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Entrepreneurship and Regional Development

Local Processes and Global Patterns

Edited by
CHARLIE KARLSSON
BÖRJE JOHANSSON
ROGER R. STOUGH

New Horizons in Regional Science

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Local Processes and Global Patterns

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Charlie Karlsson

Professor of the Economics of Technological Change and Director of CISEG (Centre for Innovation Systems, Entrepreneurship and Growth), Jönköping International Business School, Jönköping University, Jönköping, Sweden, Professor of Industrial Economics and Organization, Blekinge Institute of Technology, Ronneby, Sweden and Guest Professor of Economics, University West, Trollhättan, Sweden

Börje Johansson

Professor of Economics, Jönköping International Business School, Jönköping University and Director of CESIS (Centre of Excellence for Science and Innovation Studies), Royal Institute of Technology, Stockholm, Sweden

Roger R. Stough

NOVA Endowed Chair, Eminent Scholar and Professor of Public Policy, and Vice President for Research and Economic Development, George Mason University, Fairfax, VA, USA

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Contributors

Zoltan J. Acs, School of Public Policy, George Mason University, Fairfax, VA, USA

Catherine Armington, Census Fellow, US Bureau of the Census, Washington, DC, USA

Per Assmo, Department of Economics & IT, University West, Trollhättan, Sweden

David B. Audretsch, Institute for Development Strategies, Indiana University, Bloomington, Indiana, USA

Benny Borgman, Pfizer AB, Jönköping, Sweden

Pontus Braunerhjelm, Swedish Entrepreneurship Forum, Stockholm, Sweden

Roberta Capello, Politechnico di Milano, Department of Management, Economics and Industrial Engineering, Italy

Gary A.S. Cook, University of Liverpool Management School, Liverpool, United Kingdom

Andreas P. Cornett, University of Southern Denmark, Soenderborg, Denmark

Bernd Ebersberger, Management Center Innsbruck, Austria

Börje Johansson, Jönköping International Business School, Jönköping University and CESIS (Centre of Excellence for Science and Innovation Studies), Royal Institute of Technology, Stockholm, Sweden

Charlie Karlsson, Jönköping International Business School, Jönköping University, Jönköping, Sweden, Blekinge Institute of Technology, Ronneby, Sweden and University West, Trollhättan, Sweden

Ho Yeon Kim, Sungkyunkwan University, Department of Economics, Seoul, Republic of Korea

Sierdjan Koster, Department of Economic Geography, University of Groningen, The Netherlands

Hans Lööf, The Royal Institute of Technology, Stockholm, Sweden

Elisabet Ljunggren, Nordland Research Institute, Norway

Charlotta Mellander, Jönköping International Business School, Jönköping University, Sweden

Johanna Nählinder, Linköping University, Sweden

Johanna Palmberg, Jönköping International Business School, Jönköping University, Sweden

Naresh R. Pandit, Norwich Business School, University of East Anglia, United Kingdom

Lars Rønning, Nordland Research Institute, Norway

Roger R. Stough, School of Public Policy, George Mason University, Fairfax, VA, USA

Johan Wiklund, Jönköping International Business School, Jönköping University, Sweden

Preface

The contributions forming the different chapters in this book were first presented and discussed at the Ninth Uddevalla Symposium on Entrepreneurship and Development – Local Processes and Global Patterns held at George Mason University, School of Public Policy, Fairfax, VA, USA, June 15–17, 2006.

The aim of this international conference was to explore and analyse further the role of local processes and global patterns of entrepreneurship in functional regions. The contributions cover a wide range of topics within the field of entrepreneurship and regional economic development on a global market.

The symposium was hosted by the School of Public Policy, George Mason University, and organised in cooperation with University West, Uddevalla, Sweden and Jönköping International Business School, Jönköping, Sweden. The symposium was sponsored by the School of Public Policy, George Mason University, University West, CESIS (Centre of Excellence for Science and Innovation Studies), Stockholm and Jönköping, Sweden, the Municipality of Uddevalla, Sweden, and The Bank of Sweden Tercentenary Foundation, Stockholm, Sweden.

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Charlie Karlsson and Börje Johansson
Jönköping
Roger R. Stough
Fairfax, VA

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1. Introduction

Charlie Karlsson, Börje Johansson and Roger R. Stough

1.1 ENTREPRENEURSHIP AND DEVELOPMENT: LOCAL PROCESSES AND GLOBAL PATTERNS

Few other issues attract so much international interest and debate as globalisation. A search of the Internet using Google generates about 20,700,000 hits for the concept of globalization.[1] With such a widespread use of the concept both in academic and political circles, it is natural that the meanings attributed to the concept vary a lot. Clark (2000) sees it as the process of creating networks of connections among actors at multi-continental distances, mediated through a variety of flows including people, information, ideas, capital, and goods. Norris (2000) describes globalisation as a process that erodes national boundaries, integrates national economies, cultures, technologies, and governance, while it produces complex relations of mutual interdependence. Others view globalisation as a process fuelled by, and resulting in, increased cross-border flows of goods, services, money, people, information, and culture (Held et al., 1999).

Observing that the above descriptions of stress producing friction and rigidity in cross-border flows, we suggest that globalisation should be understood as the increasing international interdependence, integration, and interaction among people, companies, regions, and countries. Thus, political, economic, financial, environmental, social, and cultural processes that are global in scope are exerting a growing influence at the local, regional, national, and supra-national level.[2] From an economic perspective, globalisation[3] can be understood as the growing economic interdependence of regions and countries worldwide through an increasing volume and variety of interregional and international trade in goods and services and of capital flows and a more rapid and widespread diffusion of knowledge and technology.[4]

The general motivation for this book *Entrepreneurship and Regional Development: Local Processes and Global Patterns* can be found in the current interest in globalisation as a phenomenon that strongly affects the conditions of local economic development. By bringing together the contributions of a number of leading scientists in the field, our purpose is to contribute to a better understanding of some of the current development aspects, in particular those that foster the evolution of entrepreneurs in local-global processes. In particular, we want to stress that those global patterns of change that are observed and reported in the media and by social scientists are the result of innumerable local processes driven by economic, political, and social entrepreneurs in localities, regions, and nations all around the globe. With this introductory chapter, we provide the readers of this book with a general introduction to the themes brought up in the different chapters of the book.

1.2 FOUR ERAS OF GLOBALISATION

Judging from the debate on globalisation in recent years one might get the impression that globalisation is a new phenomenon, and in particular a phenomenon which more or less developed in parallel with the information and communication technology revolution in recent decades. However, the contributions in this book argue that the developments in recent decades which have been described as different aspects of globalisation are not new at all. Instead, we claim that the economic history of the last 1000 years gives several examples of similar rapid and fundamental changes in global outreach, with associated adjustments of the economic and institutional superstructure.[5] Actually, economic historians and structural economists have isolated three earlier large structural changes (see, e.g. Pirenne, 1936 & 1956), that Andersson (1986) denotes as logistical revolutions. However, here we call them eras of globalisation.[6] Each such era has its own process of network formation, where nodes expand and new links emerge.

The First Era of Globalisation

The first era of globalisation started in the twelfth century and was based upon improvements in land and, in particular, sea transportation on the one hand and upon the creation of a basic infrastructure for commercial communication and financial transactions on the other hand. This development was fostered by new transaction and transport technologies, with new instruments for payment and new sea routes, larger ships and new ports. In Europe this period was characterised by the foundation of new cities and the emergence of a city system for trade and knowledge diffusion.

During this era, the world witnessed the development of a new Southern European economic system with the city-states in Northern Italy as its backbone and the new economic system of the Hanseatic League that integrated the coasts of Northern Europe. In the Mediterranean basin as well as in Northern Europe an emerging city system formed a basis for increased trade. The evolution of this system is documented in Braudel (1982) and characterised as an enrichment of commercial networks. One decisive feature of this first era of globalisation was the integration of the two economic systems that were initiated at trade fairs held in Champagne and later pursued in Bruges and London. As a result, Western Europe became partly integrated economically for the first time and for the first time large economic centres grew up in Venice, Florence, Bruges, and Lübeck. However, the reach of this trading system went far beyond Europe because valuable products, such as spices, silk, pearls, and precious stones were imported all the way from Asia (Spufford, 2002). Not only did trade develop rapidly during this period but international financial transactions also developed in a parallel and partly integrated process (Kindleberger, 1984; Braudel, 1994).

Much of the network formation activity at this time was actually the beginning of the development of European market integration. However, it also contained the gradual growth of an Asia-Europe global trade axis.

The Second Era of Globalisation

The second era of globalisation started in the sixteenth century,[7] partly as a consequence of important developments in sea transportation. It may also be seen as an attack on the previous hegemony of Mediterranean merchants, initiated by Lisbon in particular. The development of new types of merchant ships – first the Caravel of Portuguese origin and later the Flute – that could cross the oceans was particularly significant in the evolution of Oceanwide trade. It was also due to the development of an efficient banking and credit system that, for example, could finance long distance trade over the oceans with other continents. Initially, Antwerp, and somewhat later Amsterdam, were the central nodes in the new economic system that reached its peak during the seventeenth century, but all the large capital cities in Europe were engaged in international trade (Braudel, 1994). However, as time passed by, London became the centre of gravity and rose to become the commercial and financial centre of the world.

Another aspect of this new era of widening trade is that major cities remain basic vehicles for the development, while now they serve as integral parts of emerging nation states. The new ports were the international interface of new states that were soon internally integrated. The nation state observation also relates to the fact that between 1500-1700 these new states initiated a period of colonisation, another form of globalisation that went beyond just improved and denser networks for trade.

The Third Era of Globalisation

The third era of globalisation is known as the industrial revolution and it started near the end of the 1800s in England. Its start and successful development is related to the creation of a number of technical innovations that enabled its development in England due to the dominant position that England had reached within the credit and insurance system, maritime commerce, canal building and, later, railway construction and shipbuilding. These new and relatively large-scale and geographically sparse transportation and communication systems made it possible to establish vertical integration links between the raw materials in Northern America and the large-scale manufacturing industries in the port cities of Western Europe. A novel element in this phase of development was supply chains for mass production, both textile and clothing and other standardised products for household demand.

The principle of vertical integration was used in one country after the other around the North Atlantic region. New large industrial cities grew up. Detroit, Chicago, Glasgow, Liverpool, Newcastle, Liverpool, Manchester, and New York are all examples of cities of the industrial revolution. It was also during the later phase of this era that the internationalisation of the production of companies was initiated and multinational companies were born. London was the main international financial centre with Paris and later New York as its main competitors. Capital was raised internationally for large-scale projects, such as railroad investments, and an international market for public debt bonds was created. In parallel an international network of commercial banks was created for the financing of international trade. Most countries in Western Europe and North America became centres of wealth during this era but the variation between countries was substantial (O'Rourke & Williamson, 2006).

A peak period of the third era of globalisation has been identified as the 40 years preceding World War I. In this peak period an international monetary systems based on the gold standard, spread to cover a large set of countries. Facilitated by such a multilateral payment system international trade expanded rapidly, and was accompanied by the establishment of many new multinational companies. All this was possible because of novel channels for capital flows. It took a large world war (World War II) to break this path of globalisation (Kenwood and Lougheed (1971).

The Fourth Era of Globalisation

The fourth and current era of globalisation started in the middle of the second half of the twentieth century and manifested itself almost simultaneously in a number of knowledge-intensive, often high-tech, urban regions and corridors. It is based on a rapid expansion of motorway networks and air connections and on an increased capacity and speed of information processing and transmission. It is characterised by rapid knowledge-intensification, i.e. knowledge-deepening, that is manifested through greatly increased R&D investments and a rapid increase in the share of knowledge-handlers[8] in the labour force in Western countries and increasingly so also in newly industrialised countries, not the least in Asia. A major driving force behind this development is the growing role played by multinational enterprises, which have a special capacity for building new networks and choosing both production and R&D sites across the world.

The "pole-star" for the development within the different industries is an ambition to accept and increase the use of just-in-time systems, flexible manufacturing systems and economies of scope within a framework of increasingly fine-tuned network relations between the different production units and a parallel intention to get away from the hierarchical, vertically integrated production systems that were a signature of the period following the industrial revolution. During this era, it has become increasingly common for labour-intensive activities to be outsourced – offshored – to other countries – a trend facilitated by the reduction of transport costs and the deregulation of international trade. This relocation of activities has been orchestrated by more than 70 000 multinational companies, with more than ten times as many foreign affiliates according to UNCTAD calculations (McCann, 2008).

This process of subdivision or decomposition has led to the development of globally integrated production systems where the value chain has been divided into various stages performed at different locations (Fujita & Thisse, 2006). In such a system, the plants or firms in different countries can specialise in the production of certain components or subsystems which at or along different stages of a supply chain end up in the assembly of final products. In each stage of such a series of stages economies of scale may be exploited. These changes in the structure of international production and trade have made large multinational companies the major players in the world economy. In the era of the multinational companies, increased international trade and foreign direct investments go hand in hand with the development of integrated international production systems.

A key factor in this development has been the liberalisation of international trade, international capital flows, and foreign direct investments in recent decades.[9] In a parallel process, the international financial sector has developed substantially with a rapid introduction of institutional savings and the emergence of large markets for financial derivatives to hedge the risks associated with different markets and different financial assets and derivatives. Actually, during this era of globalisation international integration has grown much faster in the financial sector than in international trade and production. In this evolution the friction of interaction over long distances is reduced, but the increased system complexity and lack of friction created instability in the system.

Another feature of the contemporary era of globalisation is an offshoring of R&D activities conducted by multinational enterprises. This is a more recent phenomenon but is quite evident during the past 20 years. Multinationals have R&D activities distributed over many R&D sites and in several different countries. Such an evolution is happening despite the observation that companies theoretically have strong reasons not to globalise their knowledge creation efforts. In particular, this development challenges the idea that R&D is a proximity-dependent process (Andersson et al., 2008).

1.3 WHAT ARE THE DRIVING FORCES OF GLOBALISATION?

Before we go deeper into the current era of globalisation, it is important to try to get a better understanding of the driving forces of the successive waves of globalisation during the last millennium. It is our impression that most economic observers have had notorious difficulties in anticipating and understanding the radical changes of the economic structure that characterises each era of globalisation.[10] One important reason today as well as in recent decades is that so much of the debate about socio-economic development deals with short-run problems, such as inflation, unemployment and the balance-of-payments. In a short-run perspective, these factors have great importance, of course, but in the long run, they are not decisive for the development of society. If we instead want to understand the long-run economic, social, and cultural developments of regions and nations, we must look to those factors that change more slowly, and, thus, affect how new structures with lasting consequences develop.

Economic structural change must be understood as a result of slow changes in the fundamental conditions of regions and nations. These basic conditions can be described as the infrastructure of the economy. In our view of the world, it is the infrastructural capacity, including accessibility to the surrounding world, that determines the long-run development of regions as well as nations. Usually, various forms of infrastructure are regarded as artifacts. However, this is an inadequate definition. Infrastructure should rather be defined as all those material (tangible) and non-material (intangible) factors that are both

- of great collective importance, and
- very durable and difficult to change, in comparison to other types of capital.

This point of view implies that the durability and collective nature of infrastructure creates an arena or an "opportunity landscape" that at the same time facilitates and circumscribes the actions and interactions of households, firms, and political decision-makers. In material and non-material infrastructure, we include

- Durable – almost constitutional – rules for economic and political decision-making, such as ownership rights, rules for setting up a business and for competition in the market, social protection systems and other rights and obligations.
- Networks for the transportation of goods, energy, information, human beings, and, thus, transmission of services and knowledge.
- The level, quality, and distribution of scientific, technological, entrepreneurial, and cultural knowledge, which may be both sticky in space and available in networks.
- Basic values and attitudes to development, creativity, and entrepreneurship.

In and across all of these respects, first Europe and later the rest of the developed world have been subject to a slow but steady change during the last 1000 years. Such a slow change of the infrastructural arena will sooner or later create tensions between fast economic processes of economic change on the one hand, and the slow adjustments of tangible and intangible infrastructure on the other. Moreover, incongruencies in the development of different parts of infrastructure and in the use of infrastructure make the way for catastrophic shifts or bifurcations that may stimulate rapid shifts in system behaviour and institutional settings, implying that one era of globalisation replaces another. As seen from the exposition above, it is obvious that such complete structural changes have occurred extraordinarily infrequently during the development of the world economy. This also implies that globalisation can not be understood as a smooth continuous process. Instead it is discontinuous with leaps and dramatic changes in specialisation and comparative advantages generating cumulative processes of growth and decline (cf. Mees, 1975).

Analysing in more detail each era of globalisation it seems as if they all have been fueled by successive technological revolutions, in particular in advances that have cut the costs of transportation of goods, people, and information. New means and systems of transportation and communication have reduced transportation and communication costs and time, which have in turn brought different parts of the world closer to each other. The advances in transportation and communication technologies have in each era been part of a wider range of technological and commercial innovations, which together with increased international trade have resulted in rapid productivity growth and a general increase in welfare. A critical factor in this type of transformation is the development of techniques for controlling interaction and decision making in networks.

1.4 LOCAL PROCESSES IN THE CURRENT ERA OF GLOBALISATION

Perhaps the most exceptional aspect of the current era of globalisation is that entrepreneurship has become the engine for local processes of economic, social, and cultural development throughout the world. Small and medium-sized enterprises and entrepreneurship clearly began increasing their relative importance during the mid-1970s (Acs & Audretsch, 1990, 1993; Loveman & Sengenberger, 1991; Audretsch, et al., 2002). Scholars naturally have begun to look for theoretical explanations to this turn-around. Brock & Evans (1989) suggested the following six hypotheses:

- Technological change has reduced the extent of scale economies in manufacturing, which may specifically reflect movements away from vertical integration towards more decomposition of activities into spatially dispersed production.
- Increased globalisation has rendered markets more volatile as a result of competition from a greater number of foreign rivals.
- The changing composition of the labour force, towards a greater participation of females, immigrants and young and old workers may

be more conducive to smaller rather than larger enterprises, due to the greater premium placed on work flexibility.
- A proliferation of consumer tastes away from standard mass-produced goods towards stylised and personalised products facilitates the emergence of small niche producers.
- Deregulation and privatisation facilitate the entry of new small firms into markets that were previously protected and inaccessible.
- The increased importance of innovation in high-wage countries has reduced the relative importance of large-scale production and instead stimulated the growth of entrepreneurial activities.

Audretsch & Thurik (2001) have launched another additional explanation for the new wave of entrepreneurship based upon the effects of increased globalisation, which shifts the comparative advantages in the rich countries towards knowledge-based economic activities.[11] Their point is that the role of SMEs changed as the comparative advantages shifted. There are two reasons for this according to the authors: (i) large enterprises in traditional manufacturing industries have lost their competitiveness when producing in high-cost countries,[12] and (ii) small entrepreneurial enterprises find new product areas and new customers in knowledge-based economies.

The observation of new areas of entrepreneurship and an associated growth in the number of small firms may seem paradoxical, since it puts our earlier observation of a growing importance of multinational firms into contrast. From one perspective, we may point at improved possibilities also for small firms to be "non-local" by making use of advances in network formation and communication. Extending this argument, small firms can interact with large (multi-location) firms and have such firms as their customers. From another perspective, we may argue that in contemporary rich countries the share of services in the economy is growing. This provides opportunities for small innovative entrepreneurs to offer a local variety of distance-sensitive supply of varieties to other firms in an economy where urban proximity is a major characteristic. Part of this supply includes deliveries of specialised knowledge.

In view of the above observations, we must persist in asking: why do small entrepreneurial enterprises find a new role in the knowledge-based, globalised economy? In line with ideas originally developed by Schumpeter (1934), some economists in recent decades have claimed that innovations offer opportunities for entrepreneurs to launch new innovative firms in the market place in a knowledge-based economy. Actually, innovative entry is now widely regarded as a central force driving competition in different markets (Dosi et al., 1997). However, genuinely new firms by definition have not been able to generate new knowledge of their own (Acs &