

Global value chains, rising power firms and economic and social upgrading

Global value chains, rising power firms

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Abstract

Purpose – The purpose of this paper is to introduce the global value chain (GVC) approach to understand the relationship between multinational enterprises (MNEs) and the changing patterns of global trade, investment and production, and its impact on economic and social upgrading. It aims to illuminate how GVCs can advance our understanding about MNEs and rising power (RP) firms and their impact on economic and social upgrading in fragmented and dispersed global production systems.

Design/methodology/approach – The paper reviews the GVC literature focusing on two conceptual elements of the GVC approach, governance and upgrading, and highlights three key recent developments in GVCs: concentration, regionalization and synergistic governance.

Findings – The paper underscores the complicated role of GVCs in shaping economic and social upgrading for emerging economies, RP firms and developing country firms in general. Rising geographic and organizational concentration in GVCs leads to the uneven distribution of upgrading opportunities in favor of RP firms, and yet economic upgrading may be elusive even for the most established suppliers because of power asymmetry with global buyers. Shifting end markets and the regionalization of value chains can benefit RP firms by presenting alternative markets for upgrading. Yet, without further upgrading, such benefits may be achieved at the expense of social downgrading. Finally, the ineffectiveness of private standards to achieve social upgrading has led to calls for synergistic governance through the cooperation of private, public and social actors, both global and local.

Originality/value – The paper illuminates how the GVC approach and its key concepts can contribute to the critical international business and RP firms literature by examining the latest dynamics in GVCs and their impacts on economic and social development in developing countries.

Keywords Standards, Development, Lead firms, Regionalization, Concentration, Globalization, Multinational enterprises, Economic and social upgrading, Global value chain, Rising powers

Paper type Viewpoint

Introduction

With the growing influence of multinational enterprises (MNEs) in the global economy, their role in promoting economic growth in developing countries has been hotly debated. In the international business (IB) literature, the mainstream approach tends to assume the positive impact of MNEs on economic development. The general consensus is that foreign direct investment and the presence of MNEs will lead to economic development in the host country through the spillover of capital, technology, skills and knowledge



(Ghauri and Yamin, 2009; Meyer, 2004). Economic development is considered as a byproduct of MNE operations, not a core objective of MNEs.

However, there has been weak evidence to support the spillover argument (Farole and Winkler, 2014; Oetzel and Doh, 2009). This has led recent IB scholarship to challenge such arguments, shifting attention to a more realistic picture of the effects of MNEs on economic and social development. This critical perspective casts light on the potential damaging effects of MNEs on economic development through the “race to the bottom” and “immiserizing growth”. At the same time, with positive development outcomes no longer guaranteed as a byproduct of MNE operations, this critical perspective questions why MNEs should be concerned about development in the host country and the potential constraints they may face in trying to achieve it (Gifford *et al.*, 2010; Meyer, 2004; Yamin and Sinkovics, 2009).

Despite this renewed interest from a critical perspective, the IB literature has yet to develop a systematic understanding of the relationship between MNEs and developing economies (Ghauri and Yamin, 2009). A more robust conceptual framework is needed, particularly because of the rapid reorganization of industrial production on the global scale, as well as the varied ways in which the MNE orchestrates its value chains across countries and regions, and inside and outside its organizational boundaries (Buckley, 2009; De Marchi *et al.*, 2014). This controversy has been accentuated by the recent global economic recession (Cattaneo *et al.*, 2010; Gereffi, 2014). This reopens the question of how these changes in the global and organizational environment of MNEs (re)shape the possibilities and constraints of economic and social development in developing countries (Buckley and Ghauri, 2004).

As a contribution to this framework-building effort, this article introduces the global value chain (GVC) approach to better understand the relationship between MNEs and the changing patterns of global trade, investment and production, as well as the impact of MNEs on local upgrading efforts in developing economies. The GVC literature is uniquely positioned to provide a bridge between the IB and development literatures. The GVC approach originated with issues like why some countries are more successful in achieving economic development than others, and these questions have recently expanded into the social impact of economic upgrading (Barrientos *et al.*, 2011; Gereffi and Kaplinsky, 2001; Gereffi and Korzeniewicz, 1994; Lee *et al.*, 2011). Unlike other streams of development studies, however, the primary focus of GVC analysis is on firms and the governance of inter-firm relations, thereby providing an entry point for investigating networked forms of MNEs and other IB concerns (Bair, 2005; Lee, 2010 for reviews).

This article will show how firms that are organized in GVCs affect economic and social upgrading in both dispersed and concentrated production systems, and it will also identify new trends in the GVC system that should be more fully incorporated in the critical IB literature. First, we introduce the GVC approach by highlighting two key concepts – governance and upgrading – that are the building blocks of this framework. Second, we discuss the implications for emerging economies and rising power (RP) firms of three significant developments in post-crisis GVCs: geographic and organizational concentration, shifting end markets and regionalization and the rise of standards and synergistic governance. We conclude with some summary reflections on how the GVC approach adds value to the IB literature.

Governance and upgrading: complementary perspectives on the global economy

A GVC refers to “the full range of activities that firms and workers perform to bring a specific product from its conception to its end use and beyond” (Gereffi and Fernandez-Stark, 2011). Generally, it includes research and development (R&D), design, production, sales and marketing, consumption and recycling. A GVC approach views the global economy as a complex network linking together suppliers and buyers that are integrated and driven by MNEs as lead firms. GVCs have become an integral part of the global economy, reshaping the traditional patterns of international production and trade. According to UNCTAD (2013, pp. 133-135), 80 per cent of world trade now passes through GVCs, and the developing country share in global value-added trade doubled from 20 to 40 per cent between 1990 and 2010. While measuring employment creation by GVCs is difficult, one study of 39 countries estimates that GVCs have generated 88 million jobs (Jiang and Milberg, 2013).

The GVC approach provides a holistic view of global industries from the vantage point of two key concepts: governance and upgrading. Governance highlights the top-down process whereby lead firms integrate geographically and organizationally dispersed economic activities. While GVC analysis shares a firm-centric approach with the IB literature, its focus goes beyond the hierarchical governance of a firm (i.e. vertical integration and headquarter–subunit relations), and extends to various forms of contractual and relational coordination between independent companies that span international borders (De Marchi *et al.*, 2014). In addition to these corporate forms of governance, the GVC approach also pays attention to public and social governance and the institutional factors that shape them (Gereffi *et al.*, 2005; Mayer, 2014).

The concept of upgrading focuses on the bottom-up strategies used by countries, regions and local firms to maintain or improve their positions and outcomes in the global economy. The GVC approach does not simply assume that integration to GVCs leads to economic upgrading through positive spillovers, but seeks to establish under what conditions, particularly under what GVC governance arrangements, upgrading (or downgrading) is likely to occur (Barrientos *et al.*, 2011; Humphrey and Schmitz, 2002)[1].

GVC governance: driving, coordinating and normalizing

GVC governance is defined as “authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain” (Gereffi, 1994, p. 97). Production processes in the globalization era have been fundamentally restructured through offshoring and outsourcing. Unlike vertical integration where internal control and corporate fiat are used to solve coordination problems within the boundary of a firm, global outsourcing involves governance mechanisms that span the activities of multiple firms across national boundaries.

The GVC literature highlights three aspects of GVC governance: driving, coordinating and normalizing (Ponte and Sturgeon, 2014). “Governance as driving” focuses on the lead firms in diverse global industries whose market power and technological or marketing assets allow them to set the performance criteria in terms of price, quality and delivery standards that shape the behavior of their suppliers. The distinction between “producer-driven” and “buyer-driven” chains is seminal: it asserts that two types of lead firms – large manufacturers and global buyers (i.e. retailers, brands and supermarkets) – drive supply chains differently and pose distinct challenges

for chain entry and upgrading (Gereffi, 1994; Gereffi and Lee, 2012). For example, while in buyer-driven chains, global buyers like Nike tend to own few or no factories and instead focus on product design, branding and marketing, their governance power extends well beyond their main contractors as their orders and specifications travel down to hundreds of lower-tier suppliers in their supply chain[2] (Donaghu and Barff, 1990).

“Governance as coordination” highlights the varied forms of inter-firm linkages in GVCs. GVCs consist of multiple linkages that connect suppliers and buyers. The GVC approach extends the “market–hierarchy” dichotomy in transaction cost economics (Williamson, 1985) by offering a more elaborate typology of enduring inter-firm networks that characterize international supply chains. For example, Gereffi *et al.* (2005) identify five types of GVC governance: market (arms-length transactions) and hierarchy (vertical integration), along with three distinctive network-types (modular, relational and captive). The GVC perspective asserts that not all network forms of governance are alike. Also, it posits that the type of GVC governance that arises in a specific chain depends on a combination of three key factors: the complexity of inter-firm transactions, the codifiability of the transactions and suppliers’ capability to meet buyers’ requirements. Thus, the nature of transactions defines the form of governance that affects upgrading of the parties involved.

While “governance as driving” relates to the entire chain (macro-level) and “governance as coordination” involves linkages at specific junctures in the chain (micro-level), “governance as normalizing” deals with the meso-level of GVC governance. Particularly, GVC scholars pay attention to various standards and relevant normative frameworks that shape the overall conditions of GVC participation and upgrading (Gibbon and Ponte, 2008; Ponte and Gibbon, 2005). Such standards allow a normative, or commonly agreed, element of coordination, such as defining rules, conventions and conditions of chain participation, to travel along the chain from one node to another, working as a mechanism “re-aligning a given practice to be compatible with a standard or norm” (Ponte and Sturgeon, 2014, p. 206).

Recent GVC research has highlighted the interaction of multiple forms of governance. Challenging the existing notion of a unipolar structure of governance, where one set of firms – buyers or producers – has dominant power to govern, newer studies feature the role of bipolar or multi-polar GVC governance, where more complicated patterns of power relations emerge between lead firms in GVCs (Fold, 2002; Islam, 2008; Kawakami, 2011). For example, in the automobile industry, one of the paradigmatic producer-driven chains, the rise of “mega suppliers” is challenging the pre-eminent role of the carmakers as lead firms and altering the balance of power in the industry (Foy, 2014). There are now 16 major car manufacturers that sell more than 1 million vehicles per year, but those cars are built from parts supplied by just ten major component makers[3], meaning that auto assemblers are now reliant on a small cadre of mega suppliers who each sell parts to rival assemblers. Although the automakers are still considerably larger than the mega suppliers in sales, the latter are more profitable than the companies they sell to[4]. While mega suppliers are in a position to bargain more effectively with global automakers[5], the latter remain in the driver’s seat in terms of overall governance of the automotive value chain because they determine when, where and at what price they will sell fully assembled vehicles to customers around the world.

Upgrading: economic and social dimensions

Upgrading refers to “a process of improving the ability of a firm or an economy to move to a more profitable and/or technologically sophisticated capital- and skill-intensive economic niche” (Gereffi, 1999, pp. 51-52). The concept originated in the observation that what matters for a country’s development was less the overall level of industrialization than the type of chain activities they were involved in. In other words, a country or firm obtains bigger gains when they move up the value chain into higher value-added chains or nodes (Gereffi and Kaplinsky, 2001).

A central argument of the GVC approach is that the type of governance structure significantly affects upgrading outcomes. Humphrey and Schmitz (2002) specify four types of upgrading, representing different “niches” where upgrading takes place:

- (1) *Process upgrading*: Making production processes more efficient by reorganizing the production system and using advanced technology;
- (2) *Product upgrading*: Moving into more sophisticated, or high-value, product lines;
- (3) *Functional upgrading*: Occupying more profitable functional nodes within a chain; and
- (4) *Chain upgrading*: Diversifying into more profitable value chains.

GVC studies have found that product and process upgrading are facilitated by learning from global buyers, whereas global buyers do not necessarily facilitate functional upgrading (Schmitz, 2004). For example, in Brazil’s Sinos Valley shoe cluster, tight coordination by foreign buyers created favorable conditions for local suppliers to achieve product and process upgrading (Bazan and Navas-Alemán, 2004). However, upgrading to higher-value activities like branding and design was constrained by a captive mode of governance (Giuliani *et al.*, 2005; Lee and Chen, 2000). Functional upgrading was out of reach when global buyers were reluctant to support it, or actively blocked it out of concern that it might bring greater competition (Bazan and Navas-Alemán, 2004). Similarly, American buyers contributed to the process and product upgrading of local blue jeans producers in Torreon, Mexico, giving rise to full-package production. Yet, more extensive functional upgrading did not take place because of the risks that such upgrading posed for MNE lead firms (Bair and Gereffi, 2001).

In much of the GVC literature, there has been an implicit presumption that economic upgrading would lead to social gains, i.e. the improvement of the well-being of workers in the chains. Yet, recent evidence suggests that economic upgrading is often not accompanied by social upgrading, and indeed, it can worsen social conditions (Lee *et al.*, 2011). Social upgrading refers to the process of improvement in the rights and entitlements of workers as social actors and enhances the quality of their employment (Barrientos *et al.*, 2011). A series of studies from the Capturing the Gains research program[6] have found that upgrading is segmented. For example, regular workers may benefit from higher wages and strong labor standards as a result of economic upgrading, while many others, particularly women and migrant workers, are put in highly flexible, unprotected and insecure work. Poor jobs are fuelled by low productivity, subcontracting and suppliers struggling to meet buyers’ requirements on product quality as well as social and environmental standards. Progress made in

measurable standards (e.g. the size and type of employment, wages and working hours) may not extend to enabling rights (e.g. freedom of association and the right to collective bargaining), with many export sectors suffering an extremely low level of unionization (Barrientos *et al.*, 2012).

In short, with the concepts of governance and upgrading, the GVC approach provides a firm-based, network-centric view of how MNEs as global lead firms affect economic and social development. The role of MNEs in promoting or inhibiting development extends beyond their hierarchical boundary to a series of GVC linkages they govern in various ways: driving, coordinating and normalizing. The GVC literature also suggests that the scope and speed of upgrading and the gains from it largely depend on a firm's position and the types of governance in place in the GVC, and economic upgrading does not necessarily lead to social upgrading.

Changing GVC dynamics and the impacts on emerging economies and RP firms

The global economy has undergone significant changes over the past two decades, and the emerging economies have been clear winners. Whereas the share of high-income countries in total value added that was generated in all manufacturing GVCs declined from 74 per cent in 1995 to 56 per cent in 2008, and the share of Japan and the East Asian newly industrializing economies (NIEs) declined from 21 to 11 per cent, emerging economies have increased their shares of value added in manufacturing by 18 per cent. China alone is responsible for half of this increase, with its global share rising rapidly from 4 to 13 per cent, but value added shares also increased in other emerging economies, including Brazil, Russia, India and Mexico (Timmer *et al.*, 2014, p. 109). During this same period, 42 million manufacturing jobs were added in China, 20 million in India, 6 million in Brazil and 2 million in Mexico (Timmer *et al.*, 2014, p. 112).

More recently, the global recession of the late 2000s precipitated sharp shifts in global production and trade, with major implications for the role played by emerging economies and RP firms in GVCs (Cattaneo *et al.*, 2010; Gereffi, 2014). In this section, we discuss the key dynamics of GVCs in the post-crisis global economy from three angles: geographic and value chain concentration; shifting end markets and regionalization; and synergistic forms of GVC governance. However, this analysis should first be related to the growing literature on RPs and RP firms in IB studies.

Nadvi (2014) has provided a clear and useful operational definition of “rising powers” that emphasizes six features: rapid and sustained economic growth; increasing participation in international trade with dominance in particular sectors; significant economic scale, including population, natural resources, a manufacturing base and a sizeable domestic market; a strong role of the state; local capital (both private and public) with an expanding international presence; and a growing voice for civil society. Although these large emerging economies (the term we will use in this article) were initially associated with the BRICs (Brazil, Russia, India and China), they now include more than a dozen countries with similar features, including Mexico, Indonesia, Nigeria and Turkey (the “MINT” countries), South Africa and others (Sinkovics *et al.*, 2014b).

While the emerging economies indeed play a central role in GVC analysis, the more controversial issue is the status of RP firms. If “rising powers” refer to countries such as China, India, Brazil, Russia and South Africa, which are on rapid economic growth and development trajectories, then RP firms can be thought of as emergent and with a clear

strategic intent to challenge the Western and dominant forms of economic organization (Sinkovics and Yamin, 2012). A more contentious issue, however, is whether RP firms are merely emulating or “catching up” with MNEs from the advanced industrial economies, or whether they are fundamentally “changing the rules of the game” in the contemporary global economy (Sinkovics *et al.*, 2014b). Within the traditional IB literature, the paradigm typically used to address this question is John Dunning’s eclectic ownership, location, and internalization (OLI) model[7] (Luo and Tung, 2007), sometimes supplemented with insights from the “late comer” perspective introduced by economic historian Alexander Gerschenkron[8] (Sinkovics *et al.*, 2014b).

From a GVC perspective, there are three shortcomings in the current literature on RP firms. First, the characterization of RP firms tends to reflect an outmoded view of the global economy centered on large national markets and asset-seeking MNEs. In a GVC-oriented world, value creation, value capture and economic rents occur in more fluid international production networks, where the ability to shape innovation processes and labor and environmental outcomes often resides in the distribution and retail segments of GVCs (Hamilton *et al.*, 2011), and not only in the production activities and OLI advantages of RP manufacturing and resource-based firms. The varied nature of GVC governance structures is typically absent in the analysis of RP firms.

Second, the RP literature usually tries to categorize RP firms as different in kind from MNEs in the earlier set of East Asia’s NIEs, namely, Hong Kong, Taiwan, Singapore and South Korea (Luo and Tung, 2007, p. 483). While there clearly are key distinctions between today’s emerging economies and the East Asian NIEs, beginning with economic scale, notable examples exist where MNEs from the NIEs are tightly integrated into the economies of rising powers, especially China, and indeed link them to the global economy in significant ways that have been directly responsible for the economic dynamism that is one of the defining features of the RP. Li & Fung, the largest trading company in the world, is headquartered in Hong Kong but does most of its sourcing from China[9]. Similarly, Foxconn Technology Group, the largest electronics contract manufacturer in the world, has its home office in Taiwan, but its production and exports for leading brand name multinationals like Apple are concentrated in mainland China, where it employs more than 1 million workers, making it by far the largest private employer in the country. In terms of GVC dynamics, Li & Fung and Foxconn act like RP firms, even if their headquarters are elsewhere[10].

Third, one of the most persuasive arguments for the transformative potential of RP firms is that they are now pursuing their own low-cost innovation strategies and trying to leverage the growing size of the low- and middle-income segments in emerging economies to seek “gold at the base of the pyramid” and to win the “fight for the middle” in RP markets, while advanced country MNEs are engaged in “a race to the top” (Sinkovics *et al.*, 2014b, p. 677). This indeed could be a very profitable upgrading approach, but it is not limited to RP firms. The business press is full of entrepreneurial initiatives being launched by innovative companies all around the world and not just in emerging economies, which are empowered by the use of the Internet, pervasive digital technologies and crowd-sourced venture capital to solve basic development problems, like the Chilean entrepreneur who found a cheap way to give hundreds of millions of people in the world access to clean drinking water (Wadhwa, 2013). Furthermore, one of the leading RP firms, China-based Lenovo Group, the top vendor of personal computers globally, is anchoring its new PC Plus strategy (based on moving beyond PCs into

smartphones, tablets and servers) not in the China market, but in North America (Oleniacz, 2014).

The discussion below of recent GVC trends will further illustrate these and other points related to emerging economies and RP firms.

The geographic and organizational concentration of GVCs

Over the past decade, GVCs have become significantly more concentrated, both geographically and organizationally. Despite the initial expectation that the global spread and fragmentation of production activities might lead to greater participation by less-developed countries and smaller firms in GVCs, recent evidence in a number of industries, from apparel to automobiles, electronics and even services, suggests that GVCs are becoming geographically concentrated in fewer countries, especially emerging economies with large domestic markets and robust supplier bases, such as Brazil, China, India and South Africa (Cattaneo *et al.*, 2010). The trend has been intensified by the global recession as GVC lead firms streamlined their supply chains to focus on a smaller number of large, more capable suppliers, which are strategically located near dynamic nodes of GVCs (Gereffi, 2014).

The example of mobile phones is illustrative (Lee and Gereffi, 2013). Until the late 1990s, the entire production of mobile phones was conducted in advanced economies. The ensuing rise of global outsourcing has shifted production to developing countries. The five largest exporters – China, South Korea, Hong Kong, Vietnam and the USA – commanded 74 per cent of the world's exports in 2012, with China alone representing a half of them[11] (Lee and Gereffi, 2013). As a result, mobile phone production today is clustered in several countries in Asia, notably China, South Korea and Vietnam. Moreover, the key nodes of mobile phone GVCs are significantly consolidated. The five leading firms account for more than a half of global markets in mobile phones (56 per cent), smartphones (60 per cent), contract manufacturing (75 per cent) and smartphone operating systems (99 per cent). Two leading firms control a big portion of each market, such as Apple and Samsung in smartphones, which gives rise to oligopolistic market structures[12].

There are several implications of this rising concentration in GVCs. First, upgrading opportunities are unevenly distributed among countries and firms, and concentration amplifies the benefits of inclusion and the disadvantages of exclusion in GVCs. As a significant proportion of world production and exports is dominated by a handful of countries, the vast majority of countries and firms are marginalized with few linkages to global industries and limited upgrading prospects. Also, the rise of large RP countries as the prominent locations for GVC production puts pressure on other countries to cut costs and squeeze their profits to compete. As a result, the geography of production – which countries are in or out – is heavily affected by the decisions of a few global brands and their key contract manufacturers.

For RP firms, rising geographic and value chain concentration has increased their influence in GVCs. They clearly benefit from the concentration of production in emerging economies, and at the same time, their growing capabilities enable global lead firms to shift more production to these countries. For example, East Asian contract manufacturers like Foxconn have taken advantage of capable supplier bases clustered in China, as exemplified by its supply chain cities (Gereffi, 2009), and neighboring East Asian countries. As global lead firms like Apple and Hewlett-Packard are keen to tap

into more capable suppliers, RP firms are better positioned to serve global firms and advance their positions in GVCs. The rise of large consolidated, transnational suppliers in RP economies generates the expectation that they may check the power of global lead firms (Appelbaum, 2008).

Actual upgrading outcomes, however, are less straightforward. Some RP firms are big, capable and transnational, but power asymmetries in their relationship with their global buyers still cannot be ignored. For example, Apple's iPods and iPhones are almost entirely assembled in China by Foxconn and Pegatron, two of the biggest electronics contract manufacturers. Yet, the value captured by these global contract manufacturers is extremely small compared to the gains by Apple and other high-end component suppliers in Japan, Korea and Germany[13] (Dedrick *et al.*, 2011). Thin margins and the fast pace of production virtually dictated by buyers significantly hamper their ability to improve labor conditions for workers, even after a series of worker suicides sparked widespread criticism and intense scrutiny from the public and the media (Chan *et al.*, 2013; Lee and Gereffi, 2013).

The extent to which RP firms can contribute to the upgrading of smaller, less capable suppliers is limited. There is some expectation that RP firms can facilitate the transfer of technology and knowledge to smaller firms in the chain. But the extent to which RP firms can deliver these results depends on their abilities and strategies to capture more value in GVCs. For instance, Foxconn manufactures many parts and components in-house as a way to compensate for slim margins in its contract manufacturing business (Balfour and Culpan, 2010); this can limit, if not completely eliminate, their ability to help the upgradation of smaller suppliers.

Furthermore, there continue to be questions about the innovative impact of RP firms. Despite China's push for greater technological autonomy and indigenous innovation, its high-tech sectors and export performance are still heavily dependent on foreign-invested enterprises. Of the top 20 exporting firms based in China in 2012, only 2 were Chinese-owned: Huawei and ZTE. Twelve of the top 20 exporters were based in Taiwan (including 6 companies owned by Foxconn), and 4 were from South Korea (Grimes and Sun, 2014, p. 66).

Shifting end markets and regionalized value chains

In the post-war world economy, international trade was premised on the fact that most final products were consumed in developed economies. Upgrading basically meant serving buyers from advanced economies. For example, export-oriented industrialization fuelled rapid economic development in the NIEs, which oriented their development strategies to the export of manufactured goods to US and European markets, and Western lead firms knew best how to cater to consumers in these markets (Hamilton and Gereffi, 2009).

This conventional flow of international trade, however, began to change in the mid-1980s due to economic slumps in the global North and rapidly growing market demand in the NIEs. In 1990, 60 per cent of the world trade was between developed countries (North-North), 30 per cent was between industrialized and developing countries (North-South) and 10 per cent was South-South. By 2020, these three patterns of trade are expected to be equally split, meaning that the relative weight of North-North trade will have been cut in half in just 30 years (Lamy, 2013). A major part of this shift is being driven by the fact that almost 60 per cent of trade in goods is now in

intermediate products that are used as imports in the production process, especially for exports – the so-called GVC trade (UNCTAD, 2013). While the import content of exports was 20 per cent in 1990, this increased to 40 per cent in 2010 and it is expected to be 60 per cent in 2030 (Lamy, 2013).

The resulting shift of end markets to emerging economies was exacerbated by the 2008-2009 global recession. It had a major impact on developed economies, while large RP countries like China, India and Brazil fared relatively better (Gereffi and Sturgeon, 2013). As world trade bounced back from the economic crises, developing economies became the main engine of the recovery (Staritz *et al.*, 2011). These emerging economies, unlike the East Asian NIEs, have much bigger domestic markets and are rich in natural resources. In 2005-2010, the merchandise imports of the European Union and the USA increased only by 27 and 14 per cent, respectively, while emerging economies expanded their merchandise imports much faster: Brazil (147 per cent), India (129 per cent), China (111 per cent) and South Africa (51 per cent) (WTO, 2011). The import growth in emerging economies is also driven by rising demand for intermediate goods and raw materials because manufacturing GVCs are concentrated in those economies, as discussed above (Kaplinsky *et al.*, 2011).

The economic downturn in advanced industrial countries and the rise of large emerging economies has fueled the regionalization of value chains. Regional production networks emerged as factories and suppliers linked through GVCs were clustered into a reduced number of strategically located countries. A notable example is the East Asian regional production network. Strong supply bases, different levels of industrial capabilities and complementarities between countries for financial, technological and human resources help the growth of cross-national production networks in the region. In electronics, for instance, many high-end components are supplied from Japan, Korea and Taiwan, which have strong R&D capabilities, and assembled in China with low-end components produced locally or in other developing countries, such as Vietnam and the Philippines (WTO and IDE-JETRO, 2011).

While such regional divisions of labor are not new (Borras *et al.*, 2000; Gereffi, 1996), nowadays more products in diverse industries are made and consumed regionally instead of being exported to advanced economies and RP firms play an active role in creating a regional circuit of production and consumption. In Sub-Saharan Africa (SSA), South African supermarkets are building up regional supply chains and spearheading the diffusion of supermarkets across the region. So are the supermarkets from Kenya, but on a different geographic scale. At the same time, the South African, Kenyan and Ugandan producers have found new markets in the Middle East and Asia. This provides SSA farmers and producers with the alternative buyers to global supermarket chains, leading to the rise of new South-South value chains (Barrientos and Visser, 2012; Evers *et al.*, 2014). Similarly, South African clothing manufacturers recently entered into neighboring countries like Lesotho and Swaziland to serve mainly South African and other SSA markets. They work with clients like South African retailers, who also are expanding regionally (Morris *et al.*, 2011).

The regionalization of value chains is also driven by global lead firms. They tend to focus on a group of countries that are proximate geographically, economically or socio-linguistically to promote their localization strategies. Wal-Mart, for example, has expanded its retail network across SSA with a regional scale of sourcing, logistics and distribution operations. Similarly, Vodafone, a UK-based, multinational mobile service

provider, operates across the SSA region to compete against major RP telecom companies that operate regionally, such as MTN of South Africa and Bharti Airtel of India. In this way, global regions have become a locus of competition between local, regional and global firms, which accelerates the regionalization of value chains.

The regionalization of value chains can provide RP firms with some upgrading advantages. First, regional markets and value chains may present alternative economic upgrading paths where RP firms may have better chances for functional upgrading than in global chains (Bazan and Navas-Alemán, 2004; Morris *et al.*, 2011). Less stringent standards and lower entry barriers with less capital and technology requirements in regional value chains or Southern markets can facilitate smaller firms in emerging economies to participate in exports and other forms of business abroad. Second, RP firms can leverage their experience and knowledge of local and regional markets in the global South to gain advantages over global firms, which often suffer from a “liability of outsidership”, or a lack of in-depth understanding of such markets (Johanson and Vahlne, 2009; Sinkovics *et al.*, 2014a). For example, the so-called “frugal innovations” (Clark *et al.*, 2009) – developing products or services especially designed for resource-poor settings – may present RP firms with an opportunity to bypass global firms in serving Southern consumers, typically with lower incomes and poor services in power supply and transportation. Such businesses tend to be low in unit margins, but they can create a high-volume market by tapping into a large population of new Southern consumers.

However, there are potential downsides for RP firms. The lower entry barriers of regional or South-South value chains may work against RP firms if they are stuck in a low-cost, low-standard market. Furthermore, the advantage of their intimate knowledge in local markets may not last for long. For example, Chinese mobile phone makers faced greater competition in the domestic market as global brands like Nokia and Samsung, after struggling with localization, caught up fast and closed the gap with Chinese competitors in terms of understanding local markets (Brandt and Thun, 2011). Thus, local advantages in upgrading may be short-lived.

The implications of regionalization for social upgrading are less clear. Compared to global or North-bound chains, less stringent social standards in regional value chains and the smaller premiums Southern consumers may be willing to pay for social labels could discourage RP firms from committing to an upgrading of working conditions in their supply chains. Also, the “high-volume, low-cost” model in Southern markets can have a negative impact on social upgrading for certain workers because firms in this model tend to rely on the extensive outsourcing of “non-core” activities to a large pool of contract workers whose employment tends to be less stable, as shown in the case of Indian information technology and telecom firms (Sarkar *et al.*, 2013). This may create favorable conditions for regular, skilled “core” workers, while contract workers suffer from precarious employment conditions.

From private standards to synergistic governance

As GVCs develop into multi-tier structures where firms in each tier outsource some of their activities, lead firms use their own standards to govern the chains and the behavior of the other chain actors involved. This gives rise to private standards (Mayer and Gereffi, 2010), which unlike public standards that are enforced mandatorily by governments, are promulgated and executed by firms, individually or collectively, and

are voluntary in principle[14]. However, recent studies suggest a more limited role for lead firms and their private standards in facilitating upgrading, especially the social dimensions (Locke, 2013; Mayer and Gereffi, 2010), which has led to calls for synergistic forms of private, public and social governance (Gereffi *et al.*, 2014; Mayer, 2014)[15].

There are different types of private standards in GVCs (Ponte and Gibbon, 2005). Quality standards involve a wide range of product quality, including product safety. Quality standards, such as GLOBALGAP (Good Agricultural Practice), have become critical in GVCs as a number of firms in different countries affect the quality of final products. Growing demand for product differentiation among consolidated lead firms increases the need for private quality standards. Another expanding area is social and environmental standards (Nadvi, 2014). Global lead firms are increasingly facing public pressure to make their supply chains socially and environmentally sustainable. Any corporate wrongdoings in their supply chains could eventually inflict reputational damage on lead firms even if the factory is not owned by them.

Private standards have upgrading implications for firms in developing countries (Humphrey, 2006; Lee *et al.*, 2012). Complying with standards requires commitments to various activities, from additional documentation to facility improvement, which incur added costs to the firms. Thus, standards can work as entry barriers for smaller suppliers or producers that tend to have limited resources. In agri-food chains, for example, large food manufacturers and supermarkets are increasingly rationalizing their supply chains to work directly with a smaller number of preferred, mostly large, suppliers capable of meeting their stringent requirements, thereby marginalizing smallholders unable to comply the standards (Maertens and Swinnen, 2009). By contrast, higher standards can be a catalyst for upgrading. Improving production techniques and product quality to meet higher requirements permits participation in high value-added chains. For example, some smallholders in developing countries have been successful in niche markets for organic and fair trade-certified products, differentiating themselves from non-certified producers (van Beuningen and Knorringa, 2009).

Over the past decade or so, the “compliance-based model” (Locke *et al.*, 2009) of governing GVCs through private standards aimed at improving quality, social and environmental outcomes has proven inadequate to address these concerns. With regard to labor conditions, the ineffectiveness of the compliance model has been under intense scrutiny following a series of highly publicized tragic events. Dozens of worker suicides in Foxconn’s factories in China since 2010 shed light on horrific conditions that confront those who assembled high-tech products like the iPhone. The latest building collapse in Bangladesh that killed over a thousand garment workers in 2013 illuminates the precarious factory conditions under which garments are manufactured by suppliers for global retail and apparel brands like H&M, Zara and Tesco. In many of such cases, contributing to these undesirable conditions are the buyers’ own purchasing and supply chain management practices, such as cost-cutting, shortening lead times and last-minute changes, which often make the supplier unable to observe their labor codes (Barrientos, 2013).

The limited impact of the compliance model has led to a search for alternative paths for social upgrading (Gereffi and Luo, 2014). More attention is being given to joint actions by multiple stakeholders to combine compliance monitoring with capability building so that supplier can learn how to address labor issues on their own (O’Rourke,

2006). Moreover, bottom-up approaches highlight the importance of local embeddedness. While developing country firms tend to be portrayed as “standard-takers”, they can initiate their own effort to improve working conditions, often collectively within clusters (Lund-Thomsen and Nadvi, 2010). Active roles can be played by workers and labor unions in GVCs, who often are the best monitors on the ground (O’Rourke, 2006) and who have considerable power to disrupt the supply chains in their bargaining with employers (Selwyn, 2013).

Finally, in the face of workers’ grievances and public criticisms over undesirable labor conditions, governments need to enforce stricter labor laws and regulations and actively police labor abuses. Government actions can go beyond the traditional law-enforcing role and adopt innovative and experimental approaches by collaborating with private and civil actors (Locke, 2013). Different forms of governance can work together to complement each other (Amengual, 2010), and this can lead to “synergistic governance” (Mayer, 2014). To make this happen, one needs to go beyond the factory as the unit of analysis (and intervention) to take into account a broader array of governance forms and public and civil society actors that could complement private GVC governance and global lead firms (Gereffi *et al.*, 2014).

Conclusion

Our discussion of the changing dynamics of GVCs in the post-crisis global economy underscores the important yet complex role of GVCs in shaping economic and social outcomes for RP firms and emerging economies. Rising geographic and organizational concentration in many GVCs leads to an uneven distribution of upgrading opportunities that should favor RP firms. Similarly, the rise of emerging economies as new end markets for GVCs and the regionalization of value chains can benefit RP firms. RP firms can play a significant role in reconstructing GVCs by building up regional supply chains and retail networks and South-South value chains. These can provide alternative markets where RP firms compete with global firms on better terms, either with more local knowledge or business models uniquely suited to developing country markets. At the same time, without further upgrading, such competitive advantage may be short-lived or only sustainable at the expense of worsening labor conditions for marginalized workers.

However, this article has also challenged some of the current stereotypes about RP firms. They need to be analyzed within the context of contemporary GVCs, not just as the newest variety of “third world multinationals”. MNEs from the East Asian NIEs have had a strong influence not only on the export performance of emerging economies, particularly China, but also on their innovation potential. As RP firms become fully integrated into GVCs, their global strategies can be powerfully influenced by their linkages to advanced countries as well as their domestic markets[16].

In terms of new patterns of GVC governance focused on social upgrading, the inability of voluntary corporate codes to address the root causes of poor labor conditions in the factories linked to GVCs has led to the call for joint governance systems built through a cooperation of MNEs, local firms and transnational and local NGOs, labor unions and governments on various levels. It remains to be seen whether such cooperative governance can address a wider array of social development issues beyond workplace and workers’ rights. Thus, the conditions under which social value and benefits are likely to be co-created within and across private, public or civil sector

(Sinkovics *et al.*, 2014a) can be one of the topics on which GVC and critical IB scholars can fruitfully collaborate. In such an endeavor, critical IB scholarship could contribute to the GVC approach by providing a deep understanding of MNEs' hierarchical governance, various business strategies beyond supply chain management and internal decision-making and coordination process across different geographies.

Notes

1. Global production network (GPN) research has many commonalities with the GVC approach, as both pay close attention to fragmented and dispersed production systems across national borders. Efforts to distinguish the two perspectives highlight the former's relative emphasis on local institutions and embeddedness (Coe *et al.*, 2008; Henderson *et al.*, 2002; Hess and Yeung, 2006), while GVC analysis deals more specifically with vertical commercial linkages and the role of power in global supply chains (Bair, 2009; Ponte and Sturgeon, 2014). This paper, however, focuses on the GVC literature to highlight its potential contribution to the critical IB literature. For a comparison of the GPN and GVC literatures, see Sturgeon (2001, 2009) and Neilson *et al.* (2014).
2. By 2011, Nike's products were made in 930 factories in 50 countries, employing more than 1 million workers. However, Nike itself had just 38,000 direct employees, most of whom work in the USA. Nike's \$15 billion in total sales included \$10.3 billion for footwear and \$5 billion for apparel. However, just 73 of Nike's 930 suppliers in 2011 were producing shoes, and most were located in Asia (Locke, 2013, p. 48). This highlights the fact that similar industries in terms of products often have contrasting forms of industrial organization, GVC governance structures and upgrading outcomes, even with the same lead firm. This is true of Nike's buyer-driven footwear and apparel suppliers: offshore footwear factories are relatively large, capital-intensive operations, which Nike was able to monitor much more closely, while garment factories are usually smaller and highly labor-intensive operations, leading to much greater volatility in performance and compliance with Nike's corporate codes of conduct.
3. The biggest car part suppliers (with 2013 revenues in parentheses) include Bosch (\$67.5 billion, 2012); Continental (\$44.3 billion); Denso (\$43.3 billion); Johnson Controls (\$42.7 billion) and Magna International (\$34.8 billion). Some of the leading car companies they supply include Honda Motor (\$119.5 billion), Fiat (\$115.3 billion) and BMW (\$101 billion) (Foy, 2014). The global top 10 auto parts suppliers account for 60 per cent of total revenues of the world's 100 largest automotive suppliers.
4. Operating margins of the ten largest automotive suppliers are about 4 percentage points higher, on average, than those of the ten biggest carmakers (Foy, 2014).
5. The role of mega suppliers in the automotive value chain is paralleled by the rise of global contract manufacturers in electronics (Sturgeon and Lester, 2004), and large-scale systems integrators in the aircraft and shipbuilding industries (Gereffi *et al.*, 2013).
6. "Capturing the Gains" is an international research network to examine the relationship between economic and social upgrading in GVCs. The project publications, working papers, policy briefs and other activities are listed at www.capturingthegains.org/
7. The three main components of the OLI eclectic paradigm are: ownership advantages, locational advantages and internalization advantages.
8. For an updated version of the "late comer" thesis applied to developmental states in East Asia and elsewhere, see the discussion of "compressed development" in Whittaker *et al.* (2010).

9. Li & Fung has about 15,000 suppliers globally and operates in more than 40 countries (Fung, 2011).
10. A similar argument could be made with respect to the dynamics of “triangle manufacturing” whereby MNEs from the East Asian NIEs played a critical role in extending production in GVCs to a broad range of low-cost locations that included small countries as well as RP economies, thereby creating more flexible sourcing networks that leveraged quota and regional trade agreement constraints and preferences in ways that increased participation by low-income economies, including RPs, in GVCs (Gereffi, 1999). This is perhaps most clearly visible in the global apparel industry; see Morris *et al.* (2011) on South Africa’s links to Lesotho and Swaziland and Bair and Gereffi (2014) on how East Asian production networks in Nicaragua are leveraging features of the Central America Free Trade Agreement (CAFTA) and North American Free Trade Agreement (NAFTA) trade agreements.
11. Similarly, over 40 per cent of the world’s apparel exports came from China alone, and the top 5 leading exporting countries accounted for 60 per cent of world export value in 2010 (Bernhardt, 2013).
12. Figures on mobile phone sales (2012) and smartphone OS (2012, 4Q) are from Gartner (2013b). Smartphone sales figures (2013, 2Q) are from Gartner (2013a). Market shares in contract manufacturing (2010) are from NIPA (2011).
13. US-based Apple is estimated to capture between one-third and one-half of an iPod’s retail price; Asian firms, like Toshiba from Japan and Samsung from South Korea, capture the largest manufacturing shares as profits from high-value components, such as the hard-disk drive, display and memory; and the assembly and testing activities by Chinese workers get just 2 per cent of the final product price (Timmer *et al.*, 2014, p. 99).
14. Private standards can be mandatory in a *de facto* sense if complying with them is a precondition for participation in the GVC.
15. Public governance involves rules and regulations set by various levels of governments in nation-states and supra-national entities like the International Labor Organization. Social governance is driven by civil society actors such as non-governmental organizations (NGOs) and labor unions. It includes codes of conduct initiated by NGOs and multi-stakeholder initiatives, such as Ethical Trade Initiative.
16. This is the case of India’s role in the dynamic offshore services GVC, which began with “body shopping” in the US. economy in the late 1990s in response to the perceived need to rewrite massive amounts of software code to avert a potential Y2K crisis, and has evolved to the point where India has some of the world’s leading offshore services MNEs, such as Infosys, Wipro and Tata Consultancy Services, but still oriented to global clients (Fernandez-Stark *et al.*, 2011).

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