1. Globalized localities: introduction

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Participating in the global economy brings both opportunities and dangers. The main danger is getting locked into a race to the bottom; in other words, competing by paying low wages, disregarding labour and environmental standards, cutting corners in the production process and avoiding taxation. Many enterprises, particularly in poor countries, use this strategy with knock-on effects for producers in other parts of the world. Witness the relentless price competition in global markets, especially for labour-intensive products; witness the falling terms of trade for developing country manufactured exports (Kaplinsky, 2000; Wood, 1997). Many producers, especially those of small and medium size, find that participating in and gaining from the global economy do not always go together.

In order to achieve both export growth and rising incomes, it seems essential for local enterprises to ‘upgrade’ – to make better products, make them more efficiently, or move into more skilled activities. Policy makers in many parts of the world are looking for ways of helping their enterprises to achieve this. Many approaches are being tried. Particularly influential is the idea that the local sources of competitiveness need to be strengthened. The buzzwords are synergy, economies of clustering, systemic competitiveness, collective efficiency or local innovation systems. Studies carried out in the 1980s and 1990s showed many unexpected success stories of local enterprise clusters breaking into global markets. These stories continue to fuel excitement amongst local policy makers and their external backers.

Simultaneously, there is a globalization debate which centres on the new rulers of the global economy: the global companies that set the terms under which local export producers operate. The core competence of these global companies is seen to lie in research and development, design, branding and the coordination of suppliers in different parts of the world. If these companies pull the strings, how feasible is it to develop local strategies for avoiding the low road and embarking on the high road to competitiveness? In what circumstances are local upgrading strategies possible? Can local policy networks make a difference – or do global forces undermine them? Another set of questions is concerned with the impact of global quality and labour standards. Do global standards reinforce or undermine local

strategies to compete on the high road. This issue is particularly important for developing country clusters. Do the global standards marginalize them or help them to upgrade? These are the questions addressed in this book.

The contributors reject the naive optimism that prevails in much of the local development debate. Similarly they reject the pessimism of the globalization critics who fear that local strategies are rendered irrelevant by global forces. Moving away from these unhelpful positions requires new conceptual work: of how the global economy is governed, of how the links between global companies and local enterprises are structured, and of how upgrading can be achieved or thwarted. Starting from this new conceptual basis, the contributors to this book dissect real cases from the developed and developing world: clusters from Latin America and South Asia which are struggling to escape the race to the bottom; an East Asian cluster with the most impressive upgrading record in recent history; and, the transformation of European clusters reflecting both upgrading and downgrading experiences.

This introductory chapter guides the reader through the book. It starts by recalling the common point of departure for all contributors; then it sets out the axes along which they advance the debate, it highlights the general findings and brings out the specific contribution of each chapter. The explanation is organized by theme rather than the sequence in which the chapters appear in the book.

1. THE LOCALITY MATTERS: A SURPRISING CONVERGENCE OF VIEWS

A paradoxical feature of the recent debate on competitive advantage in globalized markets is the importance given to locality. Influential authors from a range of different disciplines have emphasized the local determinants of upgrading. Mainstream economics re-discovered the importance of locality, prompted by Paul Krugman's (1991) *Geography and Trade*. Krugman builds on Alfred Marshall's (1920) *Principles of Economics* in which he set out how clustering small enterprises can compete in distant markets due to local external economies.

Marshall continues to be the key reference for all writers in this field, but for many of these writers the impact of clustering is not confined to agglomeration economies. The competitive advantage of locality also arises from the combination of rivalry and cooperation between local enterprises and from the partnership of public agencies and private organizations in supporting local enterprises.

The importance of local synergy and rivalry has for some time been

stressed in Michael Porter's (1990) work on industrial clusters and has been emphatically restated in 'Regions and the new economics of competition' (Porter, 2001). Similarly, the literature on industrial districts has for some time hailed the importance of local relationships for competing in the global economy. The Pyke and Sengenberger (1992) volume *Industrial Districts and Local Economic Regeneration* was particularly influential in a debate which continues to be pursued with vigour in both the academic and policy arena. Take for example, the recent issue of *European Planning Studies* in which Becattini (2002), Bellandi (2002) and Dei Ottati (2002) reassert and refine their earlier analyses of Italian industrial districts. Likewise, take the recent EU *Observatory of European SMEs* which is devoted to policies for 'Regional clusters in Europe' (EU, 2002).

A parallel line of work, concerned with local innovation systems, produced similar messages, even though its origins were different. In the 1990s, the literature on technological development moved from a focus on the individual firm and a strong distinction between innovation and diffusion towards a greater concern with learning-by-interaction (Lundvall, 1998). This led on to the studies of innovation systems, first at the national and then increasingly at the regional and local level (Freeman, 1995; Edquist, 1997; Braczyk et al., 1998; Strambach, 2002).

Even though these writers come from different disciplines, most of them share an optimistic view of the scope for local upgrading strategies. In most works there is a strong emphasis on local governance, as for example in Cooke and Morgan's (1998) *The Associational Economy* or Scott's (2000) *Regions and the World Economy*. The central message is that effective local upgrading strategies build on strong linkages between local enterprises and institutions; and that local policy networks can help local enterprises to reposition themselves in the global economy.

A very similar message came from the 1990s research on clusters, local innovation systems, and systemic competitiveness in developing countries. Contributors to this book were amongst the leading researchers in this field. Dirk Messner and Jörg Meyer-Stamer were co-authors of *Systemic Competitiveness: New Governance Patterns for Industrial Development* (Esser et al., 1996) which stresses the critical role of meso-level policy in building competitive advantage. Messner (1997) then extended the theoretical analysis of the political determinants which enhance or block policy networks concerned with competitive strategies. Meyer-Stamer (2000) opted for the more practical route of making local competitive strategies work. He pioneered the 'Participatory Appraisal of Competitive Advantage' (PACA) in which local stakeholders undertake their own analysis of constraints and opportunities and then jointly implement their ideas for repositioning the local economy.

These authors drew their inspiration from a number of sources; they include the research on industrial clusters in developing countries by Khalid Nadvi (1999), Roberta Rabelotti (1997) and Hubert Schmitz (1995). This research helped to overcome the earlier pessimism concerning the export prospects of small firms in developing countries. Conceptually this research was organized around the idea of *collective efficiency* defined as the competitive advantage derived from local external economies and joint action. The practical implications of this work were synthesized by John Humphrey and Hubert Schmitz (1996) as the *triple C of local industrial policy*. Customer-oriented, collective and cumulative were proposed as key features of effective approaches for fostering local development.

A wealth of further studies on industrial clusters and local innovation systems in developing countries has emerged since then (Cassiolato and Lastres, 1999; Nadvi and Schmitz, 1999) and made a major impact on the policy debate – in developing countries and in the donor agencies concerned with fostering economic development.¹ The conclusions and problems often mirror those found in developed countries. However, they tend to differ in one respect. The clusters in developed countries are often global leaders and they play a decisive role in innovation and product design. In contrast, developing country clusters tend to work to specifications that come from outside. A similar divide arises with respect to global standards: the developing country clusters tend to be ‘standard takers’ and not ‘standard makers’. The observation of such differences led us to embark on a new journey to find out in more detail: who defines and monitors the parameters for local producers? How do these producers respond? How do power relationships change over time? What is the connection between upgrading and different global–local power configurations?

2. TAKING INTO ACCOUNT THE NEW GLOBAL LINKAGES

While the old debate on clusters and local innovation systems was mainly concerned with local linkages, this book examines in detail the global linkages and how they affect local relationships. This is not just an add-on; it transforms the understanding of local upgrading strategies and options. It asks who sets the parameters for local producers. These producers do not just export into an anonymous global market; often they feed into chains that are governed by powerful global players. Chain governance means that some enterprises set and/or enforce the parameters under which others in the chain operate. Other parameters are set from outside the chains, notably the new quality and labour standards. In this book we ask whether and how

local enterprises manage to comply with these standards, whether and how the standards enhance or constrain the scope for local policy networks, and whether and how the standards affect different upgrading strategies. Indeed, running through all the chapters is a distinction between different types of upgrading. The common question is how they are affected by different constellations of global and local governance.

Answering this question is an ambitious undertaking. It requires bringing together three bodies of literature:

- the above-mentioned work on local and regional development
- the literature on global value chains
- the disparate work on global standards.

The book provides new assessments of these bodies of work but more importantly it seeks to bring them together, both theoretically and empirically. The building blocks are of two types: new conceptual work and a range of case studies from developed and developing countries. The objective is to provide a new understanding of how global and local governance interact. The contributors show new forms of power and inequality in global chains but they also identify scope for local action.

This provides a platform for engaging in the debate on winners and losers from globalization. Who loses and gains from globalization is one of the key questions of our time, central not just to research but to the street protests surrounding recent political summits. In the coming years, the question will become more, not less acute. By showing how and why insertion in global chains enhances or blocks local upgrading, the book can provide much needed analysis and evidence relevant to the academic and political debate on globalization.

The remainder of this opening chapter highlights how the contributors to this book have moved the debate forward. During the course of this undertaking, the subsequent chapters are introduced by theme rather than chronologically.

3. CONCEPTUAL FRAMEWORK

In order to understand the interaction between local and global governance one needs a clear understanding of how the global economy is governed. Most of the current academic literature and policy advice is informed by one of the following two views: a) the *neoliberal view* of a free global market economy in which local advance depends on local efforts and the market friendliness of government; b) the view which emphasizes the need for

regulation and intervention and puts forward a *stratified public governance* model, that is intergovernmental organizations at the global level, national governments, local governments. Neither view is helpful for us. Local enterprises and policy makers are not operating in a free global market economy, nor in a global economy which is governed in a stratified way.

The contributors to this book depart from these views with a different conceptualization: the *network-based global economy*. This is spelt out by Dirk Messner in Chapter 2 of this book. He stresses that the global economy is not just governed by a combination of reliance on free markets and rules of inter-governmental organizations. Export oriented regions experience this most directly as they are tied into global value chains often governed by global buyers and they are faced with global standards that are defined by global policy networks. This leads Messner to develop the idea of a governance triangle comprising: a) a local policy network, b) lead firms of global chains, and c) a global policy network concerned with the setting and monitoring of standards. His key point is that local enterprises and policy makers need to interact with these sector-specific global governance structures and that the options and limits for local action arise from this interaction. Thus the purpose of his chapter is to provide a framework for working out the scope for local action: instead of starting from an analysis of local relationships it starts from the global relationships. This perspective is maintained throughout the book, with some chapters focusing on the insertion of local actors in global value chains and others more concerned with the responses to new global standards.

Chapter 4 by Humphrey and Schmitz explains how and why global value chains are governed. Central to value chain analysis is the observation that there are lead firms, notably global buyers, which set and enforce the parameters under which other firms in the chain operate. The question is why would these lead firms go to the trouble and expense of setting up and supervising supply chains? No firm will incur the expense of developing arrangements with specific suppliers in order to purchase products that the market freely provides. The authors suggest that there are two reasons why the global buyers do not rely on coordination through the market and seek to govern their chains:

- Product definition. The more the buyers pursue a strategy of product differentiation, for example, through design and branding, the greater the need to provide suppliers with precise product specification and to monitor that these specifications are met.
- Risk of supplier failure. The increasing importance of non-price competition based on factors such as quality, response time and reliability of delivery, together with increasing concerns about safety

and standards, means that buyers have become more vulnerable to shortcomings in the performance of suppliers.

Understanding chain governance is not an objective in itself. The contributors to this book study chain governance because it structures the upgrading opportunities of local producers. At least this was the general proposition at the outset. In order to test this proposition, a set of tools was developed (Humphrey and Schmitz, 2000; 2002) which included a distinction between four types of value chains:

- Arm's length market relations. Buyer and supplier do not need to develop close relationships because the product is standard or easily customized. A range of firms can meet the buyer's requirements and the switching costs are low.
- Networks. Firms develop information-intensive relationships, frequently dividing essential competences between them. The interaction is coordinated and the relationship is characterized by reciprocal dependence. The buyer may specify certain product performance standards or process standards to be attained, but would be confident that the supplier can meet them.
- Quasi hierarchy. One firm exercises a high degree of control over other firms in the chain, frequently specifying the characteristics of the product to be produced, and sometimes specifying the processes to be followed and the control mechanisms to be enforced. This level of control can arise not only from the lead firm's role in defining the product, but also from the buyer's perceived risk of losses from the suppliers' performance failures. In other words, there are some doubts about the competence of the supply chain.
- Hierarchy. The lead firm takes direct ownership of some operations in the chain. The case of the intra-firm trade between a transnational company and its subsidiaries falls into this category.

With these distinctions one can then ask whether some types of chains offer local producers better upgrading prospects than others. Such questioning can be further refined if one distinguishes between different types of upgrading:

- Process upgrading: transforming inputs into outputs more efficiently by re-organizing the production system or introducing superior technology.
- Product upgrading: moving into more sophisticated product lines (which can be defined in terms of increased unit values).

- Functional upgrading: acquiring new functions in the chain (or abandoning existing functions) to increase the overall skill content of activities.
- Inter-sectoral upgrading: using the knowledge acquired in particular chain functions to move into different sectors.

Equipped with these typologies one can then investigate the hypothesis that the upgrading opportunities of local producers vary with the type of chain governance. The conclusions of this investigation are presented in Chapter 13, which draws together the evidence from the case studies in this book. What follows is a brief outline of these case study chapters.

4. LOCAL UPGRADING IN GLOBAL CHAINS

The Sinos Valley in the south of Brazil is an ideal location for testing the above hypothesis because its enterprises feed into chains which are governed in different ways. This makes it possible to conduct comparative analysis which Luiza Bazan and Lizbeth Navas-Alemán provide in Chapter 5. The Sinos Valley is Latin America's most significant footwear cluster. In order of importance its main markets are the US, Brazil, the rest of Latin America and Europe. The relationships between the producers and customers in these four markets vary significantly. The US chain is a clear case of quasi-hierarchy, that is the combination of high pressure and technical assistance from the US buyers led to fast process and product upgrading but little advance in functional upgrading. Relationships between European buyers and local producers were not quite so close and seemed to provide more space for functional upgrading. The relationships in the Latin American and Brazilian chains are more even and local producers tend to use their own design and own brands.

This research by Bazan and Navas-Alemán is the most thorough case study to date of the connection between chain governance and upgrading in that it provides both comparative and historical analysis. The analysis of the US and European chains underlines the enormous gains which local producers can derive from integrating into global chains. It enabled them to become world class producers. The downside was that they remained in a captive relationship with their buyers for a long time. According to the authors, the key point is that this is changing. Their explanations of this change are of general interest even though it is difficult to establish a clear hierarchy of factors. The trigger seems to have been a shift in the main US buyer's commitment to source from Brazil which brought into focus a long recognized but long neglected strategic issue, that is the need to diversify

marketing channels and destinations. Some firms found this more difficult than others. Not surprisingly, the most successful firms were those that had begun to operate in several chains simultaneously for some time. More of this was now required. Particularly successful in exploring new markets were a number of firms that had previously prioritized the domestic market. Their key advantage was that they had developed their own design and marketing capabilities. These were essential in particular for diversifying into the Latin American market where relationships with customers tend to be market-based. These results question the widely-held view that exporting provides superior learning opportunities for local firms. While this view holds for process and product upgrading, it does not seem to apply to functional upgrading.

While Chapter 5 provides a case of delayed functional upgrading in Brazil, Chapter 6 tells a story of functional downgrading in Italy. When Roberta Rabellotti first presented this finding at a workshop it came as a big surprise because she was studying a world class Italian industrial district. Is this district a casualty of globalization? Not quite. Many enterprises in the footwear district of Brenta continue to export products based on their own designs and using their own brands. However, an important new line of exports has emerged: the production of luxury shoes based on the design and brand of powerful top fashion companies. To be part of the chain, Brenta's producers accept a functional downgrading, abandoning design and marketing and focusing on production. Rabellotti suggests that in the short term this does not represent a step backwards because the producers inserted in this chain have higher returns than those exporting their own designs and brands. However, if one takes the long-term view one could come to a different conclusion. By abandoning their design competence these Italian producers risk giving up the key advantage which they have over their competitors in developing countries. Whether this will happen is hard to tell. It depends on whether producers dedicate themselves entirely to producing for these top brand companies or whether they engage simultaneously in other chains in which own design and branding remain important. But the space for independence seems to be shrinking. A general lesson from this case is that the growth of global buyers, design and fashion houses changes the market conditions for all producers, even sophisticated ones. The already observable trend towards explicit chain governance arising from global branding and retailing will impact on developed country clusters as well.

The shift in upgrading strategy from production to marketing is also observed in Chapter 7 which analyses the changes in the global tile industry and the changing position of tile producing clusters in Italy, Spain and Brazil. The retail market for tiles is however more diffused and global

buyers and chain coordinators have not emerged. Tile producers have taken the initiative and are trying to set the parameters for the retailers and traders. If they succeed, this would be a very interesting reversal of the situation found in other industries. At present, it is too early to come to a judgement on these initiatives.

A particular merit of this chapter by Jörg Meyer-Stamer, Claudio Maggi and Silene Seibel is that they also investigate the relationship between manufacturers and the suppliers of inputs, equipment and materials. This relationship, which has attracted a lot of attention in the technological change literature, has been neglected in the value chain literature. Both the Italian and Spanish manufacturers have network based relationships with their suppliers, based on cooperation and the sharing of competences. These relationships have contributed decisively to their upgrading of products and processes and becoming world leaders in this industry. However, such relationships are not without tension. The Italian and Spanish suppliers sell their equipment and materials to tile producers in other parts of the world and thus help those producers to upgrade their products and processes. But they remain followers, as shown with reference to the Brazilian cluster. In contrast, the Italian and Spanish clusters remain leaders in the global tile industry by virtue of the interactive innovation with key input and equipment suppliers.

The surgical instrument cluster of Tuttlingen in Germany, analysed in Chapter 8, is also a world leader, relying on interactive innovation to maintain its position. Competition from low wage countries, especially the Pakistani cluster of Sialkot, has eroded Tuttlingen's traditional strength, which is the manufacture of hand held instruments. The cluster has responded by developing new products and services. Both require substantial investment and active management of the relationships with users. The cluster's large firms have this capability whereas most of the small firms are confined to the more traditional products in which they are struggling to survive. As shown by Gerhard Halder, some of the small firms have moved from manufacture to trade in surgical instruments – sourced from Pakistan.

Large firms also source traditional instruments from low wage countries and maintain (quasi-) hierarchical relationships with their suppliers in Malaysia, Pakistan, Poland and Hungary. Their in-house manufacture concentrates on new products such as surgical implants or instruments for minimally invasive surgery. In order to develop these products, the firms maintain network-based relationships, characterized by the sharing of competences and close cooperation with leading surgeons and hospitals. Large firms have also taken on additional functions by offering hospitals sterilization services and just-in-time delivery of instrument or implant kits. Gerhard Halder concludes that the cluster has become more differentiated,

that most small firms are losing out, and that large firms capable of combining internal and external knowledge flows do well. As a result of this increasing differentiation, cluster-wide upgrading initiatives have become more difficult and the management of relationships with specific external holders of complementary competence has become strategic.

There is a general lesson which emerges from the analyses of the European clusters in Chapters 6, 7 and 8. A leap in understanding resulted from combining the cluster and value chain approaches. At the outset of the research, this combination of approaches was thought to be important mainly for the analysis of developing country clusters. In the end, it was found that bringing together the two perspectives was also critical for the developed country cases.²

Why not go the whole way and rely entirely on the global value chain approach? Four prominent clusters analysed in the book are outsourcing an increasing part of their production. Enterprises from the South Brazilian footwear cluster in the Sinos Valley have set up subsidiaries in the north-east of the country where wages are lower (Chapter 5); enterprises in the Italian cluster of Brenta are farming out the most labour-intensive operations to Eastern Europe (Chapter 6); the German cluster of Tuttlingen acquires simple surgical instruments from suppliers in Pakistan, Malaysia, Poland and Hungary (Chapter 8); and the most rapid increase in outsourcing has occurred in the Taiwanese computer cluster (Chapter 9). Does this signify a decreasing importance in the relevance of clustering for international competitiveness? Kishimoto, in his analysis of the Taiwanese case, answers this question with an emphatic NO. Following Bell and Albu (1999), he distinguishes between the production and knowledge system and shows that although the importance of clustering diminishes in the former, it increases in the latter. Shedding repetitive activities and concentrating on knowledge-intensive activities is seen as a sign of functional upgrading.

The analysis of the Taiwanese computer cluster is important for other reasons. It has become the world's most significant industrial cluster outside OECD countries and accounts for about half of the world's output in computer hardware. Substantial progress has been achieved in all categories of upgrading and the main question is how this was achieved. Kishimoto argues that the key lies in the interaction of local and global linkages. The global linkages are analysed, as in previous chapters, by using the global value chain approach. Initially local producers operated in quasi-hierarchical chains in which they were able to upgrade processes and products very fast with the assistance of their buyers. Functional upgrading was also achieved but not all the way. Many local firms acquired design capabilities but few established their own brands. Those firms that succeeded in marketing their own design and brand achieved this by maintaining the contract manufacturing for the

main buyers and simultaneously experimenting with own design and brands in other smaller markets. Such leveraging of competences across chains (Lee and Chen, 2000) has been central to the functional upgrading achieved by some of the Taiwanese computer producers.

Chapter 13 by Humphrey and Schmitz pulls together the findings on local upgrading in global chains. Clearly power and inequality in global chains need explicit attention in the assessment of cluster upgrading. However, accepting a subordinate role can bring significant advantages. The case material shows that accepting foster parents offers a fast track to product and process upgrading. But integrating into quasi-hierarchical relationships is a double-edged sword. On the one hand it facilitates inclusion and rapid enhancement of product and process capabilities. On the other hand, local producers become tied into relationships that prevent functional upgrading and leave them dependent on a small number of global buyers. The question then is how local firms can break out of such a lock-in. The chapter discusses ways in which this can be achieved and concludes that the chain approach, while providing many new insights, is not always sufficient to explain the upgrading prospects of local producers.

5. GLOBAL STANDARDS AND LOCAL RESPONSES

A central objective of this book is to understand how local firms interact with the global economy, given that this global economy is not a free market economy but governed by a multitude of private and public actors who (try to) define its operational parameters. Global quality and labour standards have become an increasingly important set of parameters. They are seen as an essential instrument for blocking the race to the bottom and nudging enterprises from the low to the high road of competitiveness. The hope pinned on these global standards is not matched by evidence on whether and how they are working. In Chapter 3, Khalid Nadvi and Frank Wältring ask why this is so. Their main argument is that the proliferation of standards in recent years has made it difficult to engage in an empirically informed debate. They then set about reducing the confusion and complexity. They introduce typologies of global standards in quality assurance, environment and employment conditions; they identify the networks of actors engaged in the formulation and implementation of standards; and they distinguish between different generations of standards which helps to understand the bewildering array of current standards and their evolution over time. The categories put forward help researchers and policy makers alike concerned with the formulation, implementation and monitoring of standards.

Two chapters in this book are specifically concerned with the question of implementation, one in Latin America and one in South Asia. In Chapter 10, Ruy Quadros presents some disturbing findings from Brazil where he investigated the adoption of global quality standards by local auto parts producers. His main question is whether the adoption of such standards has enhanced their upgrading prospects. Since he examines this question in a value chain framework, he is particularly concerned with the technical ties between the auto parts suppliers and their customers, which are transnational producers of automobiles or subsystems. He concludes that the implementation of standards has not improved the weak technical ties between local suppliers and the transnational customers. The latter have neither made substantial efforts to help local suppliers conform to the quality standards nor has the compliance led to the development of technical cooperation in areas such as product and process design. The adoption of standards was achieved mainly with the assistance of local consultants but the customers did not trust the certification process. As a result, the suppliers continue to endure the customers' own monitoring of quality. Quadros concludes that the expected reduction in transaction costs resulting from the diffusion of global standards has not materialized, that certification has induced local suppliers to upgrade quality processes, that the improvement was small and has been achieved at a high cost, and that certification has not provided a platform for moving into product development.

Nadvi provides a more positive assessment of the certification experience in Pakistan but shares some of Quadros' concerns. In Chapter 11, he examines the responses of the surgical instrument producers of Sialkot to the imposition of global standards in quality assurance. Overall, the research does not support fears that global standards would exclude small and medium sized enterprises from competing in the global economy. Adoption has been fast and widespread. Has this certification enhanced the position of local enterprises in the global economy? Like Quadros, Nadvi concludes that obtaining the certificate merely provides a certificate for entering (or staying in) the international market. The widespread adoption of standards by suppliers has increased choices for buyers. This has contributed to falling prices even though the overall volume of sales has increased. The impact of global quality standards has varied with the tier of subcontractor. The processes for assuring quality have improved amongst the first tier suppliers, but amongst their subcontractors there has been little change. Given the importance and depth of the subcontracting system in Sialkot, this raises questions about the value of the whole certification process.

Nadvi also reflects on how global standards have affected the governance of the cluster. He emphasizes that in the early stage, when Sialkot was first

confronted with global quality standards, the local business association played an important role in formulating a positive response, mobilizing support and bringing in technical expertise on quality management. Once joint action had set this process in motion, a wide array of private service providers came to Sialkot. When demands for complying with further quality standards arose, the local enterprises were able to respond rapidly with the assistance of these private consultants. The market was providing the required technical and audit services and local institutions ceased to be important for the implementation of global quality standards. Nadvi provides a contrast in terms of the implementation of global labour standards which was achieved in a different way. The comparison is instructive because both standards were externally imposed, but the certification and auditing have been carried out in different ways. The labour standards, which are focused on the elimination of child labour, are implemented through a network of local and global institutions. This policy network is an example of how local institutions can extend their activities and strengthen their effectiveness by working together with global institutions.

6. THE SCOPE FOR LOCAL POLICY

Having examined how global standards and the organization of global value chains affect local firms, what are the implications for local policy aimed at upgrading? What is the scope for local development strategies in a world where trading relationships are increasingly global? In Chapter 2, Messner (2002) argues against the pessimism of those capitulating in the face of the new global governance structures; equally, he argues against the unguarded optimism reigning in many agencies concerned with fostering local development. He calls for a new type of analysis which locates the local economy in the global networked economy and helps to identify where the scope for local action is expanding and where it is shrinking. Key factors to consider are: the specific governance pattern in the relevant global value chain; the core competence of the global lead firms; and the manner in which global standards are implemented. Messner's key message is that there are not only restrictions but also new opportunities for local action through coalitions with global actors.

This analysis builds on his earlier work (Messner 1997) which shows that, in order to be effective, local industrial policy requires building a coalition of the key actors in the public and private sector. He refers to this as building policy networks across the public-private divide and shows the context within which they are likely to work. His new work (Messner, 2002; Chapter 2 of this volume) emphasizes that such policy networks increas-

ingly need to be formed along a local–global axis. More importantly, it provides a new framework for analysing the scope of action for such policy networks.

Collective actors such as business associations are essential players in such policy networks, both because of their sector-specific expertise and their ability to mobilize political and financial support. Individual actors can also play a major role, notably the lead firms of hub-and-spoke clusters. The more clusters are integrated into global markets, the more heterogeneous they become and the more they move towards a hub-and-spoke organization in which the lead firms become the gatekeepers of both material and knowledge flows. The surgical instrument cluster of Tuttlingen (Chapter 8) is perhaps the clearest example. Halder shows that institutions concerned with strengthening existing competencies, for example the highly specialized local training institute (BBT), have the support of all local enterprises. In contrast, an institution concerned with developing new competencies (Competence Centre) does not have the backing of the local lead firm; the fear is that through participating in the new Competence Centre other firms could avail themselves of the fruits of its (the lead firm's) R&D investment.

In other words, the scope for building policy networks depends on the type of upgrading they seek to promote. This applies even more to clusters in developing countries which operate in global chains coordinated by external actors. The issue is straightforward where the policy aim is the strengthening of the *existing* position of a manufacturing cluster in a global chain. This requires process and product upgrading that is usually incremental in nature. The insertion in a global chain ensures that a great deal of learning occurs in the course of making products defined by external buyers (provided that the local manufacturers make the corresponding investment in people and equipment). Clustering facilitates the rapid diffusion of the knowledge thus acquired. Local industrial policy has an important role to play in expanding infrastructure and strengthening training, testing and certification facilities. Such local industrial policy can usually count on the support of all actors including the buyers because its aim is to strengthen and reinforce the position that the cluster occupies in the global chain.

Upgrading aimed at *repositioning* the cluster requires a more active search and risky investment in capabilities aimed at reaching new markets or reaching old markets in new ways. What scope is there for local industrial policy to foster the radical product upgrading or functional upgrading? A key issue is whether the local lead firms support the repositioning of the cluster. Which is stronger, their allegiance to the local policy network or the relationship to their customer(s) in the global chain? The answer

depends on the way in which the chain is organized. If local firms sell to few buyers to whom they are in a quasi-hierarchy relationship, their risk of supporting a project of repositioning is particularly high. The risk lies not only in the investment of exploring new markets but also in jeopardizing sales to existing markets. It is precisely for this reason that a local policy network in the Sinos Valley collapsed in the mid-1990s. As pointed out by Bazan and Navas-Alemán in Chapter 5, the local policy network became stronger again a few years later when the connection between the main global buyer and local lead firms had loosened.

Marcia Leite (2002) also examines the relevance of the value chain for the formation of policy networks. Her study, carried out in collaboration with the contributors to this book, focuses on the auto and plastics sector in the ABC region of São Paulo. These two sectors differ substantially in their involvement in the regional industrial chamber, the most important public-private upgrading initiative launched in recent years. Leite shows how and why the active participation of the plastics firms contrasts with the passive attitude of the auto and auto-parts producers. A reason for this lack of interest can be found in the relationship of the auto-parts producers with their clients who are few in number and pursue global sourcing strategies. Local producers prioritize this relationship over all others. In contrast, the plastics producers have many clients operating in many different chains and are therefore less dependent on specific vertical relationships. This has contributed to their greater reliance on collective efforts and greater involvement in the regional chamber.

Further supportive evidence is provided by Meyer-Stamer, Maggi and Seibel in Chapter 7 of this book. Their study of tile clusters in Italy, Spain and Brazil suggests that symmetrical relationships with external customers have facilitated the emergence and functioning of local policy networks. However, change is underway. In two of the three clusters, the local policy networks have weakened. The authors link this weakening to the upgrading strategies of the main local producers. Their competitive strategy has shifted from prioritizing excellence in production to controlling marketing channels and thus increasing their market share. According to the authors, this strategy has intensified competition amongst local firms and has weakened their interest in the local policy network. This conclusion applies to both the Italian and Brazilian cluster. In contrast, the Spanish tile producers, who are not pursuing such marketing strategies, continue to participate actively in collective initiatives.

The circumstances in which local policy networks can make a difference are discussed further in Chapter 12 'Paradoxes and ironies of locational policy in the new global economy'. Jörg Meyer-Stamer highlights the enormous current interest in local upgrading strategies and then assesses the

likelihood of these strategies becoming successful. He does this by drawing attention to a number of paradoxes which have not been given sufficient attention in recent debate. First, there is the 'life cycle paradox': pursuing active local policy is crucial in the early stage of economic development but effective local policy networks are more likely at a late stage. Then there is what one could call the 'integrationist paradox': local policy networks which seek to achieve close relationships between local producers and global producers will be marginalized if they succeed. Finally, the 'location paradox': firms are increasingly demanding when it comes to locational quality but show a decreasing propensity to invest in local policy networks. The main message of this insightful chapter is not one of pessimism but realism. It provides many insights which help to define the circumstances in which local upgrading strategies can be expected to succeed – or fail.

Reading across the chapters one finds increasing similarities between developed and developing countries. The conflicts, trade-offs and paradoxes are often the same for local enterprises and policy networks in developed and developing countries. In a way this is not surprising. They operate in the same global economy, and the old division of labour has changed. Export manufacturing is no longer concentrated in the developed world; Asian and Latin American developing countries account for a significant (and increasing) part of it. As stressed in Chapter 13, the co-ordination of global value chains by global buyers has contributed considerably to this increase in manufactured exports from the developing world. The build-up of manufacturing capabilities has been phenomenal. However, progress in other capabilities has been much slower. R&D, design, branding and systems integration remain largely concentrated in the developed countries. In this sense, there remains a deep knowledge divide in the global economy. Without narrowing this divide it will be difficult for the gains from globalization to spread more evenly.

NOTES

1. For example, in Brazil, the Instituto Metas produces *Clusters – Revista Brasileira de Competitividade*, a journal for the many policy makers and practitioners concerned with strengthening local production systems. In India, UNIDO has supported a programme for strengthening the export competitiveness of clusters. In Indonesia, JICA (Japan International Co-operation Agency) supports a project for strengthening the capacity of SME clusters.
2. One of the best examples of using this combination of approaches is the comparative analysis of German and Pakistani clusters by Nadvi and Halder (2002). They show that the two clusters occupy different stages in the same value chain and that the relationships between them are both conflictual and complementary.

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