Linking Local and Global Economies

The Ties that Bind

Carlo Pietrobelli and **Árni Sverrisson**
(eds.)

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THE TIES THAT BIND
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Clusters of small and medium sized enterprises (SMEs) have to adapt continually to a fast changing environment. This new book, containing contributions on countries ranging from Italy and Mexico to China and India, recognises the disparity between conditions in these countries and poses some interesting questions about what might be termed post cluster globalisation. This book will be of interest to students, academics and policy makers in the fields of economic geography, international business and entrepreneurship.

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Carlo Pietrobelli and Arni Sverrisson

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Chapter 1

The Ties That Bind: Small and Medium-sized Enterprises in the Global Economy

Carlo Pietrobelli and Árni Sverrisson

This book is about the impact of globalisation on small and medium-sized enterprises (SMEs) and about the options this process presents to them. This issue is central when analysing linkages, networks or other types of relations among firms. The book discusses how such constellations influence aspects known to be important to firm survival and growth, such as learning, exports, innovation and patenting, marketing and technological change.

The book presents a series of cases based on original research and three theoretical chapters that draw on such research. The cases discussed in the book come from all continents and the book is in this sense truly global in scope. However, and perhaps more importantly, the different contributions all transcend the local, even parochial, perspectives that often beset empirical research. They clearly identify mechanisms and causations that readers may use to query other cases that *they* want to study.

Among the major issues that emerge from the book, one is particularly significant for its wide and remarkable repercussions: the current relocation of manufacturing to the Third World and its consequences in terms of economic dynamics and technological change. The result of this transformation in terms of lost jobs, under-utilised infrastructure and educational investment in the former heartlands of industrial capitalism, are not very central to the book, however.

Rather, our interest is on what happens on the ground in what we used to call the "Third World" and in Southern Europe. But central to the book is the study of the "ties" that bind the North and the South, and the issue whether such ties, together with the industrialisation of the South are indeed leading to greater opportunities for development. It is also possible that the structures of underdevelopment are deepened rather than transcended by industrialisation in the South. Perhaps we are merely seeing the last of a long sequence of transformations of dependency since the time of mercantile colonialism. Or perhaps we can only note the extreme diversity of experiences throughout the world: the Third World in not a unitary concept – perhaps it has never been -, and some regions or countries are actually "catching up" with the more advanced countries, while others are sliding into ever-deeper misery. In other words, this book is above all about global economic mechanisms, and the ties that inevitably (especially) bind enterprises in the North and in the South of the world, and that may turn out to be impediments or powerful opportunities.

Thus, firms everywhere are increasingly embedded in multiple – multidimensional – relations, often crucially related to knowledge and technology transfers, and that occur both at the local and at the global level. One (level) does not exclude but often needs and complements the other. This is the central thesis of this book, and it is analysed from different perspectives.

The various authors in this volume contribute to the elucidation of this general topic each in their own way, and these differences are reflected in the organisation of the book. Three theoretical chapters immediately follow this introduction. The remaining chapters, which report empirical studies, are organised in three parts. The second part contains three studies of the relation between exports and enterprise growth and learning. The third part considers the direct role of different types of local and global linkages. The fourth part tries to strike a balance on whether opportunities or obstacles predominate in the processes discussed in the book, if evaluated from the vantage point of SMEs.

This introduction seeks to accomplish two tasks. The first is to provide a detailed, yet general, review of the different contributions in this book, within a consistent framework centred on the increasing relevance of the multiple linkages that tie firms across the world. The second is to draw conclusions about the future possible directions and nature of the relocation of manufacturing and of inter-firm relationships, and about the ensuing structure of world trade that is likely to prevail. We attend to them in this order.

Theoretical approaches

In the first chapter in this part, Árni Sverrisson presents and then criticizes the work on "global commodity chains" (GCC) originated by Immanuel Wallerstein and continued by, among others, Gary Gereffi. These latter developments of the concept include more aspects than Wallerstein's parsimonious version. As a result, the concept appears more and more as an empirical generalisation of a very limited number of cases, rather than as a theoretical concept proper and Wallerstein's initial insights are largely lost. However, Sverrisson argues that they can be salvaged with the aid of ideas developed by globalisation analysts such as Manuel Castells (2001) and network theorists such as Harrison White (2002) who provide concepts of more general validity.

A problem, however, is that current theories of production networks and globalisation do not adequately outline the action alternatives that are available to Third World producers, within the general framework provided by global media and universal design principles, materialised by electronic communication systems, container transport and easily transferable automated techniques for labour intensive assembly plants. Sverrisson argues that the options in the Third World are qualitatively more varied than suggested by the GCC-theorists who maintain that because of globalisation, technological upgrading can only occur through insertion into a GCC governed from the North. On a closer look, most actual production chains are not all that closely controlled by northern designers and marketing departments (cf. Amsden 2001). While they monopolise certain (and important) aspects of the process, the capability and knowledge necessary to maintain effective manufacturing operations is increasingly losing relevance in the North but developing in the South. Further, effective demand for basic manufactures is increasing in the South even if it lags behind absolute increases in the North,.[1] Hence, both the markets for cheap manufactured products and the capability to provide them is becoming more and more a South-South affair. A global production chain theory that constructs directionality exclusively from the South to the exploitative North is unable to grasp this major development, according to Sverrisson.

In Chapter Three, Marjolein Caniels and Henny Romijn bring together two strands of work in order to conceptualise how technological learning takes place in enterprise clusters. One is the studies of "collective efficiency" generated in the wake of Hubert Schmitz' studies in Latin America (Schmitz and Nadvi 1999). The other is the technological capability literature (e.g. Enos 1991, Lall, 1992, Bell and Pavitt, 1992) that is more concerned with firm-level learning processes and technological change.

Caniels and Romijn argue that agglomeration advantages (and hence, collective efficiency) can be divided into five major aspects. The first is conventionally economic in nature and includes benefits from large local markets that by lowering unit costs leave more resources available for technology acquisition. The second aspect relates to more recent discourses about knowledge economies and particularly the lowering of thresholds for exchange of information that occurs in at least some clusters and networks. The third aspect refers to knowledge spillovers that occur when enterprises are able to directly observe each other within a cluster and learn from these observations. This encourages competitive attitudes among entrepreneurs as well. The fourth aspect is the human capital formation

[1] This implies an increasing relevance of the domestic market for developing countries' producers, as recently suggested by Dani Rodrik, among others.

that occurs in clusters through varied organised learning efforts, such as local vocational training. The fifth aspect refers to the circumstance that the fundamentally individual benefit of learning is appropriated as a collective good when people who learn in one company move to another. Similar benefits occur when companies provide information to each other as a part of user-producer interaction but no special payment for this is expected nor offered.

These aspects are analysed in turn by Caniels and Romijn, who argue that , ceteris paribus, collaboration in learning and R&D tasks offers larger rewards in industries with considerable economies of scale and scope and where technological change is fast. This partly explains why the immediate incentives for such collaboration are small in many Thirdthird world contexts.

In the following chapter, Bernard d'Mello develops and illustrates a theory of profit sharing among different categories: capital owners, managers, experts and service providers. This theory combines three, rather different, theoretical approaches that originate in the work of Karl Marx, Thorstein Veblen and Joseph A. Schumpeter respectively. D'Mello argues that the outcome of the sharing process is as important for reinvestment and growth as the generation of profit and productivity increases per se. The more profit accrues to others than the owner (or the company itself in some form) the less is available for reinvesting and hence, for technological development and productivity growth. The more of this latter profit share that is used on conspicuous consumption, advertising and other types of symbolic positioning of the company and its owner, the less is available for production purposes strictu sensu. Thus, technological change is constrained both by the sharing of profits and by "unproductive costs" such as advertising. D'Mello illustrates this thesis with evidence from India.

SME analysts working in various parts of the world have certainly noted this problem. Conspicuous consumption may indeed funnel funds away from small enterprises (in which company operations and the owners personal expenditure tend to be mixed in various ways). However, if the problem is well known to the point of being taken for granted, less is known of the structural mechanisms that aggravate or amend it. Why is it that conspicuous consumption is considered good advertising that generates trust in some countries (and this is the case in India according to d'Mello) while among other peoples (e.g. the Swedes) it is not encouraged and can indeed create suspicion if expensive goods, land and buildings are paraded publicly and in ways considered "bad taste"? While not providing a final answer to this question, d'Mello initiates an interesting avenue of further analysis of how productivity growth is embedded in social mores that either facilitate or impede investment in production and technology.

Exports and enterprise growth and learning

One of the most common arguments in favour of a liberal world trade regime is that it facilitates specialization according to countries' comparative advantage, and therefore an efficient allocation of world resources. This is based on the hypothesis that markets work and efficiently allocate resources, and that rules, if any, are applied on an equal basis. Both hypotheses are notably weak (fragile) in international trade (OXFAM, 2002)

In Chapter 5, Jorge Katz reviews the Latin American evidence on these and related issues. He concludes that the results of the market-oriented reforms of the nineties have been disappointing. This does not mean that they have been absent: indeed they have "induced a major transformation in the pattern of production, specialisation and trade." As a result, two major strategies have evolved. One is based on deeper specialisation in food products and raw materials. The other is centred on assembly industries or *maquiladoras*, an example of which is analysed in considerable detail by Robine van Dooren in chapter 7. Within these general paradigms, both winners and losers emerge. In some activities, for instance, SMEs are catching up with larger enterprises and even bypassing them in terms of productivity growth. In other cases, the opposite is true. However, on balance, the Latin American economies seem to be suffering more than benefiting from liberalised trade regimes.

Katz argues in particular that more "institutional engineering" is needed in areas such as the creation and diffusion of technology, in the training of personnel and in building access to foreign markets, and finance, and in improving the legal framework. Put differently: Latin American markets cannot by themselves create the information and knowledge infrastructures they need in order to function properly, not to mention effective justice and checks on monopoly powers. Public institutions need to accomplish this and adapt to the opportunities opened by the new world trade regime.

In the following chapter, Roberto Basile, Anna Giunta and Jeffrey B. Nugent approach the relation between exports and growth from a different angle, with a focus on SMEs. They argue that it is too simplistic to analyse exports and enterprise growth as if exporting were only a dichotomous (yes/no) choice. Thus, a deep and continuing involvement in foreign markets may indeed imply the use of marketing agents and the establishment of linkages with other (foreign) firms operating in foreign markets, investing there, establishing dedicated production units or facilitating production on license. Only after a deeper and more stable involvement is achieved, then major benefits of enterprise exports may become apparent. To this aim, the authors construct an index that can grasp these different forms of foreign expansion. Their econometric analysis on Italian data reveals that there are large differences between highly specialised industries with industrial customers, where expansion is relatively easier, and scale intensive industries that operate in markets proper, where expansion is apparently more difficult. Indeed, as more complex forms of foreign expansion may be more advantageous from the firm's point of view, but this requires capabilities and structures, close monitoring and adherence to the specifications appropriate for the intended market.

In Chapter Seven, Davide Castellani poses more pointedly the issue whether exporting can in itself be considered a learning mechanism. While it is generally accepted that exporting usually needs considerable preliminary learning and general upgrading of a firm's operations, much less is known about the learning that occurs through exporting itself, whether it is deeper in some sense, or in other ways qualitatively different from pre-export learning.

Most importantly, it has been difficult to determine the direction of causality between exporting and learning and to date the empirical evidence is inconclusive in this regard. In the literature, the results seem to differ depending on the measure used: Post-export learning effects are indeed difficult to distinguish from pre-export learning. Thus, positive correlations between export intensity (i.e. the share of export in total sales) and various learning related variables (labour productivity) do not add much to this issue.

Moreover, other factors affect the interaction between increased labour productivity and learning processes: as firms with higher export intensity also tend to be larger, it is likely that the result is an effect of economies of scale and not learning per se. Larger firms tend to have more sophisticated management structures and therefore they can appropriate and utilise knowledge more effectively: they are better learners. Castellani therefore investigates if there are differences between large and small firms in the learning effect made possible by exporting, and this turns out to be the case: the correlation between export intensity and productivity growth that Castellani detects in his sample is indeed mainly explained by the large firms. Thus, increased export intensity leads to learning effects, but only if the size and internal organisation of the firm are sufficiently sophisticated to absorb and utilize relevant information and knowledge and thus capture the learning benefits.

In sum, all the three contributions in this part suggest that in order to benefit from exporting and more generally, from trade liberalisation, firms must be especially prepared for this. Moreover, the institutions that help them face foreign markets must be in place: this especially applies to developing knowledge infrastructures and information channels of various kinds.

Global versus Local Links

In part three of the book, four studies are presented, that address the more specific role that local versus global linkages have in determining success or failure among enterprises and enterprise clusters. In Chapter Eight, Carlo Pietrobelli presents a typology of industrial districts that refers to their overall structure rather than the content and character of individual links (based on Markusen 1996). Three types are identified: the Marshallian industrial district, the hub and spoke cluster, and the satellite platform. The Marshallian district is made up of a large number of companies of roughly equal size, whereas the hub and spoke cluster forms around a leading firm, the spokes being in principle its component suppliers or subcontractors. The satellite platform, in turn, gathers several local extensions of a large corporation, connecting several divisions in different places but establish few local linkages. The state-anchored district is a specific case of the latter type that may develop when industrial activities are 'anchored' to a region by a public or non-profit entity, such as a military base, a university or a concentration of public laboratories or government offices.

Pietrobelli then argues that it is useful to understand change in industrial clusters in terms of transitions between these types. The local extensions of global companies that make up satellite platforms, while initially of little consequence for local economies, can develop links among themselves and with local firms and service providers for instance. The result can be a Marshallian district or a hub and spoke cluster. These latter types can also evolve from one to the other and back, depending on whether a clear leader emerges in the cluster or not.

However, other factors also influence the evolution of districts. Notably, they are influenced by changes in technological regimes, and the diffusion of information and communication technologies, bioengineering and new materials.[2]

Pietrobelli then analyses and compares three Italian districts with electronic clusters in Taiwan from this point of view. He concludes: "there is no one best model for organising an industrial district or … cluster. A diversity of institutional arrangements is possible and each has proved successful in different circumstances." This is an important finding because there is a distinct tendency in the literature to elevate particular cluster experiences into "success" models that represent the entire clustering phenomenon. the extreme opposite views are then rejected: that either the "model" can be transposed lock, stock and barrel, or alternatively, that the local economy is too weak or distant from what is required for a successful cluster, and all clustering strategies are rejected in consequence. Policies are often required, and differ depending on the specific characteristics of each location. Pietrobelli also notes that clusters evolve constantly, making the "cluster model" approach even less appropriate and needing a re-definition. One aspect of this evolution is how clusters connect to global production networks (GPN), and here the empirical argument presented by Pietrobelli tends to converge towards the theoretical considerations voiced by Sverrisson in chapter 2.This does not mean, however, that nothing of general importance can be said about enterprise clusters in the globalisation processes. Indeed, Pietrobelli shows beyond doubt that local agglomerations of companies remain important in spite of increased dispersion of industrial and technological activities and capabilities. While functional, rather than geographical, forms of integration are becoming increasingly important in the construction of today's global production networks, this functional integration often needs to go hand in hand with spatial as well as social and cultural proximities. Thus, while modern ICTs facilitate communication across long distances, it is by no means without cost or losses in efficiency., and crucial elements of technology remain tacit and locked to clustered firms, institutions and individuals. Proximate firms that collaborate effortlessly still have an edge on the others in many circumstances.

Philip Regnier pursues one aspect of this issue in the next chapter. Are SMEs that have links with foreign enterprises more resilient once a crisis sets in? In other words, does the relationship with TNCs help face the crisis? His study is based on the experiences of three countries that recently suffered what was generally considered an economic crisis, South Korea, Malaysia and Thailand. His conclusions reveal that the type of link can be quite as important as the presence or absence of any link whatsoever. This echoes the conclusions of other authors in the book: All links are not equally valuable. Regnier argues in particular that purely export driven and foreign investment based industrialisation creates a structure that is very vulnerable to external shocks. Lacking local roots, and not least, local markets, companies may find themselves cut off from both sales channels and suppliers during turbulent periods. On the other hand, local linkages are not by themselves a sufficient basis for development either. However, the veritable invasion of South-East Asia by TNCs creates opportunities for strong and effective knowledge-intensive links that may be mutually beneficial, as

[2] Technological Regime is a Schumpeterian concept that refers to the explicit link between some structural features of industrial sectors and technological change (cfr. Pietrobelli in this volume).

shown by Pietrobelli in chapter 8. Foreign finance and export opportunities are all essential, but other types of linkages, including notably local ties, can help local firms to upgrade their activities and withstand adverse periods.

Meine Pieter van Dijk addresses another aspect of this issue in his study of an agglomeration of IT-companies in Nanjing, China, and of the policy initiatives and administrative practices intended to facilitate their upgrading. At the moment the emphasis in this cluster is on selling hardware and off-the-shelf software products. The authorities hope that it will eventually become a fruitful solution of sorts in which more advanced activities can proliferate. In this process, computer system maintenance and adaptation are obvious candidates for upgrading as well as other types of auxiliary services. In addition, content production increasingly follows the focus of IT-developers in the West. While English language versions of various IT-applications and their textual and visual content may be adequate in the short run, the digitalisation of Chinese culture will eventually create a huge market for programmers and content producers. The needs and opportunities in this regard in China are indeed so vast that they defy description in conventional terms.

In spite of the opportunities, at the moment, change is sluggish in the Nanjing IT-cluster. One of the reasons for this appears to be the social fragmentation. Most IT-companies in the cluster are small and vulnerable. This is not peculiar to Nanjing, but here the wherewithal to create larger units has not been utilised fully so far. The many institutes for scientific research and higher education in Nanjing could become the base of such activities, in conjunction with the creation of three science parks in the city. However, the problems faced by the Nanjing IT-companies in many ways reveal a certain distance between activities on the ground, and what goes on in academic institutions: of course, and this distance needs to be bridged in order to foster development.

The model envisaged by Van Dijk is reminiscent of the hub and spokes model suggested by Markusen (1996) and Pietrobelli in chapter 8 of this book. Whether this is a viable road forward depends partly on the effects of China's increased openness to imports and its acceptance of international property rights (a subject discussed in the next part of the book). At the moment, local reproduction of off-the-shelf software is a major activity that certainly constitutes a useful learning experience but cannot continue in the long run. Other avenues for linking to the global ICT industry need to be explored, and foreign capabilities must be utilised for the purpose of creating a genuinely Chinese multimedia industry. In these efforts the role of the state will be crucial, due to the peculiarities of Chinese history, if nothing else. However, so far interventions are focused on tax breaks and other non-sustainable support measures, rather than on the creation of the knowledge base and human capital that China needs to participate in the ICT revolution (cf. part II).

In the next chapter and the fourth contribution in this part, Robine van Dooren analyses an important part of the Mexican garment industry, the *maquiladoras* south of the US border that are integrated into the production chains that end in US shopping malls. Her argument proceeds at two different levels, distinct but connected. First, she argues that a major change has taken place in the relationship between the *maquiladoras* and their customers in that orders are increasingly made for so-called full package productions. The essence of this change is that the role of organising and financing production is moved from the buyers to the producers. This increases their risk and their cost, particularly in the event of adverse circumstances.

At the same time and in a separate development, ongoing experiments in establishing rural cooperatives as subcontractors to the main producers have largely failed to reach their objectives. Originally, these experiments were motivated both by the scarcity of labour in the cities and by hopes that the peasants, by starting their own cooperatives, could eventually improve their standards of living. However, the cooperatives have not been able to pay the debts incurred at the beginning, and most of their employees are made up of teenagers and people in their early twenties, who tend to move on quickly as better opportunities arise elsewhere, rather than from the established core of the peasantry. Self-governing cooperatives are, of course, difficult to sustain when the labour force is completely replaced at short intervals.

The links between these two ways of manufacturing garments, the cooperatives and the *maquiladoras*, are carefully traced by van Dooren step by step: there is credit, there is competition for labour, there is subcontracting, there are consultations and learning. Yet, the cooperatives have not meshed with the local social fabric, and they are even becoming a liability to the *maquiladoras* that "fathered" them. Increasing demands from US purchasers push more and more SMEs into the role of subcontractors themselves, while a few large companies that can organise full-package production are progressively becoming the hubs of the garment industry, severely curtailing the potential of initiatives from below. Thus the Mexican, US-oriented, garment industry has been restructuring from top to bottom, while simultaneously certain US buyers are seeking even better deals elsewhere.

In sum, this part of the book shows how local and global links need to be intimately connected. To some extent it is possible to speak of a seamless web: whether a connection or transaction crosses a border or links two regions is less important than its content: networks link different locations and complement the advantages of local with those of global relationships. Thus, while we can agree with optimistic globalisation theorists that universalisation and global networking are indeed proceeding at a fast pace (e.g. Castells 2000), it is also possible to discern, with a finer-grained filter, how local traditions, organisations, institutions, networks and knowledge shape actual developments in systemic ways. These aspects are considered in more detail in the last part of the book. In addition, several crucial dimensions of knowledge are actually tacit and not codified, and this further strengthens the strategic relevance of local systems and clusters (see Guerrieri *et al*. 2001, for an application to industrial clusters in Italy and Taiwan).

Opportunities, Obstacles and Global Rules

In the fourth and last part of the book, the focus shifts to opportunities and obstacles that globalisation presents to SMEs. In his contribution, Andrea Gallina discusses the consequences of the newly developed links in the Mediterranean area between the European Union and the countries in the region. He points out that the manufacturing systems of most of the so-called Mediterranean Partner Countries (MPCs) are not really mature for integration into the common market of a united Europe. They are still oriented towards local markets and the transition from import substitution to exports is likely to be problematic, if at all possible. He suggests that increased emphasis on trade among the MPCs, as a preparatory step, as it were, could eventually overcome some of the obstacles intrinsic to underdeveloped manufacturing systems, while retaining much of the informal sector undergrowth that is essential still for meeting everyday needs in MPCs. Competition is likely to be more forgiving in this instance.

An additional reason to consider South-South trade as a realistic option and a useful complement to the North-South trade is that such a gradual market integration strategy could help bridge the gap between existing industrial enterprises and publicly funded support institutions, uniting both in a common effort towards a goal that is within reach. Such a gradual approach would then eventually lead to a stronger position for the Mediterranean Partner Countries within old and new North-South trading networks.

The remaining chapters in this part address more specific aspects of global integration processes, and of the rules governing them. In his chapter, Carlos M.. Correa analyses the patent system from an SME point of view. He reports data gathered in England but his argument has much wider relevance and relates to problems of importance for SMEs everywhere. According to Correa, the patent system is of little use to most SMEs. One reason is that in order to apply for a patent, companies must divulge the "secret" of the patented product or process to potential competitors, and thus, in a sense, help them infringe on the patent. In addition, the protection offered by a patent has to be upheld in a court of law, a costly and tricky process.

In these circumstances it may be wiser to implement quickly any innovation that occurs within a company instead of informing everyone in exchange for protection that may turn out to be of doubtful value. Another reason to abstain from patent protection is that most innovations have limited lifespan in an economy in which the production and marketing of novelty has become a major driving force. Virtually anything can be patented these days, but the point of seeking protection for an innovation decreases if the innovation will be superseded quickly by the next generation of one generic technology or another. Patenting is even less relevant for quite trivial fads and vogues and other variations of basic themes and in some cases, copyright law may be more relevant (e.g. in software and multimedia products). Correa analyses ongoing efforts to solve these problems, inter alia through so-called utility models, a simplified process in which the claim to novelty is not evaluated before granting protection, but rather if someone infringes on the rights of the innovator, in which case s/he must show that protection actually has been granted on good grounds. However, these alternative procedures are also used very little by SMEs.

In the last chapter of the book, Keshab Das and Tara S. Nair focus on one important instance of globalisation. The issue whether Third World countries should maintain their own patent and copyright regimes, or recognize what has come to be called intellectual property rights (IPRs) has attracted considerable attention in the recent past, and not without reason. At the core of the matter is a trade-off between curing illnesses and saving lives and the payment of huge sums to Western companies that already turn a pretty good profit. From this point of view, the diffusion of IPR recognition, as discussed by van Dijk leads to rather gloomy conclusions. However, according to Das and Nair, this is only half of the story, and they show this with Indian examples. Many companies that have until now based their operations on the production of generic drugs, often in huge quantities that are required by budding public health care systems, will suffer, turn to other types of business or even disappear. For others, however, deregulation and the diffusion of IPR recognition imply opportunities to link up with global medical supply and drug conglomerates, and take on different roles, ranging from supplier to local sales agent. In these latter cases, linkages with global industry leaders can allow extensive capability building among company staff, upgrading of production facilities, early access to successful drugs through licensing facilities, and so on. Thus, while we are yet to see if these developments lead to improved or inferior health in the countries concerned, Das and Nair suggest that it might be just as effective to seek collaboration with the global drug industry as fighting a rearguard action in a cause that is probably already lost, at least for the time being.

Concluding Remarks: Directions of Research and Policy Priorities

Obviously, the different chapters are connected in ways that go beyond their ordering in this book, by shared ideas, problems and suggestions for solutions. In one chapter after another we can observe how similar distinctions or dualisms, and even dichotomies, are reproduced at different levels, from the local, regional, national, transnational, to the global level. However, the resulting fragmentation is transcended by the creation and improvement of complex networks involving companies, other organisations, individuals and groups. Taken together, the different contributions thus suggest directions of research that are inadequately explored, and hint at policy conclusions that are not high on the agenda today. In this introduction, we merely summarize them: their elaboration lies ahead, in the future.

First, it seems reasonable to consider whether the process called globalisation actually embeds another process, of more immediate importance for most people in the South, a new wave of the industrial revolution reaching even farther and deeper. All the contributors to this volume argue this more or less explicitly; they believe that the future development of the world economy hinges on industrial development. The assumptions about the forms of this process differ, however and the degree of optimism as well.

Second, the process of industrial development involves and requires an increasing number and varieties of linkages among several different firms and institutions. The ties that bind operate at the local as well as the international and global levels. They may represent opportunities for enterprise growth, learning, process, product and functional upgrading. Of course, if not properly organized and run smoothly, they may be also impediments to industrial development. Importantly, international and global linkages cannot replace local linkages: on the contrary, they need to go together. Insofar as some dimensions of technology and knowledge are still – and perhaps always – tacit, their transfer, acquisition, adaptation and improvements demand local ties and interactions.

Third, most of the contributors are in one way or another concerned with local networking and South-South trade: The South is not automatically constructed as a shadow image of the developed North. Some contributors look at the way in which local companies search for subcontractors in their vicinity, others focus on how small companies create links with multinational corporations. Studies using data from England and Italy alert us of the circumstance that the dualism, and even dichotomies of the world economy are not exclusively global in scope: They are often reproduced at the local, national, and regional levels as well.

Fourth, one of the fundamental paradoxes of industrial development policy is brought to light: while the main vehicle of such policies is and remains the national state, transnational and global organisations are becoming increasingly important. This new development calls for designing and implementing new ways and forms of policy interventions connecting all actors involved (and interested) in industrial development. This implies policy tools exploiting the mutual learning and potential benefits that may be derived by the interaction of SMEs among themselves, with larger firms, transnational corporations, global value chains, private and public organizations, universities and S&T and training institutions, and so on. To this aim, the areas of mutual interest should be searched and exploited to the common benefit.

Although it is comparatively harder to find dynamic innovation systems in the South, where politics and policies still tend to lag behind economic change, yet all the possible avenues to exploit the potential advantages of the binding local and global ties must be pursued.

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