covering the economic institutions (eight strands) and social associations (five strands). Adopting this methodology means that an overall data set is created that includes nine single-stranded adjacency matrixes as regards business-to-business relations, eight matrixes concerning business-to-economic-institutions relations, and five matrixes with respect to business-to-social-associations relations. In order to identify symmetric, i.e., reciprocated, ties, all owner-managers as well as representatives for all economic/social organizations have to be approached. These data were graph-analytically studied, cf. Borgatti et al. (1999).

Referring to Granovetter's (1973) terminology, single stranded relations may be addressed as 'weak' linkages. Symmetric single-stranded relations, for example, intertwine into multi-stranded ties of varying strength. According to the Appendix a friendship tie means that the 'acquaintance' and 'talk' strands coincide, a, personal-business, relation that the 'friendship' and 'commercial' strands combine while a, complex, tie intertwines the 'friendship', 'commercial' and 'professional/problem-solving' strands.

In order to identify and measure the relations between firms and economic/social institutions, a two-mode network analysis can be adopted (Wasserman and Faust 1994). This means that adjacency matrices where the rows indicate firms and the columns the economic or social institutions. These types of relations are as defined in research so far unidirectional (asymmetric) since it flows only from actors in one set (the business community) to the actors in the two others but not reverse.

Holistic networking and third-order embeddedness is here associated with the joint potential for networking provided by the three networks: business/

business, business/economic institutions, business/social associations. Such complex networking includes, e.g., situations where businesses are not directly related but share membership of the same social associations. Thus third order embeddedness is genuinely institutional because it signals that without the institutions a considerable number of businesspersons/firms would remain disconnected.

Repeated quantitative network studies have been carried out in a Swedish industrial district since the 1970s (Johannisson 1983) and graph-analytical techniques have been applied since the early 1990s (see for example Johannisson et al., 1994; Johannisson et al., 2002). Empirical findings from three contexts suggest that the organically created industrial district is much more densely networked than the induced science park but less densely networked than the small business community specializing in one industry (furniture). Business strands are most frequent in the industrial district while 'professional/problem-solving' strands are most common in the science park. However the portion of ties being 'complex' (see above) is the same in all three contexts. Supplementary research into the dynamics of the personal networking of young entrepreneurs in science parks suggest that their way of relating over time becomes more business oriented (Johannisson 1998).

The methodological specifications that the multiple embeddedness of economic activity in an organizing context, such as an industrial district or a science park requires still leave a number of questions unanswered. For example, how realistic is the assumption that reciprocated relations reflect exchange that is balanced with respect to the agents' power? This may be the case in the Swedish context, where the model and operationalisations were developed, but quite different in other national cultures with a different set of 'work-related values' (Hofstede 1980). Parallel research in an industrial district (Rafaela) in a national setting that in all four dimensions according to Hofstede contrasts the Swedish culture – the Argentinean one – suggests that ties are more often asymmetric due to, e.g., differences in firm size and associated power. These culture-sensitive reflections on methodology used invites to a conceptual review in order to enhance our understanding of localities as organizing contexts for entrepreneurship.

4 Reconceptualising the Organizing Context as a Socioeconomic Construct

Considering the potentiality of place as a domicile for entrepreneurial processes the conceptual and methodological elaborations above have confined themselves to the locality as a business setting with varying

institutional endowments and national settings. However, any community is a social construction as well historically and culturally locally embedded. 'Culture' for sure is a concept that embraces many more interpretations than the one adopted by Hofstede. Also, inside a country culture varies. Thus, in Fig. 3 the institutional embedding is completed with the local/ regional culture, leaving further cultural layers aside.

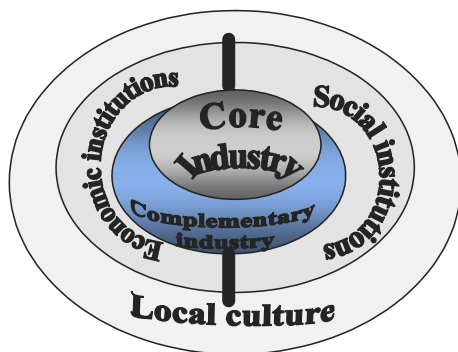


Fig. 3. Economic, institutional, and cultural embeddedness. Source: Johannisson et al. (2000b), Fig. 4, p. 310

In order open up for a culturally broader discourse on networking and entrepreneurship in a spatial perspective, three pairs of contrasting/ supplementing concepts are introduced in Fig. 4 below. The presumably reflect contemporary public discourses on local and regional economic development. The three dimensions concern the dominant life-setting in the territory (place), the general outlook of the people in the locality/region and the critical competence needed to materialise emerging ideas. The life-setting aspect juxtaposes the rural and urban ways of life. This dichotomy in our mind is closely associated with the Tönnies' (1965) distinction between 'Gemeinschaft' and 'Gesellschaft'. In the former case strong ties that originate in mechanistic solidarity create a sense of community including general and delayed reciprocity which connects people and produces strong informal institutions. Usually this way of life is associated with rural, even peripheral locations. In the contrasting urban life-setting ties are weak and asymmetric because people specialize professionally. Informal institutions are replaced by formal structures that aim at keeping selfishness at bay.

A 'local' outlook means a great concern for established traditions implying that the search for ideas and ways to deal with challenges is centripetal. In the language of different spaces (physical, social and mental) outlined above, a local outlook is practiced in an organizing context where the three

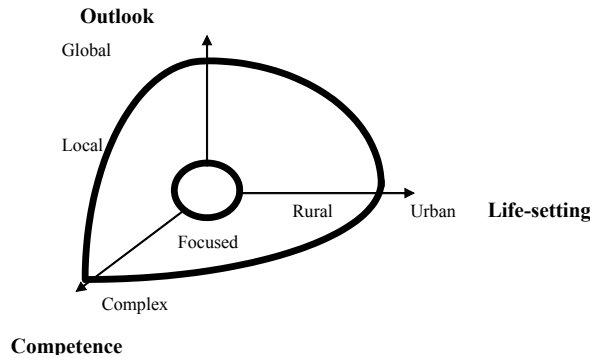


Fig. 4. Contrasting images of territorial dynamics

spaces, due to different proximities, overlap considerably. A 'global' outlook in contrast means the mental and social spaces of local communities, their members, individuals as well as collectives, are unbounded and (therefore) quite separated. People with a global outlook are to a great extent involved in distant networking and are guided by values and norms that only partially coincide with those of the place where they live.

The third aspect, that of 'competence', as we see it, ranges from focused to complex. 'Focused' competence here means approaching challenges with capabilities that the personal and socially shared experience carried by the individual as member of a community of practice so far has generated. Focused thus does not (have to) mean trivial and standardised knowledge but rather refers to insights carried by a reflective practitioner. When focused competence is at its best it emerges into qualified craftsmanship that is embodied and intuitive, superior to formal knowing and analytical reasoning. Complex competence emerges out of ability to combine insights from the frontiers of different knowledge fields, implying that the knowledge base in use is constantly being revised. Complex competence is usually associated with advanced science-based findings but may as well be found in art and the humanities in general. Design is a field where aesthetics and science are combine in order to generate unique competence. The emerging experience economy generally invites to constant reconfigurations according to progress in both science and art.

The two circular profiles in Fig. 4 summarise the proposed vocabulary into two contrasting understandings of local/regional development. The inner circular profile, according to more unobtrusive public discourse produces a rural community with an outlook that is limited by fixed local norms and strong networks and whose competences are tied to traditions

that restrict the knowledge base to a few areas. However, this view does not just encompass disadvantaged communities in the periphery. Prospering industrial districts practice a similar logic (Becattini 1990; Johannisson and Wigren 2006). The contrasting image, the outer profile, reflects the dominant recipe for growth and economic development in contemporary society, nurtured by a majority of policymakers and researchers in the field. The view is associated with the global outlook of corporations, institutions and politicians that promote complex innovation systems within a global frame of reference, systems which obviously only an urban life-setting can accommodate.

It is important to point out that the outer and inner profiles according to Fig. 4 are introduced as opposing ideal images, feasible for further conceptualization and subsequent empirically studies. The two circles express prejudice and wishful thinking that reveal contrasting ideologies, i.e., value-laden frameworks for action, and not just as opposing rationales with illusory neutrality. The outer circle, constructed out of the views of dominant coalitions in contemporary society, represents a functional logic carried by formal, preferably academic, knowledge and footloose financial capital. Since this logic thrives on centrifugal forces which deny any confinement, it articulates a threat to any specific place. The inner profile in contrast originates in the conviction that any sustainable initiative has to be taken from inside and below in order to create uniqueness and viability (Hjorth and Johannisson 2003). Such a territorial logic unites centripetal forces, including the belief that concerted action calls for multi-dimensional proximity – social and mental as well as physical.

Wishful thinking, however, does not always materialise. Typical discursive constructs such as the notion of ‘Triple Helix’ and ‘innovations systems’ seldom manage to reach the targeted co-ordination of addressed interest groups. The urban setting may provide a multitude of arenas where human encounters trigger creativity but segmentation, for example within the local academic community, often hinder the building of complex competence. Neither are rural localities just reserves for handicraft operations and people who hold traditional values as the inner profile proposes. Community entrepreneurship, as much needed for re-vitalisation of degenerated Western regions as generally in developing countries, as well benefits from tacit knowledge originating in experiential and social learning and the immediacy of collective action that the local, rural community may accommodate, compare Katz and Steyaert (2004).

The proposed dichotomies and their interrelationships that construct each circle according to Fig. 4 are constantly being revised as an outcome of a dialogue between their adherents, emphasising them as genuine

ideologies. With the vocabulary proposed by the French philosopher Deleuze it is more productive to see each pair of dual concepts as a 'contrariety', that is signifying two images that are different yet similar. The vitality of a region thus is constructed out of the awareness of keeping both (extreme) images alive in ongoing discursive and embodied practices. Talking about 'rural', 'local' and 'focused' without (also) having their contraries 'urban', 'global' and 'complex' in mind does not make much sense. We thus propose the notion of a 'virtual' logic for a mindset and related (inter)action repertoire that embeds the conceptual contrasts 'functional' and 'territorial' logics and associated centrifugal and centripetal forces. The virtual logic suggests that local practices constructively use the tensions between rural/urban, local/global and complex/focused competence to instigate and maintain change. The notion of 'virtual' invites to questioning what is taken-for-granted, for example that (global) marginality and centrality are destined to reflect the rural/urban divide. Communication and information technology (CIT) appears as a generic tool for enacting boundary-spanning new worlds.

The (institutional) context will define how the contrasting logics interactively organise people's minds and actions. Even if the urban life-setting can rationalise the existence of science parks as greenhouses for entrepreneurs, the fact that these reserves for academic researchers in the Swedish language are labelled 'science village' reveals a culture that originates in the rural way of life. On the other hand, development programmes carried by urban values, financed by both the EU and national bodies, have invaded many rural small-business settings. Constructive tensions also appear along within the realm of competencies where techniques such as CAD qualify product development processes originating in hands-on experiences. Technology and innovation systems and associated in turn seem to need a broader experimental approach to be able to deal with the interdependences which they are produced by and they themselves produce. The notion of 'development block' (Dahmén 1988; Eliasson and Eliasson 2006; Johansson 2001) provides such an analytical framework that acknowledges the need for learning by doing and interacting.

The conceptualization of a proposed virtual logic calls for a methodology that can guide empirical inquiry into the complexity and dynamics created by the parallel operation of the territorial and functional logics. There are then different ways to approach this challenge. One option is to critically review the inclusion/exclusion pressures that operate in the community as a networked collective. More recent research into the same industrial district that has inspired the conceptualisations reported above on one hand demonstrates that women and immigrant are not invited to

business networking, on the other hand that complex formal competences, urban values and practices as well as a global outlook as a basis for intensified internationalisation are brought into the community (Johannisson and Wigren 2006). A second way is to use patterns in networking practices to identify awareness of the need for combining the two logics. Repeated graph-analytical studies, comparative synchronic research in different localities as well as comparative-static diachronic research in the same community over time, provide lessons for individual firms and locals partnerships as well as for the community at large. These findings are summarized in Figs. 5 and 6.

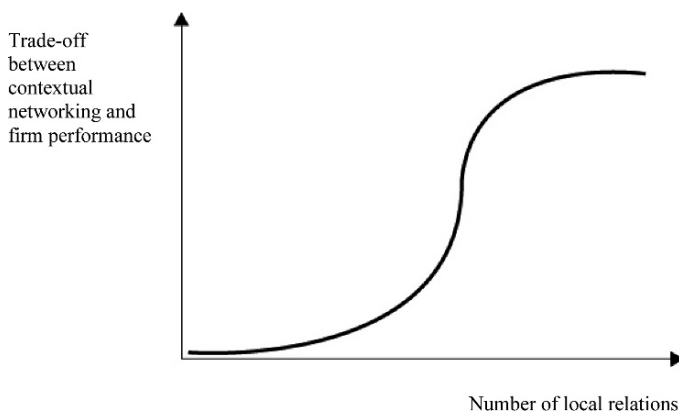


Fig. 5. The domain for contextual networking – the firm's perspective

Figure 5 proposes that the entrepreneur and the firm, in order to benefit from the local context, must accomplish a minimum of local networking so that legitimacy is gained and access to the collective local resources guaranteed through direct and indirect networking in the community. The graph also suggests that there are limits to what supplementary social and human resources other local firms and local institutions can provide. This means that the increase in the trade-off between localized networking and business performance declines once a minimum degree of integration is achieved. The opportunity cost of time used for local/contextual networking becomes very high if compared with the benefit of global networking. Empirical research confirms that small-business managers in generously endowed contexts balance local and global networking (Johannisson et al., 1994).

In Fig. 6 the unit of analysis is the (business) community at large. The model proposes that, in order to make contextual networking into a collective force, what here is associated with collective entrepreneurship, two

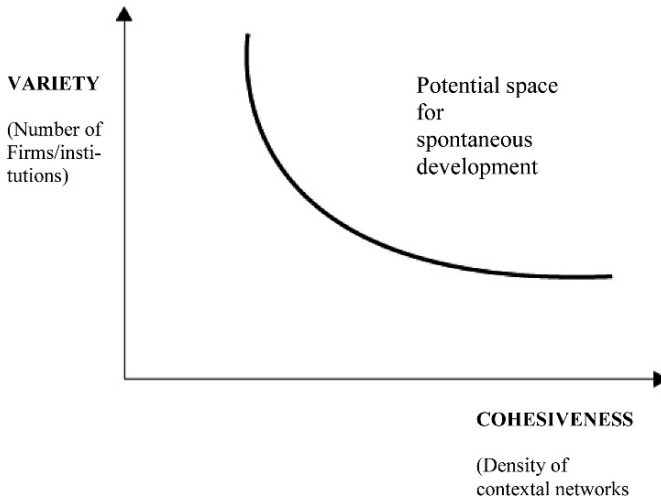


Fig. 6. The organising context as a potential space for collective entrepreneurship

conditions have to be met. First, in order provide a creative variety there is a need for a minimum of firms/institutions that are (potentially) involved in networking. Second a minimum of integration in terms of network density is called for in order to establish the shared norms and practices that concerted action demands. In what is addressed as ‘the potential space for spontaneous development’ both these requirements are met. In that space self-organising processes are triggered, meaning that beneficial changes are enforced and injurious ones dampened. Empirical research confirms that the industrial district being studied offers such a potential space for collective entrepreneurship. Science parks usually offer needed variety lack the minimum cohesiveness while former one-company towns about to revitalize may succeed in integrating emerging new ventures but have difficulties in creating needed variety.

While the notion of ‘cluster’ usually is associated with a comprehensive localized network of firms (and institutions), such a local collective usually includes different constellations, often with overlapping memberships. Such constellations or strategic groups may be identified along different lines. One option is to identify formal, contractual agreements on collaboration, another to search the general pattern of enacted dyadic relations in order to identify informal groups. Proposed important features of dynamic and innovating groups is that they as much as the organizing context at large are balanced not only with respect to diversity and cohesiveness but also as regards external orientation. High diversity then means supplementary

capabilities among group members and a collective absorptive capacity while strong cohesiveness implies close coordination of resources and shared knowledge. External orientation, supplementing internal collaboration, guarantees openness to the world outside the context. In an empirical study of an industrial district and a science park four such 'strategic groups' were identified by combining formal network analysis (intra-group similarity according to measurement of 'structural equivalence') and heuristics (Johannisson et al., 1994). The organically created and organized industrial district reports four strategic groups, all with similar ratings with respect to diversity, cohesiveness and external orientation. While all groups rate close to average on cohesiveness and external orientation, they all are above average with respect to diversity, reflecting a concern for pushing variety in a context where there are two dominating local industries (light engineering and plastics). In the induced context, the science park, the three strategic groups that were identified were much more heterogeneous between themselves with respect to diversity and cohesiveness and on the average less externally oriented than the industrial-district groups.

The further conceptualisation of localized networking and entrepreneurship offered in this section confirms the affinity between structural features and the creative organizing processes that they initiate and feed. The modelling has also revealed some of the weaknesses of organizing contexts both in the urban and the rural setting. Such drawbacks for example include the limits to rational and intentional construction of organizing contexts since they are to a great extent the outcome of unsolicited encounters and subsequent spontaneous exchange. An associated drawback is that it takes a long time to build an organizing context while support of individual firms may pay off quickly – but does not generate sustainable development.

5 Some Implications for Research, Practice and Policy

As the structure of the paper itself demonstrates the interface between two research fields – networking and entrepreneurship – which are frequently visited by both scholars and practitioners has called for a dialogue between conceptual elaboration and methodological/empirical excursions. This should not come as a surprise considering that the carrying concepts, after having for a long time been exploited by many constituencies as attractive metaphors, run the risk of ending up as platitudes. Obviously further research is needed in order to substantiate witty notions such as 'the global

village' and 'born global' and theorise interdependencies between digital and personal networking.

At the turn of the millennium a globalising world, to a great extent due to the advancements of ICT, have meant that the traditional industrial district as a role model for local and regional development has been questioned. Some of these challenges, it is argued, can only be dealt with by inviting large international firms to the local business community, corporations who are resourceful enough to build and defend global trademarks, cf., e.g., Carbonara (2002). This need for increased concentration of the local business activities however does not have to mean that equally important local variety is abandoned. Again a relational view is productive, suggesting that (complementary) spin-offs may add to both diversity and conservation of existing entrepreneurial energy. A complementary spin-off means that the founder of the new firm maintains a personal relationship to the former employer, usually as a supplier. Such a collaborative arrangement implies that the new firm already at its birth has a customer that provides orders and legitimacy which in turn bridges to further market relations. In the literature this entry to a venture career is addressed as 'extrapreneurship' (Johnsson and Hägg 1987). This model has in Sweden mainly been used to help redundant personnel to co-create own new jobs but the extrapreneurship model may also be adopted as an integral part of an offensive strategy for enforcing the local entrepreneurial spirit since it means increasing the number of relations as well as the number of firms and thus moving the community to the potential space for spontaneous development according to Fig. 6.

While the hierarchy and the networked market usually are considered as mutually exclusive extremes, cf., e.g., Sjöstrand (1992), the notion of 'heterarchy' proposes an (inter)organizational form that combines the market and the network. Originally developed by Hedlund and Rolander (1990) in a corporate setting, Grabher (2001) applies it to an urban cluster of producer-service firms. One feature of the heterarchy is that leadership of the collective shifts according to what challenges it has to take on, another that an ongoing dialogue between its members feeds learning processes and maintains alertness. As a mode of organizing the heterarchy thus facilitates self-organising and enacts collective entrepreneurship.

The proposed framework, whether considering the territorial, functional or virtual logics, is, although it accommodates entrepreneurial processes, quite static. It is implicitly assumed that the networked structures are permanent and strong ties are privileged. However the proposed vocabulary can easily be extended to include temporary clusters that appear for example at international trade fairs. They as well may operate as organizing context

as much as its members often know each other well. This in turn creates an atmosphere what offers swift trust, i.e., outcome of encounters with strangers that may instantaneously creates a new strong relationship because the 'personal chemistry' fits, cf. Meyerson et al. (1996).

Applying the lessons from the conceptual and methodological elaborations in this paper to concrete (public) measures aiming at energizing a locality thus means that relations and networks as the carrying components of the context should be targeted, not individual (economic) agents. Considering its unique social embedding there is no single general way of enhancing business activity.

Consequently support of existing small business should not address individual firms but the relations between themselves and other (local) stakeholders. As indicated, the relations are much more potent as means of creating change. It would be a waste of energy if needing firms had to be first dis-embedded while refurbished and then re-embedded. Another reason for a relation-oriented support strategy is that measures that address the social texture wherein the firms are embedded can and should be organized into a structure that generates help for self-help, that is contributes to mutual-learning processes. Collaborating with other communities makes it possible for also small communities to achieve the variety that Fig. 6 suggests is needed for a take-off. Thus, once the opening phase in local/regional development is enacted, an arena for sustained 'polylogue' may become established as a harbour for local and global venturing (Hjorth and Johannisson 2003). In order to make this happen the locality as a physical space must recognise the need for a global outlook in mental space as well as the potentiality of unlimited relatedness in social space. And, the other way around, policy makers and their frequent academic allies must pay due attention to the everydayness of core business activities.

Appendix

Operational Definitions of Network Strands

The following appendix include the adopted operational definitions of single-stranded ties in business-to-business, business-to-economic institution and business-to-social association networks

Business to business network	
Strand	Operationalisation
Awareness	The firm and its operations are known
Acquaintance	The CEO or anyone else in senior management and on the board of the firm is personally known
Talk	A face-to-face or telephone meeting was held with the senior management of the firm over the last 30 days. The conversation should have lasted for at least 5 min and concerned things other than the weather
Commercial	Some business (concerning goods and/or services) has been transacted (including lending, borrowing, and barter) with the firm over the last 9 months
Professional	The staff of the firm is approached if an ingenious or challenging problem turns up
Joint development project	Over the last 3 years there has been a partnership involving the firm and aiming at joint development of, e.g., technology or markets
Provided business contacts	The firm has been recommended to own existing business contacts, e.g., customers or suppliers
Received business contacts	The firm has mediated new business contacts, e.g., new customers or suppliers
Children schoolmates	Management's children are in the same class at school
Business to economic institutions network	
Strand	Operationalisation
Awareness	The firm and its operations are known
Acquaintance	Somebody in the management of the institution is personally known

(Continued)

Talk	A face-to-face or telephone meeting was held with a representative of the institution over the last 30 days. The conversation should have lasted for at least 5 min and concerned things other than weather
Commercial	Some business (concerning goods and/or services) has been transacted (including lending, borrowing, and barter) with the institution over the last 9 months
Problem solving	The staff of the institution is approached if an ingenious or challenging problem turns up
Projecting	Involvement in the institution with a development project over the last 3 years
Provided business contacts	The institution has been recommended to own existing business contacts, e.g., customers or suppliers
Received business contacts	The institution has mediated new business contacts, e.g., new customers or suppliers

Business to social
institutions/associations network

Strand	Operationalisation
Member	Being a member of the association
Family members	Any other family member being a member of the association
Entrustments	Being entrusted an administrative task in the association
Local business exchange	Meeting with local business colleagues at different events organised by the association
Global business exchange	Meeting with non-local business colleagues at different events organised by the association

References

- Araujo L, Easton G (1996) Network in socio-economic systems. In: Iacobucci D (ed), *Networks in marketing*. Sage, Thousand Oaks, pp. 64–105.
- Becattini G (1988) Los Distritos Industriales y el Reciente Desarrollo Italiano. *Sociología del Trabajo* 5: 3–17.
- Becattini G (1990) The Marshallian industrial district as a socio-economic notion. In: Pyke F, Becattini G, Sengenberger W (eds) *Industrial districts and inter-firm cooperation in Italy*. ILU, Geneva, pp. 37–51.

- Borgatti S, Everett M, Freeman E (1999) Ucinet 5.0, Version 1.00. Analytic Technologies, Natick.
- Brunsson N, Sahlin-Andersson K (2000) Constructing organizations: the example of public sector reforms. *Organization Studies* 21: 721–746.
- Burt RS (1992) The social structure of competition. In: Nohria N, Eccles RG (eds), *Networks and organization*. Harvard Business School, Boston, pp. 57–91.
- Carbonara N (2002) New models of inter-firm networks within industrial districts. *Entrepreneurship and Regional Development* 14: 229–246.
- Chia R (1995) From modern to postmodern organizational analysis. *Organization Studies* 16: 579–604.
- Dahmén E (1988) Development blocks in industrial economics. *Scandinavian Economic History Review and Economy and History* 36: 3–14.
- DiMaggio P, Powell W (1983) The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48: 147–160.
- Eccles RG, Nohria N (1992) Beyond the hype. Rediscovering the essence of management. Harvard University, Boston.
- Eliasson G, Eliasson Å (2006) The Pharmacia story of entrepreneurship and as a creative technical university – an experiment in innovation, organization break up and industrial renaissance. *Entrepreneurship and Regional Development* 18: 393–420.
- Galaskiewicz J, Wasserman S, Rauschenbach B, Bielefeld W, Mullaney P (1985) The influence of corporate power, social status and market position on corporate interlocks in a regional network. *Social Forces* 64: 403–431.
- Gartner WB, Bird BJ, Starr JA (1992) Acting ‘as if’: differentiating entrepreneurial from organizational behavior. *Entrepreneurship Theory and Practice* Spring: 13–31.
- Giddens A (1991) Modernity and self-identity. Self and society in the late modern age. Polity, Cambridge.
- Grabher G (1993) The weakness of strong ties: the lock-in of regional development in the rural area. In: Grabher G (ed) *The embedded firm: on the socio-economics of industrial networks*. Routledge, London, pp. 255–277.
- Grabher G (2001) Ecologies of creativity: the village, the group, and the heterarchic organisation of the British advertising industry. *Environment and Planning* 33: 351–374.
- Granovetter M (1973) The strength of weak ties. *American Journal of Sociology* 78: 1360–1380.
- Granovetter M (1985) Economic action and social structure: the problem of embeddedness. *American Journal of Sociology* 91: 481–509.
- Gulati R, Gargulio M (1999) Where do interorganisational networks come from? *American Journal of Sociology* 104: 1439–1493.
- Halinen A, Törnroos J (1998) The role of the embeddedness in the evolution of business networks. *Scandinavian Journal of Management* 14: 187–205.
- Hedlund G, Rolander D (1990) Action in heterarchies – new approaches to managing the MNC. In: Bartlett CA, Doz Y, Hedlund G (eds) *Managing the global firm*. Routledge, London, pp. 15–46.

- Hernes T (2003) Organization as evolution of space. In: Czarniawska G, Sevón G (eds) *Northern light – organization theory in Scandinavia*. Liber, Malmö, pp. 267–289.
- Hite JM (2005) Evolutionary processes and paths of relationally embedded network ties in emerging entrepreneurial firms. *Entrepreneurship, Theory and Practice* 29(1): 113–144.
- Hjorth D, Johannisson B (2003) Conceptualising the opening phase of regional development as the enactment of a “collective identity”. *Concepts and Transformation* 8: 1–24.
- Hjorth D, Johannisson B, Steyaert C (2003) Entrepreneurship as discourse and life style. In: Czarniawska B, Sevón G (eds) *Northern light – organization theory in Scandinavia*. Libero, Malmö, pp. 91–110.
- Hoang H, Antoncic B (2003) Network-based research in entrepreneurship: a critical review. *Journal of Business Venturing* 18: 165–187.
- Hofstede G (1980) *Culture’s consequences: international differences in work-related values*. Sage: Beverly Hills.
- Johannisson B (1983) Swedish evidence for the potential of local entrepreneurship in regional development. *European Small Business Journal* 1,2: 11–24.
- Johannisson B (1998) Personal networks in emerging knowledge-based Firms: spatial and functional patterns. *Entrepreneurship and Regional Development* 10: 297–312.
- Johannisson B (2000a) Modernising the industrial district: rejuvenation or managerial colonisation? In: Vatne E, Taylor M (eds), *The networked firm in a global world: small firms in new environments*. Ashgate, Aldershot, pp. 283–308.
- Johannisson B (2000b) Networking and entrepreneurial growth. In: Sexton D, Landström H (eds), *The Blackwell handbook of entrepreneurship*. Blackwell, Oxford, pp 368–386.
- Johannisson B, Wigren C (2006) The dynamics of community identity making – the spirit of Gnosjö revisited. In: Steyaert C, Hjorth D (ed) *Entrepreneurship as social change*. Edward Elgar, Cheltenham, pp. 188–209.
- Johannisson B, Alexanderson O, Nowicki K, Senneseth K (1994) Beyond anarchy and organization: entrepreneurs in contextual networks. *Entrepreneurship and Regional Development* 6: 329–356.
- Johannisson B, Ramírez-Pasillas, Karlsson G (2002) The institutional embeddedness of local inter-firm networks: a leverage for business creation. *Entrepreneurship and Regional Development* 14: 297–315.
- Johansson D (2001) *The dynamics of firm and industry growth. The Swedish computing and communications industry*. Dissertation. Stockholm: KTH.
- Johnsson T, Hägg I (1987) Extrapreneurs – between markets and hierarchies. *International Studies of Management and Organization* XVII: 64–74.
- Katz J, Steyaert C (2004) Entrepreneurship in society. *Entrepreneurship and Regional Development Special issue* 16(3): 1–18.
- Larson A (1992) Network dyads in entrepreneurial settings: a study of the governance of exchange relationships. *Administrative Science Quarterly* 37: 76–104.

- Larson A, Starr JA (1993) A network model of organization formation. *Entrepreneurship Theory and Practice* Winter: 5–15.
- Maskell P, Malmberg A (1999) Localised learning and industrial competitiveness. *Cambridge Journal of Economics* 23: 167–185.
- Maskell P, Eskelinen H, Hannibalsson I, Malmberg A, Vatne E (1998) Competitiveness, localised learning and regional development. Routledge, London.
- Meyerson D, Weick KE, Kramer RM (1996) Swift trust and temporary groups. In: Kramer RM, Tyler TR (eds) *Trust in organizations: frontiers of theory and research*. Sage, Thousands Oaks, pp. 166–195.
- Morgan G (1980) Paradigms, metaphors and puzzle solving in organization theory. *Administrative Science Quarterly* 25: 605–622.
- North C (1990) *Institutions, institutional change and economic performance: political economy of institutions and decision*. Cambridge University Press, Cambridge.
- Parkhe A, Wasserman S, Ralston D (2006) New frontiers in network theory development. Introduction to special topic forum. *Academy of Management Review* 31: 560–568.
- Rowel T, Behrens D, Krackhardt D (2000) Redundant governance structures: an analysis of structural and relational embeddedness in the steel and semiconductor industries. *Strategic Management Journal* 21: 369–386.
- Sarasvathy SD (2001) Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* 26: 243–263.
- Sjöstrand S (1992) On the rational of irrational institutions. *Journal of Economics Issues* XXVI: 1007–1040.
- Shane S (2003) *A general theory of entrepreneurship. The individual-opportunity nexus*. Edward Elgar, Cheltenham.
- Shane S, Venkataraman S (2000) The promise if entrepreneurship as a field of research. *Academic Management Review* 25: 217–226.
- Smirchich L, Stubbart C (1985) Strategic management in an enacted world. *Academy of Management Review* 10: 724–736.
- Steyaert C (1997) A qualitative methodology for process studies of entrepreneurship. *International Studies of Management and Organization* 27: 13–33.
- Storper M (1995) The resurgence of regional economies. Ten years later: the region as a nexus of untraded interdependencies. *European Urban and Regional Studies* 3: 191–221.
- Tönnies F (1965) *Community and association*. Routledge and Kegan Paul, London.
- Uzzi B (1996) The cources and consequences of embeddedness for the economic performance of organisations: The network effect. *American Sociology Review* 61: 674–698.
- Uzzi B. (1997) Social structure and competition in inter-firm networks: The paradox of embeddedness. *Administrative Science Quarterly* 42: 35–67.
- Van de Ven AH (1993) The development of an infrastructure for entrepreneurship. *Journal of Business Venturing* 8: 211–233.

- Van de Ven AH, Poole MS (2005) Alternative approaches for studying organizational change. *Organization Studies* 26: 1377–1400.
- Wasserman S, Faust K (1994) *Social network analysis: methods and applications*. Cambridge University Press, Cambridge.
- Weick KE (1995) *Sensemaking in organizations*. Sage, Thousand Oaks.
- Wellman B (1982) Studying personal communities. In: Marsden PV, Lin N (eds) *Social structure and network analysis*. Sage, Beverly Hill, pp. 61–80.
- Wenger E (1998) *Communities of practice. Learning, meaning and identity*. Cambridge University Press, Cambridge.
- Winnicott DW (1971) *Playing and reality*. Penguin, Harmondsworth.
- Zukin S, DiMaggio O (1990) Structures of capital: the social organisation of the economy. Cambridge University Press, Cambridge, pp. 3–26.

The Quest for a New Development Policy

Antonio Vázquez-Barquero

Universidad Autónoma de Madrid, Madrid, Spain

1 Introduction

Over the last two decades, a process of integration of the productive systems and markets is steadily acquiring global dimensions; and States relinquish leadership to innovative firms (generally multinational) as new information, transport and communication technology facilitate and reinforce interaction between organizations.

The globalization process means increased market competition, which calls for adjustments in the productive systems of countries, regions and cities immersed in the process. Since firms do not compete alone, but rather within the context of their productive and institutional milieu, globalization fosters new modes of organization in city and regional systems, in accordance with the new international division of labour.

Productive adjustment, unemployment and poverty have become a challenge for cities, regions and territories, which compete in an ever more globalized world. The spatial and social effects of the globalization process have caused a reaction on behalf of the local communities. Thus, the new development policy has emerged, focused towards eradicating poverty and making the territories more competitive. But there are different interpretations that explain the local response to the challenge of globalization.

The scope of local initiatives changes from one case to another. In some cases they pretend to mobilize the endogenous potential in order to find solutions for the people's problems and needs, as proposed by the populist approach to development. In other cases, the purpose of local initiatives is to use the local population capabilities and its creative capacity for the continuous transformation of the economy and society, as argued by the human development approach. Finally, most local initiatives

are directed towards acting on the key processes determining capital accumulation, as proposed by the evolutionary approach. All these approaches claim to obey to an endogenous development model, although they are very different in nature.

The paper argues that the new development policy hides an analytical and theoretical logic. Undoubtedly, local development initiatives emerged spontaneously as governments and local communities defined actions in order to answer the challenges and opportunities posed by globalization. Local initiatives obey a territorial approach of development, that refers to capital accumulation and growth processes of a locality or territory, that has culture and institutions that help support the productive transformations and economic and social progress. The paper concludes that all these interpretations of the new development policies refer to the endogenous development model.

2 Social and Territorial Effects of Globalization

The economic dynamic of countries, cities and regions are very different from each other. Each territory has human, institutional, cultural and natural resources that makes its development potential. In local economies, one can identify, for example a given productive structure, labour market, entrepreneurial capability and technological knowledge, natural resources and infrastructures, an institutional and political system, and historical and cultural heritage. Based on these, each economy articulates its growth and structural change processes and a great variety of situations, projects and economic, social and political processes are produced.

The economic, technological and institutional changes during these past 25 years have given rise to strong transformations in the productive systems. Imbalances between supply and demand of local products took place because of the change in tastes and increasing competition within the markets, and this fact altered the competitive capacity of the regions and localities, both of the poor economies as well as of the rich economies. The relative increase in production costs (above all, labour force and energy) affected the firms' production functions and provoked processes like the shut down of industrial firms, change in the location of productive plants and an increase in the competitive advantage of some local productive systems. Delocation of productive activities, increase in sub-contracting and the expansion of firm services, introduced, in turn, new changes in the economies and productive systems of the cities, regions and countries.

The results varied from one economy to another depending on the capacity of each territory to respond to these new challenges. The studies carried out point out that the factors that have determined the productive restructuring and economic growth processes are: the diffusion of innovation within the productive fabric, the skills and qualification of human resources, the entrepreneurial capability of the firms, the flexibility of entrepreneurial organizations, the transformation and adaptation of institutions, and the integration of firms, cities and regions in competitive and innovative networks, on both the national and international level.

Globalization is speeding up the productive transformations and the economic development processes, giving way to a new territorial productive system, which some call Archipelago economy and in which the global urban regions play a growing role (Veltz 1999; Scott 2001a); or if you prefer, to a new spatial division of labour on an international level. This spontaneous process led by the economic, social and political actors has made the diversity of the economic and territorial system increase. New products have appeared, some production processes have changed and the territories have adopted new economic and productive functions. The urban and regional system has become ever more polycentric and the regional and urban hierarchies tend to shrink as the relations and firm and city networks intensify, precisely as a result of the effects of globalization.

The productive system of the more dynamic cities and regions, on which the global economy is based, is more diversified than during the years of the cold war. It is shaped by high technology industrial activities (such as microelectronics, biotechnology, robotics or the aerospace industry), those manufacturing activities that during the 1950s and 1960s were characterized for their standardized production, have restructured themselves and have differentiated their production by introducing innovations (like the garment or automobile industry), advanced services activities (i.e., marketing, design or technical assistance), and financial and cultural services.

The increase and diversification in the production of goods and services and of the activities that stimulate and encourage the productive system have diversified the territorial system (Scott 1998). There are two processes that explain this. On the one hand, the conversion of the national urban systems into a European or Latin American urban system (that is to say, into global urban systems) introduce a change in the inter-urban relations that transforms the costs and price systems, as well as the institutional and entrepreneurial relations on the global level. Therefore, the conditions for greater diversity in the economic, political and institutional functions of the cities and regions within a more interactive and closely related system are created. On the other hand, a greater variety of products and activities

reduces the concentration capacity in productive and commercial functions in a city or urban region due to the agglomeration diseconomies. This dynamic leads to the creation of more flexible urban systems and the reduction of the hierarchies where they existed (Sassen 2001, 2007).

Increased territorial diversity and in the productive systems is particularly outstanding in the dynamic of the rural areas in developed and developing countries, which are experiencing an ever more complex adjustment stage, as a result of the crisis in traditional agriculture, depopulation, lack of basic infrastructures, and the deterioration of the environment (Saraceno 2006). The strength of rural development is not so much rooted in farms economies of scale, as in the enhancing of the scope economies, when diversification of farm production combines with different industrial and services activities. Similarly, industrial spaces are also very diverse and a variety of development models can be identified, with very different paths of growth (Vázquez-Barquero 2005).

Thus, the economic integration process has increased market competition, and has stimulated the adjustments of the productive system of countries, regions and cities during decades, immersed in globalization. This has led to the creation of a productive and spatial system that is ever more diversified. Yet, globalization has not eliminated poverty or the existing inequalities in the income level of an important part of the world population.

Poverty is an old problem that does not appear on the international scene with its full tragic impact until the 1980s, during the disintegration of the Soviet Union, when society in general and the scientific community in particular put forth the question of inequality in the living standards of the population. For decades, traditional economic thought and international organizations had maintained the hypothesis that the income levels of the less developed countries would tend to converge with those of rich countries, based on the idea that the growth rate of less developed countries is greater than in developed countries (Easterly 2001). The studies carried out after the 1980s show the persistent inequality in the living standards between countries and regions and the existence of large pockets of poverty in the less developed countries, particularly in Africa and Eastern Europe, and who are incapable of integrating themselves within the international economic system.

There is general agreement among experts and international organizations, that there is inequality in the income distribution in the global economic system. The human development index carried out by the United Nations Development Programme (UNDP), shows that the more developed countries have a higher development level than that of poorer countries (0.895 with respect to 0.518 in 2003), twenty years more in life expectancy

at birth (78.0 years instead of 52.2 in poorer countries), a more literate population (95.7% in richer countries as opposed to 54.2% in poorer countries), and a GNP per capita that is 20 times greater (\$25,665 as opposed to \$1,328 in poorer countries in 2003, according to the index).

The information and data elaborated by Summers and Heston (1991) and Maddison (2001) show that the differences in income have tended to rise in the long-term, producing growing divergence between poor and rich countries. In the early nineteenth century, the per capita income for richer countries was around three times that of poorer countries, whereas today it is 20 times greater. Since the mid 1970s, the differences in income between countries has increased continuously (Todaro and Smith 2006). In 1960 the income level of the richest 20% of the population in the world, with respect to the poorest 20% was 30:1. By 2000, the richest had over 70 times the income of the poor. In other words, less than 50 million of the richest people received as much income as the 2,700 million poorest receive.

The disparity in income levels, and the divergence between rich and poor countries hides a very serious fact, which is that over 1,000 million people live in absolute poverty (with less than a dollar a day, and of these over 800 million can be considered very poor) (World Bank 2002). Absolute poverty has grown and in 1980 reached close to 1,400 million people and it began to decrease since then. In the late 1990s, extreme poverty affected over 1,200 people, despite the fact that the proportion of the population that live below the poverty level went from 28.3% of the population in 1987 to nearly 24% in 1998.

According to the World Bank, between 1993 and 1998 poverty went down in the more globalized developing countries by 14% and reached 762 million people, poverty being more predominant in rural areas; whereas in the poorer less globalized countries poverty increased by 4% and reached 437 million people. In Asia, as a whole, poverty was reduced in absolute terms, as a result of the effect of improved income levels in large countries like India and China. In sub-Sahara Africa (where a 16% of the total poverty is focused) the number of poor increased and went from 217 to 290 million people. In Latin America, however, it increased during the 1990s in such a way that the levels of absolute poverty in 1997 were above those of 1980, as recognized by the Economic Commission for Latin America and the Caribbean (CEPAL 2002).

The high unemployment and poverty levels reached in the early 1980s, gave rise to a profound change in development policies, when the local and regional actors started carrying out actions focused towards the growth processes of the local and regional economies. Thus, a new development

policy is begun, that can be understood as the local communities answer towards neutralizing the negative effects of the productive adjustment on employment and standard of living of the population.

As a result of increased globalization, the cities and regions of emerging and late developed countries need to restructure their productive systems in order to face increased competition and change in the market conditions. For this purpose initiatives that help change in the organization of production, diffusion of innovation, improvement in trade and access to the products and factors markets were implemented, and in sum, they would make the firms and territories more competitive. Given the insufficiencies of the macro-economic policies for solving the problems associated with job creation and improvement in social well-being, the local and regional actors, spontaneously, tried to channel the adjustment processes by means of actions that ultimately, proposed increase productivity of farms and industrial and service firms, and improve competition within the national and international markets of firms located in their territories.

3 The New Development Policy

The new development policy is characterized by its strategic view of economic development, providing local actors with the capacity to stimulate productive restructuring and, subsequently, improve the employment rate and welfare of local communities. Local initiatives are very diverse in nature (Vázquez-Barquero 2005).

3.1 Fostering Firm s Development and Cluster

One of the objectives of local initiatives is the start-up and development of firms and the formation of firm networks. In Rafaela, Argentina, an industrial district under productive restructuring (Ferraro and Costamagna 2000), the Centre for Entrepreneurial Development was created in 1996, financed by the Inter-American Development Bank (IDB) as well as by local firms and the municipality. The Centre gives technical and financial assistance to local and regional firms, which will allow them to improve their production, have a greater presence in the markets, and increase the internationalization of small firms.

On the other hand, in the Sierra de los Cuchumatanes, in Guatemala, on the border with Chiapas (Cifuentes 2000) during the 1990s, cooperatives and associations were recovered and began to acquire full legal capacity (Formal Organization of Agricultural Producers). These organizations also

recuperate the experience and knowledge of self management that exists within the local population, and was lost during the civil war. Moreover, more informally structured organizations, or Interest Groups were encouraged, and this brought people with common productive and commercial interests together.

As indicated by Scott (2005), the improvement of the cooperative base of the shoe production cluster in Marikina (Philippines) is one of the objectives of the group of shoe manufacturers. The Marikina Footwear and Leather Goods Manufacturers Cooperative, for example, provides financial services to members of the cooperative; among which stand out “the right to take out loans, to purchase raw materials at a reduced price, and to discount letters of credit”. The cooperative has a footwear brand (B&G) that the members may use when manufacturing their shoes. The cooperative provides distribution and marketing services to its members.

The government of Penang, in Malaysia, created the Penang Development Center (PDC), whose main objective was to promote socioeconomic development, including the attraction of export oriented MNCs. The PDC played an important role in the creation of the electronic cluster in Penang with an important presence of multinational corporations (Clarion and National Semiconductors, Intel, Motorola, Hewlett-Packard, AMD, Hitachi), located during the 1970s; and consumer electronic firms (such as Sony, Toshiba, Pensangko, Komag, Seagate and others) located during the 1980s and 1990s. PDC helped stimulate the formation of firm networks, and differentiate and diversify the productive fabric, particularly after the late 1980s. A productive fabric has been created in which the domestic SMEs have established ties among themselves and with the MNCs. Yet, the lack of coordination on behalf of the government of Penang with the Federal Government of Malaysia restricted the development of local initiatives in order to upgrade human resources and diffuse innovation within the local productive fabric (Rasiah 2005).

Finally, over the last decade in Latin America, Asia and Africa, various forms of micro-credit and financial support to micro-firms and small businesses have appeared (Armendariz and Murdoch 2001; Lacalle 2002). The Grameen Bank, created in 1974, is a story of success. In 1999 it had over 2,300,000 clients (95% women) and a volume of loans of over 2,715 million dollars and it is estimated helped 12 million people in Bangladesh. In turn, International Action, founded in 1961, has a network of 19 credit offices in Latin America, with over 380,000 clients (57% women) and with over 335 million dollars in loans.

In Porto Alegre, the prefecture, in collaboration with private economic and social actors founded the community credit institution PORTOSOL, a non-profit company with two main principles, which are the combination

of real guarantees and solidarity bonds, and the provision of services to small businessmen.

3.2 Diffusion of Innovation and Knowledge

Another major axis of the new development policy is the diffusion of innovation and knowledge throughout the local productive fabric, as can be seen in the initiatives that work in territories with very different productive dynamics and levels of development. Thus, in Rafaela, in 1997 is created the Rafaela Regional Centre (Centro Regional de Rafaela) a part of the National Institute of Technology, which gives services such as analysis and laboratory tests, research and development of products, technical assistance to local firms and training to qualified workers.

A particularly interesting case is that of the Technological Centre do Couro, Calçado e Afins (CTCCA) of Novo Hamburgo, Rio Grande do Sul in Brazil. This is a private, non-profit institution established in 1972 and founded for the purpose of helping the shoe wear firms at the beginning of their export activity, by providing services that would allow them maintain the quality standards required by international markets. After thirty years it has become an institution capable of stimulating research activity and product and process development in the shoe industry of Brazil.

In Asia, both in developed as well as emerging countries, the technological policy is at the core of the development programs. In Japan, the policies in support of technology during the 1980s were focused towards promoting structural change in underdeveloped regions, through the support of high technology activities in peripheral locations. In China, the Scientific and Technological Park Zhong Guan Cun in Beijing, has become, since 1999, an example of how to combine training with scientific research and both with the creation and diffusion of innovations. In its central area are located 2,400 firms and public centers, a result of the investments of multinational corporations like IBM, Microsoft, HP, Oracle, Siemens, Motorola, NTT, Fujitsu, Panasonic, Samsung and Mitsubishi, among others.

Last of all, in Malaysia, the Malaysia Technological Park, located within the "Multimedia Super Corridor", at the outskirts of Kuala Lumpur, was created in 1996 as an instrument for converting Malaysia into an economy focused towards the production of high technology and knowledge intensive goods and services. This complex provides firms with services and infrastructures that stimulate the creation and diffusion of technological innovation and knowledge. It gives technical and financial services to entrepreneurial initiatives that wish transform an innovative idea into a business; it helps in the implementation of research projects through its Biotechnology division

(in the fields of molecular biology, biochemistry, pharmacology and food sciences); it provides training services in the fields of engineering, biotechnology and information technology; and it provides fully equipped floor space and services to firms that wish to locate in an environment focused towards a knowledge economy.

3.3 Building up Infrastructures for Local Development

Initiatives targeting the building up of infrastructures and social overhead capital are traditional instruments for urban and regional development. Investment in economic overhead capital is at present a long-term policy response to the challenges of globalization and competition between cities. In Asia, during the last fifteen years important investments in infrastructures (such as international airports, ports, roads, underground, high-speed railways) have taken place in leading cities like Bangkok, Kuala Lumpur, Seoul, Beijing or Shanghai. The purpose is to make these global city-regions more attractive to inward investment and global capital, and as a result inter-city networks are taking shape (Douglas 2001; Scott et al., 2001).

Furthermore, in Latin America, practically all the local development experiences involve improving accessibility, meeting the needs of social overhead capital and making cities more attractive places in which to live and to produce. The Villa el Salvador initiative (located in Southern Lima, Peru) bases its strategy on the creation of an industrial park in order to provide industrial land, equipment and the services required by micro-firms and small and medium-sized firms (Benavides and Manrique 2000). The Local Economic Development Program of the Mayor's office in Medellin, Colombia includes urban and metropolitan infrastructure projects.

The concern for sustainable development has led cities to develop imaginative projects like that of Curitiba, Brazil (Cambell 2001; World Bank 1999) where during the late 1990s, a project was launched that tries to integrate urban infrastructure actions (construction of a road that communicates fourteen neighborhoods in the periphery of the city) with business initiatives based on equipment goods (community huts) in which micro-firms and small enterprises can be installed with the support of the services available through professional and entrepreneurial training. The urban transport system was transformed into a surface metro system and it is considered the main element of the urban development model. The innovations introduced in the urban transport of Curitiba have been imitated in other cities of Latin America, such as the surface metro, Transmilenio, in Bogotá, Colombia.

To neutralize the negative effects of social exclusion, cities have launched urban development initiatives such as neighborhood restructuring in Caracas, Venezuela (Baldó and Villanueva 1996; Villanueva 1998). A good example is the Catuche project of 1993, an initiative which relied on the Jesuit Fathers of the Pastora to provide this marginal neighborhood with the basic services and social capital needed to improve the environment and living conditions of the population. Some of the most important actions of this initiative are the environmental clean-up of the Catuche River, improved neighbor relations, the building or reconstruction of public services and new housing and the promotion of micro-firms to carry out the construction jobs. The project was managed by the Consortium of the Quebrada de Catuche, made up of members from the Catuche community, representatives from the group of promoters, and professional participants. It was funded by the Caracas municipal government, the national government, and non-governmental organizations.

3.4 New Governance for Local Development

At the center of the new development policy are actions aimed at improving the organization of development in a given city or region in order to give an efficient answer to the problems and challenges ahead.

The development of a locality or territory is organized by the decisions of the public and private agents. Frequently, as occurred in Bogotá, in Rosario or in Quezaltenango, in the early stages of the local development policy, local leaders stimulate the implementation of local initiatives, but they should count on explicit or tacit support from other local actors as well.

In Latin America, as in Asia, endogenous development policy is also based on initiatives where social and economic projects are coordinated through new forms of governance such as partnerships among public and private actors, international agencies, or non-governmental organizations. In Villa El Salvador, the Autonomous Authority of the Cono Sur Industrial Park (Autoridad Autónoma del Parque Industrial del Cono Sur) was founded and brings together public and private agents working to develop the Industrial Park. In Jalisco, Mexico, local entrepreneurs, including executives of multinational corporations as well as the public actors, participate in the creation of local networks of suppliers. The development of city institutions has also become one of the characteristic features of the Development Policy of Rafaela (Costamagna 1999). Strategic planning helps cities and regions to define goals and initiatives, like in Rosario, Argentina.

The definition, design and promotion of local development initiatives and strategies is also strongly supported by international organizations like the OECD, the European Union, the United Nations Program for Development (UNDP), the International Labour Organization (ILO) and the World Bank, since the early 1990s. Various UN agencies, often through joint programs with other agencies and entities, propose the creation and promotion of Local Economic Development Agencies (LEDA) in developing countries and in transition economies for the purpose of promoting the economic activity and favor the improvement in the standard of living in cities and regions with economic and social problems (Canzanelli 2003).

Today, there are 42 LEDA agencies in Central America, the Balkans and Africa, which work with a great deal of autonomy. These are non-profit organizations, with mixed public and private capital, whose objective is to create and develop the environment necessary for the firm's start up and to provide support services for the economic development of the territory, as well as for social inclusion. Thus, the LEDA stimulate and support the formation and development of networks of local actors, that permit identify their own development path and which will stimulate the surge of economic, productive, social and institutional innovations.

The Local Human Development Program now under way in Cuba since late 1998, promoted by the UNDP and the ILO, is an example of the new forms of international cooperation that has advanced the introduction and diffusion of relevant innovations, particularly in the field of cooperation practices (Panico et al., 2002). It has helped bring about important changes in cooperation through the articulation of resources from various International Agencies, from governments and other public and private organizations, as well as enhancing decentralized cooperation. Furthermore, it has led to innovations and transformations in the local development processes with the forming of Municipal and Provincial Work Groups for the design and carrying out of local initiatives, and the start-up of the Rotation Fund for Initiatives of Local Economic Development, a tool for financing small and medium size local firms.

In this general framework, the Old Havana has become an example of good practice with respect to development policy through multilateral finance, thanks to the stimulus of the City Historian's Office, which works as a Development Agency. Among the more important initiatives are: the rehabilitation of the historic heritage, the improvement of urban infrastructures, support to tourist activities, the recovery of craftsmanship, (such as the sisterhood of embroidery and weavers) and the improvement of social services (for the elderly and handicapped children).

4 Diversity of Interpretation

The new development policy emerges spontaneously as an answer on behalf of the local communities and governments to the social and territorial effects of globalization. Do these initiatives have an economic rationale? Do they obey an economic development model? Could different development interpretations be understood in terms of endogenous development?

4.1 The Populist Approach

This approach argues that development is often associated with the capacity of a local community to use its development potential, and so respond to the challenges at a given historical moment. Therefore, at a specific moment in time, a territorial community, by its own initiative, may find new ideas and projects that will allow them use their resources and find solutions to their problems and their needs. The “development from below” strategies that allow mobilize and channel resources and the existing capacities within the territory, lead to economic progress when the local actors interact, organize themselves and carry out their initiatives in a consistent and coordinated manner (Friedmann and Wevber 1979; Stöhr and Taylor 1981).

This interpretation has received the support of those who believe that development is not imported, but rather is produced thanks to the economic and social work and effort of the local communities. To eliminate poverty and create jobs the most efficient strategy would be to re-establish an autonomous development model that would drive the existing development potential in the territory and stimulate small agricultural production, small and medium size firms and handicraft industry, and so detain the massive urbanization process and involve the participation of the population in the development process (Kitching 1982).

This populist view of development has appeared as a reaction to the impact of globalization and, therefore, development strategies and policies, based on solidarity, the autonomy of local communities, and the use of the territorial development potential, has received special attention in recent decades. Giordani (2004) argues that the social economy overcomes the separation between capital and labour, and introduces solidarity within the economic process, and he proposes a new development model that includes the public sector (government), the private sector (business) and the social economy sector for Venezuela. From this point of view, solidarity would be at the center of production, of accumulation, of distribution and of consumption.

The social economy appears spontaneously in answer to social deficiencies (in employment, housing, quality of life) that neither the market nor the State is able to attend (Toscano 2000). These are projects focused towards social well-being carried out by the cooperatives, the micro and small firms, the savings banks and non-profit institutions; where what counts is work done by the members involved in management, and the decisions are made democratically among its members. Social economy is a development culture that allows for the integration of population groups with risk of exclusion, takes advantage of the existing development potential within the territory, and stimulates production and employment.

In sum, this approach maintains that today, what is important about development is its autonomous character, based on the use of their own resources and can therefore be produced in any locality or territory, since all territories have a development potential available. The point would be to use the local resources in projects designed and managed by the citizens themselves and the local organizations, in such a way that its inhabitants would control the process through the local development initiatives.

This is an optimistic interpretation of the development processes. It considers that the needs of the population would be well covered, and the success of the local initiatives guaranteed when the population defines, takes responsibility and controls the projects, no matter how limited the means available and/or investments made. Furthermore, it considers that what is important are the resources and potentialities of the territory and that constitutes the capacities on which income is based. It also considers that development policies should be implemented by local action groups, the most efficient public actions are those designed and managed from the bottom up, which also gives a democratic value to development policy and to the citizens' decisions for satisfying their needs.

This approach has, however, important limitations. Above all, it ignores the fact that the development process depends on capital accumulation, that savings and investment are required mechanisms for assuring the continuity in the long-term of the economic progress and social transformation process; and that in any case, they are mechanisms that will facilitate the economic sustainability of development. The importance of introducing knowledge in the production processes is often ignored, and the importance of the role played by the institutions and the organization of production for obtaining increasing returns is not fully appreciated. Last of all, it is an autarchic approach to development, and ignores the fact that the local economies are integrated within the national and international productive systems, and that in one way or another, it is useful take advantage of its effect on these processes.

4.2 The Human Development Approach

Development processes are conditioned by the territory's institutions and culture, as acknowledged by sociologists (Weber 1905; Putman 1993; Fukuyama 1995) historians (Landes 1998; North 1990) and economists (Lewis 1955; Lasuen and Aranzadi 2002; Guiso et al., 2006). Economic success depends on cultural factors such as the work ethic, savings capacity, honesty, tenacity and tolerance, as well as the norms and institutions that regulate the relations between people and territorial organizations. Therefore, culture and institutions have a bearing on economic performance, and no doubt, in the development process.

Nevertheless, culture is something more than an instrument that facilitates and influences the development processes, since the mechanisms that favor the development processes have to do with the projection and use of individual and collective capabilities and with the creative and entrepreneurial capacity of the population. In other words, the core of the development process would lie in the development of human capabilities and in particular, in the population's creative capacity, which is one of the keys of the capital accumulation process and economic progress of societies and territories.

Sen (2001) proposes an important change in the interpretation of development, when he maintains that the concept of development goes beyond economic growth and per capita income of a country or territory, given that they are only an instrument for carrying out the capabilities of the population. What is really important is that people carry out the tasks and activities that they wish, and are capable of carrying them out. That is to say, economic development is achieved by using the capabilities that people have developed thanks to the material and human resources and to the culture that a territory has.

Alonso (2006) believes that Sen's approach presents development as an open process that feeds on the peoples' opportunities and capabilities, which change and transform as the process takes shape. A city, a region or a country develop when the necessary mechanisms are created and when institutions that allow its citizens choose freely the capabilities they wish to develop, are available. It is, therefore, a continuous transformation process of the economy and of society based on the development of potential and the capacities of the individuals, and affects all types of territories no matter what level of development.

This interpretation places man at the center of the economic and social transformation processes, and this has important implications. Above all, it is understood that the results of human activity, in a material sense, are never an end in itself, but rather an instrument for achieving the well-being

of citizens in general. Furthermore, poverty (and therefore, low income levels) is no longer a limitation for development since what is important is not the amount of resources of a territory but rather the capacities of its inhabitants.

The cultural approach to development is an interpretation that considers that transformation and change in the economy and society in general are produced thanks to people's capabilities, and more specifically thanks to their creative and entrepreneurial capacities. This allows deal with the question of poverty in a more natural manner, since even if the economic resources are few, human capacity may be used and developed so as to improve the well-being of the population. On the other hand, this view of development argues in terms of a culturally sustainable development model that interprets economic and social change as an open and continuous process and therefore conceptualizes the structural change and economic progress no matter what amount of resources are available as well as the income levels in general.

However, this view does not consider the relevance of the development potential of the territory in the economic development processes sufficiently. Furthermore, this approach does not give the mechanisms and forces of development that condition the capital accumulation process its true value, which is why its proposed actions are usually restricted, and limit the possibility of self-sustaining development processes. Lastly, this approach can be termed as assisted development, and lacks the capacity for promoting development processes that are economically and socially sustainable

4.3 The Evolutionary Approach

From the perspective of the evolution of a country's or territory's economy, the central issue of development would be to identify the mechanisms that facilitate the growth and structural change processes. Economic development is produced as a consequence of applying savings to the productive investments, and so, depend on the processes that stimulate increased productivity in the economy. Yet, in analyzing this question it is convenient identify the mechanisms that allow neutralize the effects of the law of diminishing returns, which according to neoclassical theory, could lead the economies to a steady state (Sala-i-Martin 2000).

One of the central forces of the capital accumulation process is the organization of the productive system, as seen in advanced countries, in the late developed economies and in the emerging economies over the last two decades (Becattini 1997, 2002; Pietrobelli and Rabellotti 2006). The

question lies not in whether the productive system of a locality or territory is formed by large or small firms, but rather in the organization of the production system, and its effects on the behaviour of productivity and competitiveness. Thus, clusters, local productive systems and industrial districts are forms of organization of production, based on the division of labour between firms and on a local exchange system that produces increased productivity and economic growth. They are organization models that allow generate increasing returns when the interaction between firms permit the emergence of external economies of scale, usually concealed in the productive systems, and ultimately one of the development potentials of the local economies.

The introduction and diffusion of innovation and knowledge is, in turn, another mechanism for increased productivity and economic progress, since it stimulates economic growth and structural change of the productive system (Maillat 1995; Freeman and Soete 1997). The adoption of innovations allows the firms widen their range of products, and create larger groups and build smaller plants, which are more efficient economically, and so reinforce the internal economies of scale. Furthermore, the innovations helps firms define and carry out strategies focused towards exploring and opening up new products and factors markets. The adaptation of technologies favours the differentiation of production and creates scope economies. Thus, the introduction and diffusion of innovations leads to the improvement in the stock of technological knowledge of the productive system, which in turn, creates external economies for the benefit of all sorts of firms within the system.

In today's scenario, characterized by the globalization of production and exchange and greater service activities, cities continue to be a preferred space for economic development, because it is there where the investment decisions are made and where industrial and service firms are located (Lasuen 1973; Scott 1998). Cities are a place for endogenous development. They generate externalities that lead to increased returns, they have a diversified productive system that enhances the economic dynamic, they provide space for networking in which relations among actors lead to the diffusion of knowledge, and they stimulate the innovation and learning processes of firms.

Last of all, development processes also have deep institutional and cultural roots (Lewis 1955; North 1990, 1994). Economic development, therefore, takes on strength in those territories with evolved, complex and flexible institutional systems. Its strategic relevance lies in that institutional development allows for the reduction of transaction and production costs, strengthens trust among the economic and local actors, it expands networks

and cooperation between the actors and reinforces learning and interaction mechanisms. In other words, the institutions condition the behaviour of productivity, and so, the returns and their economic progress.

Finally, development mechanisms become the economic capacities of the territory (Vázquez-Barquero 2002, 2005). They create an environment in which the economies growth and structural change processes are both organized and made. Capital accumulation processes require the combined action of each and every one of these development forces, to the extent that the effect of each one of them on productivity and returns is conditioned by the behaviour of the others. That is to say, the interaction of the forces of development and its synergic functioning stimulate economic development and social progress.

The evolutionary approach of endogenous development is an interpretation that goes beyond the proposals of traditional neoclassical growth theory, by using an analytical model that considers increasing returns focal for economic progress, considers that the introduction of innovation and knowledge is key in the development processes, and analyzes development from a territorial perspective. It also proposes a self-sustaining development model, based on the creation of a surplus that allows reinvestment and guarantees the continuous transformation of the productive system through the constant change of the forces of development. This approach is in itself a model for analysis and action.

However, it is a partial view of the economic dynamic of a country or a territory for it does not point out the relevance of the macroeconomic system, but rather leans on the assumption that the economy maintains the macroeconomic balance. Furthermore, even if it interprets economic growth under competitive conditions, it does not include an analysis of the functioning of the demand nor of the integration of the local economy within the system of international economic relations. Last of all, it is an interpretation that focuses, above all, on the economic conditions of change and transformations of the economy and society in general, and thus, does not include important elements that affect the social, cultural and environmental sustainability of development in the analysis.

5 Endogenous Development an Approach for Action

Since the mid 1980s, there is a quest for new development policies because of the high unemployment and poverty rates, caused by the negative effects of globalization and productive adjustment. The initiatives of local governments and communities have become the instruments of the new

development policy in a number of the economies of both the emerging and late developed countries (Aghon et al., 2001; Altenburg and Meyer-Stamer 1999; Scott 2001b).

Faced with the insufficiencies of the central administrations economic policies for solving the problems associated with job creation and improving the standard of living, the local actors, spontaneously, tried to settle the adjustment processes of the productive systems. They define and implement actions whose purpose is to increase the productivity of farms, industrial firms and service firms; and they carried out development projects focused towards promoting the well-being of the citizens, and improve the population's standard of living.

This is how the new development policy is born and why it is so important in the economic development processes, since it acts as a catalyst for the mechanisms and forces of development, through the local initiatives: by facilitating entrepreneurial development and the creation of firm networks, by encouraging diffusion of innovation and knowledge, by improving urban development and by stimulating the dynamic of the institutional fabric. For this purpose, the new development policy stresses the importance of creating a territorial environment that is favourable to development through local initiatives, which look after the territory's economic, social and cultural dimension.

The above discussion leads us to consider that the new development policy obeys to a complex concept in which different views of development converge. The core of this interpretation lies in the territorial character of the growth and structural change processes that depend on the territorial resources and mechanisms on which development is based, and also on the laws that regulate and govern the growth and income distribution processes. It is not possible, however, to reduce the concept of endogenous development to a single general interpretation, given that the territorial base of development differs from one place to another, reality changes and the conditions under which development processes take place, also change. In this sense, the different approaches of development are not necessarily incompatible, but rather, can be integrated within a more complex interpretation, that can be termed endogenous development.

The populist approach makes more sense within a wider interpretation of endogenous development, that considers that the entrepreneurial and creative capacity of the population are mechanisms that stimulate structural change and progress of the economy and society of places and territories through local initiatives that favour capital accumulation processes. In turn, the evolutionary approach of development is an interpretation that states the mechanical aspects of the development processes and is useful

for the analysis and actions. Therefore, it helps us to see today's development problems and guides the actor's answers to the challenges of globalization. Finally, the cultural approach of development, understands development as a culturally sustainable process. But, its sustainability requires the support of the evolutionary approach of development, since the economic development processes are stimulated by human capabilities, as well as the territory's specific resources and assets that foster the forces of development.

In this way, the concept of endogenous development has become an interpretation that helps define strategies and policies that the local actors may implement by taking advantage of the opportunities posed by globalization. The development policies should be based on the economic, social, environmental, institutional, political and cultural factors that combine uniquely in each locality, each territory. Because of this, the new development approach maintains that the development initiatives differ from one territory to another, from one locality to another; and it is the local citizens and organizations who decide how to answer the challenges that each place and territory face in the process of development.

References

- Aghon, G., Albuquerque, F. and Cortés, P. (2001). *Desarrollo Económico Local y Descentralización en América Latina: Un Análisis Comparativo*. Santiago de Chile: CEPAL/GTZ.
- Alonso, J.A. (2006). Cambios en la doctrina del desarrollo: el legado de Sen. In: V. Martínez Guzmán and S. París Albert. *Amartya K. Sen y la globalización*. Castellón: Universitat Jaume I.
- Altenburg, T. and Meyer-Stamer, J. (1999). How to promote clusters: policy experiences from Latin America. *World Development*, 27: 1693–1713.
- Armendariz de Aghion, B. and Murdoch, J. (2001). *The Economics of Microfinance*. Cambridge: MIT.
- Baldó, J. and Villanueva, F. (1996). Plan de reestructuración de los barrios de la estructura urbana. In: H. Garnica (ed) *Los Barrios no tienen quien les escriba*, *Diario El Universal*, Dec, 9: 1–4.
- Becattini, G. (1997). *Totalità e cambiamento: il paradigma dei distretti industriali*. *Sviluppo Locale* 4(6): 5–24.
- Becattini, G. (2002). *Anomalías Marshallianas*. In: G. Becattini et al. (ed) *Desarrollo Local: Teorías y Estrategias*. Madrid: Civitas Ediciones, S.L.
- Benavides, M. and Manrique, G. (2000). La experiencia de desarrollo económico local del distrito de Villa el Salvador. In: G. Aghon, F. Albuquerque and P. Cortés

- (eds) *Desarrollo Económico Local y Descentralización en América Latina: Un Análisis Comparativo*. Santiago de Chile: CEPAL/GTZ.
- Cambell, T. (2001). Innovation and risk-taking: urban governance in Latin America. In: A.J. Scott (ed) *Global City-Regions. Trends, Theory, Policy*. Oxford: Oxford University Press.
- Canzanelli, G. (2003). The role of international organizations for the promotion of endogenous development. Mimeograph. Geneva: ILO and Napoli: University of Naples.
- CEPAL (2002). *Globalización y desarrollo*. Santiago de Chile, Publicación de las Naciones Unidas.
- Cifuentes, I. (2000). *Proyecto Cuchumatanes. Transferencia de servicios técnicos a las organizaciones de productores*. Huehuetenango, Guatemala: Ministerio de Agricultura, Ganadería y Alimentación.
- Costamagna, P. (1999). *Iniciativa de desarrollo económico local. La articulación y las interacciones entre instituciones. El caso de Rafaela*. Mimeograph. Santiago de Chile: CEPAL/GTZ Project.
- Douglas, M. (2001). Intercity competition and the question of economic resilience: globalization and crisis in Asia. In: A.J. Scott (ed) *Global City-Regions. Trends, Theory, Policy*. Oxford: Oxford University Press.
- Easterly, W. (2001). *The elusive quest for growth: economists' adventure and misadventures in the Tropics*. Cambridge: MIT.
- Ferraro, C. and Costamagna, P. (2000). *Entorno institucional y desarrollo productivo local. La importancia del ambiente y las instituciones para el desarrollo empresarial. El caso de Rafaela*. Buenos Aires: CEPAL, LC/BUE/ R.246.
- Freeman, C. and Soete, L. (1997). *The Economics of Industrial Innovation*. Cambridge: MIT.
- Friedmann, J. and Weaver, C. (1979). *Territory and Function*. London: Edward Arnold.
- Fukuyama, F. (1995). *Trust. The social Virtues and the Creation of Prosperity*. London: Penguin Books
- Giordani, J. (2004). *Hacia una Venezuela productiva*. Caracas: Ministerio de Planificación y Desarrollo.
- Guiso, L., Sapienza, P. and Zingales, L. (2006). Does culture affect economic outcome? *Journal of Economic Perspectives* 20(2): 23–48.
- Kitching, G.N. (1982). *Development and Underdevelopment in Historical Perspective: Populism, Nationalism and Industrialization*. London: Methuen.
- Lacalle, M.C. (2002). *Microcréditos. De pobres a microempresarios*. Barcelona: Ariel.
- Landes, D. (1998). *The Wealth and Poverty of Nations*. New York: Norton.
- Lasuen, J.R. (1973). Urbanization and development. The temporal interaction between geographical and sectoral clusters. *Urban Studies* 10: 163–188
- Lasuen, J.R. and Aranzadi, J. (2002). *El crecimiento económico y las artes*. Madrid: Fundación Autor.
- Lewis, A. (1955). *The Theory of Economic Growth*. London: George Allen & Unwin.

- Maddison, A. (2001). *The World Economy. A Millennial Perspective*, Paris: Centre for Development Studies, OCDE.
- Maillat, D. (1995). Territorial dynamic, innovative milieus and regional policy. *Entrepreneurship and Regional Development* 7: 157–165.
- North, C.D. (1990). *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- North, C.D. (1994). Economic performance through time. *The American Economic Review* 83(3): 359–368.
- Panico, C., Fleitas, R. and Vázquez-Barquero, A. (2002). *Local Human Development Programme in Cuba. External Evaluation Report*. Havana: UNDP.
- Pietrobelli, C. and Rabellotti, R. (eds.) (2006). *Upgrading to Compete. Global Value Chains, Clusters, and SMEs in Latin America*. Boston: Harvard University Press.
- Putman, R. (1993). *Making Democracy Work*. New Jersey: Princeton University Press.
- Rasiah, R. (2005). *Cluster and Regional Industrial Synergies: The Experience of the Electronics Industry in Penang and Jalisco*. Paper prepared for the Workshop, The Regional Question in Economic Development: Local-Global Interactions in Low and Middle-Income Countries. Bellagio, Italy, 30 August – 5 September.
- Sala-i-Martin, X. (2000). *Apuntes de Crecimiento Económico*, 2nd edition. Barcelona: Antoni Bosch editor.
- Saraceno, E. (2006). *Políticas rurales de la Unión Europea y proyectos territoriales de identidad cultural*. Paper presented to the International Workshop Territorios con Identidad Cultural. Cusco, Peru. 9 and 20, April, 2006.
- Sassen, S. (2001). *The Global City*. New York: Princeton University Press.
- Sassen, S. (2007). El reposicionamiento de las ciudades y regiones urbanas en una economía global. *Eure. Revista Latinoamericana de estudios urbano regionales*. Vol. XXXIII, n° 100, 9–34.
- Scott, A. (1998). *Regions and the World Economy*. Oxford: Oxford University Press.
- Scott, A. (2001a). Globalisation and the Rise of City-Regions. *European Planning Studies* 9(7): 813–826.
- Scott, A. (ed.) (2001b). *Global City-Regions. Trends, Theory, Policy*. Oxford: Oxford University Press.
- Scott, A. (2005). The shoe industry of Marikina City, Philippines: A developing-country cluster in crisis. *Kasarinlan: Philippine Journal of Third World Studies*. 20(2): 76–79.
- Scott, A., Agnew, J., Soja W.E. and Storper, M. (2001). Global city-regions. In: A.J. Scott (ed) *Global City-Regions. Trends, Theory, Policy*. Oxford: Oxford University Press.
- Sen, A. (2001). *Development as Freedom*, 2nd edition. New Delhi: Oxford University Press.
- Stöhr, W.B. and Taylor, D.R.F. (eds.) (1981). *Development from Above or Below?* Chichester: Wiley.
- Summers, R. and Heston, A. (1991). The Penn World Table (Mark5): An expanded set of international comparisons, 1950–1988. *Quarterly Journal of Economics*, 106(2): 327–368.

- Todaro, P.M. and Smith, C.S. (2006). *Economic Development*. London: Pearson.
- Toscano Sánchez, F. (2000). *Desarrollo Local y Economía Social*. In: B. Pérez Ramírez, and E. Carrillo Benito (eds.) *Desarrollo Local: Manual de Uso*. Madrid: ESIC Editorial.
- Vázquez-Barquero, A. (2002). *Endogenous Development*. London: Routledge.
- Vázquez-Barquero, A. (2005). *Las nuevas fuerzas del desarrollo*. Barcelona: Antoni Bosch editor.
- Veltz, P. (1999). *Mundialización, Ciudades y Territorios. La Economía del Archipiélago*. Barcelona: Editorial Ariel Economía.
- Villanueva, M. (1998). *Proyecto Quebrada de Catuche. Programa de habilitación física de barrios (PROHABITAT)*. Seminar on Programas Sociales, Pobreza y Participación Ciudadana en Caracas, Cartagena: Banco Interamericano de Desarrollo (unpublished paper).
- Weber, M. (1905). *The Protestant Ethic and the Spirit of Capitalism*. Londres: Routledge.
- World Bank (1999). *World Bank Report*. Washington D.C.
- World Bank (2002). *Globalization, Growth and Poverty*. New York: Oxford University Press.

Part II Entrepreneurial Perspective of the Business

Clusters and Business Innovation

Álvaro Cuervo-García, Ángeles Montoro-Sánchez
and Ana María Romero-Martínez

Universidad Complutense of Madrid, Madrid, Spain

1 Introduction

The analysis of the geographical environment approach was developed from the work by Marshall (1890) and that of Becattini (1979, 2002, 2006) which, rather than emphasising the industry – the industrial environment – highlight the industrial district and clusters. Evidence of the interest in the study of the geographical environment and clusters is provided by the many books published by economists and sociologists, and by business scholars (Becattini 2002; Porter 1990; Pyke and Sengenberger 1992; Saxenian 1994; Steiner 1998; Van Dijk and Rabellotti 1997; Weiss 1988), in addition to the publications of national and international organisms on the subject (Observatory of European SMEs 2002; OCED 1996, 1999, 2001; UNIDO 2001; World Bank 2000).

Despite the economic and strategic importance of clusters, it was not until the 1990s when researchers made it a renewed focus of research. The seminal works of Porter (1990) and Krugman (1991) have motivated a growing number of academics to study the empirical evidence on clusters, definition, and impact on economic policy and business decision-making (Sternberg and Litzenberger 2004).

In recent years numerous studies have appeared analysing the role of clusters in economic activity, both in developed countries, especially in high

technology sectors such as biotechnology and electronics, and in developing countries, where clusters are proposed as tools to increase companies' and countries' competitiveness and as a bridge to achieve an international positioning (Carlsson 2002).

The majority of studies have endeavoured to relate the theory of comparative advantage with firm location (Audretsch 1998; Fujita et al. 1999). The underlying idea is that in many industries it is not the company itself but the spatial environment that determines business competitiveness. Therefore, emphasis should be shifted from internal economies of scale to localised external economies. The territory, from this point of view, is crucial (Soler 2006). In this sense, this new line of research has focused, basically, on studying the conditions that favour the appearance of clusters in certain regions and countries (Khan and Ghani 2004).

With regard to the theoretical approaches explaining the emergence of clusters, those most used are economic geography (Krugman 1991), the theory of industrial organisation (Porter 1990), the cost transaction theory and the innovation systems approach (Muizer and Hospers 2000).

The use of clusters has a dual purpose: on the one hand, to enhance the competitiveness of small and medium-sized companies that comprise them, by basically availing of the advantages generated by business cooperation and agglomeration economies and, on the other, to revitalise certain regions which have often seen how their deep-rooted traditional industry, the past driver of local development, has gradually lost competitiveness (Mitxeló et al. 2004).

In this way, a positive effect of clusters in companies' performance, in the economic development of the regions affected and the country's degree of competitiveness is assumed. Consequently, various institutions such as the OECD, UNIDO, the World Bank, UNCTAD and the European Commission, among others, propose the use of clusters as a tool for economic development (Enright and Flowcs-Williams 2001).

A review of the literature shows that clusters and all related issues are as yet insufficiently analysed; studies in this field are very ambiguous as regards defining what is understood by "cluster" and lack specificity when identifying their key factors, characteristics and effects.

The purpose of this paper, therefore, is to conduct a study of clusters in order to arrive at a clearer definition of the latter and identify their key factors and the advantages they offer companies in terms of innovation and productivity. To achieve this purpose, in the first place we delimit clusters starting from the evolution of the concept and their basic characteristics. We then analyse the relation between cluster and innovation, directly and indirectly, through its effect on productivity, as basic key factors of this

type of geographical grouping. Finally, the paper concludes with a brief discussion on the subject of study.

2 Delimiting Clusters: Definition and Characteristics

One of the first things any researcher embarking on this subject of study notices, after a general review of the literature, is the remarkable ambiguity that exists concerning the definition of what is understood by cluster and the lack of specificity regarding its key factors, characteristics and effects. In this regard, we judge it necessary, before addressing the relationship between clusters and innovation, to make a theoretical effort to delimit what is understood by cluster in this paper after appraising the main studies of the subject.

2.1 A Brief Trip on Cluster Research

Marshall's seminal work on industrial districts constitutes the launch pad for the majority of theories proposed on clusters. The importance of agglomeration economies "can often be secured by the concentration of many small businesses of a similar character in particular localities" (Marshall 1966, p. 230). These economies, external to the company but inherent to the geographical area in which the company is located, enhance the efficiency of each company (Rocha 2004).

However, there is a 50-year gap between Marshall's work and the resurgence of interest in clusters occurring in the 1970s. This lack of interest can be explained by the preponderance, between the 1920s and the 1960s, of the vertically integrated corporation drawing on internally generated scale economies to produce standardised goods for a predictable market (Amin 2000, p. 149).

At the end of the seventies, early eighties, interest in industrial districts is renewed. This is due to the fact that from the mid-seventies on, major economic, technological, institutional and political changes take place which considerably influence the existing industrial organisation models – that is to say, production systems. This interest in industrial districts generates copious literature which gravitates around three main schools: the Italian School (Becattini 1979, 1989; Brusco 1992; Pyke and Sengenberger 1992), the Institutional or flexible specialisation school (Piore and Sabel 1984; Sabel and Zeitlin 1985) and the Californian School (Scott 1988; Storper and Scott 1989).

In the late nineties, two contextual factors increase the importance of clusters: globalisation processes and radical technological changes (Rocha 2004). Within this context, literature on clusters separates into two currents: the economic one (Krugman 1991; Porter 1990, 1998, 2001), which highlights the economic externalities mentioned by Marshall; and the socio-economic and innovative trend, which highlights the territorial, social, institutional, and cultural factors underpinning cluster dynamics and is called the network paradigm (Conti et al. 1995; Powell 1990). This latter stream encompasses the innovative milieu school (Camagni 1991; Maillat 1996), the Nordic School of innovation and learning (Lundvall and Maskell 2000; Malmberg and Maskell 1997) and the geography of innovation approach (Audretsch and Feldman 1996; Zucker et al. 1998a,b).

2.2 What is a Cluster?

The word “cluster” means different things for different researchers in the academic world, and even for politicians (Feser and Bergman 2000). However, the evolution of the cluster phenomenon shows that clusters have three basic dimensions: geographical proximity, networks between companies and networks with organisms and institutions (Rocha 2004).

With this in mind, the most widely accepted definition in recent times is that of Porter (1998): “a cluster is a geographically proximate group of interconnected firms and associated institutions in related industries”. This definition encompasses the cluster’s essential dimensions and allows it to be clearly differentiated from any other kind of phenomenon (Rocha 2004). So, many authors have subsequently used Porter’s definition in their papers (Carlsson 2002; Iturrioz et al. 2005; Khan and Ghani 2004; Mitxeo et al. 2004; Rocha 2002, 2004; Rocha and Sternberg 2005; among others).

The geographical dimension refers to the proximity of companies’ location and is the only cluster dimension included in the majority of quantitative studies (Baptista and Swann 1998). The geographical aspect is key in defining a cluster. Clusters denote a special case of networked companies¹ that are geographically concentrated (Khan and Ghani 2004).

The network dimension between companies refers to the relations that are established between the companies located in the cluster. Inter-firm networks refer to both market-based transaction and untraded or informal

¹ When companies cooperate with one another but are not geographically close, we speak of organisational networks.

relationships (Storper 1997) between firms within a cluster. Traded interdependencies are production and commercial links as measured by input–output tables and constitute the main dimension to define sectoral clusters (Porter 1990). Untraded interdependencies “take the form of conventions, informal rules, and habits that coordinate economic actors under conditions of uncertainty” (Storper 1997, p. 5).

Finally, the third dimension, institutional networks, refer to the relationships between firms, non-governmental, and governmental organisations within the cluster (Aydalot 1986; Becattini 1979; Saxenian 1994). The institutional network dimension of clusters includes both formal and informal relationships. Given the public good nature of institutional networks, they are closely related to the concepts of social capital (Coleman 1990), institutional embeddedness (Van de Ven 1993) and second and third order networking (Johannisson et al. 2002).

In this way, clusters are characterised as encompassing a set of tangible assets (companies and infrastructures) and intangible (knowledge, technologies, know-how); and institutional elements such as public administrations and training and research centres, which act interconnectedly in a geographical space.

Clusters, therefore, represent a new form of spatial organisation between markets, on one hand, and hierarchies or vertical integration, on the other. A cluster, therefore, is an alternative way of organising the value chain. Compared with market transactions between buyers and sellers, the geographical proximity of companies and institutions and the numerous exchanges between them promotes greater coordination and trust. Thus, clusters mitigate the problems inherent in relationships without imposing the inflexibilities of vertical integration or the management challenges of creating and maintaining formal links such as networks or partnerships. A cluster represents a robust organisational form that provides advantages as regards efficiency, effectiveness and flexibility (Porter 1998).

In the earliest literature on this subject, clusters were defined as Industries related through formal production links, without taking geographical proximity into account. When such clusters did not exhibit a high degree of geographical concentration they were referred to as industrial complexes (Czamanski and Abblas 1979). Other authors stress geographical concentration and define them as a group of companies geographically located near to one another which produce or provide basically the same product or service (Marshall 1890; Arthur 1990). Porter (1990), for his part, includes in the definition the fact that there exist related industries in the cluster. He also emphasised the fact that such clusters tend to be located in one space (Porter 1998). Also very relevant in the definition have been the references

to the interrelations between companies (Becattini 1989) and with institutions situated in the same geographical area (Saxenian 1994).

The lack of consensus as regards defining cluster has meant that in some studies it has been erroneously taken as a synonym for other terms. To be specific, it is noteworthy that clusters have frequently been equated with industrial agglomerations, both in theoretical (Glassman and Voelzkow 2001) and empirical studies (Baptista and Swann 1998). An industrial agglomeration is a concentration of companies from the same industry that enjoy agglomeration economies or external location economies. This concept has its origin in Marshall (1920). The basis of agglomeration economies is that the links between companies, institutions and other economic agents, located geographically close together, generate advantages of scale and scope (Ivarsson 1999). However, clusters are more than industrial agglomerations insofar as the latter are clusters without networks (Rocha and Sternberg 2005).

This has also occurred in many studies on industrial districts. The lack of clarity and specificity in definitions has led to clusters and industrial districts being considered as synonyms when they are not. Marshall (1920) proposed the term “industrial district” to describe the grouping together in one territory of small companies of similar characteristics, which try to improve productivity as a consequence of the division of labour among them.

Another instance of possible confusion with the definition of cluster is with Rabelotti (1995). He proposes four stylized facts to identify Industrial districts: (1) a cluster of mainly small and medium-sized enterprises spatially concentrated and sectorally specialized; (2) a strong, relatively homogeneous, cultural and social background linking the economic agents and creating a common and widely accepted behavioural code, sometimes explicit but often implicit; (3) an intense set of backward, forward, horizontal and labor linkages, based both on market and non-market exchanges of goods, services, information and people; (4) a network of public and private local institutions supporting the economic agents in the clusters.

To define the term exactly, it must be noted that the industrial district is only a cluster of small and medium-sized manufacturing companies focused on a predominant type of production (Becattini 1979, 2006). Therefore, all industrial districts are clusters, but not all clusters are industrial districts; it is the peculiar social and organisational characteristics of the district that distinguishes it from a cluster.

Finally, it must be stated that clusters may be classified by fulfilling three particular criteria: the type of cooperation established between the members of the cluster (regional clusters, industrial clusters, regional innovation network) (Sternberg and Litzenberger 2004), the kind of activity (clusters based on a production value chain and clusters based on another type of interrelation) (Iturrioz et al., 2005) and the origin of the same (spontaneous clusters – informal, organised and innovative – and constructed clusters) (Mitxéo et al. 2004; Mytelka and Farinelli 2000).

2.3 Cluster Key Factors

A review of the literature displays a long list of key factors in the emergence of clusters: economies of scale and of scope, transport costs (inputs and outputs), transaction and sourcing costs, availability of production factors and/or components in a specific location, knowledge, information and technological spillovers, innovation development, cooperation between companies or between suppliers and buyers and the reduction in uncertainty (Baptista and Swann 1998; Krugman 1991; Muizer and Hospers 2000; Nelson 1999; Porter 1990).

For Krugman (1991), Marshall (1920) is the original source of the reasons leading to the emergence of clusters and these are: it favours the emergence of a specialist workforce market (Almazan et al. 2006; Costa and Kahn 2001; Diamond and Simon 1990), which enables the supply of specific inputs of that industry with greater variety and less cost (Holmes 1999), and generates technological spillovers (Jaffe et al. 1993).

Krugman (1991) proposes as cluster key factors the existence of economies of scale and scope, transport costs and mobile production factors.² The consequence of pooled labour is that all workers and companies end up in the same geographical area. The general idea is that both firms and workers prefer to locate within clusters, since firms can more easily expand when they are located in a market with abundant trained labor, and workers can more easily find new jobs. Companies within the cluster benefit from the reduction in sourcing and recruitment cost and from the qualified workforce which, moreover, is easily available. Individuals with necessary skills are drawn to the cluster by the benefits of plentiful employment opportunities and the reduced risk of relocation if they change job. Feldman (1994) also explicitly confirms that the major factor that leads to the emergence of a cluster is the existence of a specialised workforce and knowledge.

² In subsequent studies this first set of key factors is broadened and leads to more sophisticated models which have completed and developed Krugman's initial findings (Fujita et al., 1999; among others).

This labor pooling argument can also be extended to capital, which can also be more efficiently reallocated when industry participants are geographically close. More specifically, locating in a cluster may make it easier for firms to acquire capital assets when they decide to expand, or more generally to acquire or combine with other firms to adjust the scale and scope of their business.

Porter (1998) highlights the positive effect of agglomeration economies as an explanatory factor for the existence of clusters. Specifically, he proposes as key factors: sharing infrastructures, communication technologies and access to input and to output market. In addition, he also mentions the role of transport costs (of inputs) in the existence of clusters, although these transport costs differ from those mentioned by Krugman (basically those of outputs). Although there are some exceptions, many of the factors that Krugman uses to explain clusters are associated with company input demand, whereas Porter's refer mainly to the supply, inasmuch as he refers to the production process.

Baptista and Swann (1998) and Carlsson (2002) explicitly distinguish between demand factors and supply factors. On the demand side, they distinguish four factors: clusters may emerge in places with strong demand, companies may win market share by moving closer to competitors, the existence of a cluster enables the searching cost client to be reduced, and companies located close to them may easily exploit important information supplied by the latter. On the supply side, they quote the three factors initially pointed out by Marshall: pooled labour, availability of specialised inputs and technological spillovers.

Clusters may produce high levels of technological spillovers and innovation (Krugman 1991). This is because, in the first place, geographical proximity facilitates the flow of information. All the previously mentioned cluster characteristics play an important role in promoting technological innovation within the clusters. The highly confident environment and the easy access to specialist suppliers increase the number of transactions which, in turn, leads to an increase in the exchange of technical and technological know-how among the companies of the cluster.

Although companies within a cluster frequently cooperate with suppliers and distributors as these are an external source of innovation and information, it is curious to note the scant attention paid to cooperation as a key factor of clusters. Insofar as some studies show that clusters emerge close to knowledge institutions (universities, etc.), cooperation with these institutions is also important, as they serve as a means of disseminating research, provide services and educate and train future workers.

Khan and Ghani (2004) also highlight the existence of trust in clusters as a concept related to social capital. Nahapiet and Ghoshal (1998, p. 243)

define social capital as the “sum of the actual and potential resources embedded within, and available through, and derived from the network and relationships possessed by an individual or social unit”. Rousseau et al. (1998) identify consequences of trust to include reduction of harmful conflict, decrease in transaction costs, and promotion of effective responses to crises. Adler and Kwon (2002) summarize a series of studies indicating how social capital facilitates resource exchange between firms, product innovation, entrepreneurship, creation of intellectual capital, supplier relationships, and regional production networks (clusters).

Nahapiet and Ghoshal (1998) discuss how networks with high levels of social capital encourage firms to combine and exchange knowledge. This reduces the amount of time and investment required to gather information. Saxenian (1994) describes how the high trust environment in Silicon Valley resulted in the development of a technical community, which accelerated the diffusion of technological capabilities and know-how within the region. Krugman (1991) notes that while much of the evidence for technological spillovers are reported for high-tech clusters, such spillovers occur equally in low tech clusters.

So, although clusters have many key factors, there are four especially important ones: the availability of a specialised workforce, the existence of knowledge spillovers (for example, because of the proximity of universities), the degree of competition and cooperation between companies and institutions.

At any rate, a cluster's roots are often related to historic circumstances. Clusters may also appear because of unusual and sophisticated local demand; and the prior existence of supplier industries, related industries or even related whole clusters provides another seed for new clusters. New clusters may also appear owing to one or two innovative companies that stimulate the growth of many others (Porter 1998).

To conclude, it must be pointed out that government policy can play an important role in the development of clusters, and can also play a role in transfer of technology among clusters (Khan and Ghani 2004). Institutional support for training, financing, and maintenance of new technologies can help reduce the risk of adopting new technologies (Schmitz 1995a,b). Krugman (1991) suggests that local chambers of commerce and city councils can attract foot-loose firms to become self-sustaining once a critical mass has been attracted. On the other hand, incorrect regional policies, often designed to help distressed areas, often end up fragmenting scarce human and capital resources, thereby damaging cluster development (Pouder and St. John 1996).

Government policy plays a dominant role in determining the rules of the game, it is important to design policies encouraging positive rather than

negative innovation. Porter (1998) suggests that governments, particularly in developing countries, can play an essential role in the development of well-functioning industrial clusters that encourage positive innovation. At times, government policies unwittingly work against cluster formation such as restrictions on industrial location and subsidies to invest in distressed areas.

In Spain's case, Navarro (2003) identifies the following components of a government cluster policy: the provision of certain public assets, such as training, infrastructures, research, information..., especially adapted to the requirements of each cluster and which the market does not properly provide; support for cooperation and the networked functioning of its members (companies with companies or with research providers); construction of the "community" (creation of forums, communication mechanisms, visible concentration, make or branding); help to compensate for the weaknesses or imbalances that might exist in some parts of the cluster.

3 Clusters, Productivity and Business Innovation

Most effects of belonging to a cluster normally come from cluster key factors. Many authors focus on studying cluster key factors but do not explicitly analyse the effects they cause. A review of the literature reveals that among the principal positive effects of clusters the acceleration of economic and technological growth and the development of educational structures, the enhancing of corporate competitive edge reflected in the increase in companies' productivity and performance and in export levels, the increase in cooperation and the creation and diffusion of knowledge, and an incentive to corporate venturing stand out. From among the possible effects these latter generate, we have focused our attention in this study on the impact of clusters on innovation, directly and indirectly, and on the effect on productivity and company efficiency, variables explanatory of company performance and its investment-growth.

3.1 Clusters and the Increase in Productivity

Firstly, a classic consequence of clusters is the increase in productivity. This increase occurs as a consequence of greater access to inputs, to information, to technology and to institutions. Situating a company within a cluster enables greater coordination with other companies, with the result that advantages can be obtained from complementarities between

companies' activities and from their increased negotiating power. That is, supply side advantages (Prevenzer 1997).

With regard to access to inputs, the ease with which a specialised, technically or scientifically skilled workforce is accessed is worthy of note. Both of these – workers with specialist skills seeking employment and companies who are looking for this kind of worker – gain access to a common labour market in the same location (Krugman 1991; Marshall 1920). On the one hand, employees benefit from access to a supply of new skilled labour from different companies or research centres and universities. On the other, companies have access to available, experienced and skilled workers without incurring in search and transaction costs in order to recruit them. In this sense, clusters provide opportunities and lessen the risk of relocation for employees. In fact, this can act as an incentive to attract talented people from other locations, a major advantage in some industries. The workforce within a cluster is also specialised as it forms part of a network and has knowledge of people and their work. Specialised knowledge of the people network in a technical or business community is valuable, especially for new companies. Employee networks are an information exchange mechanism.

Companies belonging to a cluster also gain favourable access to other kinds of specialised inputs such as information, teams, research instruments, related technologies in need of being developed and designed for a particular new market. Having a pool of these inputs close by is advantageous for companies. Being supplied locally rather than having to resort to distant suppliers reduces transaction costs, in addition to minimising the need to hold stocks, eliminating costs and delays, and, since it is essential to enjoy a good reputation locally, reducing the risk of suppliers overcharging or not meeting their commitments.

Moreover, proximity improves communications makes it more likely that suppliers will provide help or support services such as installing a supply pool and waste treatment. Another equally important aspect is that local outsourcing is better than distance outsourcing, especially when the specialised inputs needed include technology, information and service (Porter 1998).

With regard to access to institutions and public assets, investments made by the government or public administrations may enhance company productivity. However, private sector productivity does not only improve because governments provide public assets. Investments by companies – training programmes, infrastructure, quality centres, laboratories, etc. – also contribute to increasing productivity. This kind of private investment is often performed collectively as cluster participants recognise its collective profit potential.

Finally, with regard to complementarities between companies, the greater the number of links between companies, the greater the joint value resulting from the cluster than the sum of its parts. Given that the members of a cluster are mutually dependent, a company's good performance can promote the success of others.

3.2 Clusters and the Increase in Innovation

Clusters play a fundamental role in a company's ability to innovate. Companies belonging to a cluster have a window open on to the market, better than their isolated competitors. Clusters also provide the capacity and flexibility to act faster. A company within a cluster can acquire what it needs more quickly, from its suppliers and partners, so as to implement its innovations and thus better address its clients' needs (Porter 1998).

Porter (1998) identifies a series of factors that favour innovation in clusters. In the first place, the existence in the cluster of sophisticated buyers who become a major source of information on emerging technologies and markets. In the second place, cluster companies, thanks to their easy access to a wide range of specialist suppliers, are very flexible and are able to implement innovations quickly. Moreover, they can experiment with new innovations at a lower cost and hold back necessary investments until the reaction of the innovation's potential market has been verified. Finally, the high levels of competition and the pressure existing among rival companies within the cluster act as a major stimulus to innovate.

Also, cluster characteristics play an important role in technological innovation within the clusters. A high-trust environment with easy access to specialist suppliers increases the number of transactions, which results in an increase in technical know-how exchanges between cluster companies (Khan and Ghani 2004).

In this sense, clusters increase the number of innovations from the basis of tacit knowledge and the capacity to learn, they generate knowledge spillovers and a greater accumulation of knowledge and enhance the speed of knowledge diffusion between companies (Krugman 1991). This is especially due to proximity since information flows more easily than over long distances. According to the theoretical literature on clusters, the latter should increase the number of innovations, generate knowledge spillovers and a greater accumulation of knowledge and enhance the speed of knowledge diffusion between companies. As companies are located geographically close to one another, they can cooperate relatively easily to develop innovations, notify one another of changes in input specifications, launch new products and detect changes in technology and in demand.

Specifically, empirical studies have analysed how clusters increase innovation, support small companies and the development of radically new products or technologies. The findings confirm that a positive relationship exists between clusters and innovation (Baptista and Swann 1998), and between clusters and technological spillovers (Audretsch and Feldman 1996; Jaffe et al., 1993).

When the cluster phenomenon takes place in sectors with great technological intensity (e.g., biotechnology, information technology, new materials) (Bouwman and Hulsink 2002), it receives the name “technopole” (Castells and Hall 1994) or “technopolis” (Smilor et al., 1988). It refers to “various deliberate attempts to plan and promote within one concentrated area, technologically innovative, industrial-related production” (Castells and Hall 1994, p. 8). In this regard, different attempts have been made to create and develop technopoles all over the world. This kind of policy seeks three objectives: develop new industries through national policies, regenerate a region in decline or stagnation and develop an innovation milieu. Those objectives are pursued through furthering collaboration between leading research universities, corporate laboratories, core firms with their sub-contractors and spin-offs, and venture capitalists. Another related concept relevant to understanding dynamic techno-industrial districts is “milieux of innovation”, defined by Castells and Hall (1994, p. 9) as “social, institutional, organisational, economic and territorial structures that create the conditions for continuous generation of synergy, (...) both for the units of production that are part of the milieu and for the milieu as a whole”.

Other empirical studies in general confirm this too, though most use a more roundabout way. In some cases this may improve the analysis by showing the nature of the relationship between innovation and clusters or by showing the factors that contribute to this relationship. This explanation has its origin in the literature on local technological externalities, also sometimes called geographical spillovers, which analyses the relationship between clusters and innovation through technological spillovers.

In this case, interest is focused on studying to what extent research and innovation have spatial concentration features, and seek out the causes of this concentration, especially in the localised nature of knowledge transmission. Two kinds of approach may be distinguished here (Feldman 1994): the first emphasises the coincidence between the phenomenon of localised growth and the presence of technological externalities, while the second measures the geographical dimension of spillovers.

Jaffe et al. (1993) analyse the effect of location on innovation spillovers by comparing the geographical location of patents. Their findings suggest that clusters generate more innovations due to the existence of local spillovers. Audretsch and Feldman (1996) construct a model that explains the

geographical distribution of innovations in each industry through the geographical distribution of production, R&D, skilled labour and research in the university.

There are also studies analysing the nature of cluster companies by distinguishing between the effects of knowledge spillovers on large and small companies. Arcs et al. (1993) confirm that spillovers stemming from university research affect small companies more than big ones, while corporate R&D stimulates innovation more in large companies than in small ones. These were also the findings of Audretsch and Vivarelli (1994) based on data of Italian companies.

Also worthy of mention is the work of Baptista (2000), who uses a case study to analyse the technology diffusion process in clusters. His data show that the greater the number of companies in the region that have adopted the technology the higher the adoption rates. Therefore, geographical location matters as regards the speed of diffusion of new technology.

Nonetheless, on examining the way that empirical studies analyse the spatial concentration mechanisms of innovation activities it is revealed that in the analysis of geographical spillovers it is hazardous to infer questions of location of indicators such as patents, number of innovations or even relationships between geographical areas and expenditure on R&D (Anselin et al., 1997).

That is why there are authors who hold that traditional explanations in terms of spillovers are still unsatisfactory. Economic theory is still undecided as regards the ability of small and medium-sized companies to capture externalities. Whereas conceptual studies stress the concept of the capacity of absorption, empirical studies describe a correlation between the intensity of the presence of a research university in a given geographical area and the propensity for innovation, regardless of the sector considered. This does not throw much light on the verified presence of local externality effects.

Audretsch and Feldman (1996) and Audretsch and Stephan (1996) conducted a specific analysis of high technology sectors and showed that, in sectors where innovation is science based, geographical links are weak. 70% of relationships between biotechnology companies and universities are not based on geographical proximity. Studies on relationships between biotechnology companies and universities are not, however, applicable to the choice of location when companies are set up. In this phase, relations between start-ups and companies within its “natural” network are fundamental and location is often performed in a “natural” enterprising environment. Therefore, it appears that analysis is very different at start-up

(emergence) when the company's survival and development depend on the network of relations close to the founder, and later on when the company is established and builds relationships within the same scientific, productive and commercial network.

Additionally, although clusters play an important role in technological innovation, under certain conditions the opposite may also be true, since although clusters initially encourage innovative behaviour, over time companies located within clusters can suffer diseconomies of resources and isolated competitive practices, which might eventually discourage innovation (Pouder and St. John 1996).

In any case, and in spite of the different opinions, it is possible to identify a series of conclusions with regard to the relationship between clusters and innovation (Lemarie et al., 2001): (a) innovation in a region is closely related to the public and private research invested in the region (Feldman 1994), including non-research intensive industries (Mangematin and Martin 1999); (b) innovation in a given region is not only related to the public and private R&D invested but also to the technology transfer infrastructure in the whole region (presence of technology centres, technology transfer agencies, etc.) (Feldman 1994), thus the presence of complementary activities generates more spillovers and reduces the costs and risks associated with company innovation; and (c) there are no eviction effects between the public and private R&D invested. Both are encouraged to create areas of experience (Jaffe et al., 1993). Therefore, empirical findings show unanimity on confirming a positive relationship between clusters and innovation.

Similarly, regional institutions act as vehicles that facilitate knowledge transmission between companies of a cluster. Public technical centres run by administrations offer technical consulting services and seminars and broadcast information on new technologies and products. Chambers of Commerce and commerce and business associations coordinate activities within clusters and provide technical information and information on new markets, products and technologies (Yamawaki 2002).

4 Final Discussion

The emergence of industrial districts and, in consequence, clusters, represents a multidisciplinary research area which combines strategic management perspectives, industrial organisation, economic geography and sociology in an attempt to improve formal and informal relations between companies and institutions in specific regions (Feser and Bergman 2000). This paper

conducts an integration to delimiting clusters and their key factors and an analysis of those that have a fundamental effect on company innovation, efficiency and performance.

In this sense, in the first place, a review of the literature on clusters shows that, although it has been a much analysed issue over the last few decades, especially from the theoretical point of view, all the evidence has thus far not enabled a solid general theoretical framework to be produced by which clusters might be analysed with some thoroughness. Although clusters are studied from different theoretical perspectives – economic geography, industrial economy, resources and capacities – it is acknowledged that the subject of analysis is multidisciplinary; however, an integrating model has yet to be developed.

On the one hand, there is no consensus as regards defining a cluster. The term is often used as a synonym of industrial district, industrial agglomeration, or even industrial networks of cooperation. This lack of unanimity together with the absence of a solid theoretical model has made delimiting it difficult in order to carry out empirical studies. The lack of an accurate methodology to identify clusters has amounted to one of the major limitations of these studies as it prevents generalisations and comparisons being made from the results obtained in different studies (O'Donoghue and Gleave 2004; Soler 2001). In this paper we have defined clusters from their three basic dimensions and in accordance with the generally accepted trend of recent years (Porter 1998): a cluster is a geographically proximate group of interconnected firms and associated institutions in related industries.

This aspect has also indirectly conditioned the creation of an integrating model, as most authors have analysed or selected as important factors those closest to the dominant theoretical perspectives in their area of expertise (Paniccia 1998). This has once again prevented comparison and generalisation of the results obtained. Throughout the present paper we have asserted the importance of economies of scale and scope, input and output linked transport costs, the availability of factors in a specific location, cooperation and technological spillovers.

In Spain's case,⁵ of the different attempts to identify and analyse clusters, the work of Boix and Galletto (2006)⁶ and Trullen Thomas (2006) are especially worthy of mention. These authors, using ISTAT (Istituto

⁵ The studies of Costa-Campí (1988) and Ybarra (1991) provide a first approach to the identification of industrial districts in the cases of Catalonia and the Valencia Autonomous Region.

⁶ This study was previously published as Working Paper (no. 05/14) in the Department of Applied Economics at the Autònoma University of Barcelona in 2005.

Nazionale di Statistica de Italia) methodology, identified 237 industrial districts in Spain, among which they highlight the textile industry (with 53 districts), the food industry (52 districts), the furniture industry, jewellery and toy industries (40 districts), household products (37 districts) and leather and footwear (30 districts).⁷

To identify these clusters, the authors have followed the methodological approach of the Italian Institute which is based on the idea that, in order to achieve the condition of district, the agglomerations detected must meet certain sectorial specialisation requirements: the percentage of people in employment in the manufacturing sector must be above the national average, the percentage of employment provided by small and medium-sized companies in the region must be above the national average, the percentage of people in employment provided by the main industry of the local system must be above the national average for that industry, the percentage of employment provided by small and medium-sized companies in that sector must be above the national average.

In general, although it is possible to find abundant theoretical literature on clusters, it is not until the late nineties that empirical analyses begin to proliferate (Paniccia 1998). In this regard the existing literature, employing case study methodology as a rule, has focused from the beginning primarily on explaining the success of certain regions in Europe and North America (Saxenian 1994), applications to Third World and Asian economies being the most recent (Cawthorne 1995; Meyer-Stamer 1995).

A review of the literature reveals two main lines of study: the analysis of the cluster formation process and its dynamism; and the effect of clusters on business competitiveness. In this sense, the goal of much of the literature is to explain the creation of industrial clusters (Arthur 1989; Krugman 1991; Prevenzer 1997) and empirically identify the positive externalities as a consequence of industrial agglomeration (Ausdretsch and Feldman 1996; Jaffe et al., 1993). More recent studies attempt to study the dynamic process of industrial agglomeration, for the purpose of analysing the key factors that generate the emergence of new clusters and the consequent disagglomeration that some regions and industries experience in this process (Dumais et al., 2002; Sorenson and Audia 2000).

A review of the literature (Baptista and Swann 1998; Krugman 1991; Muizer and Hospers 2000; Porter 1990) enables us to assert that the key factor variables in the emergence of clusters are economies of scale and scope, transport costs (inputs and outputs), transaction and search costs, the availability of production factors and/or components of a specific

⁷ Hernández et al. (2005) use the same methodology as Boix and Galletto (2006), although with certain adjustments, for Catalonia.

location, knowledge, information and technological spillovers, innovation development, cooperation between companies or between suppliers and buyers and the reduction in uncertainty.

A large part of the literature stresses that industrial clusters promote the creation of companies and enhance competitiveness (Carlsson 2002; Lemarie et al., 2001; Sternberg and Litzenberger 2004; Yamawaki 2002). Most of the literature focuses on the relationship between clusters and the competitiveness of companies, regions and countries. Nevertheless, the empirical analyses tend to be imprecise and the findings inconclusive.⁸

Finally, we should point out that in this paper we have especially focused on analysing two positive aspects of clusters for business efficiency and performance and innovation. On the one hand, we have shown the advantages clusters bring to companies as a result of better access to inputs, information, technology and institutions. On the other, one of the main characteristics of clusters is their capacity to generate an innovative environment which is based on the complex interaction of cooperation and competition factors (Porter 1990, 1998; Saxenian 1994). As companies are located geographically close to one another, they can cooperate relatively easily to develop innovations, notify one another of changes in input specifications, launch new products and detect changes in technology and in demand.

However, cooperation and spillovers may take place over a long distance. In this case, geographical proximity matters especially for radical technological change, as contact between people is important. It matters less for incremental technological change because this type of innovation requires more codified knowledge than can be communicated remotely. Therefore, clusters are more important for companies that use or develop new technologies than for companies that use or develop incremental innovation.

In any case, and despite the review and integration work conducted in this paper – focused, on the one hand, on delimiting clusters conceptually, and on the other, especially, on analysing the role of clusters as direct and indirect generators of innovation – the theoretical and empirical evidence is still too heterogeneous to be able to establish conceptual limits and generalisable conclusions. All of this points to the fact that not only cluster research is an area that has had a revival of interest in recent years: this interest still demands greater and more thorough research in order to

⁸ Countering the argument that defends the importance of geographical location, other authors stress that, especially in developed countries, there are other important factors which explain companies' results, apart from their location, or that, at any rate, only in periods of economic recession are companies especially influenced by their location (Davidsson 1989).

address many of the enigmas and questions as regards what they are, how they can be empirically delimited and what their key factors and principal effects are on company efficiency and economic development.

Acknowledgement

This paper has been supported by Project SEJ2005-03871/ECON and Project CCG06-UCM-HUM-1052 of the Complutense University of Madrid.

References

- Adler, P.S., Kwon, S.W. (2002) Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17–40.
- Almazan, A., Motta, A., Titman, S. (2006) Firm location and the creation and utilization of human capital. *Review of Economics Studies*, 74(4), 1305–1327.
- Amin, A. (2000) Industrial districts. In E. Sheppard and T.J. Barnes (Eds.), *A Companion to Economic Geography* (pp. 149–168). Oxford: Blackwell.
- Anselin, L., Varga, A., Acs, Z. (1997) Local geographic spillovers between university research and high technology innovation. *Journal of Urban Economics*, 42, 442–448.
- Arthur, W.B. (1989) Competition technologies, increasing returns and lock-in historical events. *Economic Journal*, 99, 116–131.
- Arthur, W.B. (1990) Silicon valley locational clusters – when do increasing returns imply monopoly. *Mathematical Social Sciences*, 19, 235–251.
- Audretsch, D.B. (1998) Agglomeration and the location of innovative activity. *Oxford Review of Economic Policy*, 14, 18–29.
- Audretsch, D.B., Feldman, M.P. (1996) R&D spillovers and the geography of innovation and production. *American Economic Review*, 86(3), 630–640.
- Audretsch, D.B., Stephan, P. (1996) Company scientist locational links: the case of biotechnology. *American Economic Review*, 86(3), 641–652.
- Audretsch, D.B., Vivarelli, M. (1994) Small firms and R&D spillovers: Evidence from Italy. CERP Discussion Paper no. 927.
- Aydalot, P. (Ed.) (1986) *Milieux Innovateurs in Europe*. Paris: GREMI.
- Baptista, R. (2000) Do innovation diffuse faster within geographical clusters? *International Journal of Industrial Organization*, 18, 515–535.
- Baptista, R., Swann, P. (1998) Do firms in clusters innovate more? *Research Policy*, 27, 525–540.
- Becattini, G. (1979) Dal ‘settore industriale’ al ‘distretto industriale’. Alcune considerazioni sull’ unita d’indagine dell’economia industriale. Cited in G.L. Becattini (Ed.) *Sectors and/or districts: some remarks on the conceptual foundations of industrial economics*. *Rivista di Economia e Politica Industriale*, 123–135.

- Becattini, G. (1989) Sectors and/or districts: Some remarks on the conceptual foundations of industrial economics. In E. Goodman et al. (Eds.), *Small firms and industrial districts in Italy* (pp. 123–135). London: Routledge.
- Becattini, G. (2002) Del distrito industrial marshalliano a la teoría del distrito contemporánea. Una breve reconstrucción crítica. *Investigaciones Regionales*, 1, 9–32.
- Becattini, G. (2006) Vicisitudes y potencialidades de un concepto: El Distrito industrial. *Economía Industrial*, 359, 21–27.
- Bellandi, M. (2006) El distrito industrial y la economía industrial. Algunas reflexiones sobre su relación. *Economía Industrial*, 359, 43–57.
- Boix, R., Galletto, V. (2006) Sistemas locales de trabajo y distritos industriales marshallianos en España. *Economía Industrial*, 359, 165–184.
- Bouwman, H., Hulsink, W. (2002) A dynamic model of cyber-entrepreneurship and cluster formation: Applications in the United States and in the Low Countries. *Telematics and Informatics*, 19, 291–313.
- Brusco, S. (1992) Small firms and the provision of real services. In F. Pyke and W. Sengenberger (Eds.), *Industrial districts and local economic regeneration*. Geneva: International Institute for Labour Studies.
- Camagni, R. (1991) ‘Local Milieu’, uncertainty and innovation networks: Towards a new dynamic theory of economic space. In Camagni (Ed.), *Innovation networks. Spatial perspectives* (pp. 121–143). London: Belhaven.
- Carlsson, B. (2002) Institutions, entrepreneurship, and growth: Biomedicine and Polymers in Sweden and Ohio. *Small Business Review*, 19, 105–121.
- Castells, M., Hall, P. (1994) *Technopoles of the world. The making of 21st century industrial complexes*. London: Routledge.
- Cawthorne, P.M. (1995) Of networks and markets: The rise and rise of a South Indian town, the example of Tiruppur’s cotton knitwear industry. *World Development*, 23, 43–56.
- Coleman, J.S. (1990) *Foundations of social theory*. Cambridge: Harvard University Press.
- Conti, S., Malecki, E., Oinas, P.E. (1995) *The industrial enterprise and its environment: spatial perspective*. Aldershot: Avebury.
- Costa, D., Kahn, M. (2001) Power copules. *Quarterly Journal of Economics*, 116, 1287–1315.
- Costa-Campi, M.T. (1988) Descentramiento productivo y difusión industrial. El modelo de especialización flexible. *Papeles de Economía Española*, 35, 251–276.
- Czamanski, D., Ablas, L.A. (1979) Identification of industrial clusters and complexes: A comparison of methods and findings. *Urban Studies*, 16, 61–80.
- Davidsson, P. (1989) Continued entrepreneurship and small firm growth. The Economic Research Institute, Stockholm School of Economics.
- Diamond, C., Simon, C. (1990) Industrial specialization and the returns to labor. *Journal of Labor Economics*, 8(2), 175–201.
- Dumais, G., Ellison, G., Glaeser, E. (2002) Geographic concentration as a dynamic process. *Review of Economics and Statistics*, 84(2), 193–204.

- Enright, M., Flowcs-Williams, I. (2001) Local partnership, clusters and SME Globalization. In OECD (Ed.) *OECD* (pp. 115–150), Paris.
- European Commission (2002) Observatory of European SMEs 2002. http://ec.europa.eu/enterprise/enterprise_policy/analysis/doc/execsum_2002_en.pdf.
- Feldman, M.P. (1994) *The geography of innovation*. Dordrecht: Kluwer.
- Feser, E.J., Bergman, E.M. (2000) National industry cluster templates: A framework for applied regional cluster analysis. *Regional Studies*, 34(1), 1–19.
- Fujita, M., Krugman, P., Vanables, A. (1999) *The spatial economy: cities, regions and international trade*. Cambridge: MIT.
- Glassman, U., Voelzkow, H. (2001) The governance of local economies in germany. In C. Crouch, P. Le Gales, C. Trigilia and H. Voelzkow (Eds.), *Local production systems in Europe: rise or demise?* (pp. 79–116). Oxford: Oxford University Press.
- Hernández, J.M., Fontrodona, J., Pezzi, A. (2005) Mapa dels sistemes productius locals industrials a Catalunya. *Papers d'Economia Industrial*, 21, Generalitat de Catalunya.
- Holmes, T. (1999) Localization of industry and vertical disintegration. *Review of Economics and Statistics*, 81(2), 314–325.
- Iturrioz Landart, C., Aranguren Querejeta, M.J., Aragón Amonarriz, C., Larrea Aranguren, M. (2005) La política industrial de cluster/redes mejora realmente la competitividad empresarial? Resultados de la evaluación de dos experiencias en la Comunidad Autónoma de Euskadi. *Ekonomiaz*, 60, 10–61.
- Ivarsson, I. (1999) Competitive industry clusters and inward TNC investments: The case of Sweden. *Regional Studies*, 33(1), 37–49.
- Jaffe, A.B., Trajtenberg, M., Henderson, R. (1993) Geographical localization of knowledge spillovers as evidenced by patent citations. *Quarterly Journal of Economics*, 63, 577–598.
- Johannisson, B., Ramirez-Pasillas, M., Karlsson, G. (2002) The institutional embeddedness of local inter-firm networks: A leverage for business creation. *Entrepreneurship and Regional Development*, 14, 297–315.
- Khan, J.H., Ghani, J.A. (2004) Clusters and entrepreneurship: Implications for innovation in a developing economy. *Journal of Development Entrepreneurship*, 9(3), 221–238.
- Krugman, P. (1991) *Trade and geography*. Cambridge: MIT.
- Lemarié, S., Mangematin, V., Torre, A. (2001) Is the creation and development of biotech SMEs localised? Conclusions drawn from the French case. *Small Business Economics*, 17, 61–76.
- Lundvall, B., Maskell, P. (2000) Nation states and economic development: From national systems of knowledge creation and learning. In G.L. Clark, M.P. Feldman and M.S. Gertler (Eds.), *The Oxford handbook of economic geography* (pp. 353–372.). Oxford: Oxford University Press.
- Maillat, D. (1996) Regional productive systems and innovative milieux. In OECD (Ed.), *Networks of enterprises and local development* (Chap. 3). Paris: OECD.
- Malmberg, A., Maskell, P. (1997) Towards and explanation of regional specialization and industry agglomeration. *European Planning Studies*, 5(1), 25–42.
- Mangematin, V., Nesta, L. (1999) What kind of knowledge can a firm absorb? *International Journal of Technology Management*, 37(3), 149–172.

- Marshall, A. (1890/1920/1966) *Principles of Economics* (8th Ed). London: Macmillan.
- Meyer-Stamer, J. (1995) Micro-level innovations and competitiveness. *World Development*, 23, 143–148.
- Mitxéo Grajinera, J., Idigoras Gamboa, I., Vicente Molina, A. (2004) Los clusters como fuente de competitividad: El caso de la Comunidad Autónoma del País Vasco. *Cuadernos de Gestión*, 4(1), 55–67.
- Muizer, A., Hospers, G.J. (2000) SMEs in regional industry clusters. the impact of it and the knowledge economy. Zoetermeer: EIM.
- Mytelka, L., Farinelli, F. (2000) Local clusters, innovation systems and sustained competitiveness. Working Paper, Institute for New Technologies, The United Nations University.
- Nahapiet, J., Ghoshal, S. (1998) Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Navarro (2003) Análisis y política de clusters: Teoría y realidad. *Ekonomiaz*, 53, 14–49.
- Nelson, R.R. (1999) The sources of industrial leadership: A perspective on industrial policy. *The Economist*, 147, 1–18.
- O'Donoghue, D., Gleave, B. (2004) A note on methods for measuring industrial agglomeration. *Regional Studies*, 34, 419–427.
- OECD (1996) *Networks of enterprises and local economic development*. Paris: OECD.
- OECD (1999) *Booting innovation. The cluster approach*. Paris: OECD.
- OECD (2001) *Innovative clusters: Drivers of national innovation systems*. Paris: OECD.
- Paniccia, I. (1998) One, a hundred, thousands of industrial districts. Organizational variety of local networks of small and medium-sized enterprises. *Organization Studies*, 4(19), 667–699.
- Piore, M.J., Sabel, C.H. (1984) *The second industrial divide: Possibilities for prosperity*. New York: Basic Books.
- Porter, M.E. (1990) *The competitive advantage of nations*. London: Macmillan.
- Porter, M.E. (1998) Clusters and the new economics of competition. *Harvard Business Review*, 76(6), 77–90.
- Porter, M.E. (2001) Enhancing the microeconomic foundations of prosperity: The current competitiveness index. In K. Schwab, M. Porter and J. Sachs (Eds.), *The global competitiveness report 2001–2002* (pp. 52–73). New York: Oxford University Press.
- Pouder, R., St. John (1996) Hot spots and blind spots: Geographical clusters of firms and innovation. *Academy of Management Review*, 21, 1192–1225.
- Powell, W.W. (1990) Neither market nor hierarchy. Network forms of organization. *Research in Organizational Behaviour*, 12, 295–336.
- Prevenzer, M. (1997) The dynamics of industrial clustering in biotechnology. *Small Business Economics*, 9, 255–271.
- Pyke, F., Sengenberger, W. (1992) Industrial districts and inter-firm cooperation in Italy. International Institute for Labour Studies, Geneva.

- Rabelloti, R. (1995) Is there an "Industrial District Model"? Footwear districts in Italy and Mexico compared. *World Development*, 23(1), 29–41.
- Rocha, H.O. (2002) Entrepreneurship and development through clusters: A theoretical model. Paper presented at the British Academy of Management Conference, London.
- Rocha, H.O. (2004) Entrepreneurship and development: The role of clusters. a literature review. *Small Business Economics*, 23(5), 363–400.
- Rocha, H.O., Sternberg, R. (2005) Entrepreneurship: The role of clusters theoretical perspectives and empirical evidence from Germany. *Small Business Economics*, 24, 267–292.
- Rousseau, D.M., Sitkin, S.B., Burnt, R.S., Camerer, C. (1998) Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(2), 393–404.
- Sabel, C.H., Zeitlin, J. (1985) Historical alternatives to mass production: Politics, markets, and technology in nineteenth-century industrialization. *Past and Present*, 108, 133–176.
- Saxenian, A. (1994) *Regional advantage. Culture and competition in Silicon Valley and Route 128*. Cambridge: Harvard University Press.
- Schmitz, H. (1995a) Small shoemakers and fordist giants: Tale of a supercluster. *World Development*, 23(1), 9–28.
- Schmitz, H. (1995b) Collective efficiency: Growth path for small-scale industry. *The Journal of Development Studies*, 31(4), 529–566.
- Schmitz, P.M.P.F., Heijs, J.B.M. (2001) Hot spots: Ruimtelijke patronen van innovatie in Nederland, Beleidsinteractierapport 2001–03, Senter, Den Haag.
- Scott, A. (1988) *New industrial spaces: Flexible production organization and regional development in North America and Western Europe*. London: Pion.
- Sternberg, R., Litzenger, T. (2004) Regional clusters in Germany. Their geography and their relevance for entrepreneurial activities. *European Planning Studies*, 12(6), 767–791.
- Smilor, R.W., Gibson, D.V., Kozmetsky, G. (1988) Creating the technopolis: High-technology development in Austin, Texas. *Journal of Business Venturing*, 4, 49–67.
- Soler, V. (2001) Verificación de las hipótesis del efecto distrito. *Economía Industrial*, 334: 13–23.
- Soler, V. (2006) Nuevas técnicas para la medición del efecto distrito en las aglomeraciones industriales. *Economía Industrial*, 359, 81–87.
- Sorenson, O., Audia, P.G. (2000) The social structure of entrepreneurial activity: Geographic concentration of footwear production in the United States, 1940–1989. *American Journal of Sociology*, 106(2), 424–462.
- Steiner, M. (1998) *Clusters and regional specialisation*. London: Pion.
- Storper, M. (1997) *The regional world*. New York: Guilford.
- Storper, M., Scott, A.J. (1989) The geographical foundations and social regulation of flexible production complexes. In J. Wolch and M.E. Dear (Eds.), *The power of geography: How territory shapes social life* (pp. 25–43). London: Unwin Hyman.
- Trullén Thomas, J. (2006) Distritos industriales marshallianos y sistemas locales de gran empresa en el diseño de una nueva estrategia territorial para el

- crecimiento de la productividad en la economía española. *Economía Industrial*, 359, 95–112.
- UNIDO (United Nation Industrial Development Organization) (2001) Development of clusters and networks of SMEs. Viena.
- Van de Ven, A.H. (1993) The development of an infrastructure for entrepreneurship. *Journal of Business Venturing*, 8, 211–230.
- Van Dijk, M.P., Rabellotti, R. (1997) *Entreprise clusters and networks in developing countries*. London: Frank Cass.
- Weiss, J.W. (1988) *Regional cultures, managerial behaviour, and entrepreneurship. an international perspective*. New York: Quorum Books.
- World Bank (2000) Electronic conference on clusters.
- Yamawaki, H. (2002) The evolution and structure of industrial clusters in Japan. *Small Business Economics*, 18, 121–140.
- Ybarra, J.A. (1991) Determinación cuantitativa de distritos industriales: La experiencia del País Valenciano. *Estudios Territoriales*, 37, 55–67.
- Zucker, L.G., Darby, M.R., Brewer, M.B. (1998a) Intellectual human capital and the birth of US biotechnology enterprises. *American Economic Review*, 88, 290–306.
- Zucker, L.G., Darby, M.R., Armstrong, J. (1998b) Geographically localized knowledge: spillovers or markets? *Economic Inquiry*, 36, 65–86.

Entrepreneurial Behaviour in Transition Environments

David Smallbone¹ and Friederike Welter²

¹ Kingston University Business School, Kingston Hill,
Kingston-upon-Thames, Surrey, UK

² RUREG, JIBS, Sweden

1 Introduction

This paper is concerned with entrepreneurial behaviour in hostile environments, where market reforms have been slow or only partially installed. The term “transition” is often used to describe economies with these characteristics, which if used, must not be taken to imply that the country is necessarily on a path towards a more market-based economy. In practice, such conditions are found in many of the former Soviet republics, which can be increasingly differentiated from former socialist countries that have recently joined the European Union, such as Poland and the Baltic States.

In such conditions, the institutional context becomes a critical factor influencing the development of entrepreneurship, since government still has to create the framework conditions for private sector development to become embedded and sustained. In such situations the external environment plays a major role in influencing entrepreneurial behaviour; and the types of adaptive reactions by entrepreneurs can be distinctive, as several studies have shown. This chapter explores entrepreneurial behaviour in such environments drawing on a variety of empirically-based projects in which both authors have been involved.

The remainder of the chapter is structured in three parts. The next section introduces the conceptual framework applied to analyse entrepreneurial

behaviour in a transition context, namely institutional theory. The following section presents examples of different “strategies” used by entrepreneurs in transition countries, in the context of the specific external conditions they experience. This is followed by a short conclusion.

2 A Conceptual Framework to Analyse Entrepreneurial Behaviour

The framework used to analyse entrepreneurial behaviour in a transition context draws on institutional theory, which has gained importance in recent studies analysing entrepreneurship, particularly in transition environments (e.g., Aidis 2005; Dallago 1997; Feige 1997; North 2005; Peng 2000, 2003; Smallbone and Welter 2006b; Welter and Smallbone 2003), where the environment has a greater influence on entrepreneurial actions than in most mature market economies. In such a context, “Institutional theory offers several unique insights into organization–environment relations and the ways in which organizations react to institutional processes. (...). Institutional theory also draws attention to the causal impact of state, societal, and cultural pressures (...)”. (Oliver 1991, p. 151)

The framework used to analyse the role of institutions is that postulated by Douglass North, who characterises institutions as representing the “rules of the game”. North (1990) introduced the distinction between formal and informal institutions. Whereas the former represent the legal and organizational framework for entrepreneurial activities, the latter comprise values, norms and attitudes of society and individuals towards entrepreneurship. Since informal institutions are embedded in society and reflected in individual behaviour, they tend to change more slowly than formal institutions, which are particularly pertinent in situations where external conditions are turbulent and rapidly changing, as in many transition environments. “Although formal rules may change overnight as the result of political and judicial decisions, informal constraints are much more impervious to deliberate policies”. (North 1990, p. 6). Informal institutions, such as cultural traditions, societal customs, or human rights mainly have spontaneous origins (Williamson 2000), i.e., they self-organise; whilst formal institutions arise out of human actions.

Such forces influence entrepreneurial behaviour insofar as entrepreneurs may draw on previously “learned” strategies based on informal values and attitudes acquired in the Soviet period but which contradict the formal rules of a market economy. In this regard, Oliver (1991) suggests a typology of strategic responses to institutions and institutional change, including five

types of strategies, namely acquiescence, compromise, avoidance, deviance and manipulation, with specific tactics associated with each strategy.

Acquiescence and compromising strategies include tactics which acknowledge the existing institutional framework. In the case of compromise and bargaining tactics, this includes attempts to negotiate with institutional stakeholders, although this is less of an option for new and small enterprises, without market power and legitimacy, than it is for established firms. Such strategies signal that entrepreneurs have recognised the changed institutional framework and adapted their behaviour accordingly.

Avoidance, defiance and manipulation constitute the other end of institutional responses, since all signal varying degrees of non-conforming behaviour. According to Oliver (1991, p. 154), organizations achieve avoidance by “concealing their nonconformity, buffering themselves from institutional pressure, or escaping from institutional rules and expectations”, by changing their business field. Defiance characterises a “more active form of resistance” to institutional pressures. This includes organizations and entrepreneurs ignoring or circumventing institutional rules, which especially happens in situations where there is low potential for external enforcement as is the case during the transition period. Defiance also refers to organizations openly challenging rules or even attacking them, which again is less of an option for new and small firms lacking the power and reputation, than it is for established firms. This also applies to Oliver’s fifth strategy “manipulation”, which involves actively attempting to change the institutional environment.

In his analysis of entrepreneurial behaviour, Peng (2000) suggested a three-fold typology which integrates elements of Oliver’s framework, whilst simultaneously paying attention to a transition context. He identifies prospecting, networking and boundary blurring as distinctive strategies for new and small enterprises in a transition environment. The term “prospector” is used to characterise firms “with a changing market, a focus on innovation and change and a flexible organisational structure”. Peng contrasts “prospectors” with so-called “defenders”, who are firms with narrow markets, a stable customer group and an established organisational structure. While prospecting might paint a rather idealised picture given the circumstances that most entrepreneurs in transition economies work in, networking takes on particular importance in such environments, facilitating economic exchanges. Boundary blurring resembles Oliver’s avoidance and defiance patterns, with entrepreneurs working both illegally and legally because the institutional framework is deficient.

To summarise, in a situation where “learned” norms and values (as reflected in individual behaviour) no longer fit to a newly established institutional framework, entrepreneurs might be expected either to over-conform, in order

to re-establish legitimacy in a new order, and/or to show avoidance and defiance patterns in their entrepreneurial behaviour. Drawing on both Oliver's and Peng's framework, empirical investigation shows evidence of entrepreneurs in hostile and turbulent environments applying evasion strategies, distinctive financing patterns and networking, in response to the institutional deficiencies apparent in such conditions. The evidence to support this is presented in the following section.

3 Examples of Entrepreneurial Behaviour

In this section, data from various projects that both authors have participated in is explored to illustrate entrepreneurial behaviour in an environment, which is characterised by frequent changes in laws and regulations affecting business activity and a frequently hostile attitude of government and public towards small firms and entrepreneurs. The emphasis is on describing how entrepreneurs cope with the legal framework in such environments, as well as exploring the role of networking and sources of social capital.

3.1 Ignoring and Circumventing the Legal Framework: Applying Evasion Strategies

Frequent changes in legal regulations and the tax system, combined with a prohibitive tax level, an unpredictable behaviour of state officials in applying legal and tax regulations, and inadequate access to external capital encourage entrepreneurs to use evasion strategies in order to reduce tax payments with the underlying objective to preserve the capital base of their enterprises.

A study, in which both authors participated, concerned with employment behaviour in Russia and Moldova serves to illustrate the various elements of such coping behaviour, with regard to labour regulations.¹ The first example of evasion refers to tax and social security payments, paid by both employers and employees. The results of both a large-scale survey and case studies indicate a predominance of unofficial payments being used to reduce social security contributions (Welter and Smallbone 2003). In depth

¹ This refers to a study of employment behaviour in Russian and Moldovan SMEs, undertaken in 1999–2000 (INTAS OPEN 97-1805). This study included 1,200 interviews with SMEs from manufacturing, construction, trade and services. Case studies were also carried out with a total of 80 SME owners and selected employees.

case studies, involving both entrepreneurs and their employees, indicated that unofficial payments are made at virtually all firms in order to reduce taxes and social security contributions. A common method is to pay officially calculated minimum wages, with a bonus paid as an informal payment. Others give “informal” guarantees to their employees instead of paying all social security payments. Evidence from other empirical surveys confirms such results (e.g., Chepurenko 1999; Clarke and Borisov 1999; Frye and Shleifer 1997; Gustafson 1999; Hendley et al., 2000). For example, an enterprise survey in Russia indicated that in late 1998 half of the surveyed enterprises did not pay any taxes at all; those entrepreneurs that did make a tax declaration reported only 30% of their turnover and paid social security for only 10% of the wages (Chepurenko 1999).

A second example of an evasion strategy refers to the avoidance of legal regulations. With respect to employment contracts, in the study of employment in SMEs in Russia, referred to above, the majority of entrepreneurs claimed, in the survey, to conclude a written labour contract. However, 20% reported enrolling “on order” (i.e., the enterprise management issues an order to employ this employee), or by verbal agreements, rather than relying on a legally enforceable contract, thereby violating the labour law. The case study evidence shows that few labour contracts are really used in practice, indicating the unreliability of survey data when some questions may encourage respondents to admit they are breaking the law. Employers were either reluctant to talk about labour contracts or they (in-) voluntarily violated the labour law.

For example, Viktor, the owner of a small publishing company, does not conclude labour contracts in writing, because “these give us too much headache”. He reported having discussed the legal implications of switching his employment of labour to a written contractual basis with a lawyer on more than one occasion, yet “the snags are so many there!” To support this, Viktor cited his own experience of starting work under a contract years ago, when he was a university Professor. “Contracts were concluded on a voluntary basis. However, lecturers without a contract continued to work as before. Once the qualifying committee certified a lecturer for five years, no-one could force him to sign a contract for one year”. Since he reported facing similar problems in his enterprise, he eventually gave up the idea of concluding written contracts.

Employees that were interviewed as part of the enterprise case studies typically stated that they either did not have contracts or were unaware whether they had a contract or not. Whilst the use of such practices results in increased labour flexibility for the entrepreneur, it could leave employees with reduced job security. For example, Dmitri, who works as an advertising manager in a Russian SME, complained to the interviewer

that his employer unilaterally extended the probation period beyond that agreed when he was taken on. Moreover, his current wage differed substantially from the remuneration agreed orally at the outset. So, while he admitted to the advantages of not having a contract when he said: "What if I quit in a month? No need to spoil my service record", he would also value the greater job security that a contract should provide him with. Another example is Galina, an employee in an apothecary, who refused point blank to answer the question about unofficial remuneration. However, when asked if she was certain that the firm pays the contributions they should make to the Pension Fund, she stated that she doubted "this very much". According to her, monitoring the insurance premiums paid by entrepreneurs for their employees should constitute one of the functions of the state. However, in practice, she referred to: "The tax office as we know it today has long been bought up by the interested parties". A further example of this type of behaviour by Russian SME owners, faced with stringent labour laws, is provided by Sergei, who works as programmer in Viktor's publishing company. On pay-day he signs for a particular amount, which is different from the salary he actually receives. This worried him a lot, "as pension is not too far away".

The coping and evasion behaviour described with respect to labour laws is also found in relation to other aspects of the legal and regulatory framework, reflecting deficiencies in business regulations and/or their implementation. Deficiencies in the legislation itself leave too much room for interpretation by officials, which in turn contributes to corruption. In this regard, Boris, the owner of a small manufacturer of windows and doors in Moscow, described the current practices in his firm, regarding payment of taxes and social securities. According to him, his firm stands to gain a lot from the current state of labour remuneration policy: "The state has driven itself in a corner, having set the minimum wage. Accordingly, my financial reporting shows minimum figures, too. What does the tax service say? They turn a blind eye to this. We are small fry to them".

This kind of behaviour prevails in most transition environments where the legal framework does not function properly, as another case of a female entrepreneur, Olga, from Kiev in the Ukraine illustrates: "At the inception stage (of the business) there were problems with tax agencies and customs. After three months of operations the tax inspector did not approve our report because there was no 'funds movement'." Olga explained that nothing was sold during these first three months as the goods were halted by the customs. She had little experience with customs officers and was unable to solve this problem until she found a person who served as an "authorized

agent” of customs officials. This person took the bribe and the documents from her, which she presumed were passed on to the official, because after this, the goods were allowed into the Ukraine. The case illustrates a general practice of informal intermediaries acting between importers and customs officials.

The examples described in this section suggest that in transition economies where the institutional framework conditions for sustainable entrepreneurship are not yet in place, a common coping strategy used by entrepreneurs involves non-, or partial compliance with employment, tax and other regulations. Analysis of case study evidence suggests that this behaviour pattern is not a result of greed, or an unwillingness to operate legally, but is rather a result of a regulatory framework that makes it difficult for private enterprises to operate totally within the law and be profitable. Moreover, with respect to employment laws, for example, it may be argued that the development entrepreneurship is contributing positively to increases the degree of flexibility in the labour market.

3.2 Coping with a Deficient Institutional Framework: Financing a Business

In hostile and unpredictable “transition” environments, an additional mechanism used by entrepreneurs to cope with a restrictive legal framework is to set up several companies, representing a distinctive form of portfolio entrepreneurship. In some cases, this may include the registration of a second “fictitious” company, in order to lower or evade taxes (Smallbone and Welter 2001; Welter and Smallbone 2003). However, forms of portfolio entrepreneurship, as well as serial entrepreneurship, also serve to finance business activities. In these circumstances, they represent a “bootstrapping” solution to raising the financial resources necessary to start and/or develop a business, in a context where the financial system and access to external finance is inadequate. Essentially, the process involved reinvestment of profits, but between different businesses, either sequentially or in parallel. (Smallbone and Welter 2001).

A common phenomenon is for entrepreneurs who now own substantial businesses to start on the path into entrepreneurship with shuttle trading activities, which involved buying goods abroad and bringing them back to their own countries for sale, sometimes avoiding customs duties in the process. A typical case of shuttle trading activity is that of two sisters in Grodno, Belarus, both in their thirties, who trade in window ledges, helped

by their mother (Welter et al., 2006b).² The business activity was started 6 years ago, mainly to boost family income. Today, they have two trading places at markets in Grodno: one is a typical “plastic cell” of 2 m²; the other is their own small shop. The respondents travel to Poland to search for suitable products in markets there. The business is based on requests from their customers. It involves bringing the products purchased to the border, where they are distributed among so-called “transporters”, who take the goods across the border. Since such people must be trusted by the entrepreneur, finding such people is a constraint on the development potential of this particular trading activity. A more substantial business in window ledges would require documents confirming the sales in Poland, as a requirement for the respondents to register and pay customs fees and to import goods beyond the individual customs-free limit. However, as most sales partners are operating semi-legally themselves, the sisters would have to change their business partners in order to operate their business legally. Alternatively, they could use the cash they have generated from their shuttle trading activity to set up a more substantial business operating legally. However, the hostile nature of the environment for private business in Belarus under President Lukashenko provides little incentive for them to do this. By contrast, in Poland, it is easier to find examples of SME owners who began their entrepreneurial careers through shuttle trading activity, using it to provide a financial stepping stone in circumstances (e.g., in the early/mid 1990s) where external finance was extremely difficult to obtain.

In a situation where the framework for entrepreneurship is lacking, serial entrepreneurship represents one solution for entrepreneurial people to deal with a lack of (access to) financial resources to set up a business in activities requiring more capital investment. It involves cash generated in one business being re-invested in a subsequent enterprise, often operating at a higher value added level. Moreover, empirical research has shown portfolio entrepreneurship to be a common feature of enterprise development in transition economies, together with an extensive use of diversification, in order to ensure enterprise survival (Welter and Smallbone 2003). For example, in Ukraine, Belarus and Moldova every fifth of a total of 563 surveyed entrepreneurs owned more than one enterprise, mainly in industries such as construction and manufacturing, where financial investment requirements are higher compared to the service sector.

² The data come from a study on cross-border entrepreneurship, carried out from 2005–2007 (INTAS OPEN 04-79-6991). A total of 300 case interviews were conducted in three regions in Belarus and the Ukraine respectively two regions in Moldova.

Empirical results from two surveys confirm the overall occurrence and importance of diversification (Welter and Smallbone 2003).³ A majority of SMEs, interviewed in 1997 in Ukraine, Belarus and Moldova and in 1999 in Russia and Moldova, pursued two or three activities. As in the case of portfolio entrepreneurship, diversification differs across sectors, reflecting different capital requirements. For the most part SMEs in manufacturing and construction named additional activities in trade or service activities, which assisted in financing their main product line in situations where access to external capital was scarce and the demand for products varied considerably over time. Although this type of vertical integration is found in manufacturing SMEs in mature market economies, such as the UK, the lack of external sources of finance for SMEs is a key driver in transition conditions with major deficiencies in the financial institutions.

Diversification by SMEs is particularly pronounced in hostile environments, such as in Belarus. The authors' own survey data demonstrate that more than 80% of the Belarusian SMEs were involved in two or more activities, which is associated with the insufficient legal, financial and political framework for entrepreneurship in this country (Smallbone and Welter 2006b).

In such a context, diversification behaviour is more of a financial strategy to secure enterprise survival rather than a strategy for risk minimisation, enterprise growth and development (Peng and Heath 1996). Although our empirical evidence also implies that motives for diversification strategies can be opportunity-driven, the role that portfolio entrepreneurship and diversification play in securing the financial base of enterprises is more important. This can be illustrated with reference to the case of a female entrepreneur, who privatised a state optics company in the Namangan region in Uzbekistan, because she perceived a niche market opportunity. She initially set up a wholesale and retail trading business in medicines, which provided her with capital to privatize her previous place of work. However, the severe import regulations in place posed unsolvable problems for her, in relation to both optics and medicines. As a consequence, she is currently selling products from her own farm, and is considering diversifying into buying her own livestock.

³ Data come from a study of the support needs of SMEs in Ukraine, Moldova and Belarus, undertaken in 1997 (TACIS-ACE T95 4139R). The empirical work in this study included a total of 619 face to face interviews with SMEs from manufacturing, construction and selected service sectors. The second study was on the contribution of SMEs in Ukraine, Moldova and Belarus to regional economic development, undertaken in 1998–99 (INTAS UA 96-0266). The survey comprised a total of 643 SMEs from manufacturing, construction, trade and services. In addition, a total of 94 case studies were carried out.

Overall however, such behaviour often results in a broad and unrelated portfolio of business activities, thus reflecting a short-term behavioural response to overcoming pressing financial and environmental constraints instead of a strategic response (Welter and Smallbone 2003).

3.3 The Use of Personal Networks and Networking

The use of networks and networking is a common theme in studies of entrepreneurship in mature market economies. However, in fragile environments such as the former Soviet countries, where the formal institutional framework for entrepreneurship does not function properly or is not installed yet, the role of networks and networking has additional dimensions. For example, it can facilitate market entry as well as influencing the business field chosen. Networking and personal contacts can also enable daily business operations in such environments. In many respects, this type of behaviour is a reminder of Soviet times, where the “exchange of favours” (“*blat*”) was a necessary response to the constant shortage of materials in the socialist period. Several studies have described how in hostile and unstable environments individuals draw on social contacts and individual networks dominated by mutual trust in order to pursue business activities (e.g., Ledeneva 1998, 2006; Manolova and Yan 2002; Peng 2000; Smallbone and Welter 2001, 2006a,b; Welter 2005; Welter and Smallbone 2003; Welter et al., 2003; Yan and Manolova 1998). One of the themes emerging from some of these studies is the influence of the qualitative composition of an entrepreneur’s networks, which influences the extent to which a network can be viewed as a potential asset for start-up and for business development purposes. Networking and the use of personal contacts is not restricted to a mere exchange of favours, but is often coupled with gifts (Adler and Kwon 2002), where it involves people outside the kinship group.

Case studies from a project concerned with women’s entrepreneurship (which included a male control group) in Ukraine, Moldova and Belarus demonstrated that entrepreneurs draw heavily on informal sources of information and advice, such as family, friends, and business partners in order to solve their business problems (Welter et al., 2006a).⁴ Whilst the propensity to make use of informal sources of information and advice

⁴ Data within this project were collected in Ukraine, Moldova and Uzbekistan, from 2001–2003 (INTAS 00-843). In Ukraine, a total of 297 female and 81 male entrepreneurs were surveyed; in Uzbekistan and Moldova the figures were 200/60 and 218/63 respectively. Additionally, case interviews with up to 30 women in each country and five men were conducted.

was not significantly different between men and women, case study evidence revealed some differences in the qualitative characteristics of networks used by men and women.

In Moldova and Uzbekistan, women entrepreneurs drew on informal sources of information and assistance, both at start-up, for example when developing the business idea, as well as for dealing with current business problems. Evidence from Ukraine showed how assistance from a formal source for registering a business, such as a legal adviser, was commonly reported; illustrating how scarce resources need to be applied to a process, which in an entrepreneurial society should be available with minimal costs of compliance.

In drawing on their network links, women entrepreneurs often combined inputs from different sources within their personal networks. This can be illustrated with reference to an interior design business in Moldova. In this case, the father of the entrepreneur proposed the business idea, as the entrepreneur had no experience in the field. The father also helped his daughter to engage a design specialist and provided a substantial part of the funds necessary to register the firm and renovate the business. A friend of the entrepreneur offered space in her own shop, foregoing payments for half a year, whilst her brother, an artist, assisted her in kind, by working in her firm. Another example is a small hairdresser's salon in Chisinau, Moldova. In this case, a brother helped his sister during the initial stage of setting up the business, by renovating premises and delivering and fixing equipment, whilst other relatives supplemented the entrepreneur's own savings with a loan.

Loans to entrepreneurs from informal sources within personal networks were commonly mentioned in case studies of female entrepreneurs, which one respondent described this as being "traditional for our family". In fact, finance provided by the spouse and/or the family is one of the differences in the "support" received by men and women entrepreneurs, as Tables 1 and 2 demonstrate. Surveyed entrepreneurs in all three countries were asked if their family supported their enterprise and, if so, how. Similarly, men and women entrepreneurs were asked if their spouse supported their business. The tables show that in the overwhelming majority of cases, entrepreneurs of both genders reported both their families and their spouses provided some support for their business.

At the same time, qualitative differences can be observed in the nature of the support received. The most significant difference between men and women shown in these tables is with respect to finance, perhaps reflecting the fact that women had fewer financial resources to offer to their male

Table 1. Family support for male and female entrepreneurs in Ukraine, Uzbekistan and Moldova

	Women	Men	All respondents
Yes, with capital (%)	16.6	3.8	11.5
Yes, by working in the business (%)	25.5	20.2	13.8
Yes, by providing advice (%)	21.5	25.7	24.3
Yes, with emotional support (%)	25.2	31.1	22.4
Yes, in other ways (%)	0.5	4.9	26.5
No (%)	10.8	14.2	1.4
No of respondents	651	183	834

Note: the table summarises answers to two questions: Does your family support your business? If so, how? Each respondent was able to give up to three types of support

Source: own survey data

Table 2. Support from spouses for male and female entrepreneurs in Ukraine, Uzbekistan and Moldova

	Women	Men	All respondents
Yes, with capital (%)	33.4	8.3	27.1
Yes, by working in the business (%)	39.1	28.9	36.5
Yes, by providing advice (%)	65.9	62.8	65.1
Yes, with emotional support (%)	66.9	77.8	69.7
Yes, in other ways (%)	3.2	2.8	3.1
No (%)	14.2	14.4	14.3
No of respondents	532	180	712

Note: the table summarises answers to two questions: Does your family support your business? If so, how? Each respondent was able to give up to three types of support

Source: own survey data

spouses/partners than vice versa. However, the very low proportion of male entrepreneurs to draw on family financial support, compared with female entrepreneurs, suggests there may be other or additional explanations, such as a greater desire on the part of men to be financially independent or fewer financial resources available within the family. Smaller differences between male and female entrepreneurs can also be observed with respect to using family labour (more common in women-owned businesses); and emotional support, which was less commonly received by women from their families and spouses than men, possibly reflecting differences in social perceptions of the respective roles of men and women.

Case study evidence shows that other examples of informal support range from advice about the business idea; physical help in setting up the firm; help in accessing financial resources from other sources; and assistance in finding customers and in obtaining supplies. Women entrepreneurs also often turn to informal contacts to help them deal with the authorities, either to access help in registering the firm or to solve problems with licenses, tax payments, and similar requirements. "My husband helped me with his personal contacts", illustrating how women's entrepreneurship in transition conditions often needs to be interpreted in the household context, in the sense that other members of the household may provide inputs in to the (micro) enterprise. "I set up informal contacts with the authorities". These are typical statements of women entrepreneurs in the case studies, undertaken in Uzbekistan, Ukraine and Moldova, reflecting the importance of being well connected with officials in order to do business (Ledeneva 1998). The example also illustrates the influence of the qualitative composition of an entrepreneur's personal network on the extent to which it may be viewed as a business asset.

In Uzbekistan, the specific local environment (so-called *mahallia*, which are local neighbourhood communities) plays an additional role in enabling (or constraining) female entrepreneurs. This is mainly related to the attitude of neighbours towards women's entrepreneurship. Case studies from Uzbekistan illustrate an ambiguous picture, where women entrepreneurs who set up their business in the local neighbourhood, experience envy from some neighbours ("they don't send their girls into my sewing school, but take them to another district"). Often women entrepreneurs support the community by training local girls or offering reduced prices for local community members. This type of community-based social capital is also reflected in research on ethnic minority businesses in mature market economies, which emphasises the role family and local communities play in offering social capital to individually-owned enterprises (Fadahunsi et al., 2000). It is specifically the close nature of families or communities, which allow ethnic, or in this case women entrepreneurs, to access social capital.

The case study evidence shows instances where women entrepreneurs make use of assistance from their spouse and/or family head. It may be interpreted as reflecting the "renaissance of patriarchy" (Zhurzenko 1999, p. 246) in post Soviet societies. Moreover, in a country such as Uzbekistan, where traditional social values lead to an expectation that widows and young women will not act on their own, assistance from family sources becomes a necessity. This may be illustrated with reference to the case of a woman, aged 34, who set up a sewing firm in the Namagan region. In this case, the mother accompanied her daughter to the authorities to

register the enterprise. However, as a business develops, and the female entrepreneur gains confidence as well as her own contacts, this distinctive feature of social capital may lose importance. Disapproval by male spouses, where it occurs, appears to be more common with respect to certain business activities such as trade and micro enterprises, which some men may view as demeaning.

At the same time, a narrow emphasis on the effect of a renewal of traditional values on gender roles as an explanation of the role of social capital for women entrepreneurs neglects the diversity of women's entrepreneurship. In countries, such as Uzbekistan, Ukraine and Moldova, many women enter entrepreneurship in order to sustain themselves and their families, sometimes facing disapproval from family and spouses. Another scenario is illustrated by case study evidence showing spouses working in the firm in a subordinate role, having tacitly accepted their wife as a business owner. For example, one of the Ukrainian case study firms was involved in manufacturing and selling women dresses in a linked retail outlet. The woman owner who started the business to provide a means of survival for her household, described her husband who worked in her firm as a manager and driver, as "reliable, but without initiative". Another example is that of a small retail enterprise, selling flowers, where the woman took the initiative to set up a business to supplement the family income, despite strong opposition from her husband.

Interestingly, survey evidence suggests that the share of divorced entrepreneurs in transition environments is higher in the case of women (14%) than for men (5%), suggesting that life as a woman alone and/or as a single parent may encourage a woman to view business ownership as a route to survival. The same survey also shows more women entrepreneurs being widowed (4.5% women, 0.5% men), especially in Uzbekistan (7.5% women, 0 men). Case studies illustrate that women in these situations also start and act on their own, thus putting the concept of a renewed patriarchy in post-Soviet countries into perspective.

Another form of social capital is *co-operation*. Although less than half of all surveyed entrepreneurs reported some form of co-operation, a significant minority did so: 42% overall or 48% of men and 41% of women entrepreneurs. Partners were mainly other enterprises or entrepreneurs within the same sector. Although not many entrepreneurs appear to realise the potential value of cooperating with their competitors, some emphasize this as a tacit investment, expecting reciprocity in the future. For example, a female entrepreneur from Moldova stated: "In case I am not able to serve a customer (e.g., when the enterprise is overloaded with work and we are not able to carry out orders on time, or if we do not

offer the products or services the client needs), I send them to competitors. I know the competitors will act the same way in an analogous situation”.

Case studies also illustrate that entrepreneurs frequently draw on advice from business partners without considering this as cooperation, but rather “a natural form of human relations”. Business partners are an important potential source of social capital for both women and men entrepreneurs, based around the principle of reciprocity, but qualitative differences can be identified in the nature of the process by which assistance is received. In this context, the study revealed a few cases where female entrepreneurs had made use of assistance from formal sources, mainly with regard to help in registering the company and/or undertaking business-related training. In their own words, women entrepreneurs feel more comfortable using assistance from informal sources, such as their personal networks, which they value highly. At the same time, some case study evidence shows informal sources acting as a substitute for formal assistance, partly because a formal business support infrastructure was missing when women set up their business.

On the whole, our evidence supports the proposition that social capital can be both a complementary resource and a substitute for assistance from formal sources, especially in fragile environments where adequate formal support structures are still lacking. Thus, in a context where formal sources of business support are lacking and institutional deficiencies appear to be the norm, social capital becomes a vital element in an entrepreneur’s resource base. Moreover, a lack of trust in formal institutions encourages entrepreneurs to rely on trust-based relationships within their personal networks, as a means of accessing resources. This applies to both men and women, although the nature and role of social capital shows some gender variations.

4 Conclusions

It has previously been emphasised that if businesses want to thrive and grow in hostile, transition-type environments, they are often forced to rely on types of behaviour, which are expedient for the firm in achieving its immediate objectives to survive, but not necessarily entirely positive from the standpoint of economic development (Smallbone and Welter 2006 a, b; Welter and Smallbone 2003). This is because a development path that involves the types of adjustment to institutional deficiencies described in the chapter does not encourage productive entrepreneurship and is often wasteful of resources that could be more gainfully employed. In some

cases, it forces firms to allocate resources to unproductive activities whilst also restricting limiting the total number of firms that are able to cope and survive. The picture emerging from the evidence presented here is one where coping with a distorted legal framework involves recurring to deviant behaviour, ignoring existing rules because entrepreneurs perceive that government has low potential to enforce the legal framework. "Boundary blurring", to use Peng's characterisation of a lack of distinction between actions that are legal and those that are not, is commonplace, which does not help to promote a positive image of entrepreneurship to the population at large.

The cases reported in this chapter provide evidence that entrepreneurs themselves are aware of the contradictions and the ethical dilemma that such behaviour poses to them. This may be illustrated with reference to Valeri, who owns a company offering construction and renovation services and installing sanitary and ventilation equipment in Moscow. When interviewed, he admitted that "under-counter payments" are just a small link in the chain of illegal activities that his enterprise is engaged in. According to him, "shady operations" begin at the stage of signing contracts with employees, hiring the "illegal workforce" and end at the stage of final payments with clients. The main reason for an entrepreneur placing part of their activity "in the shadow" in this way is a genuine desire to obtain "some" profit, in a context where the costs of full compliance are prohibitive. Valeri thinks there are no completely law-abiding managers among those who are genuinely trying to develop their businesses. When asked about the conditions in which he could legalise his business activity, he became agitated, stating: "Not in Russia, it's just impossible to do fair business here. No tax reduction will help. Entrepreneurs in Russia have the brains of thieves. It will take generations to pass before civilized business-men emerge in Russia".

The problem in such circumstances is how to break the vicious circle. Initially, many firms may survive and grow by using a network-based strategy based on personal trust and informal agreements among managers and officials in order to overcome institutional uncertainties (Peng and Heath 1996). However, extensive and sustained development of private entrepreneurship will only occur if transition economies move from a relationship-based, personalized transaction structure to a rule-based, impersonal exchange regime. This is necessary to enable "unfamiliar parties, who would have been deterred from transacting before" to be able to rely on third party enforcement rules, thus entering business relations with each other (Johnson et al., 2000).

References

- Adler P and Kwon S-W (2002) 'Social capital: prospects for a new concept', *Academy of Management Review*, 27 (1), 17–40.
- Aidis R (2005) 'Institutional barriers to small- and medium-sized enterprise operations in transition countries', *Small Business Economics*, 25, 305–318.
- Chepurensko A (1999) 'Die neuen russischen Unternehmer: Wer sie sind, wie sie sind', in Höhmann H-H (ed), *Eine unterschätzte Dimension? Zur Rolle wirtschaftskultureller Faktoren in der osteuropäischen Transformation*, Analysen zur Kultur und Gesellschaft im östlichen Europa, 9, Bremen, pp. 139–152.
- Clarke S and Borisov V (1999) 'New forms of labour contract and labour flexibility in Russia', *Economics of Transition*, 7 (3), 593–614.
- Dallago B (1997) 'The economic system, transition and opportunities for entrepreneurship', in Entrepreneurship and SMEs in Transition Economies, in OECD (eds) *The Visegrad Conference*, Paris: OECD, pp. 103–124.
- Fadahunsi A, Smallbone D and Supri S (2000) 'Networking in ethnic minority entrepreneurship: an analysis of small minority owned firms in North London', *Journal for Small Business and Enterprise Development*, 7 (3), 228–240.
- Feige E (1997) 'Underground activity and institutional change: productive, protective, and predatory behavior in transition economies', in Nelson J, Tilly C and Walker L (eds) *Transforming Post-Communist Political Economies*, Washington D.C.: National Academy, pp. 21–34.
- Frye T and Shleifer A (1997) 'The invisible hand and the grabbing hand', *American Economic Review*, 87 (2), 354–358.
- Gustafson T (1999) *Capitalism Russian-Style*, Cambridge: Cambridge University Press.
- Hendley K, Murrell P and Ryterman R (2000) 'Law, relationships and private enforcement: transactional strategies of Russian enterprises', *Europe-Asia Studies*, 52, 627–656.
- Johnson S, McMillan J and Woodruff C (2000) 'Entrepreneurs and the ordering of institutional reform', *Economics of Transition*, 8 (1), 1–36.
- Ledeneva A (1998) *Russia's Economy of Favours: Blat, Networking and Informal Exchange*, Cambridge: Cambridge University Press.
- Ledeneva A (2006) *How Russia Really Works: The Informal Practices that Shaped Post-Soviet Politics and Business*, New York: Cornell University Press.
- Manolova T and Yan A (2002) 'Institutional constraints and entrepreneurial responses in a transforming economy', *International Small Business Journal*, 20, 163–184.
- North D (1990) *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North D (2005) *Understanding the Process of Economic Change*, Princeton: Princeton University Press.
- Oliver C (1991) 'Strategic responses to institutional processes', *Academy of Management Review*, 16 (1), 145–179.

- Peng M (2000) *Business Strategies in Transition Economies*, Thousand Oaks: Sage.
- Peng M (2003) 'Institutional transitions and strategic choices', *Academy of Management Review*, 28 (2), 275–286.
- Peng M and Heath P (1996) 'The growth of the firm in planned economies in transition: institutions, organizations, and strategic choice', *Academy of Management Review* 21 (2), 492–528.
- Smallbone D and Welter F (2001) 'The distinctiveness of entrepreneurship in transition economies', *Small Business Economics*, 16 (4), 249–262.
- Smallbone D and Welter F (2006a) 'Conceptualising entrepreneurship in a transition context', *International Journal of Entrepreneurship and Small Business*, 3 (2), 190–206.
- Smallbone D and Welter F (2006b) 'Institutional development and entrepreneurship in a transition context', in Styles C and Galbraith C (eds) *Developmental Entrepreneurship: Adversity, Risk and Isolation*, Amsterdam: Elsevier, pp. 37–53.
- Welter F (2005) 'Entrepreneurial behavior in differing environments', in Audretsch, D, Grimm H and Wessner C (eds), *Local Heroes in the Global Village*, International Studies in Entrepreneurship, New York: Springer, pp. 93–112.
- Welter F and Smallbone D (2003) 'Entrepreneurship and enterprise strategies in transition economies: an institutional perspective', in Kirby D and Watson A (eds) *Small Firms and Economic Development in Developed and Transition Economies: A Reader*, Aldershot: Ashgate, pp. 95–114.
- Welter F, Smallbone D, Aculai E, Isakova N and Schakirova N (2003) 'Female entrepreneurship in post Soviet countries', in Butler J (ed), *New Perspectives on Women Entrepreneurs*, Greenwich: Information Age, pp. 243–270.
- Welter F, Smallbone D and Isakova N (eds) (2006a) *Enterprising Women in Transition Economies*, Aldershot: Ashgate.
- Welter F, Smallbone D, Slonimski A, Linchevskaya O, Pobol A and Slonimska M (2006b) Enterprising households in a cross-border context, Paper presented at the RENT Conference, Brussels.
- Williamson O (2000) 'The new institutional economics: taking stock, looking ahead', *Journal of Economic Literature* 38 (3), 595–613.
- Yan A and Manolova T (1998) 'New and small players on shaky ground: a multicase study of emerging entrepreneurial firms in a transforming economy', *Journal of Applied Management Studies*, 7 (1), 139–143.
- Zhurzhenko T (1999) 'Gender and identity formation in post-Socialist Ukraine: The case of women in the shuttle business', in Bridgman R, Cole S and Howard-Bobiwash H (eds) *Feminist Fields: Ethnographic Insights*, Ontario: Broadview, pp. 243–263.

Successful Rural Hosted Accommodation in Western Australia: Gender Matters

Paull Weber¹ and Jack Carlsen²

¹School of Management, Curtin Business School, Curtin University of Technology, Perth, Australia

²Curtin University of Technology, Perth, Australia

1 Introduction

There have been many contributors to our understanding of the rural tourism phenomenon. The geographers' view of tourism pays special attention to the inherent differences between urban and rural tourism settings. They draw valid attention to the impact that transport and access have on tourism, as well as the pressures of alternate and often competing uses of the land to determine carrying capacity and the wider concerns of sustainability (Hall and Page 2002). However, such a focus on the location of the tourism asset overlooks the human involvement in the production of rural tourism and recreation service. What are the characteristics and success correlates of rural entrepreneurs? This chapter uses data collected from a survey offered to all identifiable owners of hosted accommodation in Western Australia to explore this question. We find that gender is one area where significant differences do exist.

Many hosted accommodation businesses in this study were conducted on the farm, often not primarily because of the idyllic location of the farm. But, rather because of the pragmatic decisions of the owners of the farm-based business to diversify the range of income producing activities that the land can sustain. With many farms having a traditional patriarchal farming heritage it seemed often to fall upon the matriarch of the family to develop and manage such non-core farm activities as the bed and breakfast or farmstay accommodation business.

In times of hardship in rural settings these non-core activities do add significantly to the survival of the farm and the farming family. However, as farms modernize and attitudes to gender roles evolve there is perhaps an expectation that the gap between the roles and responsibilities of male and female farm owners will reduce as is suggested by Still et al. (2005). However, in the research discussed in this chapter it is revealed that gender differences in Western Australian rural settings are still significant and sizeable. It appears that females are running rural businesses with lower levels of capital and concomitant lower levels of success than their male counterparts. Whilst we can only speculate on the reasons for this, the focus of the overarching research agenda does allow for some potential explanations of this gender inequality.

2 The Research Conducted

Research focusing on the owners of hosted accommodation in Western Australia was conducted in late 2004 and early 2005 via mail questionnaire to 650 urban and rural businesses. The research sought to understand the characteristics of the owners, how they defined and measured success and how successful their businesses were.

The data presented in this chapter reports on some of the significant differences between the rural and urban owners in that overarching study. The variables measured encompassed items that focused on the owner and some that focused on the business, they included:

- Demographic characteristics such as age, gender, number of children and education level
- Personal experience (years of management, business ownership and industry experience)
- Personal financial satisfaction
- Personal net worth
- Personal networks (time spent in these networks)
- Overall success (subjective self-assessment)
- Personal health (using a scale commonly used for self-reporting physical and mental health)
- Personal values (such as commitment to marriage and frugality)
- Hours worked in the business
- Use of the Internet in the business
- Estimated annual sales
- Occupancy rates.

A key demographic difference between hosted accommodation and other small businesses more generally was the gender balance. It was found that hosted accommodation is dominated by female participants. This female gender bias is also investigated from a characteristics and success perspective.

Valid responses for this particular treatment of the data were received from 132 rural owners, along with 35 urban owners. In line with the Australian Bureau of Statistics' definition of rural location (Australian Bureau of Statistics 2006b), all businesses in Western Australia outside of the Perth metropolitan area (the capital city of Western Australia) were classified as rural. The analysis and findings are discussed later, but first it is appropriate to consider the context of the rural farming family in Western Australia.

3 Rural Farming Families

The number of farming families in Australia has decreased by 22% between 1986 and 2001. For many of the remaining farming families, farm income has reduced due to declining profit margins requiring family members to earn non-farm income. Adding to this financial burden, over half (54%) of Australia's farming families have dependent children living with them (Australian Bureau of Statistics 2003a). Australian farming families have an average of 1.8 children, which is marginally higher than their urban counterparts.

The disproportionate burden placed on females to care for children is one factor posited to encourage female entrepreneurship (Birley 1989). The evidence of larger family size in the rural sample coupled with diminished job opportunities in rural communities (Australian Bureau of Statistics 2003a) may be catalysts for the commencement of some on-farm complimentary businesses such as hosted accommodation (farmstays). Other contributing factors to the choice to start a hosted accommodation business include the presence of suitable buildings on the farm property and the generally increased role of females involved in earning non-farming income for farming families.

Farmers often work well beyond the early retirement age of 55. In 2001, over 15% of all farmers were still working on the farm beyond 65 years of age. There is evidence that the age of farm owners is increasing. The median age of farmers in Australia was 51 in 2001, which government statisticians suggest is indicative of an ageing farm owner population when compared with earlier estimates (Australian Bureau of Statistics 2003b).

Hosted Accommodation Assets, Utilizing the Family Home or Farm:

One factor driving the demographic profile of owners of hosted accommodation is the need to have access to a large dwelling suitable for the hosting of guests. Such assets typically represent substantial capital investments which have taken many years to acquire. There are three common pathways to the ownership of the requisite substantial property. The first is via family title (the family farm) where underutilized farm buildings are converted to farmstay accommodation.

Secondly, through the purchase of substantial private residences by non-farming owners, using wealth accumulated prior to business start-up. The wealth may have been accumulated via another unrelated business or through their main occupation or profession and is invested in rural property by those not seeking high returns on investment but rather a rural lifestyle (Kelly 2003).

The third pathway to ownership of these properties occurs when retirement savings funds preserved in regulated government approved funds can be accessed after age 55 (Kehl 2002). Government pension rules favour the ownership of substantial family homes as a way to preserve assets, as this asset is partially exempt from asset tests for pension benefits. The first farm business pathway is often motivated by the need to supplement an income under stress (Jennings and Stehlik 1999). Pathways two and three are often motivated by lifestyle desires which are discussed later.

Whichever pathway to ownership of the hosted accommodation is relevant on a case-by-case basis, the expectation is that rural hosted accommodation owners will be relatively asset-rich individuals in order to enter this business type. National data on wealth distribution does include an estimate of the net personal wealth of rural individuals in 2003–04 (Australian Bureau of Statistics 2006a). The average net personal wealth of all rural Western Australians was \$452,619. Within the dominant age groups in this study, 55- to 64-years-olds had \$727,800 and 65- to 74-years-olds possessed \$632,100 in Western Australia (Australian Bureau of Statistics 2006a). This information permits some comparison with the sample means from our study although timing differences (2003–04 vs. 2005) do introduce some potential for error.

Once owned, these farms and rural lifestyle dwellings may represent a large proportion of the owner's personal net wealth, resulting in varying financial pressures which lead to attempts to extract greater marginal returns on the property investment (Kelly 2003). In the case of the family farm, hosted accommodation is sometimes a marginal activity intended as a supplement to main farm activities (Andersson et al. 2002).

4 Career Stage and Lifestyle

Some characteristics of the hosted accommodation businesses appear to encourage the entrance of late-career participants who for varying reasons are not yet ready or able to retire from work. Two commonly cited reasons for this late-career entry to small business more generally are lack of viable alternatives (Creagh 2004; Hughes 2003; Platman 2002) and for bridge-employment until full retirement is desired (Baucus and Human 1994; Clark and Quinn 2002; Kellard et al. 2004; Quinn 1996).

These late-career entrants have a wide range of motives for entering the hosted accommodation industry and some of these motives have been shown by prior research to be of a non-financial lifestyle nature (Ateljevic and Doorne 2000; Carlsen and Getz 2000; Hall and Rusher 2004; Lynch 1998; Stringer 1981). These goals have been described by entrepreneurship and small business theorists as intrinsic motivations (Buttner and Moore 1997; Kuratko et al. 1997). That is not to say that earning an income is unimportant, rather it can have lesser importance to many hosted accommodation owners.

5 Gender

Wall and Norris (2003) believe that it is not always possible to provide conclusive links between the relationships of gender and tourism, but we should be aware that such relationships are important and do exist. Gender is also highlighted as an important issue in small business research (Still et al., 2004, 2005). Some researchers have suggested that national longitudinal studies of Australian business indicate that females tend to choose lower risk and lower return industry sectors (Watson 2003) such as hosted accommodation. However, less is known about why these choices have been made, or if in fact they were choices at all, or more a case of lack of alternative.

The importance and recognition of females in the Australian farming context is increasing. However, the current structure and behaviour of farming families is still influenced by social norms that Pini describes as "...popular and media constructions of the rural [farmer], in government reports of farming work which have ignored women's labour, in patrilineal inheritance on family farms and in women's exclusion from agricultural training" (Pini 2005).

In 2001, 91% of farmers in Australia were members of a family household, yet only one third of the females in these families listed their occupation as farmer (Australian Bureau of Statistics 2003a). Whilst males still dominate in the traditional farm business population, the role of supplementary income generation through other on-farm activities such as hosted accommodation may be expected to rest disproportionately with the female ‘non farmer’ partner.

Hosted accommodation has a very different demographic profile to small business more generally, but with some commonalities. In Western Australia, males aged over 50 are the owners of nearly 70% of all small businesses within this age cohort (Australian Bureau of Statistics 2003c). This profile has been relatively consistent over the past several years (see Table 1), with only a 2% shift in the gender balance of small business populations (Australian Bureau of Statistics 1997, 1999, 2001, 2003c, 2004a).

Table 1. Gender and age composition of Australian small business owners

Year	Under 30 Male (%)	30–50 Female (%)	Over 50 Male (%)	Overall Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
1997	64	36	63	37	69	31	65	35
1999	68	32	66	34	70	30	67	33
2001	65	35	65	35	72	28	67	33
2003	65	35	65	35	70	30	67	33

Source: Australian Bureau of Statistics (1997, 1999, 2001, 2003c)

The profile derived from our research project shows that hosted accommodation is dominated by older participants, with an average age of 57 for the total sample (n = 167). However, contrary to the gender balance of the wider small business community, a clear majority of hosted accommodation owners are female (66.5%) which was very similar to the results obtained by Getz and Carlsen (2000) who found that females accounted for 59% of owners in their study.

It is probable that the somewhat older cohort of business owners in hosted accommodation introduces an inverse gender bias towards female ownership. This is in part because; in the Western Australian population there are only 82 males for every 100 females in the over 65 age-range (Australian Bureau of Statistics 2004b). Women are living longer than

their partners, thus a number of related financial and social pressures are having an effect on the gender profile of hosted accommodation. Gender is clearly an important point of difference in hosted accommodation. Gender-based risk profiles and Australian farming social norms are also investigated in this chapter.

6 Success in Hosted Accommodation

In an earlier phase of this research the authors sought to derive some useful and parsimonious measures of success for hosted accommodation owners. Success was viewed in terms of intrinsic and extrinsic motivations/goals which have been investigated in varying ways by many prior studies (Andersson et al., 2002; Carlsen and Getz 2000; Getz and Carlsen 2000; Kuratko et al., 1997; Still et al., 2003). From this prior research phase, three main success measures were identified for use:

- A single item measure used by the ABS (Australian Bureau of Statistics 1997) of the owners' opinion of their success.
- A four-item scale proposed by Kaufman et al. (1996) which focuses on attainment of personal goals and financial goals through the business. This scale had previously been used and validated on hosted accommodation owners.
- Hall and Page (2002) describe one variant of the measurement of occupancy rates as basic occupancy, the percentage of rooms occupied daily. This study chose this basic occupancy as the appropriate measure of business success. A method was derived of reporting estimated occupancy rates on a month-by-month basis which accounted for months where the business was intentionally closed.

This chapter examines the success of rural versus urban businesses and of male versus female participants using the above success measures, reporting the significant differences, where apparent. Due to the size difference between the two groups, some of the mean differences reported do fall outside accepted parameters for t-tests of equality of means. However, the larger number of rural respondents in the sample allow for some interesting comparisons and observations to be made. In Table 2 the main differences apparent between rural and urban owners are presents.

The picture that emerges is one of rural hosted accommodation owners who earn little more than half the average annual return of their urban counterparts. This is despite possessing greater levels of business experience (often posited as a success correlate) and working longer hours in the

Table 2. Differences between urban and rural hosted accommodation owners

Variable or characteristic	Mean Urban	Mean Rural	Significance Two-tailed
Dependent children	0.23	0.45	0.085
Other businesses owned	0.34	0.49	0.168
Business experience (years)	11.49	15.27	0.048
Time spent networking with business associates (hours per month)	3.03	1.52	0.065
Annual sales estimate (dollars)	66,998	34,899	0.108
Hours worked in the business (per week)	27.15	32.48	0.228
Use of the Internet (%)	100	89	0.000
Urban: N = 35, Rural: N = 132			

business. It appears from the data that the rural hosted accommodation owner also has to contend with a reduced capacity to use business tools such as the internet, whilst supporting slightly larger families with fewer business networking opportunities.

Given all these imposts on the rural hosted accommodation owner, one might expect that they would have lower levels of satisfaction with their success. However, this was not evident across the total sample. Using the ABS measure of personal success (Australian Bureau of Statistics 1997) as well as the Kaufman personal success measure (Kaufman et al., 1996), very little difference, significant or otherwise existed between rural and urban participants.

7 Examining the Gender Differences in the Rural Businesses

If the analysis had been contained at the rural/urban level of aggregation it may have been tempting to surmise that owners of rural hosted accommodation generally were content to accept lower returns and cope with busier and more isolated lives, since no significant differences in intrinsic success levels (overall success or Kaufman’s success scale) between urban and rural respondents were detected. It may have been reasonable to propose

that in exchange for lower returns rural owners would derive the often-expressed lifestyle advantages that rural hosted accommodation business owners seek (Carlsen and Getz 2000; Hall and Rusher 2004; Kelly 2003).

However, a decision to segregate and focus on the responses of the rural respondents by gender depicts a different and somewhat disconcerting landscape. This picture is evidenced in Table 3 below where females involved in businesses have significantly less management or business experience, only two thirds of the personal net worth of their male counterparts and occupancy rates 16% lower than male respondents. Table 3 also shows that for whatever reason, females undertake less formal networking with community, charity and religious groups that are often considered to have influence and advantage in rural communities (Miller et al., 2001).

Table 3. Gender differences in rural hosted accommodation (t-test)

Variable or characteristic	Mean Male	Mean Female	Significance two-tailed
Age at last birthday	59	55	0.025
Number of children still dependent	0.42	0.47	Not significant
Number of children	2.67	2.25	0.049
Business experience: defined as years running your own business.	18.47	13.73	0.034
Management experience: defined as years of management experience.	23.42	12.76	0.000
Networking: contact with community, charity and religious groups (hours per month)	1.95	0.33	0.001
Satisfaction with present financial situation, a score of 0–10 with 10 being highest satisfaction and 0 lowest satisfaction (see Appendix 1)	6.47	5.51	0.021
Estimate of personal net worth (\$,000)	943	634	0.006
Overall success (reverse scored) 1 = highly successful, 3 = unsuccessful	1.70	1.92	0.035
Occupancy rate	29.14%	24.25%	0.068
Rural respondents N = 132, male = 43, female = 89			

Given these findings, how do females in rural hosted accommodation businesses rate their own success compared to their male counterparts? Not surprisingly, they are less satisfied, scoring significantly lower on satisfaction with overall success. They also express lower levels of satisfaction with their present financial situation.

It is interesting to note that females had significantly lower average personal net worth of \$634,000 compared to males who reported mean values of \$943,000. Given this real and sizeable inequality, females who owned hosted accommodation would still appear to be relatively financially well off, with the average personal net worth of all rural Western Australians being considerably lower at \$452,619 (Australian Bureau of Statistics 2006a).

Both male and female-hosted accommodation owners are in a stronger net personal wealth position than is the norm for rural Western Australia. However, measures of personal net worth can mask other financial tensions where some individuals are asset strong but income poor. An ancillary question in our research questionnaire enquired whether or not the respondent felt they had sufficient assets to fully retire. On this retirement readiness question, two thirds of females answered no (64%), whereas nearly half of the males surveyed answered yes (48.8%). A Chi Square examination of the expected counts revealed a two-sided significance of 0.157 indicating that the differences were significant. Having regard for their age, retirement intentions would be quite salient for male rural respondents with an average age of 59 and females of average age 55. It may be that the aforementioned asset rich but income poor scenario is evidenced here.

In the larger overarching study, a number of independent variables were utilized to isolate and investigate personal resources of the hosted accommodation owners which might be correlated with their age. Whilst these age relationships are not part of the analysis presented in this chapter, the core variables from this research did provide a further opportunity to investigate gender differences at a deeper level. Table 4 displays the core variables considered and their source within the literature is provided provided below so that the interested reader may investigate further.

There were a few significant correlations between the success measures used and gender of the rural respondents in the sample. Performance differences exist between females and males in entrepreneurship, but the relationships are complex (Fischer et al., 1993). The matrix of bivariate correlations of these personal resources and success measures was investigated for evidence of relationships in both the male and female subsets of rural hosted accommodation owners.

Table 4. Core personal resource variables, scale properties and source

Variable category	Scale utilised	Scale properties	Source
Personal health	Health status SF12 v 2 Physical and mental components	Twelve items which combine to give a summary health score ranging from 0 to 100	Ware et al. (2002)
Personal experience	Three items that measure business, management and industry experience	Ratio scales seeking years of experience in these roles, additive	Chandler (1996)
Personal financial resources	Satisfaction with access to financial capital (past)	Single item measure, 7-point interval scale	Wiklund and Shepherd (2005)
	Personal financial satisfaction (present)	Single item measure, interval scale (10 points)	Joo and Grable (2004)
Personal networks	Time spent in personal networks (summed score of the seven categories)	Ratio scale, hours spent with each network each month are summed to indicate total time spent in networks	Dodd et al. (2002)
Personal values	Frugality	Eight items Likert interval scale	Lastovicka et al. (1999)
	Commitment to marriage	Five items Likert interval scale	Johnson et al. (1999)
Business success	Room occupancy rate	Ratio measure, percent of rooms occupied (of average actual capacity)	Bull (1995)
Personal success	Summed score of four items 'Measure of Success'	Mean score on all four items must be greater than 2 and total score greater than 15, summed scale	Kaufman et al. (1996)

Some prior research on gender difference in small business has found that female-owned small businesses under-perform male-owned small businesses because they are less likely to have relevant management and entrepreneurial experience (Hisrich and Brush 1984). Other research on gender and performance where success is measured through firm survival does not support the benefit of management or business experience (Kalleberg and Leicht 1991).

The differences in management and business experience between genders in rural hosted accommodation were statistically significant in our sample and large in absolute terms. Males had nearly 5 years more business experience and over 10 years more management experience than females. However, an assessment of bivariate correlations between experience and success did not suggest any significant relationships. In fact, the only significant relationship was a modest inverse relationship between management experience and business success (occupancy rates) for the rural male respondents (-0.352 , significant at the 0.05 level). This was a perplexing result. Why would males with more management experience tend to operate rural hosted accommodation businesses that had lower occupancy rates? No explanation for this unexpected finding was apparent, it is an interesting yet counter-intuitive anomaly.

In further analysis of the bivariate correlation matrix of the variables in this study, the only noteworthy significant correlation for male rural respondents was a 0.400 Pearson's R (significant at the 0.01 level) between personal net worth and time spent in charitable and community networks. This relationship may well be related to philanthropic activities of successful owners rather than networking for business success per se.

Turning attention to the female subset of rural hosted accommodation owners, there were no significant bivariate relationships between the personal resources investigated and the success measures adopted. So, whilst differences were evident between males and females, any suggestion of a relationship between the differences and success is not possible.

8 Conclusions and Recommendations

This research highlights some very real and substantial differences in the characteristics of urban and rural hosted accommodation owners. The study also points to gender differences in a rural setting that deserve further and more focused attention. It would be inappropriate to attempt any further extrapolation of the findings to identify causal relationships from data which was collected for the purpose of identifying descriptive

characteristics. However, this chapter has shown that significant differences do exist between urban and rural hosted accommodation owners in Western Australia.

The most substantial differences between rural and urban owners related to the superior levels of business experience and greater annual sales that urban owners enjoy. The annual sales may be explained by the geographic advantages enjoyed by these urban locations, but there appears no logical explanation of the link between geographic location and levels of business experience. Other differences such as internet use, networking with business associates and hours worked in the business all favoured the urban owner of hosted accommodation.

From a closer investigation of the gender differences of rural respondents it was revealed that the females underperformed their male counterparts on the key business success measure of occupancy rates. If it were the case that females had different motivators and goals in business as suggested by others (Buttner and Moore 1997; King 2002), then this lower occupancy rate may not be a significant finding. However, the responses of the female owners themselves are suggestive of a real performance gap via a correspondingly lower satisfaction with their overall self-reported level of success.

If the position of Still et al. (2005) is taken (that few differences now exist between gender-based motivations and goals in small business) then it seems likely that real constraints to success may exist for rural females. The large difference between the resources available for males and females may be a factor, with rural males having nearly \$300,000 more in personal net worth. The relatively lower involvement of females in local community and charitable networks may be another contributing factor.

One limitation of this research that must be acknowledged is the very broad definition of 'rural' that has been adopted. This study adopts Australian Bureau of Statistics methodology for dividing rural and urban location. Whilst allowing closer comparison with national data on small business and farming families, it introduces new problems. Primarily this mismatch of definitions results in some regional cities being treated as rural in our results. In reality the owners of hosted accommodation in some of these regional cities may have much more in common with their urban counterparts. It is possible that had we reclassified these regional city businesses as urban that the gender differences in the more remote rural locations would have been greater still.

This rural/urban definitional limitation leads on to one area of potential future investigation – a better understanding of the existence of gender-based advantages or disadvantages in remote rural areas. The tyranny of

distance involved in such research in the vast and sparsely populated rural regions of Western Australia would be challenging. But then so are the difficulties faced by hosted accommodation owners in these same diverse and far-flung locations.

The research indicates that hosted accommodation in rural areas of Western Australia is not a very lucrative or satisfying business, particularly for women, yet perplexingly it is still quite a common choice. The marginal nature of many rural farming communities and businesses may be one factor resulting in the formation of low return businesses whose prime purpose is to add marginally to the farm income through greater use of farm infrastructure. It does appear that females are running a disproportionate number of these rural hosted accommodation ventures, with over two thirds of all hosted accommodation owner-managers being women. This is in contrast to the wider SME community where females only represent one third of all business owners.

Armed with such knowledge it would be tempting for some commentators to apply gender stereotypes and simply dismiss these businesses as hobbies and of no particular significance to local or wider economies. However, if (as the authors believe) these small hosted accommodation businesses are often born of necessity to support a farm that is in financial stress, then the phenomenon is worthy of closer investigation. Maybe there are some Australian small businesses in rural areas who were 'riding on the sheep's back' that are now relying on tourists as alternate transport?

A point that is acknowledged earlier in the chapter is the lack of distinction between truly rural environments and rural 'cities' in this study. The very fact that Western Australia is a relatively (by world standards) sparsely populated region allows us this latitude. However, it must be acknowledged that the nuances of urban tourism per se are not teased out from the data presented. This concern for a lack of a focus on urban tourism is well summed up by Professor Gregory Ashworth who points out that "The relationship between cities and tourism is asymmetrical. Cities are important to tourism but this does not automatically imply that tourism is important to cities" (Ashworth 2003, p. 157).

This study does indicate the need to further investigate the motivations and goals of the rural female entrepreneur in particular. It is hoped that subsequent studies in this area are able to shed light on why it is that rural female entrepreneurs seem to be underperforming their male counterparts and unhappy with this result. The authors suspect that there are altruistic motives to support the family and farm to 'keep it afloat' at play, this deserves further more targeted enquiry in the future.

References

- Andersson, T., Carlsen, J., Getz, D. (2002) Family business goals in the tourism and hospitality sector: case studies and cross-analysis from Australia, Canada and Sweden. *Family Business Review*, 15(2): 89–106.
- Ashworth, G. (2003) Urban tourism: still an imbalance in attention? In: C Cooper (ed.), *Classic Reviews in Tourism*. Channel View, Clevedon.
- Ateljevic, I., Doorne, S. (2000) Staying within the fence: lifestyle entrepreneurship in tourism. *Journal of Sustainable Tourism*, 8(5): 378–392.
- Australian Bureau of Statistics (1997) Characteristics of small business, Australia Cat. 8127.0, ABS, Canberra.
- Australian Bureau of Statistics (1999) Characteristics of small business, Australia Cat. 8127.0, ABS, Canberra.
- Australian Bureau of Statistics (2001) Characteristics of small business, Australia Cat. 8127.0, ABS, Canberra.
- Australian Bureau of Statistics (2003a) Australian social trends 2003, Cat. 4102.0, ABS, Canberra. http://abs.gov.au/Ausstats/abs@.nsf/_/2f762f95845417aeca25706c00834efa/cdcd7dca1f3ddb21ca2570eb00835393!OpenDocument. Accessed 25 April 2006.
- Australian Bureau of Statistics (2003b) Australian social trends, housing arrangements: home ownership across Australia, ABS, Canberra.
- Australian Bureau of Statistics (2003c) Characteristics of small business, Australia Cat. 8127.0, ABS, Canberra.
- Australian Bureau of Statistics (2004a) Characteristics of small business, Australia Cat. 8172.0, ABS, Canberra.
- Australian Bureau of Statistics (2004b) Newsletters – Age matters – Issue number 9, ABS, Canberra. www.abs.gov.au/Websitedbs/D3110129.NSF/f128006d2dle7c10ca2566fd0081ba4b/be016449e17c40f1ca25ed2001c77a3. Accessed 20 April 2006.
- Australian Bureau of Statistics (2006a) Household wealth and wealth distribution, Australia, 2003–04, Cat. 6544.0, ABS, Canberra.
- Australian Bureau of Statistics (2006b) National regional profile: explanatory notes, ABS, Canberra, 16/1/2006. <http://www.abs.gov.au/ausstats/abs@.nsf/exnote/1379.0.55.001#Remoteness>. Accessed 7 February 2006.
- Baucus, D., Human, S.E. (1994) Second career entrepreneurs: a multiple case of entrepreneurial processes and antecedent variables. *Entrepreneurship Theory and Practice*, 19(2): 41–60.
- Birley, S. (1989) Female entrepreneurs: are they really different? *Journal of Small Business Management*, 27(1): 32–37.
- Bull, A. (1995) *The Economics of Travel and Tourism*, 2nd edn. Longman Australia, Melbourne.
- Buttner, E.H., Moore, D.P. (1997) Women's organizational exodus to entrepreneurship: self-reports motivations and correlates with success. *Journal of Small Business Management*, 35(1): 34–45.

- Carlsen, J., Getz, D. (2000) Relatively speaking: business goals and operating issues for rural, family owned/operated tourism and hospitality businesses. In: Proceedings of the International Council for Small Business (ICSB), June 2000, Brisbane.
- Chandler, G.N. (1996) Business similarity as a moderator of the relationship between pre-ownership experience and venture performance. *Entrepreneurship Theory and Practice*, 20(3): 51–64.
- Clark, R.L., Quinn, J.F. (2002) Patterns of work and retirement for a new century. *Generations*, 26(2): 17–24.
- Creagh, M. (2004) Desperation and inspiration: towards a typology of the older entrepreneur. In: Proceedings of the 34th EFMD EISB Conference: New Economy Comes of Age, 8–10 September, Turku, Finland.
- Dodd, S.D., Jack, S., Anderson, A.R. (2002) Scottish entrepreneurial networks in the international context. *International Small Business Journal*, 20(2): 213–219.
- Fischer, E.M., Reuber, A.R., Dyke, L.S. (1993) A theoretical overview and extension of research on sex, gender and entrepreneurship. *Journal of Business Venturing*, 8: 151–168.
- Getz, D., Carlsen, J. (2000) Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism Management*, 21(6): 547–560.
- Hall, C.M., Page, S.J. (2002) *The Geography of Tourism and Recreation*, 2nd edn. Routledge, London.
- Hall, C.M., Rusher, K. (2004) Risky Lifestyles? Entrepreneurial Characteristics of the New Zealand bed and breakfast sector. In: R Thomas (ed.), *Small Forms in Tourism: International Perspectives*. Elsevier, Oxford.
- Hisrich, R.D., Brush, C.G. (1984) The women entrepreneur: management skills and business problems. *Journal of Small Business Management*, 22(1): 30–37.
- Hughes, K. (2003) Pushed or pulled? women's entry into self-employment and small business ownership. *Gender Work and Organization*, 10(4): 433–454.
- Jennings, G., Stehlik, D. (1999) The innovators are women: The development of farm tourism in central Queensland, Australia. In: Proceedings of the International Society of Travel and Tourism Educators Annual Conference, Vancouver, Canada.
- Johnson, M.P., Caughlin, J.P., Huston, T.L. (1999) The tripartite nature of commitment: personal, moral, and structural reasons to stay married. *Journal of Marriage and Family*, 61(1): 160.
- Joo, S.H., Grable, J.E. (2004) An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, 25(1): 25–50.
- Kalleberg, A.L., Leicht, K.T. (1991) Gender and organizational performance: determinants of small business survival and success. *Academy of Management Journal*, 34(2): 136–161.
- Kaufman, T.J., Weaver, P.A., Poynter, J. (1996) Success attributes of B & B operators. *Cornell Hotel and Restaurant Administration Quarterly*, 37(4): 29–33.

- Kehl, D. (2002), Research Note 22 (2001) Superannuation preservation rules: a summary. Economics, Commerce and Industrial Relations Group, Federal Government of Australia, 13/2/2002. Accessed 15 May 2003.
- Kellard, K., Legge, K., Ashworth, K. (2004) Self-employment as a route off benefits, Research report No. 177. Department of Work and Pensions Research, London.
- Kelly, M. (2003) Break out into an awesome B&B. *The Australian, Personal Investor*, 8 May: 12 (Investor Liftout).
- King, S. (2002) Entrepreneurs' measure of success: is it more than profits? In: *Proceedings of the 47th World Conference of the International Council for Small Business (ICSB)*, SBANC University of Central Arkansas, 16–19 June, San Juan, Puerto Rico.
- Kuratko, D.F., Hornsby, J.S., Naffgizer, D.W. (1997) An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, 35(1): 24–33.
- Lastovicka, J.L., Bettencourt, L.A., Hughner, R.S., Kuntze, R.J. (1999) Lifestyle of the tight and frugal: theory and measurement. *Journal of Consumer Research*, 26(1): 85–98.
- Lynch, P. (1998) Female microentrepreneurs in the host family sector: key motivations and socio-economic variables. *Hospitality Management*, 17(3): 319–342.
- Miller, N.J., McLeod, H., Oh, K.Y. (2001) Managing family businesses in small communities. *Journal of Small Business Management*, 29(1): 73–87.
- Pini, B. (2005) The third sex: women leaders in Australian agriculture. *Gender Work and Organization*, 12(1): 73–88.
- Platman, K. (2002) The myths and realities of the portfolio career for experienced, older professionals. Economic and Social Research Council (ESRC). WWW3.open.ac.uk/events/200252/59184_01.doc. Accessed 6 August 2003
- Quinn, J. (1996) The role of bridge jobs in the retirement patterns of older Americans in the 1990s. In: *Proceedings of the International Association for Research in Income and Wealth Conference*, 16–23 August, Lillehammer.
- Still, L.V., Soutar, G.N., Walker, E. (2003) Differences in the start-up goals and later satisfaction of women small business proprietors in Western Australia: a comparison across years. In: *Proceedings of the 17th Annual ANZAM Conference*, 2–5 December, Fremantle, Western Australia.
- Still, L.V., Soutar, G.N., Walker, E. (2004) Generational differences in the start-up goals and later satisfaction of women small business proprietors. *Small Enterprise Research*, 12(1): 71–79.
- Still, L.V., Soutar, G.N., Walker, E. (2005) The impact of gender and generation on the start-up goals and satisfaction of home-based and commercial enterprises. *Small Enterprise Research*, 13(1): 72–79.
- Stringer, P (1981) Hosts and guests: the bed and breakfast phenomenon. *Annals of Tourism Research*, 8(3): 357–376.
- Wall, G., Norris, J. (2003) Gender and tourism. In: Cooper (ed.), *Class Reviews in Tourism*. Channel View, Clevedon.

- Ware, J.E., Kosinski, M., Turner-Bowker, D.M., Gandek, B. (2002) How to score version 2 of the SF-12 health survey. Quality Metric Incorporated.
- Watson, J.T. (2003) SME performance: does gender matter? In: 16th Annual Conference of Small Enterprise Association of Australia and New Zealand, 28 September – 1 October 2003, Ballarat, Victoria.
- Wiklund, J., Shepherd, D. (2005) Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1): 71–91.

Universidad Social Capital and the Competitiveness of Entrepreneurs: A Review of the Literature and Proposals

Mariel Fornoni, Francisco Mas-Verdú, Domingo Ribeiro Soriano
and Salvador Roig Dobón,

Universidad Nacional de Mar del Plata, Buenos Aires, Argentina

Universidad Politécnica de Valencia, Valencia, Spain

Universidad de Valencia, Valencia, Spain

Universidad de Valencia, Valencia, Spain

1 Introduction

Sources of value creation in organizations are normally separated into three different types: financial capital (money, bank reserves, lines of credit); human capital (natural qualities such as intelligence and good health combined with skills acquired via formal education in the professional field); and social capital – relationships with colleagues, friends or contacts through which opportunities open up for using financial and human capital (Burt 1992).

In management literature, the concept of social capital has received notable attention over recent years. The underlying basis of the theory of social capital rests on the idea that social networks constitute a fundamental resource for doing business (Burt 1992; Nahapiet and Ghoshal 1998). These networks allow entrepreneurs to expand their field of action, to become more efficient and to access exclusive opportunities (Batjargal 2003). Equally, for some workers, their social capabilities have allowed them to obtain a good job or to find a better one (Granovetter 1973; Ibarra 1995; Lin and Dumin 1986). Social capital can lead to professional success for mid or top level managers by strengthening their degree of power and status (Belliveau et al., 1996; Burt 1992, 1997; Leana and Van Buren 1999).

The essential question asked in this study is “How can social capital become a competitive tool for entrepreneurs”. The answer lies in showing how their own networks can provide the value and competitiveness that entrepreneurs need for their business projects.

This chapter is structured as follows: firstly, a review of the concept of social capital is presented. Secondly, the sources, types and levels of social capital are discussed from different approaches, as well as different means of measuring social capital with a view to associating different levels of social capital with the performance of entrepreneurial projects. The chapter ends with a series of proposals and conclusions.

2 What is Social Capital?

The topic of social capital has come to represent a line of research of enormous interest for economists, political scientists and sociologists in recent years. An ever-increasing number of research articles, book chapters, entire books, citations and Internet sites in the last 10 years bear witness to this fact, though this growth has not been equalled by a greater clarity of the concept. As Paldam puts it, “social capital is close to becoming a concept common to all branches of science ...” (2000, p. 631).

The term social capital was first used in a study by Hanifan in 1916. He argued that performance in rural schools could be attributed to “...those tangible substances that count for most people in their daily lives: good will, commitment, kindness and social interaction between individuals and families that make up a social unit...” (1916, p. 130).

However, without a doubt, one of the major precursors was James Coleman (1988, 1990) with his seminal works “Social capital in the creation of human capital” and “Foundations of social theory”. In his approach, the social context is characterized by the organization of relations between the actors, in other words, social structures. These structures obtain the resources that constitute social capital. For Coleman, capital does not come from a decision that seeks to make profits in the future, but from other activities, thus making it more of an external factor that enables the actions of individuals (1988, p. 118).

The clearest example laid down by Coleman is the way that the diamond market in New Cork functions. This example contains all the elements of Coleman’s perception of social capital: the existence of profit more easily obtained through interaction based on trust (economy of transaction costs), a relatively closed community, sufficiently strong relationships for opportunist behaviour to be rejected and diffused, and unwritten rules concerning honesty associated with strong enough sanctions, such as exclusion from the community.

Although Coleman does not contribute to the development of the concept, his works are considered to be pioneering.

Another of the great precursors of this topic of social capital is Robert Putman. A Harvard politologist, and fine public speaker, he had the ability to link the concept of social capital with the more up-to-date problems of public policy, and became one of the authors that has contributed most to the diffusion of the concept. From among his many contributions, the first "Making Democracy Work", in 1993 (Putman et al., 1993), constitutes seminal research on the conditions under which political institutions obtain performance. In his study, he presents the results of research in the 1970s on the institutional performance of 20 Italian regions.

In 1995, in his study "Bowling alone: America's declining social capital", Putman addresses three important ideas: mapping the symptoms of the decline of social capital, showing the benefits associated with the possession of a high degree of social capital and taking action that will foment research into social capital to continue. The underlying conceptualization of his work can be encapsulated in the following lines: "... social capital refers to characteristics of the social organization such as networks, norms and social trust that enable coordination and communication, enhance reputations and thus allow the dilemmas of collective action to be resolved (...) finally, dense networks of interaction develop within the participant a feeling of being oneself, developing the 'I' in 'us', leading the participants to experience collective advantages" (1995, p. 67).

In his work "Bowling Alone: the collapse and revival of American community" (2000), Putman proposes a different definition from the one that appears in the 1993 study, as he brings the same notions into play but in reverse order, thereby eliminating an immediate reference to the beneficial effects: "... Just as physical or human capital can increase productivity (individual and collective), social contacts can also affect the productivity of individuals and groups" (2000, p. 18).

Another important figure at the forefront of research into social capital has been Francis Fukuyama (1995), who presents a remarkably simple theory: a nation's capacity to develop the institutions that will drive it forward depends upon its population's inclination for trust, whose origin can be found in values that are inherent in that nation's culture. For Fukuyama, social capital is defined as "...an asset born from the predominance of trust in a society or in certain sectors of society... Social capital differs from other forms of capital in that it is normally created and transmitted through cultural mechanisms such as religion, tradition or past behaviour" (1995, p. 36). Fukuyama's work fundamentally focuses on dividing the world's nations into two types of countries: high trust nations

and a group of countries with a majority of small family or state-owned businesses, labelled as low trust countries.

Pioneering authors refer fundamentally to a macro level of analysis, i.e., one that addresses the social capital that forms the structure of relationships in society, leaving, on the one hand, a system of trust, institutions, norms and social networks and, on the other, organizations that make up the interactions of agents in a social context. All these factors constitute an asset for the individual and collective production of social welfare.

However, social capital must also be associated with other levels of analysis, where its composition is highly important: firstly, in the framework of firms and organizations, where a particular composition of social capital can optimize growth; and secondly, for individual social capital and, in our specific case, for the social capital of the entrepreneur.

When talking of social capital at an organizational level, we refer to capital that is generated in the relationships established by the members of an organization for collective action and can be observed at an individual level between firms, between and within units and firms.

A pioneering study in relation to intrafirm organizational social capital was provided by Nahapiet and Ghoshal (1998), who analyze the advantages for an organization that has the capacity to create and share knowledge. For these authors, social capital enables the creation of new organizations of intellectual capital. Depending on their ability to construct denser social capital, they will be able to obtain advantages over other firms in terms of creating and sharing intellectual capital. This study constitutes a suitable framework for understanding the creation of value in networks within a firm. Social capital thus considers the network and the assets that can be mobilized through that network (Bourdieu 1986; Burt 1992).

Tsai and Ghoshal (1998) subsequently applied the framework developed by Nahapiet and Ghoshal to apply it to a multinational electronics firm. They analyzed relations between 15 business units of the multinational, investigating four resources produced by the network: information, products, staffing and support services. Social interaction, a manifestation of the structural dimension of social capital, and trust, a manifestation of its relational dimension, were positively related to the degree of the exchange of the resource in question, which had a significant effect on product innovation. Figure 1 synthesizes the conceptual model applied by these authors in their research.

Leana and Van Buren (1999) studied social capital among firms, particularly in terms of employment practices. They introduce the term organizational social capital, at the same time as developing a model on its components and consequences.

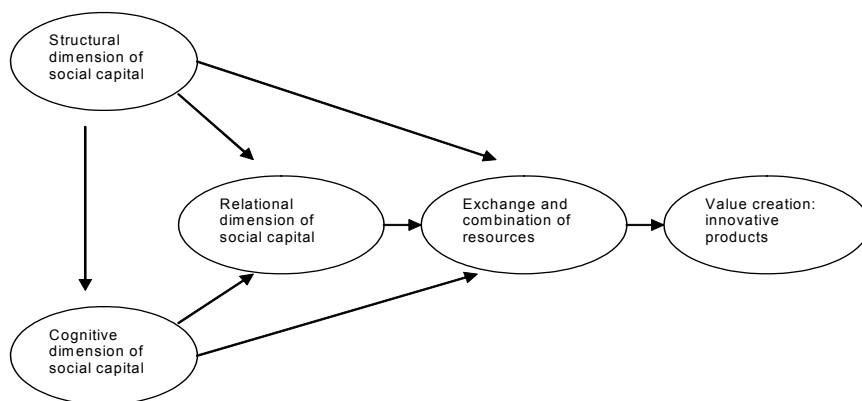


Fig. 1. Model of social capital and value creation from the model of Tsai and Ghoshal. Source: Adapted from Tsai and Ghoshal (1998)

The different streams that analyze the concept of social capital can be placed into two groups: (a) those that define it as a public value, where the benefits arise from the social structure itself (Coleman 1988; Fukuyama 1995; Putman 1993); (b) those that consider it to be a private value whose results are for the benefit of the owner of that social capital (Burt 1992; Lin et al., 1981).

Leana and Van Buren define organizational social capital as an "...attribute of the organization..." (1999, p. 540), i.e., as an asset that may benefit both the organization and its members. Despite the fact that these authors also ponder the costs associated with the creation and maintenance of social capital, this aspect is not analyzed through empirical studies.

From amongst the more notable research on organizational social capital at an interfirm level, it is essential to mention the work of Uzzi (1997), who develops a systematic understanding of the articulation of networks in the organization. Uzzi carried out an ethnographic study by analyzing 23 entrepreneurial firms in the women's clothing market in New York, where competition is extremely high, there are thousands of firms, and the barriers to entering the sector are relatively few. The conclusions of this study show that relations have three main components that regulate the expectations and behaviour of exchange between the different parties: trust, the transfer of detailed information and resolving common problems.

Table 1 summarizes some of the research on the creation of the value of social capital within the framework of organizations.

Table 1. Summary of research on the creation of the value of organizational social capital

Researchers	Sources of value creation	Type of network	Industry	Size
Nahapiet and Ghoshal (1998); Tsai and Ghoshal (1998)	Product innovation	Intra	Electronics	Multi-national
Leana and Van Buren (1999)	Flexibility in the workplace Collective organization Intellectual capital intellectual	Intra	No empirical study	
Yli-Renko (1999)	High performance: new product development, reputation and technological advantages	Inter	Pharmaceutical industry, communications, electronic instruments	Sales of between 5 and 26 million pounds
Walker et al. (1997)	Growth in industry	Inter	Biotechnology	Start-ups
Uzzi (1997)	Information exchange Learning	Inter	Fashion industry	Medium-sized and large
Zaheer, McEvily and Perrone (1998)	Avoiding conflict Reduction of negotiation costs	Inter	Electrical equipment for manufacturers	All
Goes and Park (1997)	Innovation	Inter	Hospitals for the treatment of acute patients	All
Singh (1997)	Moderation of technological changes in high tech	Inter	Software industry for hospitals	All
Shan, Walter and Kogut (1994)	Innovation	Inter	Biotechnology	Start-ups
Deeds and Hill (1996)	Acceleration of product development	Inter	Biotechnology	All

Source: Author's own work

As opposed to the approaches mentioned above, other studies have attempted to analyze the motivations of individuals for using social capital and for investing in its use. From an individual perspective, the emphasis lies on the potential benefits individuals may acquire from their network of formal and informal ties with others.

The leading author of this line of research is Ronald Burt (1992), beginning with his study "Structural holes, the social structure of competition". In this study, he considers social capital to be a private value, pertaining to each individual. This study by Burt (1992) also clearly shows the role played by particular points in a network when creating competitive advantages. These are points where the nodes and their occupants converge with information that is unlikely to be accessed by other means. They represent valuable capital for those that find themselves in a particular structural position. Burt's study (1992) explains why an actor that occupies a point in a network with its corresponding series of contacts, may have a competitive advantage over others, obtaining better returns for their investments. The agent thus "... describes the way in which social structure generates imperfect competences, creating entrepreneurial opportunities for certain actors and not for others" (1992, p. 8).

In short, social capital appears as a metaphor for advantage (Burt 2001). When certain individuals, or groups of individuals, obtain better returns for their efforts, it may be supposed that such inequality is the result of the fact that such people are more skilled or more highly qualified. The social capital approach suggests that an individual, or group of individuals, has better connections (Burt 2001). In this sense, social capital becomes a contextual complement for human capital.

Burt's theory (1997), supported by the more recent article by Bolino et al. (2002), contributes contingent value to social capital. In other words, decisions taken by individuals have a fundamental impact on the development of social capital and the behaviour of members in an organization founded on honesty, obedience and social participation and contribution to the development of that organization.

Therefore, from a review of the scientific literature on social capital, research can be classified into three levels: (1) some research focuses on a macro level, with regard to society, country or region (2) a second group deals with a meso or organizational level (3) lastly, the third grouping adopts an individual or micro level at which to analyze social capital. The graphic below (Fig. 2) is a synthesis of these groups of studies, characterized according to the classification of the level of analysis.

In addition, it should be stated that, in recent years, a stream of research has emerged that attempts to explore the possible negative or undesirable effects caused by certain forms of social capital.

Portes (1998) shows that certain social networks, such as those developed by terrorist or mafia groups, can use social capital for destructive ends. This author also presents other examples of possible negative consequences of social capital such as excessive demands on members or taking advantage of the success of a particular group via restrictions on individual

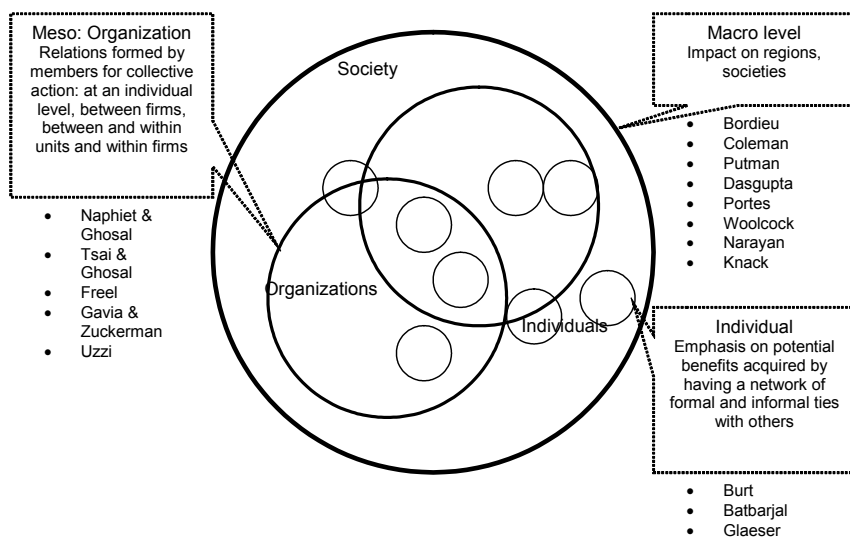


Fig. 2. Summary of levels and contributions to social capital. Source: Author's own work

freedom and the possible tendency to place certain norms at a level that can hinder the full participation in their social lives of members of a particular oppressed group (1998, p. 15).

3 Social Capital, can it Really be Considered a Type of Capital?

Different outlooks can be found with regard to this question. Indeed, some prestigious economists see the concept of social capital with some scepticism, for Arrow (2000), Dasgupta (2000) or Solow (2000).

Solow (2000) is extremely critical of the concept and the way it is used; he not only stated that the concept of social capital is inapplicable to economic fields, but also that, hitherto, only vague ideas and the occasional empirical study have been produced. Generically, "capital" is an action resulting from production factors from which productive returns can be expected within a certain time, which cannot be said of social capital, and thus its conceptualization as capital is a poor analogy. Solow claims that "...In relation to social capital, trust... there is a profitability in terms of added productivity. But can we really think of social capital as a type of capital? How might an accountant measure and accumulate this capital? I have never asked so many rhetorical questions in all my life..." (2000, p. 19).

Arrow (2000) maintains that the metaphor of capital should be abandoned within the context of the notion of “social capital”, as the term “capital” implies three aspects: a length of time; a deliberate sacrifice made in the present in order to obtain future advantages; and alienability. This last concept cannot be applied to social capital. He also believes that social networks are essentially formed for reasons other than economic ones, aside from the value that their participation in the network may represent (2000, p. 17).

Some researchers claim that social capital can be invested in with the expectation that it will generate benefits in the future, in just the same way as other types of capital do, although perhaps with more uncertain returns (Putman 1995). Moreover, just as happens with other types of capital, social capital can be appropriated (Coleman 1988) and converted (Bourdieu 1986), for example, in cases where social capital can be transformed into another type of capital thanks to a position held in a particular network that provides both economic advantages as well as others. It will, of course, be less liquid than other forms of capital, but in a similar way to other types, social capital can be substituted or complement other resources (for example, reducing transaction costs).

Similarly to human (though not economic) capital, social capital needs upkeep and does not possess a foreseeable indication of depreciation. Social capital can become devalued both by over-use and by a lack of it, and in some cases it can become obsolete due to influential contextual changes (Adler and Kwon 2002).

Other researchers, though, hold a favourable view of regarding social capital as another type of capital (Glaeser et al., 2000; Knack and Keefer 1997). As Grootaert and Van Bastelaer (2002) point out “... it is the only form of capital that cannot exist at the heart of a Robinson Crusoe-style economy, at least until the arrival on the island”.

In his latest study, “Social Capital, a theory of social structure and action”, Lin (2001), places social capital within the family of capital theories (classical and neo-classical theories). The evolution of capital theory in the last four decades has paved the way for a new theory labelled the neocapital theory, which includes human, social and cultural capital. “Human capital, which supposes that capital can rest on individual labour, goes all the way back to Adam Smith, who included all acquired, useful capabilities in a country’s population as part of its capital (1937)” Lin (2001, p. 9).

Table 2 shows some of the differences between economic capital and non-economic capital, which includes social capital.

Table 2. Differences between economic and non-economic capital

Characteristics	Economic capital (financial, physical)	Non-economic capital (human, social)
Control	Ownership	Shared
Rationale	Speculation	Social (genuine)
Tangibility	Tangible	Intangible
Transferability	Transferable	Non-transferable
Dynamics	Static	Dynamic
Duration	Decreases with use	Increases with use

Source: Author's own work

Summing up, this section could be concluded by stating that, in our opinion, in light of the review carried out, social capital does enter into what might be called the heterogeneous family of types of capital (Arrow 2000). Whether this is a correct assumption or not, the specificities of this capital require the development of "ad hoc" methodologies in order to carry out measurement and analysis.

4 Measurement of Social Capital

The concept of social capital has undergone a notable evolution, largely due to empirical verification that associates the presence of a large stock of social capital with diverse, positive social and economic results. However, paradoxically, there is no consensus of opinion on how to carry out these assessments, a difficulty that is not unlike that experienced by the field of social sciences.

The measurement of social capital has, in fact, become a challenge in recent times, so much so that the OECD and the World Bank have taken the initiative of organizing an international working group with the aim of reaching a consensus on a series of indicators that will allow them to obtain a homogenous measurement. Such a task is hindered by the multidimensional character of the concept, which incorporates different levels and units of analysis and by the fact that the nature and forms of social capital vary over time.

Despite all this, several studies have addressed the issue. At a macro level of analysis, research by Putman (2000), in relation to the differences observed in social capital in the US, is based on both longitudinal and transversal approximations. His measurements of social capital are based on indices made up of different elements: degree of participation in organizations and the life of citizens, participation in public or voluntary life, informal, social ties and subjective levels of trust between individuals.

The World Bank has attempted to carry out measurements using surveys. For example, Narayan and Pritchett (1997) designed a measurement instrument used in an empirical study performed in rural Tanzania from data obtained on capital and poverty (SCPS).

Another means of evaluating variations in social capital consists of measuring the absence of social cooperation. Fukujama (1995) attempted to make these measurements via the evolution of certain indirect indicators. These studies suffer from a lack of clarity and moreover, run the risk, at times, of confusing the origins with the consequences.

One of the instruments that has had the greatest repercussion on the measurement of social capital is that of the World Value Survey, carried out by Ronald Inglehart, who gathered data from 43 different societies in order to understand the role of cultural and political factors in economic development. Some researchers into social capital, such as Knack and Keefer (1997) demonstrated the existence of a strong relation between generalized levels of trust and levels of investment in 29 countries.

Another measurement instrument is that of the New South Wales Study, developed by Onyx and Bullen (1997). It is a practical means of measurement applied in the state of New South Wales (Australia) in which eight underlying factors were isolated when analyzing the make-up of social capital: participation in the community, proactiveness in the social context, a feeling of trust and security, connections with neighbours, family/friends and work colleagues, tolerance towards diversity and valuing life. Focusing on scores for the social capital of individuals, the authors predict which area individuals belong to.

The Barometer of Social Capital (BARCAS), designed by John Sudarsky (1999), largely based on the WVS and applied in an empirical study in Colombia, functions in two dimensions: social capital and trust in sources of information. Using factorial analyses, he finds eight dimensions included within the factor of social capital: institutional trust, civic participation, reciprocity, horizontal relations, hierarchies, social control, civic republicanism and political participation.

Figure 3 shows the key variables considered in studies on the dimensions that make up the construct of social capital.

There are also studies that attempt measurements at an organizational and individual level. The analysis of networks studies the structural aspects of social connections. According to network researchers, the individual is the focus of attention and the reference point. Amongst the most frequently used methods for these approximations is that of saturation and surveys according to name, position or post. The saturation-based approach can only be used in studies of succinct or highly delimited cases, because researchers must be totally familiar with the plan of relations. With regard to large

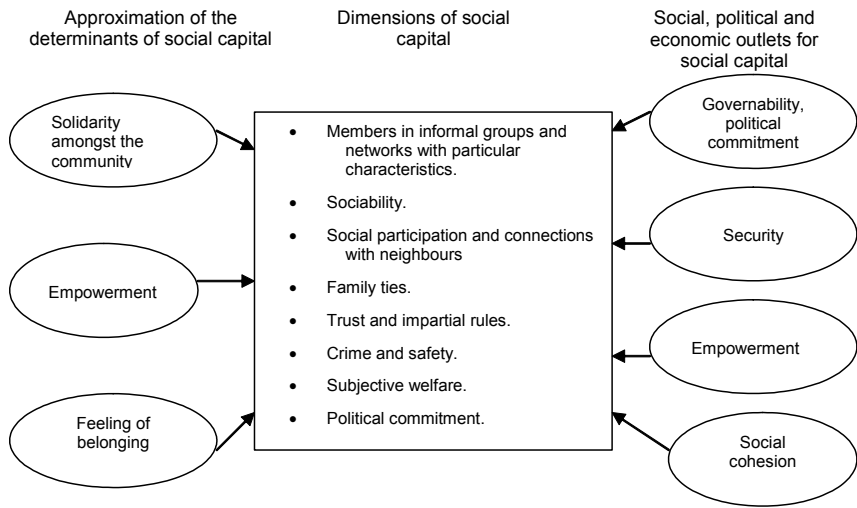


Fig. 3. Key dimensions that make up the construct of social capital. Source: Adapted from Narayan and Casidy (2001, p. 65)

networks, the individual represents the reference point from which diverse personal relationships can be assessed. In the use of the technique of survey by name, individuals are asked to describe their interpersonal ties and relationships, which provide information on the available resources in those networks. The technique of survey by position consists of asking individuals whether they know the people that occupy specific positions or predetermined types of post, adjudged to be important for accessing certain resources in a particular context.

Defenders of the analysis of networks maintain that these approximations are the only means of measuring. As Lin puts it, “without the approximation of social capital to social networks and the resources that go with them, the concept is in danger of evaporating” (2001, p. 23). Detractors claim that the field of interest in network analysis is limited and ignores essential qualitative and contextual dimensions for understanding and explaining social phenomena.

A field where notable advances have been made, thanks to the work of Glaeser et al. (2001), is in assessing the individual investment required for social capital. Researchers analyze the formation of social capital using a mathematical model that allows individual investment decisions to be optimized. Several proposals are put forward in their study (rational investment in social capital is higher in jobs where greater social skills are necessary); social capital decreases in accordance with the likelihood of mobility; people that invest in human capital also normally invest in social capital, etc.).

These empirical, diverse and contradictory solutions clearly show up a certain weakness in the theoretical framework that could boil down to a circular mode of reasoning that comes close to tautology. As Paldam put it: "... The dream of social capital tells us that social capital is robust. If social capital is as important as it suggests, it would be a good idea for the majority of differing definitions to attach themselves to a 'flowering rock', so that they all address aspects of the same story ..." (2000, p. 631).

Such thoughts make it necessary to continue working on a finding a more homogeneous means of measurement. On his website, Putman¹ states, "Why measure social capital?: There are three reasons, the first is that measuring social capital will help to make it appear to be more tangible (for those that consider it too abstract); it will also allow us to vindicate investment in social capital, as a model where performance is the main criterion for investment in resources shows that the performance of social capital will increase interest for possible investors; and, lastly, it will show us in what kind of actions are worth investing in for the creation of more social capital".

5 Social Capital and Competitiveness for Entrepreneurs

5.1 Entrepreneurs and Competitiveness

The study of the entrepreneurial function and the creation of new business can be approached from varying theoretical perspectives (economic, psychological, institutional and managerial; see Fig. 4) (Veciana 1999). Obviously, this chapter is rooted in the socio-cultural or institutional level, dimensionally close to the micro or individual level, i.e., from the perspective of the entrepreneur.

According to Veciana (1999), theories that can be included within the socio-cultural or institutional approach have a solid, common nucleus: "the basic assumption that the decision to run one's own business, and therefore the creation of new firms, is conditioned by external or environmental factors. In other words, it is the socio-cultural factors or the institutional framework that determines entrepreneurial spirit and new firm creation in a given place and time". (1999, p. 21). On an individual or micro level, still within the socio-cultural approach, key researchers mentioned by this author are Birley (1985), Aldrich and Zimmer (1986), Johannisson (1986),

¹ See <http://www.ksg.harvard.edu/saguaro>.

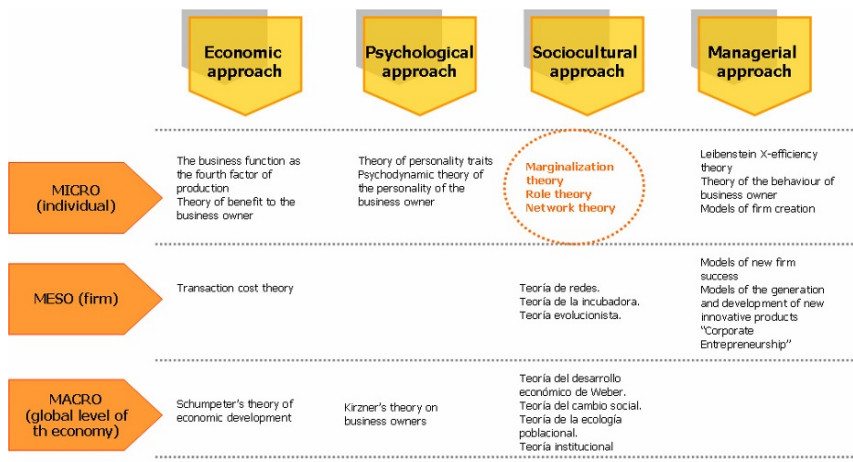


Fig. 4. Theoretical approaches to the entrepreneurial function. Source: Veciana (1999)

Aldrich et al. (1986) and Aldrich et al. (1987). The basic idea is that the entrepreneurial function is inserted and developed within a network of social relationships. New firm creation is enhanced or constrained by a complex labyrinth of relations between the future entrepreneur, available resources and opportunities. This approach is thus of particular interest as it is based more on the idea of cooperation and trust than on competence and distrust.

As a starting point, the entrepreneur can be understood as an individual entrepreneur-business owner of an SME who starts up a project originated from an idea that he/she attempts to impose on the market, driven by a strong centralization and personalization via strategic management. According Aldrich and Zimmer (1986), the phenomenon of new firm creation should be understood as a dynamic process, a function of structures of opportunity and motivated entrepreneurs with access to resources. Therefore, firm creation constitutes a “phenomenon incrustated within networks of continuous social relations” (1986, p. 8) that can enable or hinder the process of firm creation through links between potential entrepreneurs, resources and opportunities.

The omnipresence of the firm’s management may help to explain the fact that networks of relations in SMEs are derived from those of the entrepreneur. Indeed, it is thanks to the relations that entrepreneurs maintain with the parties involved that the firm gains access to its first customers, obtains key information, gains access to new markets and looks for the necessary funding for growth and development. In line with these idea, Aldrich and Davis (2000) claim that “under the competitive conditions of

modern economies, resources directly controlled by owners are insufficient for ensuring the survival and growth of small firms. Consequently, for some opportunities, entrepreneurs need to supplement what they personally control by using social capital” (2000, p. 2).

Therefore, entrepreneurial social capital can be defined as the added value that facilitates the network of relations for the entrepreneur; the relational links that make up their social network. This social capital can be looked at (and therefore measured) at different moments: once at the beginning of the entrepreneurial project or firm (M1), i.e., the entrepreneur’s ties and contacts established before starting up the firm, for example, via family or contacts from school/university, or when the firm is up and running; while the firm is carrying out its activities (Mn).

The analysis of M1 is more closely linked to qualitative aspects of the entrepreneurial function, where the success or failure of the entrepreneur does not depend on psychological or personality traits.

The following variables are used by Cuervo (2003) in a similar vein when summarizing the most relevant variables for producing entrepreneurial capabilities: “personal and group characteristics, family and group environments, the values and culture of a society, the institutions and their functioning, the model of training used, the system of science and technology, the actions of the state and the reward system” (2003, p. 57).

Thus, how do entrepreneurs really obtain a competitive advantage?

In an attempt to answer this question, Burt (1992) carried out an analysis of what he calls “structural holes”, which exist when complementary resources can be found in places in the network that have weak connections or are unrelated. Those actors (entrepreneurs) who are in a solid position and are capable of connecting them with other sites in the network will enjoy significant competitive advantages, as they are able to construct closer connections, obtain synergy from complementary resources, and build advantages from the productivity that stems from their position. According to Burt, these actors possess sizeable social capital. This is an additional element to the classic Schumpeterian analysis. Schumpeter (1975) claimed that the function of business was to reform or revolutionize the pattern of production by exploiting an invention. The more entrepreneurs can act in an innovative way, the more they can take advantage of the structural holes and turn them into opportunities for their entrepreneurial projects.

The idea that entrepreneurial opportunities (which generally refer to the absence or excess of demand for a particular product) are to be found in gaps that exist in the market is not a new one. However, economic theory offers scarce explanation for the variety and performance of each entrepreneurial project. For example, why do some successfully initiate and maintain a new firm while others fail? In Burt’s theory in relation to structural

holes, he puts forward the following explanation: “much of competitive behaviour and its outcomes can be understood in terms of the access of particular locations to those holes... in the competitive arena. This is why structural holes are entrepreneurial opportunities for accessing information, coordination and control. Entrepreneurs who manage to gain access to a variety of social connections probably enjoy a higher level of structural autonomy and competitive advantage”. (1992, p. 12). If we consider three players: A, B, and the entrepreneur, the entrepreneur will be in a structural hole when the three following conditions are present: (1) A and B have no direct contact with each other; (2) A and B possess different types of information; (3) the entrepreneur has contacts with both A and B. The entrepreneur acts by bringing demands and preferences into conflict and constructs value from that discord (Burt 1992, p. 34).

The role of networks and the establishment of a network have also been adopted as a means of understanding entrepreneurial behaviour, both at the start-up stage of new firms (Aldrich and Zimmer 1986), and in their subsequent development and growth. Johannisson (1986) proposed a paradigm in the establishment of a network and the process of starting up a new firm: entrepreneurial behaviour in establishing a network is likely to affect the potential success of the firm.

Figure 5 shows the three dimensions of the analysis of networks (availability, and diversity; nature; quality of links) that an analysis of the literature on this concept clearly shows in regard to measuring its extent (Batjargal 2001; Burt 1997; Nahapiet and Ghoshal 1998; Lai et al., 1998).

Researchers have attempted to explain the performance of entrepreneurial projects from the viewpoint of the behaviour of diverse factors (the strategy chosen, characteristics of the sector, characteristics of the start-up) but the importance of the role of the entrepreneur in a firm's success has also been observed from two other standpoints; from an individualist and a social perspective (Alizadeh 2000). In addition, March and Sutton (1997) analyze the different ways of measuring performance (in comparison to growth in investment, operating margins or the reinvestment of assets).

Moreover, some research on job markets (Granovetter 1973; Lin and Dumin 1986), has shown that the larger an individual's network of relations, the greater professional success they may attain (measured in terms of pay, power and mobility). Using analogous reasoning, the possession of a wide-reaching network of relations could enhance the firm's performance, insofar as entrepreneurs with numerous contacts can establish relations with their customers more easily, as well as neutralizing, to a certain extent, their negotiating power. The use of large social networks allows them to reduce transaction costs, fundamentally when accessing information, in negotiations and in decision-making.

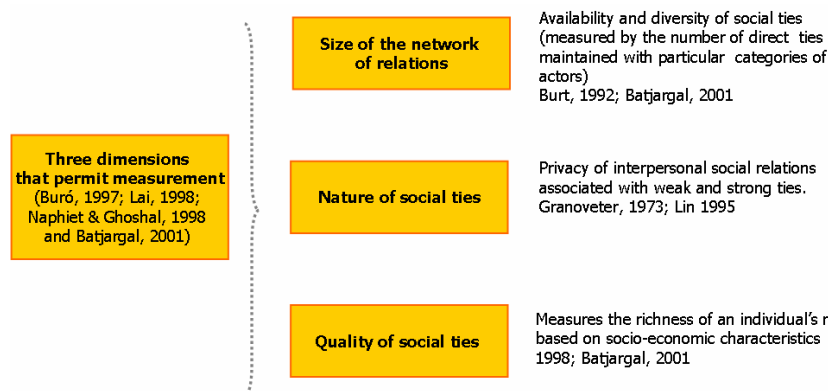


Fig. 5. Summary of the analysis of the dimensions of networks. Source: Author's own work

Several proposals can be made on work from this theoretical framework that relate the performance of a start-up with the social capabilities of the entrepreneur, two fundamental questions in research that support the idea of the use of entrepreneurial social capital in the functioning and success of projects. Our first proposal would be:

P1: The larger the networks possessed by entrepreneurs, the greater their chances of reaching improved performance in their business projects.

The theory of social networks has also shown the existence of a positive relation between the professional success of individuals and the quality of their social ties. Quality, in this case, refers to connections found within the organization with sound ties (Lin and Dumin 1986). In the case of entrepreneurs, maintaining quality social relationships also enables them to take action to improve access to markets and to financing, and may even help to enhance the firm's name and image.

We can thus put forward a new proposal:

P2: In cases where entrepreneurs possess quality social links, i.e. a large number of people in important positions, their entrepreneurial projects will perform better.

In any business project, access to external resources represents one of the most common obstacles. The accumulation of such resources allows available, productive opportunities to be exploited in the environment and provides a more satisfactory safeguard against threats (Yli-Renko et al., 2000). From among the external resources within the reach of SMEs, those which commonly entail the most difficulty are access to funding and access to information.

With regard to the access of information, external resources are widely recognized as a determinant of competitiveness in any firm, though it is also recognized that for SMEs, and even more so for the projects they start up, they represent one of the major weaknesses.

In this sense, the benefits of social capital for accessing information have been widely discussed in the literature on social networks and social capital. As Adler and Kwon state, "...for the actor, social capital enables access to wide-reaching sources of information at less cost, providing quality, relevant, opportune information". (2002, p. 14). Brüdler and Preisendörfer claim that "...social relations and social contacts are important channels for accessing information... information received through established links in social relations is often more useful, reliable, exclusive and less redundant" (1998, p. 214)

We view an entrepreneur's social network as being of utmost importance in bestowing competitive advantage insofar as it allows the entrepreneur access to key, privileged information and endows it with value. We can thus formulate the following proposal:

P3: The larger an entrepreneurs network of relations, the more access he/she will have to sources of information.

Access to information on the part of the entrepreneur and his/her social relations can be linked to the theory contributed by Granovetter (1973) on strong and weak ties. The logic behind this theory is based on the fact that, when the relationship between two people is strong, (strong ties), there is a high possibility that these people will know the same type of individuals and will therefore possess the same information. On the other hand, weak ties increase the likelihood that an individual can gain access to people with different interests and other kinds of knowledge. Weak ties pave the way for fresher, more unique information than strong ties, where redundant information often abounds.

We can therefore put forward another proposal:

P4: Entrepreneurs that have access to better information are those that possess numerous weak ties among their social relations.

It has already been stressed that, among the external resources that the entrepreneur needs to procure are access to information and sources of funding. Entrepreneurs can use social networks to access this type of resource. Some studies have gone as far as to show the beneficial effects for entrepreneurs of having social relationships with bankers (Uzzi 1997), which could fundamentally come under the umbrella of relationships of trust. We can thus propose that:

P5: Strong ties allow better access to financial resources than weak ones.

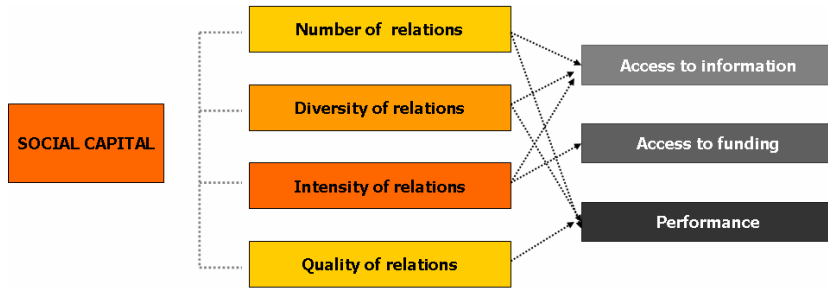


Fig. 6. Conceptual model. Source: Author's own work

The group of proposals we have presented herein can be interconnected as shown in the Fig. 6.

6 Conclusions

Using a review of the literature, in this study, we have carried out an extensive analysis of the concept of social capital. This analysis has allowed us to ascertain that social capital can be viewed from a macro perspective, (in the framework of social structure) all the way down to an individual level, via organizational and institutional levels.

The study attempts to make progress in the stream of research that considers a theoretical approximation to the value of social capital in management science using up-to-date literature on social capital and value creation. The outcomes of empirical studies in the field and on interfirm and intrafirm relations have also been taken into account.

It can be concluded that the possession of social capital is an important element when generating a competitive advantage that allows the entrepreneur to give shape to entrepreneurial projects with sound business performance. This is why the performance of these projects does not depend solely on strategies, product quality, or the gaps they will attempt to bridge in the market, but also on the social capital they possess in order to give the new firm the necessary drive. The entrepreneur's capacity to build a fertile, wide-reaching network of social relations allows him/her to complement the physical and intellectual capital they may possess.

References

- Adler, P., Kwon, S. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, 27, 17–40.
- Aldrich, H., Davis, A. (2000). The organizational advantage? Social capital, gender and access to resources. <http://www.unc.edu/~healdric/workpapers/wp132.pdf>. Accessed 10 September 2005.

- Aldrich, H., Zimmer, C. (1986). Entrepreneurship through social networks. In: Sexton D., Smilor R. (Eds.), *The Art and Science of Entrepreneurship*, pp. 3–23. Cambridge: Ballinger.
- Aldrich, H. E. et al. (1986). Social behavior and entrepreneurial networks. *Frontiers of Entrepreneurship Research*. Babson College.
- Aldrich, H. E. et al. (1987). The impact of social networks on business foundings and profit: a longitudinal study. *Frontiers of Entrepreneurship Research*. Babson College.
- Alizadeh, Y. (2000). Unravelling small business owner/manager's networking activities, <http://www.sbaer.uca.edu/research/icsb/2000/icsb/pdf/56.pdf>. Accessed 10 September 2005.
- Arrow, K. (2000). Observation on social capital. In: Dasgupta, P. (Ed.), *Social Capital: A Multifaceted Perspective*. New York: World Bank.
- Batjargal, B. (2001). Social capital and entrepreneurial performance in Russia: A longitudinal study. *Organization Studies*, 24, 535–556.
- Batjargal, B. (2003). Social capital and entrepreneurial performance in Russia: A longitudinal study. *Organization Studies*, 24(4), 535–556.
- Belliveau, M., O'Reilly, C., Wade, J. (1996). Social capital at the top: effects of social similarity and status on CEO compensation. *Academy of Management Journal*, 39, 1568–1594.
- Birley, S. (1985). The role of networks in the entrepreneurial process. *Journal of Business Venturing*, 1(1), 107–117.
- Bolino, M., Turnley, W., Bloodgood, J. (2002). Citizenship behavior and the creation of social capital in organizations. *Academy of Management Review*, 27, 505–522.
- Bourdieu, P. (1986). The forms of capital. In: Richardson, J. (Ed.), *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood.
- Brüdler, J., Preisendörfer, P. (1998). Network support and the success of newly founded business. *Small Business Economics*, 10, 213–225.
- Burt, R. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge: Harvard University Press.
- Burt, R. (1997). The contingent value of social capital, *Administrative Science Quarterly*, 42, 339–365.
- Burt, R. (2001). The network structure of social capital. In: Sutton, R., Staw B. (Eds.), *Research in Organizational Behaviour*, vol. 22. Greenwich: JAI.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95–120.
- Coleman, J. (1990). *Foundations of Social Theory*. Cambridge: Belknap.
- Cuervo, A. (2003). La creación empresarial: De empresarios y directivos. In “Entrepreneurship: Homage to profesor Jose Maria Veciana”. Universidad Autoconoma de Barcelona, Barcelona. P. 49–73.
- Dasgupta, P. (2000). Social capital: a multifaceted perspective. New York: World Bank.
- Deeds, D.L., Hill, C.W.L. (1996). Strategic alliances and the rate of new product development: An empirical study of entrepreneurial biotechnology firms. *Journal of Business Venturing*, 11(1), 41–55.

- Fukuyama, F. (1995). *Trust: The Social Values and the Creation of Prosperity*. New York: The Free Press.
- Glaeser, M., Laibson, D., Scheinkman, J., Soutter, C. (2000). Measuring trust. *The Quarterly Journal of Economics*, 811–846.
- Glaeser, M., Laibson, D., Sacerdote, B. (2001). The economic approach to social capital. *Working Paper Harvard Institute of Economic Research*, No. 7728. Cambridge: Harvard Institute of Economic Research.
- Goes, J.B., Park, S.H. (1997). Interorganizational links and innovation: The case of hospital services. *Academy of Management Journal*. 40(3), 673–696.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Grootaert, C., Van Bastelaer, T. (2002). *Understanding and Measuring Social Capital: A Multi-Disciplinary Tool for Practitioners*. Washington DC: The World Bank.
- Hanifan, L. J. (1916). The rural school community center. *Annals of the American Academy of Political and Social Science*, 67, 130–138.
- Ibarra, H. (1995). Race, opportunity and diversity of social circles in managerial networks. *Academy of Management Journal*, 38, 673–703.
- Johannisson, B. (1986). Networking strategies: management, technology and change. *International Small Business Journal*, 5, 19–30.
- Knack, S., Keefer, P. (1997). Does social capital have an economic payoff ? a cross country investigation? *The Quarterly Journal of Economics*, 112, 1251–1289.
- Leana, C., Van Buren, J. (1999). Organizational social capital and employment practices. *Academy of Management Review*, 24, 538–555.
- Lin, N. (2001). *Social Capital: A Theory of Social Structure and Action*. Cambridge: Cambridge University Press.
- Lin, N., Dumin, M. (1986). Access to occupations through social ties. *Social Networks*, 8, 365–385.
- Lin, N., Ensel, W., Vaughn, R. (1981). Social resources and strength of ties: structural factors in occupational status attainment. *American Sociological Review*, 46, 393–405.
- March, J., Sutton, A. (1997). Organizational performance as a dependent variable. *Organization Science*, 8, 698–706.
- Nahapiet, J., Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23, 242–266.
- Narayan, D., Pritchett, L. (1997). Cents and Sociability: Household Income and Social Capital in Rural Tanzania, World Bank, Washington DC, USA.
- Narayan, D., Casidy, M. (2001). A dimensional approach to measuring social capital: development and validation of a social capital inventory. *Current Sociology*, 49, 59–102.

- Onyx, J., Bullen, P. (1997). Measuring social capital in five communities. CACOM Working Paper Series No. 41. Sydney: University of Technology.
- Paldam, M. (2000). Social capital: one or many? Definition and measurement. *Journal of Economics Surveys*, 14, 629–653.
- Portes, A. (1998). Social capital: Its origins and applications sociology. In: Lesser, E. (Ed), *Knowledge and Social Capital: Foundations and Applications*, pp. 43–67. Boston: Butterworth-Heinemann.
- Putman, R. (1993). The prosperous community. Social capital and public life. *The American Prospect*, 4, 35–42.
- Putman, R. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6, 65–78.
- Putman, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Putman, R., Leonardi, R., Nanetti, R. (1993). *Making Democracy Work, Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- Schumpeter, J. (1975). *Capitalism, Socialism and Democracy*. New York: Harper and Row.
- Shan, W., Walter, G., Kogut, B. (1994). "Inter-firm cooperation and start-up innovation in the biotechnology industry", *Strategy Management Journal*, 15, 387–394.
- Singh, K. (1997). The impact of technology complexity and interfirm cooperation on business survival. *Academy of management Journal*. 40(2), 339–357.
- Sudarsky, J. (1999). "El Capital Social de Colombia: La Medición Nacional con el BARCAS (Barómetro del Capital Social)". Archivos de Macroeconomía, 122. World Bank.
- Solow, R. (2000). Notes on social capital and economic performance. In: Dasgupta, P. (Ed.) *Social Capital: A Multifaceted Perspective*. New York: World Bank.
- Tsai, W., Ghoshal, S. (1998). social capital and value creation: the role of intra-firm networks. *Academy of Management Journal*, 41, 464–476.
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 29, 598–621.
- Veciana, J. (1999). Creación de empresas como programa de investigación científica. *Revista Europea de Dirección y Economía de la Empresa*, 8, 11–36.
- Walker, G., Kogut, B., Shan, W. (1997). Social capital, structural holes and the formation of the industry network. *Organization Science*, 8, 109–125.
- Yli-Renko, H.K. (1999). Dependence, Social Capital and Learning in Key Customer Relationships: Effects on the Performance of Technology-Based New Firms. *Acta Polytechnica Scanidnavica, Industrial Management and Business Administration Series*, Finnish Academy of Technology.
- Yli-Renko, H., Autio, E., Sapienza, H. (2000). Social capital, relational learning and knowledge distinctiveness in technology based new firms. http://www.babson.edu/entrep/fer/papers99/XXVIII/XXVIII_D/XXVIII_Dtext.htm. Accessed 1 September 2005.
- Zaheer, A., McEvily, B., Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*. 9(2), 141–159.

Entrepreneur and Organization: Symbiotic Change and Transition

Emeric Solymossy

Department of Management, College of Business and Technology,
WIU-QC, Moline, IL, USA

1 Introduction

“Grow or die.” (Rodale 1987). “If we don’t keep growing, we’ll die. This company must keep growing” (Olson and Terpstra 1992). Growth is the cover story in a variety of public business journals such as *The Harvard Business Review*, *Fast Company*, *Fortune*, *Inc.* and more. The dynamics of the competitive environment, the executive (or entrepreneur), and the firm itself impact and are affected by the process of successfully growing an organization. There is abundant research exploring the overall growth process. Less examines the critical process of changing a small, simply structured entrepreneurial firm into a functionally structured and professionally managed firm. Many entrepreneurs echo XM’s observation: “We are falling because we did not know how to focus on the development in agreement with the growth” (Solymossy and Penna 2001). Growth presents challenges to the entrepreneur, the employees and the organization. Growth requires change, and successful change is facilitated by developing attitudes, behaviors, and processes focusing on tasks and organizational processes that lead to a successful and mature organization.

2 Background

Organizations¹ emerge and subsequently proceed through a variety of changes in the process of achieving success. Many do not succeed. Research suggests that over half of all businesses cease operations within one and a half years of being started, regardless of industry, culture, or country. Even among those firms that survive, few achieve successful growth. The vast majority remain small businesses. Business failure can be attributed to many causes, while failure to grow is generally related to management's inability to adequately respond to crises (Olson and Terpstra 1992; O'Neill 1983; Scott and Bruce 1987). As the business grows, leadership's tasks and responsibilities change, functional tasks change, employees are impacted, and the firm's organizational structure is altered. The entrepreneur's competencies and the firm's managerial requirements change as the business grows. Some authors report that over 90% of small business failures can be attributed to a combination of managerial incompetence and lack of appropriate experience (Carland and Carland 1999).

3 Analyzing Growing (Evolving) Organizations

Organizations evolve in cycles, and are impacted by external circumstances (e.g., market place, technology, competition) and internal (e.g., personnel, competencies, resources) factors. Businesses are admonished to "adapt, evolve, or die." Originally expressed by Michael Powell (FCC Chairman) at the 2004 National Broadcaster's Conference in Las Vegas, this imperative is echoed in the popular press, and is virtually accepted as a law for businesses. The organization's stability and existence is threatened when strategies and structures are not changed to accommodate the consequences of growth. As organizations grow, they exhibit different characteristics reflected in changes in their structure. Structure refers to how work activities are defined and arranged for coordination, control and continuation.

Scholars have explored the most appropriate organizational structures, and the level of flexibility each company could be expected to have in order to accommodate possible future change or growth. Successful evolution

¹ For simplicity's sake, the phrases "business," "venture," "firm," "enterprise," and "organization" are interchangeable in this chapter. The term "business" sometimes implies that the organization is a profit oriented enterprise. This is an unwarranted conceptual restriction. Literature and the author's experience show concepts of firm growth are related to multiple factors working to increase complexities of managing the organization, not its profit orientation.

requires that organizations design appropriate structures and sophisticated measurement and control systems to handle multiple challenges (Olson and Terpstra 1992). Pugh et al. (1968), analyzed the variables with which to categorize an evolving organization. These include specialization, standardization, formalization, centralization, configuration, and flexibility.

Structure is dependant on strategy, and changes in either require changes in management. Business principals devise strategic responses to environmental opportunities and organizational capabilities, and structure themselves in the most effective manner to support the accomplishment of their intended strategy. Personal preferences, analysis of the environment and organizational capabilities and the intended strategy contribute to the design and implementation of a structure critical for the accomplishment of organizational goals.

Successful growth requires a combination of applied (e.g., human resource management) and conceptual (e.g., competitive strategies) abilities. Managers must, therefore, adjust their individual goals, operational abilities, managerial abilities, and strategic abilities (Churchill and Lewis 1983). To accommodate growth, leaders must develop their management skills (Stevens 1988), apply appropriate management styles at the right time (Johnson 1989; Olivier 2004; Waldrop 1987), and make adjustments to their behavior and attitude based on changing circumstances. The inventive and innovative entrepreneur ultimately evolves into an executive manager with the evolving, growing organization.

4 Life-Cycle and Stage Theories

Managerial and structural changes are related and are virtually inseparable within the life-cycle theory framework. Organizations assume “life” that is comparable to a living organism, and their growth and development follows a regular, predictable sequence.² Quinn and Cameron show that “changes that occur in organizations follow a predictable pattern that can be characterized by developmental stages. These stages are sequential in nature; occur as a hierarchical progression that is not easily reversed; and involve a broad range of organizational activities and structures” (1983, p. 33).

The developmental stages reflect identifiable organizational activities and structures (Dodge et al., 1994; Hanks et al., 1993; Quinn and Cameron 1983). Reporting relationships, decision-making, information processing, departmentalization, and operational procedures are interdependent, and

² Mason Haire (1959) is generally attributed the first application of the biological model to organizations, which appeared in Modern Organization Theory.

change over time from one stage to the next. As the firm progresses through the various stages (or achieves certain milestones), changes in issues being faced create the need for organizational change. Management and structures, that where once appropriate, become incapable of coping with the dynamics of growth induced change, and become an obstacle limiting further growth. In addition, the dominant personality of the entrepreneur and the established patterns of behavior within the firm may act as an impediment for the necessary transitions (Hizon et al., 2004). This signals an improper fit with the organization's environment. The firm's resulting lack of efficiency or its inability to achieve its objectives threatens its survival.

The developmental stages and their descriptive dimensions vary depending on the researcher. Because of this, there is a wide array of models, some focusing on the events, some the milestones, and others the stages between milestones and events. The simplest framework is Schumpeter's, with two: entrepreneurial and functionally managed firm (1983). Other, less complex models have three (Downs 1967; Smith et al., 1985) or four stages (Baird and Meshoulam 1988; Chandler 1962; Hanks et al., Kazanjian 1988; Quinn and Cameron 1983). More detailed models use five or six stages (Churchill and Lewis 1983; Greiner 1972; Miller and Friesen 1984). Models can be found for twelve (Pinchot 1985; Vesper 1990), and even fourteen stages or milestones (Carter et al., 1996). The importance of the early stage(s) is shown by more in-depth analysis of the formation activities in the more comprehensive models. Reviews of previously proposed models are beyond the scope of this chapter; however, Quinn and Cameron (1983) review eight models, providing integration between them. Six additional models are reviewed by Lee (2005). Even these two reviews are not comprehensive.³

Regardless of the number of stages, each author describes similar developmental progressions in greater or lesser detail. Although the names and labels change, the fundamental descriptions of the activities and organizational configuration are relatively consistent. A firm emerges (first stage), achieves some success and growth, (stage two) and with each succeeding stage demonstrates growth or expansion and differing structural configurations.

³ Some other models include: Hayes and Wheelwright (1979); O'Neil (1983); Kazanjian and Drazin (1990); Kimberly and Miles (1980); Hanks et al. (1993); Autio (1997); Hizon et al. (2004). Even this additional listing is not intended or represented as completely inclusive.

Structural changes are the result of growth strategies, which are revised and implemented in response to various crisis as well as environmental gaps. Each distinct stage of growth for a business is associated with a crisis point (Greiner 1998; Scott and Bruce 1987) (see Fig. 1). Combining Greiner's, Chandler's, and other frameworks, an organization emerges at inception and evolves over time through various stages. Each transition between stages evidences a series of crises, which in turn causes the organization to seek new managerial and structural configurations.

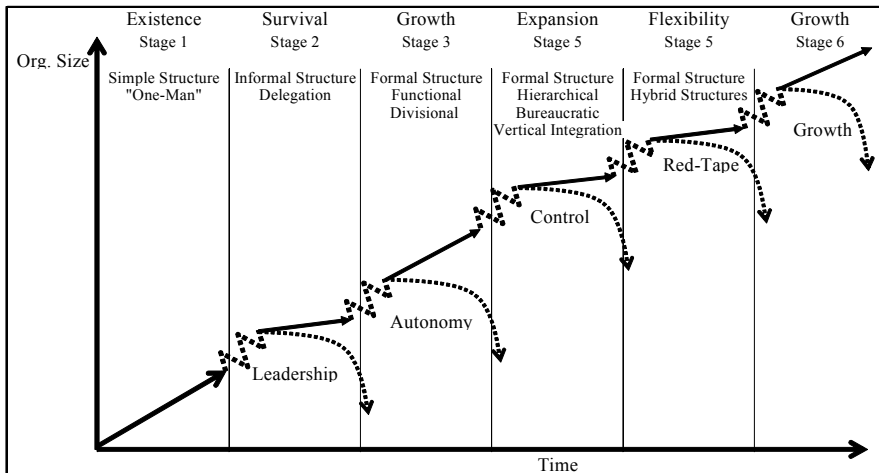


Fig. 1. Stages, structures and crisis (transition) points, where the firm adapts, changes and grows, or falters

The nature of each crisis brings attention to inadequacies in coordination, communication and control. These inadequacies must be addressed for growth to resume. Crisis becomes obvious when management realizes it is unable to efficiently manage increasing operations and still remain flexibly responsive to changing opportunities and challenges in the business environment. If the organization is to thrive, it must change. For this to be successful, the change strategy must integrate structure, process and personnel. As argued by Kilzer and Glausser (1984), crises can be successfully overcome with careful time and growth planning, contingency planning, tactical planning, maintaining an operating budget, and equitable treatment of all stakeholders: in other words, focusing on every aspect of the business. Given that organizational structures and processes are integrated, one cannot be changed without altering the other, and both are influenced by the firm's leadership.

5 Discussion of Stages and Transitions

The initial or existence stage is characterized by the founding entrepreneur working to commercialize and make the firm viable. In an entrepreneurial organization, the entrepreneur is the leader, the embodiment of the firm's strategy, and the initiator of all subsequent structural configurations. Staff is either nonexistent or minimal, and the entrepreneur performs multiple functions. As the firm establishes legitimacy and survival is assured in stage two, it grows. Employees are added to accommodate growth, and firm's increasing size forces the entrepreneur to become a supervising manager. Additional employees make good communication and consistency essential. Increasingly, the entrepreneur functions as a manager, directing the work of others while remaining a productive member of the organization. With growth and complexity, the entrepreneur can no longer personally supervise everything. This requires a change from "hands-on" management to "hands-off" delegation. Tasks, processes, and authority must be transferred to others, causing the entrepreneur to sacrifice personal control.

This is where difficulties emerge, when others begin to directly supervise the productive employees. Many businesses flounder at this stage, since the directive managerial style (personal guidance) that fostered early success, is contrary to the "let the manager do their job" approach that is necessary for continued growth. The crisis identifying this stage is one of limited managerial resources: the sheer impossibility of one person managing the entire operation. This is resolved by delegation and additional managerial depth. This, however, leads to the next crisis; difficulties caused by a loss of control. This, the fourth stage, relies on establishing or strengthening communication, coordination and control systems. The fifth stage, with continued, accelerated growth its drive for efficiency and control, is marked by hierarchical structure and bureaucracy. Bureaucracy relies on standardization and procedural formality. Bureaucracy, however, is inflexible and not responsive to rapidly changing market and customer opportunities. This crisis leads to the sixth stage; revitalization and renewed growth, generally through some form of alliance or network.

6 The Critical Transition Point

Existing literature can lead one to the conclusion that no single transition is more critical (to the subsequent success of the firm) than another. Organization growth encompasses several periods of relatively smooth growth

interrupted by periods of crisis, upheaval, and radical change. The implication is that each crisis is comparable and a matter of life-or-death for the firm. In each case, the admonition is the same: Adapt, evolve, change, or die. Corrective action must be taken or the firm's performance will decline, growth will suffer, and the firm will either stagnate or die. This is true, however, the crises causing an entrepreneurial firm to transform to a traditionally managed organization is paramount, given the magnitude of change to the person, employees, and processes, and how successfully navigating this transition positions the firm for subsequent stages.

Entrepreneurial behavior is driven by opportunity, resulting in formation of new ventures which supersede previous products and processes. Schumpeter (1983), calling the process of new venture formation "creative destruction," identified the entrepreneur's role in economic change, and notes that the critical stage in the evolution of the firm occurs when the firm changes from an innovative to a traditionally managed organization. Peter Drucker (1999) found that a firm's size didn't fundamentally change the business or its objectives, but did affect management structure, requiring different behaviors and attitudes. Small business executive could perform multiple tasks simultaneously, but not as the firm grew. A change in size highlighting the inability to solve the problems of management was the "most serious" change and most difficult to accomplish according to Drucker.

As the organization evolves from startup to the growth stages, it becomes increasingly complex, formalized, and decentralized (Miller and Friesen 1984; Olivier 2004). It undergoes fundamental shifts in how things are done (Hayes and Wheelwright 1979) and must implement organizational systems and structures (Lee 1989). Prescriptive advice has been offered to aid the entrepreneur, ranging from the need to recognize various psychological phases (Grego 1996), the need to communicate vision and values (Baum et al., 1998), relying on other people (Fenn 1996) surrendering power to enable others to take over tasks and responsibilities (O'Neill 1983; Stevens 1988), acquiring and building specific management skills (Johnson 1989), and to changing management styles (Waldrop 1987). The dynamic combination of the person's needs and the needs of the business determine the most appropriate management style (Johnson 1989), and also whether or not the individual is competent, capable and willing to provide the necessary leadership to guide the organization to its next level of growth. Each of these admonitions are valid, but do not adequately convey the symbiotic linkage between the changing person of the entrepreneur and the changing organization.

Interviews with entrepreneurs support Schumpeter's and Drucker's assessment.⁴ All future stages of growth depend on the success of this point because of the magnitude of impact on the entrepreneur, the firm, and the employees of the firm. Growth adds employees and increases managerial duties. Continued growth requires adding management, usually between the entrepreneur and other employees. The small, informally managed organization transitions to a functionally managed firm. The entrepreneur still manages the firm, however, no longer directly supervises the employees. This transition point is shown in Fig. 2 wherein the simple and informal entrepreneurial structure expands, and transitions into the first stage of a functionally, hierarchically structured, three-level organizational structure.

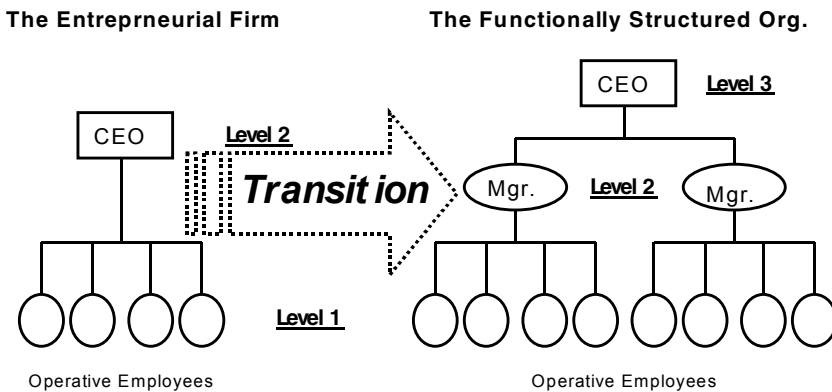


Fig. 2. Transition in organizational structure for a growing firm (Figure reproduced with permission from Solymossy and Penna, 2001)

7 Introduction of Professional Managers

New, emerging organizations strive to establish legitimacy in the marketplace. Since attention is focused on comparatively short-term oriented issues and challenges, long-term strategic orientation is virtually nonexistent. As the entrepreneur personally supervises and directs all activities, there is minimal need to articulate decision-making criteria and organizational priorities to other employees. As the company begins to introduce professional managers, resource acquisition and technological development become more important than personal controls (Kazanjian and Drazin 1990).

⁴ For additional insight, four mini-case examples are included within the Appendix, each highlighting a different aspect of the challenges of growing through this stage.

None the less, the psychological characteristics and competency of the leader influences the firm's growth and culture (Eggers 1999).

Successful companies are not entirely dependent on their leader's credibility and competence (Fenn 1996; Osborne 1994), however, the organization cannot change and grow without corresponding changes in the entrepreneur. This requires strategic intent, shifting of tasks, delegation of responsibilities, and managerial leadership. Over time, the initially simple and informal structure evolves into a formally structured hierarchy with appropriate structures and processes, human resource practices, and processes to facilitate continued growth and success (Jaques 1992). Managerial layers are created and intentionally structured to achieve required tasks, matching individuals to specific tasks within functional areas to maximize the value in each task (Jaques 1990).

8 Challenges Faced by Growing Organizations

As an organization grows, money is needed for purchasing additional equipment, inventory and expanding facilities. Money is also required for adding employees and production capabilities. In a small, young organization, expenses consume available cash; and accounting systems are either nonexistent or unable to handle the sophisticated needs of increased volumes. Growth requires planning and implementing an appropriate financial system to align capital management with operations. This requires realistic sales projections, cash flow analysis, budgets, and systematic and regular financial reports for each critical aspect or department in the organization. Day-to-day operations take precedence, and financial systems are rarely put in place at an early stage. Through growth, the need for financial systems become more pressing, and requires more sophistication and detailing. Higher levels of task-specific managerial competence are required, often leading to a dedicated financial manager who reports to the chief executive officer.

Growth is enabled by changes in the market (because the market is expanding), however, the changes in the market also cause changes in competition and the organization's competitive strategy. Growth causes markets to expand, which introduces new competitive elements and market phenomena. Challenges to the firm's ability to differentiate itself may result in either further innovation or price reduction to protect some competitive advantage in order to maintain market position. Acquiring or sustaining a competitive advantage as the firm grows becomes increasingly difficult. Similar to financial systems, is the development and deployment

of a marketing plan that begins with the entrepreneur. However, with growth, it is usually delegated to a dedicated marketing manager or marketing professional.

New employees must be added to enable growth and to accommodate increased volumes resulting from growth. The costs associated with hiring “wrong” people are high financially as well as in lost time. Recruiting, selecting, and maintaining qualified persons for a small firm does not require a fulltime professional, and is frequently done by the entrepreneurial manager. While a firm is young (small, and simply structured), each individual employee can be treated uniquely (e.g., in terms of their payroll calculation method and benefits). With growth, however, individualized human resource policies give way to official, standardized policies designed to assure fair and equal treatment to all employees. Size also subjects a firm to federally mandated policies, which are complex to administer. While possible to outsource these activities, frequently the firm hires a human resource professional (see Appendix, Case 2). The human resource professional or department will manage recruiting, compensation, benefits administration as well as training employees in preparation for subsequent changes in their tasks and duties.

Behaviors, attitudes and cognition must be changed to accommodate growth, especially in the entrepreneurial executive. Differing levels of cognitive ability are evidenced in different settings and at differing points in the organization’s growth and hierarchy. Elliot Jaques (1986) found that a manager’s intellectual capability fell into distinct levels based on the complexity of their tasks. Changes to the firm required changes in the entrepreneur’s as well as the workforce’s behavior. The entrepreneur’s intellectual capability enables growth in the organization, and the capability must be developed to handle increasing complexity. Enhanced cognitive processes increase intellectual capability, which in turn increases managerial leadership competence. The cognitive processes of the entrepreneur change and develop as managerial tasks change. The founder assumes different roles as the firm grows, and must relinquish and delegate authority.⁵ Cognitive skills and capabilities must be sequentially developed (or acquired) to achieve success. This results in a stair-step approach for building executive competence, organizational strategy, and the ensuing structures to ensure success (Hay and Williamson 1991).

⁵ For additional reading on the process of delegating authority and its critical role of executive skill development and the growth of the firm, interested readers should review the book “Growing Pains: How to Make the Transition from an Entrepreneurship to a Professionally Managed Firm,” by Eric Flemholz and Yvonne Randle (1999).

9 Process of Achieving Structure

Organizational processes, such as how activities are structured, how control and authority are distributed within the organization, and the presence (and size) of organizational support personnel and systems are some of the main operational areas impacted by the firm's structural configuration. The structural configuration itself is measured in relative terms based on specialization, standardization, formalization, centralization, and configuration.

A growing organization is more complex. The number of tasks and activities increase, accompanied by a need for increased efficiency, which leads to a division of labor that favors specialization. Limited by how many tasks can be accomplished by any one individual, tasks and activities must be organized in an efficient manner, logical for the required process, yet matching the appropriate task with persons having the necessary knowledge, skills, and abilities. Efficiency is more likely with individuals working on dedicated tasks rather than multiple tasks. With continued growth, more people will be required to perform the same or similar tasks, bringing about a need for standardization of processes to assure uniformity. Consequently, each person performing the same task should perform the task similarly. Standardization and specialization are methods of promoting cost efficiency with enhanced quality. With growth and increased number of tasks and activities, the configuration of the firm itself reflects the increased complexity generally manifested in more departments or logically separated work groups. Managerial control is maintained by assigning responsibility to work groupings.

Growth and complexity are accompanied by documentation, or formalization. At the onset, a firm is loosely organized and there are no policies other than verbal directives. However, with growth, a firm needs written documentation, policies and procedures. The entrepreneurial executive conveys decision-making values and criteria to subsequent managers, and documents processes and procedures that further reinforces the structural dimensions of specialization, standardization, and configuration. Growing challenges are minimized by establishing a managerial framework that guides and enables employees to recognize and properly react to emerging situations. The process of articulating values, tasks, and objectives unifies a firm and serves as a foundation for a system of management that will evolve with company growth. It also serves as a managerial toolkit that enables future managers to cope with new and evolving circumstances.

10 Helping the Entrepreneur s Evolution

Successful growth relies on the entrepreneurial leader, and the personal changes that are required of him/her coinciding with growth of the firm. The size of the organization does not fundamentally change the responsibilities of managers or what the firm does, but does impact the complexity of managing the firm. Faced with increasing complexity, the entrepreneur may want to retain “hands-on” control. The entrepreneur’s habits may serve an impediment to growth, causing reactive, crisis-driven decisions without strategic deliberation or seeking other’s opinions. As the firm grows, it can no longer rely on a single individual. Many entrepreneurs form and nurture a company, but they resist or don’t know how to hand over control at the right time. Many avoid or are skeptical of planning, policies and procedures, seeing money as a universal solution to crisis rather than recognizing the need to evolve managerial capabilities and to change themselves. Developing a managerial infrastructure often requires fundamental changes in the entrepreneur. Their tasks, areas of responsibility, personality and behavior must change. Changes to the entrepreneur compliment the changes to the organization, and can be monitored and guided in four areas: documentation, functions, motivation, and cognitive processes (Solymossy and Penna 2001).

Documentation: Developing a habit of written records is the first step in the process of fostering entrepreneur and organizational growth. Documentation facilitates changes in the entrepreneur and yields several benefits for the organization. Entrepreneurial executives who systematically maintained journals, (recording their instructions to their employees as well as work incidents) were successful in making the transition to a functionally managed firm (Penna 2000). Written records are a prerequisite to the documentation necessary for job analyses, policies, procedures, and training materials. The introduction of documentation has several effects. It changes the expectations and culture of the firm from reactive, emotional, and verbal to a systematized, value-driven culture. It provides employees with enhanced direction and task instructions. Task are achieved more consistently and solidly, and leads to a higher level of work standardization.

Functions: The entrepreneur’s journal records the tasks and duties of the executive and relative time spent on each. This becomes an inventory of tasks reflecting the multiple functions of the manager (e.g., design, sales, bookkeeping, inventory, etc.). The journal indicates the relative importance of the tasks, and whether the tasks are new to the entrepreneur, requiring

the development of new knowledge, skills and abilities⁶ (Solymossy and Penna 2001). At an early stage, more time is spent on functional tasks, and less on managerial tasks. As the firm grows, greater amounts of time will be required to perform managerial tasks. A crucial transition point occurs when the time demands for both managerial and functional tasks exceed the personal capacity of the entrepreneur. When the capacity of the person has been exceeded, either functional or managerial tasks must be delegated to others.

Motivation: Environmental factors are noted by documenting the issues demanding the entrepreneur's attention, and recording their relative importance and urgency. Entrepreneurs are frequently reactive, and are often pulled away from their areas of strength to react to situations that serve as "overwhelming distractions" (Fenn 1996; p. 98). Identifying the motivating forces acting upon the entrepreneur through the firm's growth (a function of the journal), will reveal multiple motivational influences. Recognizing and tracking whether or not the motivating forces (or event triggers) are self-induced or caused by environmental factors is essential. For example, the entrepreneur may desire to decrease his/her involvement with the firm to pursue other activities (self-induced trigger), as opposed to being overworked by sales and production growth beyond the entrepreneur's managerial ability (environmental trigger). Occasional unusual environmental issues will occur. However, changes in the entrepreneur's motivation and subsequent behavior caused by sustained environmental pressures signals an impending crisis and a transition point.

Cognitive Processes: How an entrepreneur thinks will change as tasks and roles change, and their managerial capabilities are developed and expanded. This is aided by introspection, reflecting on the changes being experienced (see Appendix, Case 4). Changes in cognitive processes will be reflected by notes in the journal. This may be in the form of evolving activities and tasks, changes in time allocation, evidence of planning, and the development of measurement and control schemes. Reactive thinking will change to proactive planning. An example of this would be the development of an inventory control system. A sequence of activities may trace the change from an occasional visual observation, development of a schedule, the combination of observation and schedule, the documentation of physical inventory, and eventually the delegation of the physical

⁶ It is recommended that the journal also identify whether the activities are perceived as being value-adding, whether the knowledge, skills and abilities required for performing the tasks are newly acquired or existing, and whether the associated activities require the executives direct attention and deliberate thought (as opposed to being performed reflexively).

control of inventory to another individual. Changes will also be noticeable in the development of strategic processes, and the ability of the entrepreneur to articulate and communicate strategy and vision to the employees.

Changes in the entrepreneur's behavior as he/she evolves into an executive of a functionally, hierarchically structure organization can be seen as reflected in Table 1.

Table 1. Comparison of entrepreneur to executive manager

	Small-firm entrepreneur	Larger firm manager (executive)
Budget, planning	Skeptical about planning, policies, and procedures (limiting, constraining)	Appreciate plans and budgets as guidelines
Decisions	Reactionary, crisis-driven with little input from others	Proactive, based on mission and affordability
Staffing decisions	Hand-picked (working for the person, rather than for the organization separate from the founder)	Frequently based on task analysis, generally tied to responsibilities, training and capabilities
Input	Rely on those most loyal and accessible. Frequently avoid contrary perspectives	Seek staff and board with strong expertise and feedback to provide multiple perspectives
Change	Difficulty relinquishing personal control. When pushed to initiate change, frequently forces rather than facilitates	Recognizes that organizational inertia will resist change, uses measures and communication to facilitate necessary change
Communication	Occasional staff meetings to report crisis and rally personnel	Established, routine communication of objectives, policies, and procedures
Documentation	Limited	Habitual
Customer relations	Strong personal tie to customers	Strong organizational tie to customers and service providers

11 Conclusion

The successful growth of an organization from a small, simply structured firm to a large, functional structured organization is dependant on many factors, but principally relies on changes involving the entrepreneurial,

managing founder. The entrepreneur and the organization are in a symbiotic relationship; both require each other, and they must change together. Organizations exhibit evolutionary, sequential steps in their growth, with each transition marked by a period of crisis (events which overload the managerial capabilities of the firm, and which require restructuring the organization to effectively meet the impending threats). The most critical of these stages is the one which overloads the entrepreneurial founder, and for which the solution is expansion of managerial capabilities by increasing the hierarchy within the firm. This step brings fundamental changes to the entrepreneur's tasks, cognitive processes, and method of interacting with the employees and the customer. Early patterns of short-term reactive management change, evolving to long-term, strategic orientation that enables growth of the firm. The vision, values, and decision-making processes used by the entrepreneur, through documentation processes become the foundation for policies and procedures guiding other managers and employees' decision-making to assure consistency and maintenance of the founding objectives. Without changing the entrepreneur's focus and facilitating the changes in behavior and organizational processes, either the firm will not achieve successful growth, or the growth will occur by replacing the entrepreneur with a professional manager. Not all entrepreneurs are able to make the transition to becoming a professional manager (see Appendix, Cases 1 and 3), however, those that succeed recognize that the growth occurs through other people, not solely on the entrepreneur's own mastery of a given set of knowledge, skills, and abilities.

Appendix

Case Studies in Small Firm Transitions

Case 1: Unable to Grow Further, Resulting in a Buy-out

E-MU systems (<http://www.emu.com/corporate/>) was founded in 1971 by two childhood friends. The company had a simple strategy; according to Scott Wedge (Kimberly and Miles 1980); it was to: “Build a synthesizer, sell it. Build another one, sell it. Redesign it, build it, (and) sell it.” (Kimberly and Miles 1980, p. 35). They continued as a small operation for the first 10 years, until they invented a digital sampling technique that allowed a musician to record and modify any sound. Attention was focused on the firm after Michael Jackson used the experimental synthesizer to create *Thriller*, released in 1982. This ushered in a period of accelerated growth that was difficult to manage. Orders flooded the company, and they had to move to consecutively larger quarters several times over the next few years. The rapid growth highlighted weaknesses in the company’s informal business style. While it had been appropriate and beneficial in the early stages of the firm, it was not adequate for managing a growing and complex firm. “The company had grown so large that we couldn’t keep track of all operations and work in research at the same time” stated Wedge (Kimberly and Miles 1980). Scott Wedge moved from R&D into the role and responsibilities of being president. However, even this redirection and change of functions was not enough. E-MU’s growth continued (with approximately 100 employees), and it called attention to the need for operational, financial and managerial systems. Rather than hiring additional management, they used consultants. Systems were put in place, however, the complexities of the systems (e.g., inventory control) were not understood by the employees, and required specific training. Training permitted the founders to communicate their perspectives and philosophies to the employees. This was a critical phase in the evolution of the firm. As they progressed, they began formally organizing the firm, subdividing the production operations into separate departments. As they grew, the combination of a more formalized structure and increasing workforce required more levels of management. Increasing bureaucracy constrained innovation and morale suffered. A profit-sharing and employee ownership program was instituted to bolster morale and reinvigorate innovation. This period of growth was punctuated by E-MU Systems being named one of Inc.’s 500 fastest growing companies in 1988. The organization’s growth reached a plateau, however. With insufficient monetary resources to fund

further expansion, the firm stopped growing, limiting its product line, this imposed additional constraints on future growth. According to Scott Wedge, “We’ve got 20 products we want to work on, but we can fund development of only one or two. It’s frustrating.” Unable to acquire venture capital funding, E-MU systems was sold to Creative Technology Ltd. of Singapore in 1993.

Case 2: Implementing Systems to Facilitate Growth

CFDay (<http://www.cfday.net/>) was founded in 1995 to provide contract services to the government, principally in manufacturing and logistics. As a contract specialist, its full-time permanent staff was one person: Charles Day, while field operations were staffed with contract employees. For the first 10 years, growth was gradual and incremental, fueled by increasing credibility and legitimacy from successfully completing contracts. With four permanent employees, and increasing variety in their contracting opportunities, Charles saw the need to grow the firm. To facilitate growth, managerial expertise was sought. A part-time contract operations manager was hired in 2004, and within six months, converted to full-time. In 2006, with 22 full-time employees, an experienced business systems manager was brought on board. One of the actions undertaken was the implementation of management systems, including a Human Resource Management system. To maximize their resources, they worked with a regional University to initially design a program as a starting point. Systems that are considered mission-critical (such as their information-technology) are managed entirely in-house, while supporting functions that are not as critical (e.g., payroll and taxes) are subcontracted. In this manner, the company is able to focus its limited resources in those areas that can be leveraged to enable continued growth.

Case 3: Divestiture Rather than Relinquishing Controls

ANE⁷ was originally founded as a spin-off business in 1979 to provide engineering and construction services. The outside-investor owner was not involved in the operation of the firm, and management did not participate in ownership. The firm was relatively stable with four permanent employees and up to 15 temporary employees until the economic downturn of 1982. On the verge of bankruptcy, the owner brought in an aggressive, outside manager with engineering expertise and entrepreneurial experience. The drastic changes in managerial style and direction resulted in

⁷ The name of this company was changed at the request of the owner.

100% turnover of employees within six months. Within a year, sales had increased 100%, without any changes in overhead. However, as soon as it appeared that bankruptcy had been averted, the owner resisted any further risk. To resolve the conflicting vision for the organization between the owner and the manager, the firm was sold to the new manager. This marked a period of fairly rapid growth. Within five years, sales had increased over 500%, staff had increased to 14 permanent employees, and 100 contract specific employees, with two new ventures as additional business units. Increasing competitive pressures forced margins to decrease. Constant vigilance was required to minimize unnecessary overhead and protect profitability. Due to regulatory oversight by numerous state and federal agencies, operational requirements were stringent. Measurement, planning and control systems were designed and implemented. Several employees could not make the transition to new procedures and new supervisors. Employees that had been comfortable with the loose, responsive style of early operations felt constrained by increasing formality and what they saw as procedural red-tape. The strain on managing a growing enterprise was also evidenced by the owner. As stated by the owner, "I was tired of working 16 and 18 hours days six days a week. I could hire engineers easily, but I couldn't find anyone that could run the business properly." At the same time, financing growth through operations subjected the business to the erratic payment cycles of customers, without leaving enough money to fully fund expanding overhead. Approaching burnout, the owner began selling business units in 1998, and by 1992 had divested all of the business units. Discussions with the owner revealed that not only was he a serial entrepreneur, but that he has a historic pattern of business formation and subsequent divestiture. Of six entrepreneurial ventures, two were divested in 2–3 years, three within 3–4 years, and one in 6 years. In each case, the frustrations were brought about by an inability ;to completely relinquish control. A combination of growth, competition, and changing business environments required a major change in how the business was managed. In his words, the business "wasn't fun anymore." While remaining profitable, success was not measured financially but by whether or not the personal objectives were being met.

Case 4: Psychological Impact of Growth

Hemodynamia had austere beginning in 1983. Two young, achievement oriented surgeons had an opportunity to open an independent diagnostic and treatment clinic affiliated with a local hospital. The business proceeded smoothly and relatively steadily. The complexities of evolving technologies in the medical field and increased opportunities (due in part to

increased public awareness of health issues pertaining to heart attacks and stroke and in part to effective marketing) brought the small firm to a realization that growth was necessary, and that success for the business required professional managerial skills rather than only medical skills. As the firm added employees, day-to-day procedures were gradually delegated to employees while the two partners divided up the administrative and managerial duties, and began pursuing other business opportunities. A second clinic was opened in 1995. A third facility, partnering with another hospital was opened in 2000, and a fourth clinic was opened in 2004. All administrative duties were centralized, and the partners personally supervised all of the employees. After 20 years, the firm had 12 employees, and had achieved financial success and significant growth, however, reached another crisis; one of direction. Success had permitted the two partners to be exposed to business in different directions. One partner, Adolph, the "administrator," developed an affinity for the prestige of administration and the stability of established structures and coordination. The other, Carlos, recognized his passion for entrepreneurial initiatives and personal as well as organizational growth. A clinic in a neighboring city was nearing completion and brought their philosophical differences to the forefront. Adolph elected not to be partner in this new venture, but this was not enough to calm the disturbance. Unable to resolve their differences, the two partners split, each retaining control of one hospital and one clinic. Splitting a firm that the two had built over almost of a lifetime was not easy for them or their twelve employees. The firm's momentum was halted, and the negative energies from the split affected the employees, resulting in divided loyalties. The psychological impact on the partners was traumatic. Support each could count on from the other through the first 23 years of the firm's existence disintegrated. Similar to the emotional upheaval of a divorce, the split had emotional and psychological consequences. At 55 years of age, neither was mentally or psychologically prepared. Adolph is now content; he has leveraged his business position into becoming the administrator of the hospital, and has the stability and prestige he craved. For Carlos, starting in new directions and reorienting himself to being the CEO rather than a partner was challenging. Therapy, management coaching, and reflection were invaluable aids in his making a successful change. For him, reflection permitted transforming the situation into a learning and growth experience. Carlos has restored his intention to grow the firm. Increasingly, he finds his time spent with strategic and administrative duties rather than treating patients. The clinic in the neighboring community was opened in 2006, and he is now working on another clinic in another town.

Acknowledgement

The author is grateful to Claudine K. Johnson for her valuable contributions to this chapter.

References

- Autio, E. (1997) Early growth and external relations in new technology-based firms. In: *Proceedings, 1997 USASBE Conference*. Retrieved March 01, 2007 from <http://www.usasbe.org/knowledge/proceedings/1997/P183Autio.PDF>.
- Baird, L., Meshoulam, I. (1988) Managing two fits of strategic human resource management. *The Academy of Management Review*, 13 (1): 116–128.
- Baum, R. J., Kirkpatrick, S. A., Locke, E. A. (1998) A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83(1): 43–54.
- Carland, J., Carland J. (1999) *Small Business Management: Tools for Success* (2nd edn.). Houston: Dame.
- Carter, N. M., Gartner, W. B., Reynolds, P. D. (1996) Exploring start-up event sequences. *Journal of Business Venturing*, 11(1): 151–166.
- Chandler, A. (1962) *Strategy and Structure*. Cambridge: MIT.
- Churchill, N. C., Lewis, V. L. (1983) Growing concerns: The five stages of small business growth. In: D. E. Gumpert (Ed.), *Harvard Business Review*: 30–50.
- Dodge, H., Fullerton, S., Robbins, J. (1994) Stage of the organizational life cycle and competition as mediators of problem perception for small businesses. *Strategic Management Journal*, 15: 121–134.
- Downs, A. (1967) The life cycle of bureaus. In: A. Downs (Ed.), *Inside Bureaucracy*. San Francisco: Little, Brown/Rand, 296–309.
- Drucker, P. F. (1999) *Practice of Management*. Oxford: Butterworth-Heinemann.
- Eggers, J. H. (1999) Developing entrepreneurial growth. *Ivey Business Journal*, 63(4): 76–81. Retrieved September 2, 2000, from PerAbs_FT database (01831649).
- Fenn, D. (1996) Breakthrough leadership: higher ground. *Inc*, 18(15): 92–99.
- Flemholz, Eric G., Yvonne Randle (1999) *Growing Pains: How to Make the Transition from an Entrepreneurship to a Professionally Managed Firm*. San Francisco: Jossey-Bass.
- Grego, S. (1996) Replace yourself, *Inc*. 18(18): 125–126.
- Greiner, L. (1972) Evolution and revolution as organizations grow. *Harvard Business Review*, July–August: 37–46
- Greiner, L. (1998) Evolution and revolution as organizations grow. *Harvard Business Review*, May–June: 55–67.
- Haire, Mason, ed. (1959) *Modern Organization Theory: A Symposium*. New York, Wiley
- Hay, M., Williamson, P. (1991) Strategic staircases: planning the capabilities required for success. *Long Range Planning*, 24(4): 36–43.

- Hanks, S., Watson, C., Jansen, E., Chandler G. (1993) Tightening the life cycle construct: a taxonomic study of growth stage configurations in high-technology organizations. *Entrepreneurship Theory and Practice*, Winter: 5–29.
- Hayes, R. H., Wheelwright, S. G. (1979) The dynamics of process–product life cycles. *Harvard Business Review*, 57(2): 127–136.
- Hizon, M.I., Bronson, J.W., Dougan, W. L. (2004) The role of technology as a competitive weapon in each of the five phases of growth. In: R. Khadpekar (Ed.), *Management of Technology: Practical Perspectives*. Hyderabad: The ICAFI University Press, 3–13.
- Jaques, E. (1992) Managerial accountability. *Journal for Quality and Participation*, 15(2): 40–44. Retrieved September 4, 2000, from AIB_INFORM database (00725529).
- Jaques, E. (1990) In praise of hierarchy. *Harvard Business Review*, 68(1): 127–133.
- Jaques, E. (1986) *Requisite Organization*. Arlington: Cason-Hall.
- Johnson, K. (1989) Building your management skills. *Managers Magazine*, 64(7): 21–23.
- Kazanjian, R. (1988) Relation of dominant problems to stages of growth in technology-based new ventures. *Academy of Management Journal*, 31(2): 257–279.
- Kazanjian, R. K., Drazin, R. (1990). A stage-contingent model of design and growth for technology based new ventures. *Journal of Business Venturing*, 5: 137–150.
- Kilzer, J., Glausser, G. (1984) Closing the small business management gap. *Management Accounting*, 65: 57–61.
- Kimberly, J.R., R.H. Miles (1980) *The Organizational Life Cycle*. San Francisco: Jossey-Bass.
- Lee, P. M. (1989) Growing pains. *Small Business Reports*, 14(7): 34–37.
- Lee, S. S. (2005) Needs of business assistance programmes to stages of growth in Korean venture companies. *International Journal of Entrepreneurship and Innovation Management*, 5(1–2): 155–164.
- Miller, D., Friesen, P. H. (1984) A longitudinal study of the corporate life cycle. *Management Science*, 30(10): 1161–1183.
- Olivier, A. (2004) Entrepreneurs and entrepreneurial executives. In: *Proceedings of BIOSS/Third Foundation Systems 1996: International conference on managing complexity*, Johannesburg, pp. 1–14.
- Olson, P. D., Terpstra, D. E. (1992) Organizational structural changes: Life-cycle stage influences and managers’ and interventionists’ challenges. *Journal of Organizational Change Management*, 5(4), 27–40. Retrieved September 2, 2000, from PerAbs_FT data-base (00667378).
- O’Neill, H. M. (1983) How entrepreneurs manage growth. *Long Range Planning*, 16: 117–123.
- Osborne, R. (1994) The myth of the renaissance man: The balance between enterprise and entrepreneur. *Review of Business*, 16(3), 36–40. Retrieved August 30, 2000, from ABI_INFORM database (00865738).

- Penna, A. A. (2000) Understanding the nature of work in small business: development of the CEO's skills in the small business. In: *Proceedings of 2000 Joint USASBE/SBIDA International Conference*, San Antonio, TX.
- Pinchot, G. III. (1985) *Intrapreneuring*. New York: Harper and Row.
- Pugh, D. S., Hickson, D. J., Hinings, C. R. (1968) Dimensions of organization structure. *Administrative Science Quarterly*, 65: 64–105.
- Quinn, R. E., Cameron, K. (1983) Organizational life cycles and shifting criteria of effectiveness: some preliminary evidence. *Management Science*, 29(1): 33–51.
- Rodale, Robert (1987) Grow or die, Magazine publishing. *Folio*, September.
- Scott, M., Bruce, R. (1987) Five stages of growth in small business. *Long Range Planning*, 30(3): 45–52.
- Schumpeter, J. A. (1983) *The Theory of Economic Development*. Cambridge: Harvard University Press, Transaction Inc. Reprinted (originally published 1934).
- Smith, K., Mitchell, T., Sumner, C. (1985) Top level management priorities in different stages of the organizational life cycle. *Academy of Management Journal*, 28(4): 799–820.
- Solymossy, E., Penna, A. (2001) Entrepreneur and organization: contingencies of successful organization transition. *Journal of Applied Management and Entrepreneurship*, 6(3): 69–80.
- Stevens, M. (1988) Guiding a business through it life cycle. *D & B Reports*, 36(3), 38–49.
- Vesper, K. H. (1990) *New Venture Strategies* (rev. edn.). Englewood Cliffs: Prentice Hall.
- Waldrop, H. (1987) How to manage a growing company. *Working Woman*, 12(4): 39–42.

Female Entrepreneurship

Nerys Fuller-Love

School of Management and Business, Aberystwyth University,
Aberystwyth, UK

1 Introduction

There has been a growing level of interest in female entrepreneurship in recent years. Initially, there was an awareness of the lower participation of women than men in the creation and growth of new enterprises. More recently, there is recognition that female entrepreneurship can have a positive impact on economic prosperity. This chapter looks at the importance of female entrepreneurship to the economy as well as some of the additional hurdles faced by women starting a business such as finance, management skills, networking and confidence.

Entrepreneurs start a business for a variety of reasons, some may spot an opportunity, some are motivated by wanting to make money or flexible working hours, others may want to employ family members or feel they have no other option. It can be difficult to start a business in any circumstance yet there is evidence that some groups may find it more difficult. Women in particular, may face some degree of additional problems in trying to start a business. Access to resources, including finance, skills and access to markets, may be more difficult for some females.

There are various factors that can explain the gap in the numbers of men and women starting a business. One of the major hurdles for women is acquiring resources, particularly finance for their new venture. Women, traditionally, have found it difficult to raise finance and only a small percentage of women succeed in raising venture capital (Brush et al, 2002). Interest in female entrepreneurship in particular has been increasing all around the

world and women now play an increasingly important role in entrepreneurial activity.

The Global Entrepreneurship Monitor (GEM) report on Women and Entrepreneurship (Minniti et al, 2005) found that men are twice as likely as women to be engaged in entrepreneurial activity. There are also sectoral differences as women are more likely to be engaged in the consumer-oriented sector than men. Overall, the rates of male business owners in the UK are 14.24% and female 5.82%. Of those with established businesses, the highest female participation rates in the GEM survey were Thailand with 13.2% and China at 10.3% (Minniti et al, 2005).

According to the GEM report (Minniti et al, 2005) fewer women than men know other entrepreneurs and believe they have sufficient skills to run a business. This suggests that men are more confident in their abilities than women and also have better business networks. Therefore, the availability of networks and enhancing skills for female entrepreneurs may be very important. Developing confidence in female entrepreneurs and addressing their fear of failure may also be important.

The increase in female entrepreneurship is likely to have a positive effect on economic development. All over the world, women are successfully starting new business ventures. Entrepreneurial activity varies across countries and there are different motivations for starting a business. Women's business ventures are more likely to be in the service industries, for example retail and health and beauty. Education and training may be an important factor in providing female entrepreneurs with more resources and confidence.

The perspectives presented in this chapter illustrate some important points. First, the problems faced by women in trying to run their own businesses. This chapter looks at various issues concerning female. Firstly, what are stereotypical views and are they justified? Secondly, do they face additional hurdles such as raising finance? The reasons for the fact that there are fewer female than male entrepreneurs are investigated as well the different ways in which they grow their business, use networks, and develop management skills.

2 Female Entrepreneurs

Traditionally, it has been thought that female entrepreneurs faced different problems and had different attitudes towards their male counterparts and that was why there were fewer of them. Much of the research has been focused on the discrimination faced by women when they wanted to start a business and some of the additional hurdles they had to overcome. However,

in recent years there has been a growing importance of the economic contribution that female entrepreneurs can make and this has provided the impetus for encouraging women to start their own business.

For women, their aspirations may be low as they tend to start local, small-scale businesses in retail and service industries that gives them an income but allows them to retain some flexibility so that they can still make time for their family commitments. Women state that providing a family income, having a flexible schedule, solving social problems and doing meaningful work as important to them (Brush 1992).

The perceptions about women's role at work and in business may be influenced by their education, society, the media, their families and their experiences. Even if both parents work, the female is more likely to take care of childcare, cooking and housework whereas the male is more likely to take care of maintenance and repairs. Education also plays a role in developing gender stereotypes in that the percentage of women studying science and technology is lower than for men. The main reasons given by women for starting a business (Brush et al, 2004, p. 80) were learning and personal achievement, with flexibility and economic reasons less important. Brush et al (2004) found in a survey of 800 nascent entrepreneurs that 24% of the male respondents wanted to have a business as large as possible, but only 15% of the women reported the same.

One of the problems facing female entrepreneurs is that, despite making great strides in the workplace and equal opportunities legislation, female earnings are still only 70% of the male equivalent. Also, fewer women reach the higher level of management and are generally underrepresented at board level. One way of avoiding the glass ceiling in the workplace is to become an entrepreneur and an increasing number of women have taken this route in the last few years.

There are several ways to measure female entrepreneurship including the percentage of female entrepreneurs in the labour force as well as the percentage of total entrepreneurial activity. Female entrepreneurship varies from country to country. Countries where the levels of entrepreneurial activity are high usually have a higher level of involvement of women in starting their own business. In the US, the level of female entrepreneurial activity is 13% compared to 5.82% (Table 1).

In all the countries in the GEM survey, men are more likely to be involved in entrepreneurial activity than women. Middle income countries such as Venezuela and Thailand had the highest women's early-stage entrepreneurial activity at 23.8% and 19.3% respectively whereas high income countries such as the Netherlands and Japan had the lowest at 2.1% and 1.2% respectively (Minniti et al, 2005).

Table 1. Male and female entrepreneurial activity

	Early-stage entrepreneurial activity (nascent and new) (%)		Established business owners (%)		Overall business owners (nascent + new + established) (%)	
	Male	Female	Male	Female	Male	Female
Argentina	14.82	7.39	8.38	1.58	23.21	8.97
Australia	11.62	7.55	12.08	7.09	23.70	14.65
Austria	9.68	3.66	5.10	2.58	14.78	6.23
Belgium	1.39	2.42	7.23	4.03	8.62	6.46
Brazil	15.24	10.83	13.33	7.00	28.58	17.84
Canada	14.21	5.56	9.72	5.09	23.93	10.65
Chile	14.17	8.21	4.82	2.76	18.98	10.97
China	11.82	11.60	16.06	10.27	27.88	21.87
Croatia	5.43	2.58	4.74	2.61	10.17	5.19
Denmark	5.08	3.09	6.56	2.12	11.64	5.21
Finland	7.17	4.41	12.43	4.73	19.59	9.14
France	6.40	3.33	2.76	1.79	9.16	5.11
Germany	8.67	3.82	5.99	2.35	14.66	6.18
Greece	7.40	3.37	11.36	9.63	18.76	13.00
Hungary	6.58	2.39	2.08	1.95	8.66	4.34
Iceland	13.11	6.40	9.05	5.48	22.16	11.88
Ireland	9.56	5.48	12.26	3.88	21.81	9.35
Italy	6.90	3.70	9.17	3.64	16.07	7.34
Jamaica	21.65	15.69	9.57	9.49	31.22	25.18
Japan	3.20	1.20	7.67	3.11	10.87	4.31
Latvia	7.28	5.02	6.57	3.60	13.85	8.62
Mexico	5.88	4.55	3.11	0.77	8.99	5.32
Netherlands	3.20	2.11	7.35	3.94	10.55	6.05
New Zealand	15.73	13.75	13.83	8.03	29.56	21.77
Norway	5.52	4.47	10.10	4.38	15.62	8.82
Singapore	8.47	5.04	7.49	2.15	15.95	7.19
Slovenia	9.78	2.92	8.74	3.78	18.62	6.70
South Africa	13.91	4.49	1.63	1.00	15.54	5.49
Spain	6.92	4.15	8.75	6.68	15.67	10.83
Sweden	5.79	2.99	8.68	3.91	14.48	6.90
Switzerland	7.38	4.89	11.86	7.59	19.24	12.48
Thailand	18.37	19.33	15.09	13.15	33.46	32.49
UK	6.17	3.74	8.06	2.08	14.24	5.82
US	14.15	9.65	6.01	3.35	20.15	13.00
Venezuela	22.20	23.86	10.93	6.25	33.13	30.12

Source: Minniti et al. (2005, p. 11)

Lower female self-employment may be as a result of the sectoral distribution of self-employment, difficulties in raising finance, and the fact that women are more likely to be the primary carers for children and the elderly and also to undertake the major domestic responsibilities (Barclays 2000). However, the rate of growth of women expecting to start a business is higher than for men since 2003 (Harding 2007).

The gap between male and female entrepreneurs is gradually getting smaller as more and more women are starting their own business. In the UK, the entrepreneurial activity is 3.9% of the women of working age compared to 8.1% for men. The entrepreneurial activity for men fell from 9.8% in 2003 to 8.1% in 2005. The gap is narrower in the early stages of the business with men 52% more likely to start a business up to 3 months old but 72% more likely to have a business that is more than 42 months old (Harding 2007).

One of the factors that may affect the decision to start a business is a lower rate of self-confidence or risk aversion which may particularly affect women. Women worry more about failure than men with 37% of women stating that fear of failure would prevent them from starting a business compared to 32% of men (Harding 2007). Some groups may prefer advice and networks involving people with similar backgrounds.

Carter et al (2001) identified six major themes in the research into female entrepreneurship. These were reviewed in 2006 (Carter and Shaw 2006) and found that the themes had changed over time (Table 2).

During the five years from 2001 to 2006, there has been a considerable amount of research into female entrepreneurship and, as a consequence, there has been an increasing focus into particular areas. Research into female entrepreneurship can be divided into two parts, firstly comparing male and female entrepreneurship and, secondly, comparing two or more

Table 2. Main themes in research into female entrepreneurship

Main themes 2001	Main themes 2006
Characteristics and motivation of women entrepreneurs	Defining and measuring women's enterprises
Start-up: patterns, resources and constraints	The socio-economic context of women's enterprise
Management of female owned firms	Social construction of women's enterprise
Business networks	Non-financial entrepreneurial capital
Finance and related issues	Financial capital
Business performance and growth	Sustainability and performance

Source: Adapted from Carter and Shaw (2006, p. 18)

groups of women business owners. However, this research has focused on specific areas including the economic context, social capital such as networks, finance and business performance.

3 Definitions

Generally, definitions of female entrepreneurs are based on majority ownership, usually 51% of the business. Carter and Shaw (2006) define a women-owned business as one that is majority owned by one or more women. Other definitions include the roles carried out by the female entrepreneur such as establishing the business, or forming a strategy. Moore and Buttner (1997) define a female entrepreneur as one who has used her knowledge and resources to develop or create a business opportunity, is involved in managing it, owns at least 50% and has been operating for more than 12 months. Marlow and Patton (2005, p. 718) suggest that this refers to women who 'have initiated a business, are actively involved in its management, and own a majority share of the enterprise'. In general there is an understanding that a female-owned business is one that has been established and is owned and managed by one or more women.

4 Characteristics

The majority of research about entrepreneur has, in the past, focused on men and it is only relatively recently that there has been discussion of the characteristics of females. Birley (1989) looked at three factors which influence female entrepreneurs including antecedent influences including background, motivation, education and skills; incubator organisation which provides the entrepreneur with experience prior to start-up; and environmental factors, which include the availability of capital, role models and other support. Environmental issues, such as difficulties in obtaining finance, remain an important factor, and may result in under-performance in relation to male entrepreneurs (Marlow and Patton 2005). However, it is possible that female entrepreneurs are less ambitious than men and they might have different priorities especially in relation to risk and family commitments. Langowitz and Minniti (2007) found that attitudes toward entrepreneurship were important especially self-confidence, opportunity perception, and the likelihood of starting a new business. DeTienne and Chandler (2007) found that females showed significantly lower entrepreneurial self-efficacy patterns, i.e., the self-confidence in having the necessary skills to run a

business, than males in schools and on MBA programmes and that these reflected gender based role expectations. Birley (1989) concluded that the role of women was developing as society was changing and that they will continue to get closer to the characteristics of male entrepreneurs.

5 Economic Context

One of the reasons given by the EU (European Commission 2002, p. 3) for promoting female entrepreneurship is that they are a source of 'economic growth and new jobs' and that the barriers they face in setting up and running a business must be tackled. There is an understanding that entrepreneurs in general make a contribution towards economic growth, mainly in terms of job creation but also in terms of innovation. Therefore, if the numbers of entrepreneurs can be increased by bringing the levels of female entrepreneurship to the equivalent for male business owners, then that will help the economy. In the US, female entrepreneurs account for 38.8% of all privately owned firms (Minniti et al, 2005) and this is seen as one of the reasons for the higher GDP than in countries where the participation rate for women is lower.

One of the dramatic changes in the labour market over the last 50 years has been the increasing participation of women in the workforce. Together with this, there has been an increasing number of women starting and running their own business. Entrepreneurship is generally regarded as a flexible means of generating income for women with family responsibilities. It is also a way of overcoming the 'glass ceiling', the barrier to promotion in large organisations.

There has been a growing interest in the field of female entrepreneurship in recent years. Some countries have higher rates of female entrepreneurship than others. For example, the USA, Canada, New Zealand and Australia have relatively high rates of female owned businesses. Other countries such as Spain, Portugal, Italy and Greece have high rates of female self-employment but lower rates of female owned businesses.

6 Finance

Research has also shown that women face additional problems when trying to raise funding. Men are more likely to use external funding for their businesses than women (Carter et al, 2001). Brush et al (2004) found that women invested less in their businesses than men, because they did not

have the same level of financial resources available. One of the reasons for this is that women earn, on average, 70% of the male average wages and this gender disparity is wider the higher up the management hierarchy. Also, a high proportion of the female workforce spends time out of the work-place looking after children or they may work part-time. Although, women are closing the pay gap, there is still a disparity in pay and promotion prospects. This disparity in earnings means that females are more likely to have less savings and financial resources to start a business.

Women generally start their business with less capital than men. Men generally put in two-thirds of the initial capital themselves with women putting in half. Fewer women apply for loans than men to finance their business but they have lower failure rates in obtaining overdrafts and unsecured loans (Harding 2007). Raising finance is seen as one of the barriers that women face that may prevent them from starting a business, although other factors such as lack of confidence may be important.

Sources of finance are becoming more accessible for women. Generally, women still tend to rely on more accessible sources of finance such as credit cards and are generally more reluctant to seek bank financing than men. However, when women choose to seek bank finance, the owner's credit risk and prospects are more important than gender (Brush et al., 2004). As women generally have less savings to start their business, they are more likely to rely on friends and family to help them get started. Women often take a more cautious approach to raising finance. This may be because they are less risk averse than men. However, women are more likely to raise finance if they have achieved higher levels of education.

According to Brush et al (2004), female entrepreneurs in the US received less than 5% of all venture capital finance in the 1990s. Although only a small proportion of all firms, whether run by male or female entrepreneurs, receive venture capital funding, the effect on growth is considerable.

The reasons why women raise less venture capital than men may be due to a number of factors, including the potential of their businesses, their attitudes, their willingness to go through the process, or a lack of skills. It may also be the attitudes of the providers of venture capital towards women. The perceptions of female entrepreneurs may have an impact on their ability to raise sufficient finance to grow their business. Management experience is often essential for raising finance and, as women are at a disadvantage in achieving the higher echelons of management, there may be a perception that they do not have sufficient skills or experience. This may be reinforced by the subjects that women chose to study that focus more on the arts and social sciences rather than engineering and technology.

Brush et al (2004) found that women were more likely to succeed in attracting outside equity investment if they had previously used bootstrap finance to build up their business. Bootstrapping can include a variety of methods which are all designed to keep the amount of capital used in the business as low as possible. These techniques can be effective for both male and female entrepreneurs. However, female entrepreneurs may be more likely to use bootstrapping techniques to start and grow their business because they may either be more reluctant to raise finance for their business or find it more difficult.

Venture capitalists usually concentrate on one industry sector such as IT, biotechnology, software, etc. The majority of women starting a business in these sectors is very low as they generally tend to focus on service Industries, although the numbers of women starting a technology-based business is growing. There are, of course, many examples of women who have grown a retail business such as Laura Ashley and Anita Roddick with the Body Shop but they did develop their own products. Women, generally make up a small proportion of the decision makers in the venture capital industry. According to Brush et al (2004, p. 226), the most highly qualified women still find it difficult to raise venture capital because they 'don't know the right people and don't know the ropes'.

7 Growth

Women-led firms are generally smaller and also earn less than businesses owned by men. They also tend to employ fewer people. One reason for the fact that owner-led firms are smaller may be that men may be more motivated to grow their firms. Men generally have higher expectations of growth than women with 49% more likely to have high expectations of growth in that they intend to create 19 or more jobs in the next five years. Women only expect to create three jobs over the next five years compared to five jobs for men. Turnover expectations are also higher for men than for women over five years (Harding 2007).

Entrepreneurs can control the growth of their firms by limiting their resources in terms of time, finance and not recruiting additional personnel or opening up new markets. Other factors related to growth can be the education and background of the entrepreneur. Owners with better education and previous business experience are more likely to grow their firms. Women with less business experience might lack the confidence to grow their firms. Another reason may be that women tend to start their business in low-growth industry sectors. These businesses may be easier for women

to enter in that they might have lower capital requirements and need fewer skills. Women may also have smaller firms because of their family commitments such as small children or elderly relatives.

The majority of women-led businesses stay relatively small. One of the reasons for this may be the choice of sector. Female entrepreneurs traditionally choose the service industry such as health and beauty, retail, and hospitality and tourism. One of the reasons for focusing on low-growth, service industries such as shops and hairdressers is that the female entrepreneurs are focusing on creating and maintaining an income rather than growing a business. However, these decisions may be because of lack of opportunities. However, women are increasingly developing businesses in high-technology, high-growth sectors including manufacturing and technology.

Although the number of female entrepreneurs has been increasing rapidly over the last few years, women rarely achieve the levels of success of their male counterparts. This may be due to a number of reasons, including the fact that women tend to focus on low-growth, low technology sectors where there is a high degree of personal interaction with the customer. One of the reasons may be that women find it difficult to raise the financial resources necessary for growth, in particular venture capital.

One of the fundamental issues for growth is that the business concept needs to be scalable otherwise the business will remain a small, local enterprise. Brush et al (2004) found that networks and social capital and the ability to use them effectively were important in making sure the financial, human and technological resources were available. However, often it is that women use these skills that differ from their male counterparts, as well as the attitudes of the entrepreneurs themselves.

Female entrepreneurs may face additional barriers in establishing relationships with their customers, suppliers, bankers, etc. One area that has been the subject of much discussion and research is whether female entrepreneurs find it difficult to raise finance for their business venture. Female entrepreneurs generally tend to have smaller businesses and employ fewer employees. There is the question of whether this is as a result of inadequate capital to grow their business.

Men may have different aspirations to women in that female entrepreneurs may be less ambitious for their business, and want more in terms of social aspirations. However, the fact that women have, in the past, focused on low-growth, low scale businesses does not mean that they would not take the opportunity to grow and use technology. One of the factors, however, that may limit a female entrepreneur's capacity to grow her business is family considerations, especially if she has young children.

8 Management Skills

Entrepreneurs, whether male or female, need particular skills if they are to set up a new venture or grow an existing one. They need to ensure they have sufficient resources, in terms of skills, finance, space, equipment, people, etc., that they need to run their business. Often, they need to be able to start something out of very little. Entrepreneurs need to ensure that their venture is scalable if they are to achieve high growth and high value. How do women differ from men in terms of skills? Often, it is not in the skills themselves but in the management experiences, technical education and their attitudes towards success that defines the female entrepreneur.

Walker and Webster (2006) attempted to identify the current participation level of managerial competencies of women participants at two points in time, when they started their business and their perception of their current managerial competencies. The women had generally been in business for less time than the men and had a higher level of education. Women generally rated themselves significantly higher on customer service, managing people, and computer and internet skills. This may reflect previous administrative experience (Winn 2005).

Relevant experience in an industry can provide the entrepreneur with knowledge and contacts and often people do start a business in which they have worked or have developed an interest. Previous experience of management is also considered to help entrepreneurs run their businesses effectively and efficiently. Women are less likely to have gained the relevant experience necessary because they are less likely to achieve top management positions because of the glass ceiling, although this situation is slowly changing.

Management teams are essential to build a business. Skills such as marketing, finance, human resources, operations are all required to grow a business. A good team will bring together different skills and experiences and will also bring access to different networks. Women might find it more difficult to recruit the right personnel because they are not part of the business networks and have less previous management experience. There is evidence that women are less likely to share ownership than men. Both men and women are more likely to recruit similar people to themselves so women tend to build female teams.

The vast majority of businesses in the UK are family business and most of these are run by husband and wife teams. It is difficult to determine the role of the women in these businesses. Some are very hands on and provide strategic leadership whereas others are involved on a peripheral basis and are only there to provide support for their husbands.

Entrepreneurs often use their social contacts to build a management team for their business, including family and friends and business contacts. However, using family and friends may not be the best choice for the business if they do not have the correct skills. Using family and friends does have an advantage in that it might be easier to keep the team together when things get difficult if they already know each other. Women may find it easier to employ family and friends, especially if they do not have management experience or business contacts which can put them at a disadvantage when building management teams to grow the business.

9 Technology and Innovation

Although the numbers of girls taking subjects such as medicine, business and law has increased over the last 20–30 years, fewer girls study science and technology than boys. The lower percentage of females studying science, engineering and technology may have an impact on their ability to develop innovative new ideas for their business. Innovation is critical for the success of a new business and can take the form of a new product, improvements in an existing product or developing new markets.

One of the fundamental research questions about female entrepreneurship is the extent to which they differ from their male counterparts. Two areas where differences have been noted are growth and technology. Although women have similar growth expectations to men, in reality they grow more slowly than male-led new businesses and employ fewer employees (Minniti et al, 2005). Matthews and Human (2000) found no differences as regards to growth expectations and Kollinger and Minniti (2005) found little support for the theory that women were more prone to ‘fear of failure’ (Wagner 2004). Previous research in North America (Carter and Brush 2004; Menzies et al, 2004) found that women tended to major in health related subjects whereas men were more likely to study science, computers and technology. There is evidence to suggest that women are more likely to use existing technology and use less start up capital (Minniti et al, 2005).

Menzies et al (2006) in a study of nascent entrepreneurs in Canada found significant differences in university education with men choosing applied science and computers and women focusing on health related subjects. Men estimated a higher probability that their business would be operating in five years and men had more start-up experience, were more likely to own their own homes and had more friends and neighbours with businesses. Women, unsurprisingly, spent more time on household tasks. This

study appears to confirm stereotypical views of men and women entrepreneurs, i.e., that men are more interested in science and technology, particularly when choosing university degrees. Women were also more likely to focus on local customers than men who were more optimistic about having international clients. Other factors such as the completion of a business plan, hiring employees or duration of gestational activities were the same for both male and female entrepreneurs. However, one of the critical factors appeared to be the higher degree of confidence amongst the male entrepreneurs. This confidence may be because the male entrepreneurs were more likely to own a home, be less burdened by domestic responsibilities, have expectations that the business would succeed in the long term, using technology, greater networking opportunities, etc. On the other hand women were more likely to achieve an operating business and were better prepared, especially if they were members of a team.

Traditionally, men have been credited with innovation and women generally register fewer patents than men. Some of the innovations created by women include disposable nappies, etc. It is difficult to measure the effect of technology and science education on innovation but generally, men are credited with more innovative new ideas than women.

10 Women in Rural Areas

Warren-Smith and Jackson (2004) found that there were strong incentives for self-employed women to create new job opportunities and additional farm income for rural families. Networks such as WIRE (Women in Rural Enterprise) provide support for rural female entrepreneurs can provide support for rural women in self-employment.

Female entrepreneurs in rural areas may be a long way from the markets and may need to use IT. Women are more likely to use new technology than men with 20.9% of women setting up in business using technology that was not around a year ago compared to 10.6% of men (Harding 2007), especially as it can provide them with the opportunity to work from home. This may be important for women with small children at home and those in rural areas.

11 Networks and Social Capital

Networks can help entrepreneurs in a number of different ways, by providing access to information and resources that would not otherwise be

available in a small firm. There are different types of networks in business, both formal and informal. Social networks, for example, are important, especially for women. Business networks can provide access to legal and professional advice and support from people such as solicitors and accountants. Women may find it difficult to break into some of the business networks that have traditionally been associated with men.

Formal networks include professional organisations with paid membership, an industry association, chamber of commerce or business clubs. These usually have regular meetings or events and will also distribute information. Even if a woman joins these groups, she might be in a minority and feel like an outsider. Menzies et al (2004) found no differences between male and female entrepreneurs in their social contacts. (Daniel 2004) found that women have better networking skills than men, especially in building relationships with others. Women have a tendency to form social networks and interact in a different way. They will join a social network for emotional support and friendship rather than to support their business. Education and social groups may have an influence on the choice of network and whether or not a woman will feel accepted.

It has been found that women communicate in a different way from men. Women are more likely to express doubts about their ability or the future prospects of the business than men which may be interpreted as having less confidence. Women are also less likely to boast about their achievements. Men will talk about sports, politics or the news whereas women will talk about their personal lives and their families. Men will also bring up problems when they want a solution whereas women will talk about their problems to build a relationship. These differences can then have an impact on the way that they use networks.

Social capital is the goodwill you accumulate with interaction with other members of a network whether it is a social or a business networks. A kindness given by one persona can be repaid or given to another person. Entrepreneurs generally need a lot of social capital as they are withdrawing rather than depositing (Brush et al, 2004). Friends and family can provide moral and financial support. Other support groups such as clubs, charities and communities can also provide sources of social capital such as a customer base. Entrepreneurs call on the social capital built up over years when they start a new venture. Women are very good at building social capital but they tend to focus on family and friends whereas men build networks with people who can help them with their business.

12 Government Policy

One of the main impetus for government support for female entrepreneurs is the awareness of the contribution that they can make to the economy and also the intention to reduce inequality in the numbers of men and women business owners. There are various issues which can be explored with regard to government policy to encourage female entrepreneurship. These include finance, training, general enterprise support and networks. The question of whether policies for female entrepreneurs should be the same as that for men is a difficult one and there are few initiatives aimed specifically at women although these are increasing in number as there is recognition of the differences challenges that female entrepreneurs face when starting a business.

In the UK, the government published the Strategic Framework for Women's Enterprise in 2003. The aim of this strategy was to close the gap between entrepreneurial activity in the UK and the US. The actions proposed included business support, mentoring, coaching and training as well as improved access to finance. In addition, a Women's Enterprise Task Force was announced in November 2005.

The three principal aims of the 2003 Strategic Framework are:

- To tackle underlying issues affecting female entrepreneurship
- To develop customer focused services
- To change attitudes towards women's enterprise through the media, schools and communities.

The government's intention was to increase female participation to US levels, to improve business support and to encourage strategic partnerships. The policy was based on evidence that women were less entrepreneurial than men because they lacked business support, had less access to finance and had additional responsibilities such as childcare. Other factors included difficulties in moving from income support into self-employment and a lack of role models.

Harding (2007) noted three problems with government policies to encourage female entrepreneurship. The first one was regionalisation/decentralisation of support which was seen as undermining a cohesive strategy. Secondly, the focus on disadvantaged groups rather than mainstreaming the support and thirdly, seeing women as a homogenous groups. What is clear is that female entrepreneurs are not a homogenous group and may need specific support which has been designed to meet their needs.

13 Conclusion

It is clear that female entrepreneurs face a greater challenge than their male counterparts. Large numbers of women are studying business and management subjects at university but the numbers studying science and technology remain relatively low. This puts women at a disadvantage when it comes to raising finance for their businesses, especially venture capital, as these funds are geared towards high-growth, high-technology ventures. However, women can bring organisation and marketing skills to these businesses. Although women now find it easier to raise finance for a new business, particularly from banks, they are under-represented when it comes to raising venture capital.

Female and entrepreneurship has become an increasingly popular subject over the last few years. The contribution that female entrepreneurs can make to economic prosperity is now recognised and there is now a greater understanding of some of the hurdles that they may face in trying to set up their own business. Females are generally under-represented as business owners, and even when they do start a business, their earnings and number of employees are lower than male entrepreneurs. There are now many initiatives, support and training programmes to help women getting into business. There are many other issues to consider when dealing with female entrepreneurs with regard to setting up and growing a business. Some of the reasons for this include the fact that men are more confident and, although women are better at social contacts, men have better business networks. Although women appear to have similar entrepreneurial orientation, men appear to achieve the same or better performance.

Women generally earn less than men and therefore may have fewer financial resources to start and grow a business. They are less likely to grow their business and employ fewer employees than their male counterparts. Women entrepreneurs are more likely to base their businesses in retail and service industries. They are also more likely to use bootstrap finance and other sources such as their own savings and credit cards. Generally, they are less ambitious than their male counterparts. The reasons for this may include difficulties in raising finance, lack of confidence and managerial competencies. Women also generally network for social reasons, are more focused on family and friends, and may have other responsibilities such as childcare. It is clear that female entrepreneurs may need additional support in order to start a business and this has implications for government policy and future research.

References

- Barclays (2000) *Women in Business, the Barriers Start to Fall*. London, Barclays Bank
- Birley, S. (1989) Female entrepreneurs: are they really different? *Journal of Small Business Management*, 27(1): 32–37
- Brush, C.G. (1992) Research on women business owners: past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16(4): 5–30
- Brush, C.G., Carter, N., Greene, P., Hart, M., Gatewood, E. (2002) The role of social capital and gender in linking financial suppliers and entrepreneurial firms: a framework for future research. *Venture Capital*, 4(4): 305–323
- Brush, C., Carter, N.M., Gatewood, E., Greene, P.G., Hart, M.M. (2004) *Clearing the Hurdles: Women Building High Growth Businesses*. Financial Times Prentice Hall, New Jersey
- Carter, N.M., Brush, C.G. (2004) Gender. L., Gastner, W.B., Shaver, K.G., Carter, N.M. & Reynolds, P.D. (Eds.), *Handbook of entrepreneurial dynamics*. Sage, London
- Carter, S., Shaw, E. (2006) *Women's business ownership: recent research and policy developments*. Report to the Small Business Service
- Carter, S., Anderson, S., Shaw, E. (2001) *Women's Business Ownership: A Review of the Academic, Popular and Internet Literature*. Sheffield, Small Business Service
- Daniel, T.A. (2004) The exodus of women from the corporate workplace to self owned businesses. *Employment Relations Today*, 30(4): 55–61
- DeTienne, D.R., Chandler, G.N. (2007) The role of gender in opportunity identification. *Entrepreneurship Theory and Practice*, 31(3): 365–386
- European Commission (2002) *Good Practices in the Promotion of Female Entrepreneurship; Examples from Europe and other OECD Countries*. European Commission, Brussels
- Harding, R. (2007) *Stairways to Growth: Supporting the ascent of Women's Enterprise in the UK*. Prowess, Norwich
- Kollinger, P., Minniti, M. (2005) Not for lack of trying: American entrepreneurship black and white. Paper presented at the conference: *Nascent Entrepreneurship: The Hidden Potential* (CD), Durham, 2005
- Langowitz, N., Minniti, M. (2007) The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3): 341–364
- Marlow, S., Patton, D. (2005) All credit to men? entrepreneurship, finance and gender. *Entrepreneurship Theory and Practice*, 29(6): 717–735
- Matthews, C.H., Human, S.E. (2000) The little engine that could: uncertainty and growth expectations of nascent entrepreneurs. In: Reynolds, P.D. et al. (Eds.), *Frontiers of Entrepreneurship Research 2000*. Babson College, Wellesley
- Menzies, T.V., Diochon, M., Gasse, Y. (2004) Examining venture-related myths concerning women entrepreneurs. *Journal of Developmental Entrepreneurship*, 9(2): 89–107

- Menzies, T.V., Diohcon, M., Gasse, Y., Elgie, S. (2006) A longitudinal study of female vs. male nascent entrepreneurs in Canada: characteristics, process and out-come differences. *International Entrepreneurship and Management Journal*, 2(4): 441–453
- Minniti, M., Arenius, P., Langowitz, N. (2005) Global entrepreneurship monitor: 2005 report on women and entrepreneurship. The Centre for Women's Leadership, Babson College. Babson Park, 40 pp.
- Moore, D.P., Buttner, E.H. (1997) *Female Entrepreneurs: Moving Beyond the Glass Ceiling*. Sage, Thousand Oaks
- Wagner, J. (2004) What a difference a Y makes: female and male nascent entrepreneurs in Germany, IZA DP No. 1134. Forschungsinstitut zur Zukunft der Arbeit, Bonn, Germany, 2004
- Walker, E., Webster, B. (2006) Management competencies of women business owners. *International Entrepreneurship and Management Journal*, 2(2): 495–508
- Warren-Smith, I., Jackson, C. (2004) Women creating wealth through rural enterprise. *International Journal of Entrepreneurial Behaviour and Research*, 10(6): 369–383
- Winn, J. (2005) Women entrepreneurs: can we remove the barriers? *International Entrepreneurship and Management Journal*, 1: 381–397