Introduction: Globalisation, Value Chains and Development

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1   Introduction[*]

Globalisation has become a catchword for the international economy in the late twentieth century. It is a truism that nations have become more interdependent through the flows of goods, services, and financial capital since the 1970s. The growing importance of export-oriented industrialisation has made integration into the global economy virtually synonymous with development for a number of nations. Most recently, the projection of national production systems across borders through direct investment and international subcontracting has deepened the interdependence and functional integration of the world economy. However, there is an acute awareness that the gains from globalisation are very unevenly distributed within, as well as between, societies.

In recent years there has been a growing body of work analysing globalisation processes from the perspective of 'value chains'. Various researchers have taken up the idea that international trade in goods and services should not be seen solely, or even mainly, as a multitude of arm's-length market-based transactions. An important part of global trade is conducted within multinational enterprises or through systems of governance that link firms together in a variety of sourcing and contracting arrangements. Research carried out on particular sectors, such as garments, electronics and agricultural commodities, has provided valuable insights into the role of lead firms in constructing these chains. The lead firms are predominantly located in developed countries and include not only multinational manufacturers, but also large retailers and brand-name firms. They play a significant role in specifying what is to be produced, how, and by whom.

In global capitalism, economic activity is not only international in scope, it is also global in organisation. 'Internationalisation' refers to the geographic spread of economic activities across national boundaries. As such, it is not a new phenomenon. Indeed, it has been a prominent feature of the world economy since at least the seventeenth century when colonial empires began to carve up the globe in search of raw materials

and new markets for their manufactured exports. 'Globalisation' is much more recent than internationalisation because it implies functional integration between internationally dispersed activities (Dicken 1998: 5).

If globalisation in the productive sphere implies functional integration between internationally dispersed activities, then the value chain perspective is an effective means of conceptualising the forms that this integration takes. It shifts the focus from production alone to the whole range of activities from design to marketing, and it problematises the question of governance – how chains are organised and managed. This helps us ask questions about the winners and losers in the globalisation process, how and why the gains from globalisation are spread, and how the number of gainers can be increased. At the same time, we are cognisant of the fact that there are numerous downsides to globalisation, including falling prices for producers and cases where upgrading of products or processes does not necessarily lead to increased profits and sustainable incomes.

The value chain view of global economic integration highlights that for many industries access to international markets is not achieved merely through designing, making and marketing new *products*. Instead, it involves gaining entry into international design, production and marketing networks consisting of many different firms. Understanding how these value chains operate is very important for developing country firms and policymakers because the way chains are structured has implications for newcomers. How can economic actors gain access to the skills, competences and supporting services required to participate in global value chains? What potential is there for firms, industries, and societies from the developing world to 'upgrade' by actively changing the way they are linked to global value chains?

In September 2000 a group of researchers working on value chains came together for one week at the Rockefeller Foundation's conference centre in Bellagio, Italy in order to address these questions.[i] The meeting brought together 14 researchers from 11 different institutions in 9 countries spread across five continents (see Appendix 1). While everyone had researched and published work on value chains in the global economy, they had employed several distinct terminologies. The initiative to hold this meeting arose directly from a workshop on 'Spreading the Gains from Globalisation' hosted by the Institute of Development Studies at the University of Sussex in September 1999. One of the key assumptions of this workshop, which was carried over into the Bellagio meeting, was that integration into global trading systems could have both positive and negative effects for people in developing countries. The most fruitful response is not to debate whether global economic integration should take place at all, but rather to examine how this integration can be managed in order to produce positive effects for a majority of

participants. The Bellagio workshop was a first step toward developing a common framework for value chain research through the establishment of a standard set of terms and the isolation of the key theoretical variables upon which value chain analysis turns. Most of the papers in this *IDS Bulletin* either build on papers presented at Bellagio, or result from work which was stimulated by discussions at this workshop.

2 The challenges of global value chain analysis

The researchers who met in Bellagio recognised that progress had been made in developing value chain analysis, but also agreed that there was a need to take the value chain perspective further. The meeting at Bellagio addressed several basic challenges confronting value chain researchers:

- Within value chain analysis there is a proliferation of overlapping names and concepts. Different researchers use different terminology to discuss very similar ideas. Global commodity chains, value chains, value systems, production networks, and value networks are just some of the terms used by researchers whose common ground is much greater than their divisions. In the well-known framework developed by Michael Porter (1990: 40–44), for instance, the 'value system' is a set of inter-linked 'complete' firms that have all the business functions. One of the main virtues of the value chain perspective as utilised by other researchers is that it allows us to think about 'incomplete' firms that have specialised in certain value chain functions, such as design or marketing. By focusing on the chain or organisational network as the unit of analysis, rather than the firm, interesting questions about power, governance and the dynamics of chains emerge.

- Case studies have multiplied, but this has not led to a clear operationalisation of concepts. While it is easy to point to empirical illustrations of concepts such as value chain governance, industrial upgrading, or producer-driven value chains, the precise meaning of these terms is usually not well defined, and the scope of generalisations may be ambiguous. It was often unclear whether the results of particular empirical analyses could be applied to value chains in general, or only applied to particular types or parts of chains. For example, the distinction between buyer-driven and producer-driven value chains introduced by Gereffi (1994) usefully highlighted the role of retailers and brand-name companies (the buyers), as well as Gap and Nike, in structuring global trade in labour-intensive, fashion products, and the role of producers such as Ford and Compaq in structuring global production in capital and technology intensive industries. However, it was less effective in dealing with value chains lacking strong control exercised by a lead firm, and it failed to identify the theoretical underpinnings that help to explain the differences between these two types of governance

structures. The group felt that it was important to specify the conditions under which such value chains arise and to specify more clearly the range of possible value chain types.

- The lack of a well-defined theoretical framework limits both the generalisations that can be derived from diverse case studies and comparisons of different value chains. In order to make the approach more effective, it is necessary to develop common parameters for defining different types of value chains and a taxonomy of value chains that can be operationalised through a robust set of indicators.

While the group made significant progress, more work will be required before a formal framework can be crafted and released. The group is committed to continued efforts on this front.

3 Building blocks for global value chain analysis

The discussions at the workshop extended over six days. Each day was devoted to a particular theme. In the subsections that follow, we review some of the progress that was made. These sections do not necessarily reflect unanimous agreement or the last word on these issues, but rather mark the general direction that members of the Bellagio group meeting are taking in their research.

3.1 Types of chains and spatial scales

There are a variety of overlapping terms that have been used to describe the complex network relationships that make up the global economy. The 'value chain' concept was adopted over several widely used alternatives because it was perceived as being the most inclusive of the full range of possible chain activities and end products. Each of the contending concepts, however, has particular emphases that are important to recognise for a chain analysis of the global economy:

- Supply chains – A generic label for an input-output structure of value-adding activities, beginning with raw materials and ending with the finished product.
- International production networks – A focus on the international production networks in which multinational corporations act as 'global network flagships' (Borrus *et al.* 2000).
- Global commodity chains – An emphasis on the internal governance structure of supply chains (producer-driven vs. buyer-driven distinction) and on the role of diverse lead firms in setting up global production and sourcing networks (Gereffi and Korzeniewicz 1994).

- French *filière* approach – A loosely knit set of studies that used the *filière* (or chain) of activities as a method to study primarily agricultural export commodities such as rubber, cotton, coffee, and cocoa (Raikes *et al.* 2000).

- Global value chains – These highlight the relative value of those activities that are required to bring a product of service from conception, through the different phases of production – involving a combination of physical transformation and the input of various producer services – delivery to final consumers, and final disposal after use.

The group agreed that an analysis of the global economy must incorporate multiple spatial scales (including local, national, regional, and global). International value chains operate in more than one country. Value chains at the scale of supranational regions often operate at the level of trade blocs, and global value chains operate in two or more regional blocs.

3.2 Value chain governance

Governance is a central concept to value chain analysis. Governance can be defined as non-market coordination of economic activity. The starting point for interest in global value chains is the fact that some firms directly or indirectly influence the organisation of global production, logistics and marketing systems. Through the governance structures they create, they take decisions that have important consequences for the access of developing country firms to international markets and the range of activities these firms can undertake. The clearest examples of value chain government are in sectors such as garments, processed fruit and horticulture, where the power of the buyers is clearly evident (Gereffi 1999; Kaplan and Kaplinsky 1998: Dolan and Humphrey 2000). Nevertheless, all sectors do not display these characteristics. In the computer industry, for example, coordination of the activities appears to be based on the combination of arm's-length market relations and a network-style of governance based upon a division of competences between firms (Sturgeon 1997; Lee and Chen 2000; Dedrick and Kraemer 1998).

The following features of governance now appear to be clear:

- Coordination within value chains can take various forms. As well as coordination through arm's-length market relations, there are three forms of governance in value chains: inter-firm networks, quasi-hierarchical relationships between powerful lead firms and independent but subordinate firms in the chain, and vertical integration within enterprises.

- Where powerful lead firms do exist, their power stems from two attributes: their market power (measured in part by concentration or market share) and their positioning in chain segments in which they can create and/or appropriate high returns. Both sources of power are derived from a multiplicity of barriers to entry (Kaplinsky 1998).

- Governance structures, as opposed to arm's-length market relationships, arise primarily in response to two distinct needs for coordination. Firstly, the more companies are involved in specifying the products that their suppliers have to make, the more they are likely to develop governance structures to coordinate supplier activities. Secondly, the more they are exposed to risks as a result of the suppliers' failures, the more they will directly intervene to coordinate and monitor the supply chain.

- Governance involves the ability of one firm in the chain to influence or determine the activities of other firms in the chain. This influence can extend to defining the products to be produced by suppliers (in extreme cases not only the direct suppliers, but also the suppliers' suppliers) and specifying processes and standards to be used. This power is exercised through the lead firms' control over key resources needed in the chain, decisions about entry to and exit from the chain and monitoring of suppliers. It may also involve providing technical support to suppliers in order to enable them to achieve the required performance. Chains differ significantly with respect to how strongly governance is exercised, how much governance is concentrated in the hands of a single firm, and how many lead firms exercise governance over chain members.

Some questions about governance still need to be addressed. Firstly, what is the role of government agencies and other external forms of regulation in determining both product and process parameters in value chains? Secondly, to what extent is there a trade-off between coordination and control within the chain and the use of external agencies to certify and regulate firms? Thirdly, power relationships within chains need to be given greater prominence in discussions of chain dynamics.[ii]

3.3 Industrial upgrading

Many emerging economies have shifted their development strategies from simple export-oriented industrialisation to an emphasis on gaining access to higher value activities in global value chains. The pace of technological change, the intensity of international competition, and the ongoing dispersion and interpenetration of productive activity have convinced policy-makers and entrepreneurs alike that participation in global value chains and production networks is the key to economic growth. The implication is that policy tools that employ a value chain perspective have gained in importance. How value chains that exist in emerging economies fit (or do not fit) into global value chains has become a crucially important question. In this view, firm upgrading involves insertion into local and global value

chains in such a way as to maximise value creation and learning. For the firm, this often means changing its array of competences by either bundling or unbundling value chain activities.

The concept of upgrading refers to several kinds of shifts that firms or groups of firms might undertake to improve their competitive position in global value chains (see Humphrey and Schmitz 2000 and Gereffi 1999 for more detailed discussions of some of these types of upgrading):

- Product upgrading: Firms can upgrade by moving into more sophisticated product lines (which can be defined in terms of increased unit values).

- Process upgrading: Firms can upgrade processes by transforming inputs into outputs more efficiently through superior technology or reorganising the production systems. For example, the production reorientations involved in the move from craft production to mass production, and then from mass to lean (or just-in-time) production would be a form of process upgrading.

- Intra-chain upgrading: This involves several types of upgrading opportunities that exist within a particular value chain. Firms can acquire new functions in the chain, such as moving from production to design or marketing (functional upgrading). Firms can also move backward or forward to different stages in a value chain, such as moving from the production of finished goods to intermediates or raw materials (upgrading via vertical integration). In addition, firms can diversify their buyer-supplier linkages within a value chain, for instance an apparel maker adding different kinds of lead firms such as an upscale retailer or brand-name client to expand or raise the price points of its orders (network upgrading).

- Inter-chain upgrading: This occurs when firms apply the competence acquired in a particular function of a chain (e.g., competence in producing particular inputs, or in export marketing) to a new sector. For example, a company or a cluster of companies that specialise in graphite materials could move from making golf clubs and tennis rackets to racing bikes, fishing rods, and even airplane components.

These various types of upgrading offer a framework that is not only relevant to the analysis of firms, but also to an understanding of how countries fashion development strategies to attempt to move themselves into relatively high value, sustainable niches in the global economy.

3.4 Measurement

A fundamental aspect of global value chain research is how 'value' itself is conceptualised and measured. What do we mean when we say that a firm tries to upgrade by moving to a relatively high value niche? There are several metrics that have been used to try to assess value in global chains:

- Profits – The distribution of profits is often used as the primary indicator of global income shares in value chain analysis. The most appropriate measure is generally return on capital employed, and the concept of 'rent' can be used if the premium accruing to entrepreneurship or ownership can be sustained above the normal industry profit rates (Kaplinsky 1998). However, profitability has limitations for global value chain analysis because capital (whose reward is profit) is only one factor of production. Profits do not tell us anything about the returns to labour or the general productivity of the economy at large. Also, it is often difficult to get public data on profit rates for many firms and profit data that are sufficiently disaggregated to permit us to measure value at different stages and locations in global value chains.

- Value added – The distribution of value added along the chain is another conventional indicator of income shares that can be used in two different ways. Value-added shares can be calculated for different links in the chain. For example, a dress selling at $100 in the United States might break down into $6 going to workers, $9 to the contractor, $22.50 for fabric, $12.50 for the manufacturer, and $50 to the retailer. A second way to calculate value added is to look at its distribution by countries or regions, using international import-export data to get approximations of national value-added shares. Industry reports as well as primary research with actors in the chain are other ways to get relevant information.

- Price markups – This tends to be the most unreliable indicator of value accruing to different actors in a chain. Price markups are sometimes used to suggest that the higher the margin on sales, the higher the share of value chain rents. This measure is clearly flawed because price markups themselves mean very little unless they are related to the volume of transactions as well as to the activities that underlie the increments in price. Mass or discount retail chains typically have very low price markups per item, yet their high volume of sales may generate high rates of profitability. Similarly, if shoes retail at double their landed purchase price, this does not automatically mean high profits because retailing involves the cost of putting the product on the shelves, paying rent, working capital stocks until the product is sold, returns due to poor quality, etc.

Given the difficulties inherent in these and related measures of value, global value chain analysts have to be pragmatic and eclectic in gathering multiple indicators through both primary and secondary sources, and in focusing on those segments of the chain that are of greatest relevance to the industries and countries under investigation.

4 Current trends in global value chains

Recent improvements in the realm of information and communications technologies – especially supply-chain and logistics automation, computer aided product and component design tools, and computer-controlled production equipment – appear to be allowing greater volumes of information to flow through global value chains with less governance. The Internet, in particular, may be lowering the barriers for firms to enter and participate fully in global value chains by creating a standardised, low-cost linkage mechanism. At the same time, many such systems appear to be in their infancy, and their rapid development and uncertain trajectories may well create new risks and barriers for entering firms (see Gereffi, this volume).

Another notable shift that has occurred is in the realm of value chain organisation, especially in complex assembly industries such as autos, electronics, and apparel. Many 'lead' firms have narrowed their focus to product development and marketing while outsourcing production and production-related functions to suppliers. The largest suppliers provide these services for multiple lead firms, giving rise to significant external economies of scale. Driving this shift is the rising costs associated with brand development (product development, marketing, advertising) that stem from increasing product diversity, shorter product life cycles, and intensified international competition. At the same time, as the capabilities in the supply-base have improved, world-class manufacturing capacity has become increasingly commodified. Much of this shift can be captured by noting the increased cost and importance of activities that deal with *intangibles*, such as fashion trends, brand identities, design and innovation, over activities that deal with *tangibles*, the transformation, manipulation, and movement of physical goods. As intangibles become more important, tangibles have become increasingly commodified, leading to new divisions of labour and new hurdles for developing country producers to overcome if they wish to enter these chains. It is almost certainly a pervasive trend therefore that the barriers to entry in intangibles are growing faster than those in tangible activities, although this is an hypothesis which is subject to testing in future research.

5 Next steps: where do we go from here?

The participants at the Bellagio conference agreed upon a series of concrete steps that would further develop common thinking on value chains and contribute to the increased consistency and visibility of the value chain perspective. The overall aim is to establish a coherent perspective on value chains, attract other scholars to the project and to establish the importance of the value chain perspective within the research and policy-making communities.

This *IDS Bulletin* is one of the concrete steps taken following the conference. It contains not only papers drawing on the conference discussions, but also papers commissioned to reflect issues not raised at the conference. In the next six months, we will work towards achieving the following:

1. Create a publicly available website that will publicise the group's activities and research, provide access to value chain research findings and summarise the group's collective position on concepts, methodology and strategy.
2. Produce and disseminate a more detailed collective statement about the importance of value chain research, the concepts that are employed in it, and a research strategy to further understanding and acceptance of the approach.
3. Produce of training materials, curricula for university courses and codifying procedures (research manuals, handbooks, practical tools etc.) to help practitioners carry out value chain analysis. The first two manuals has now been prepared. The first is for use by practitioners and analysts working on informal sector garments production in developing countries (McCormick and Schmitz, 2000), and the second is a methodological manual targeted at researchers, teachers and graduate students (Kaplinsky and Morris 2001).
4. Continue research activity on value chains and the formation of comparative projects, between countries and between different chains that will elucidate the analytical relationships described above.

Appendix 1

Participants in Global Value Chains Workshop, Bellagio, Italy, 25 September–1 October 2000

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[ii] The first two of these questions are discussed in the paper by Humphrey and Schmitz in this *IDS Bulletin*.

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