economic and social upgrading

Capturing the Gains brings together an international research network to examine economic and social upgrading in business communities across the developing world.

The programme explores the connections between business competitiveness and social prosperity with attention to firm innovation, trade expansion, labour standards and decent work.

Its research allows policymakers and business leaders to better understand the relationship between business growth and poverty reduction in the global South.



# Global value chains, upgrading and poverty reduction

Joonkoo Lee, Gary Gereffi and Stephanie Barrientos

## Abstract

Global value chains (GVCs) are changing the way trade is conducted and value is created and captured. As more trade is organized through close coordination between buyers and suppliers, moving to high value-added activities, or economic upgrading, is critically determined by lead firms, particularly global buyers. However, growing evidence shows that economic upgrading of producers does not necessarily lead to social upgrading of workers, and the relationship is complicated by GVC restructuring in a post-crisis world. Dynamic monitoring of global and regional chains, joint public-private support for value chain upgrading, and improved trade metrics will provide more effective policy interventions for poverty reduction in a rapidly changing global trade environment.

## **Keywords**

Global value chains, trade in value added, economic upgrading, social upgrading, poverty reduction

## Authors

Joonkoo Lee is a Postdoctoral Research Scholar in the Social Science Research Institute at Duke University (email: joonkoo.lee@duke.edu).

Gary Gereffi is Professor of Sociology and Director of the Center on Globalization, Governance & Competitiveness at Duke University (email: <u>ggere@soc.duke.edu</u>).

Stephanie Barrientos is a Senior Lecturer in the Institute for Development Policy and Management, and Associate Director of Brooks World Poverty Institute, University of Manchester (email: <u>s.barrientos@manchester.ac.uk</u>).

"

Global value chains have risen as production becomes fragmented

"

#### Notes

- G. Gereffi and K. Fernandez-Stark (2011). Global Value Chain Analysis: A Primer (p. 4). Durham, NC: Center on Globalization, Governance & Competitiveness, Duke University. Available: http://www.cggc.duke. edu/pdfs/2011-05-31\_GVC\_analysis\_a\_ primer.pdf
- WTO and IDE-JETRO (2011). Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks (p. 81). Geneva and Tokyo: World Trade Organization and Institute of Developing Economies.
- Y. Xing and N. Detert (2010). 'How the iPhone widens the United States trade deficit with the People's Republic of China'. Tokyo: Asian Development Bank Institute. Available: http://www.adbi.org/workingpaper/2010/12/14/4236.iphone.widens. us.trade.deficit.prc/
- R. Koopman, Z. Wang, and S.-J. Wei (2008). 'How much of Chinese exports is really made in China? Assessing domestic value-added when processing trade is pervasive'. Cambridge, MA: National Bureau of Economic Research Working Paper Series, No. 14109.
- GVCs and GPNs are complementary terms and used interchangeably in this brief. GPNs incorporate wider institutional actors linked to GVCs, while GVCs focus on commercial actors and their linkages.



## Global value chains are changing the way trade is conducted and value is captured

Global value chains (GVCs) refer to the full range of activities to bring a product from its conception to end use, including design, production, distribution and consumer support. Each activity can be contained within a single firm or divided among different firms through outsourcing, adding different amounts of value to the final product.<sup>1</sup>

Global value chains have risen as production becomes fragmented into specialized and geographically dispersed value-adding tasks. In 2009, world exports of intermediate goods exceeded the combined export values of final and capital goods, accounting for 51 percent of non-fuel merchandise exports.<sup>2</sup>

A large proportion of trade is coordinated by global buyers and suppliers, defying the notion of trade as arm's-length market transactions between countries. As various stages of intermediate goods are traded across borders, the discrepancy is growing between where final goods are produced and exported and where value is created and captured.

For example, Apple's iPhones, entirely assembled in China and exported to the USA, generate a US\$ 1.9 billion deficit for the USA in its trade with China, using a traditional measure that assigns the gross export value of the product to the exporting country (see Figure 1). In value-added terms, however, most of the deficit comes from Japan and other exporters of high value-added components and not from China, which represents less than four percent of the US iPhone trade deficit.<sup>3</sup> This is not an exception for the world's largest manufacturing country. Domestic content only accounts for about half of China's manufacturing exports and even less (18 percent) of its processing exports, mostly done by foreign-owned firms.<sup>4</sup>

### Value capture is critically determined by who leads GVCs

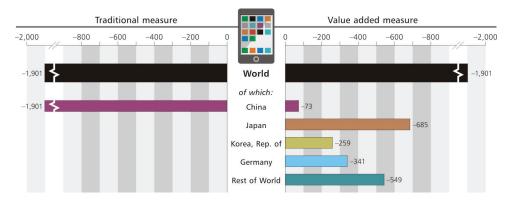
As more trade is organized via offshore outsourcing, integration into global production networks (GPNs) and 'upgrading' – moving from low valueadded to high value-added activities within and across GPNs – become crucial for pro-poor employment in developing countries.<sup>5</sup> This is the case even in the sectors not generally associated with poverty reduction, like tourism (see Box 1). Yet, where high value-added activities are located and who is included in GVCs are largely determined by lead companies that govern the chain.

## capturing the gains



quality standards can push out developing country suppliers, or be a springboard to help them upgrade

#### Figure 1: 2009 US trade balance in iPhones (in US\$ millions).



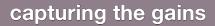
Source: WTO and IDE-JETRO (2011) Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks (p. 105).

Global value chains are increasingly driven by the demand side, and lead firms tend to be buyers at the downstream end of a chain. Retail concentration has strengthened the role of global buyers in GPNs. Walmart, the world's largest retailer, is China's seventh largest trading partner (ahead of the UK), spending more than \$18 billion annually on Chinese goods.<sup>6</sup> Ouality standards are one of the key mechanisms by which buyers govern the chain. Depending on which products are to be supplied, and how, when and where they will be produced, quality standards can work as a potential barrier that pushes out developing country suppliers unable to comply, or they can be a springboard to help them upgrade.

Governance is not uniform, but varies across GPNs. While supermarkets and retailers play the key role as lead firms in agro food chains, their power is significantly moderated in mobile telecom by the presence of brand manufacturers. Even in the same sector, lead firms may organize GPNs differently. Unlike Apple Inc., which outsources its entire smart phone production to China, Nokia keeps a significant portion of its production inhouse and in its home country (Finland). Different market niches (e.g., high-end vs. low-end) and geographical markets have distinctive GPN structures, with varying patterns of value creation.7 Thus, the rise of demand in emerging markets and the resulting shift of the end market from developed countries

#### Notes

- 'Wal-Mart, the US retailer taking over the world by stealth', *The Guardian*, 12 January 2010.
- In shoes sold in the European Union, for example, manufacturing costs relative to the wholesale sales price are much higher in low-end products (66 percent) than in high-end products (46 percent), while upstream activities such as R&D create more value in high-quality shoes (33 percent) than in low-quality ones (15 percent). OECD (2011). 'Global value chains: preliminary evidence and policy issues'. Paris, OECD: DSTI/IND(2011)3, 4 March, p. 26.



Some workers in GPNs benefit from strong labour standards, many others are in poor jobs



## Box 1: Life at the end of the chain – tourism and poverty reduction in Asia

Tourism is often seen as resulting in a great deal of leakage of revenue, with only poor quality, casual and temporary jobs in developing country destinations. Capturing the Gains research, however, shows that, even in segments at the end of the chain, there can be a substantial impact on reducing poverty. It finds that two upland economies in China and India have substantially benefited from tourism. In the Yunnan villages in China, the tourism impact was largely due to the excursion segment of the value chain; in the Uttarakhand village in Northern India, it was due to the road-side eateries and rest houses along the tourist route.

There are two types of local impacts: high volume, benefiting numerous people but with low unit value per person (e.g., animal rides); and low volume, benefiting few people but with high unit value per person (e.g., home stays). Tourism has brought other benefits to these villages, such as a preservation of natural and cultural capital, which are themselves the basis of tourist attraction, good communications and improved sanitation and hygiene.

Lesson: we need to look not only at leakages but also linkages to promote upgrading.

can offer developing country suppliers distinctive upgrading opportunities in local and regional chains, although dealing with multiple chains and standards can be challenging.<sup>8</sup>

## Economic upgrading does not necessarily lead to social upgrading

Moving to higher value-added activities is critical, yet does not necessarily lead to social upgrading, which entails improvement in workers' rights and entitlements, and enhancement of the quality of their employment.<sup>9</sup> Some workers in GPNs, as a result of economic upgrading, may benefit from higher wages and strong labour standards. But for many others, particularly women and migrant workers, economic upgrading may be achieved by putting them in highly flexible, unprotected and insecure work. Poor jobs are also fuelled by low productivity, subcontracting, and supplier struggles to meet buyers' requirements. Progress made in employment and wages may not extend to other dimensions, like freedom of association.

The recent global crisis is adding more complexity to the relationship between economic and social upgrading. If shifting demand to the South could help suppliers develop higher value-added activities, like product design, it may generate higher-skilled employment. Conversely, it could

#### Notes

- O.Cattaneo, G. Gereffi, and C. Staritz (eds.) (2010). Global Value Chains in a Postcrisis World : A Development Perspective. Washington, DC: World Bank; and C. Staritz, G.Gereffi and O.Cattaneo (Guest Editors) (2011). 'Shifting end markets and upgrading prospects in global value chains', International Journal of Technological Learning, Innovation and Development, 44(1/2/3).
- S. Barrientos, G. Gereffi and A. Rossi (2010). 'Economic and social upgrading in global production networks: developing a framework for analysis'. *Capturing the Gains Working Paper 2010/3*.

capturing the gains





The recent global crisis is adding more complexity to the relationship between economic and social upgrading

deteriorate workers' conditions if suppliers cling to slimmer margins with little effort to advance product and process standards (see Box 2). Similarly, consolidation in post-crisis GVCs can create small pockets of well-positioned suppliers with better conditions for workers, while eliminating others from the chains. The uncertainty and complexity involving economic and social upgrading necessitate research to monitor the trends and better inform policy in a rapidly changing global trade environment.

#### Box 2: Upgrading in horticulture value chains in Africa

Horticulture value chains provide important opportunities for economic and social upgrading in Africa, with more than 350,000 workers (mostly women) employed in South Africa, Kenya and Uganda alone. In recent years, in addition to European supermarkets that have long provided an export destination, new value chain destinations are opening up. Supermarkets are expanding across Sub-Saharan Africa, as shown in Walmart's recent acquisition of Massmart, giving it access to 14 African countries. Asia is a growing destination for African produce.

Capturing the Gains research finds that export diversification of value chains gives producers more options. But buyer pressures, and rising input costs, make competition more intense. Social standards are often lower in new emerging economy markets, but product quality remains important. Meeting multiple standards creates complexity. Upgrading outcomes are more favourable for large farmers and regular workers than for small-scale farmers and casual workers.

- Greater worker skills are required, with more intensive training and rising educational entry levels (e.g., grade 10 in some packhouses).
- Farmers and agricultural labour receive low rewards within value chains (in citrus, farmers receive an estimated 10 percent and workers three percent of the final price).
- Agricultural workers/producers embedded in traditional social relations (gender and ethnic discrimination, paternalism and attitudes to unions) require a 'mindset shift'.
- Younger more productive farmers and workers are leaving agriculture for better options, resulting in a shortage of the 'right kind' of labour.



Center on Globalization, Governance & Competitiveness, Duke University, USA

Centre for Analysis and Forecasting, Academy of Social Sciences, Vietnam

Centre for Management in Agriculture, Indian Institute of Management, India

Centre for Science and Technology Innovations, Nairobi, Kenya

CPDA, Rural Federal University, Rio de Janeiro, Brazil

Danish Institute for International Studies (DIIS), Denmark

Economic Policy Research Centre, Kampala, Uganda

Institute for Human Development, India

> Institute of Social Studies, Netherlands

Instituto de Pesquisa Econômica Aplicada (IPEA), Brazil

International Labour Organisation (ILO)

New School for Social Research, USA

Northumbria University, School of Design, UK

The University of Manchester, UK

United Nations Institute for Training and Research (UNITAR)

University of Cape Town, Labour and Enterprise Policy Research Group, South Africa

University of Colorado at Boulder, USA

University of Copenhagen, Denmark

University of North Carolina, USA

Zhongnan University of Economics and Law, Hubei Province, China

#### Policy points

• Policy interventions for sustained poverty reduction require use of GVCs/GPNs as a policy tool.

Value chain governance and competitive dynamics vary across sectors and regions. More effective monitoring of value chains can identify key leverage points available to all actors (firms, governments, trade unions, NGOs, and policy makers). This helps to promote economic and social upgrading of winners, provide support for possible losers, and reposition countries on a high road path to development.

• Private-public-civil society partnerships are needed to facilitate value chain upgrading of workers and producers.

The rise of quality standards in value chains makes capability-building of suppliers a necessary, but not sufficient, condition to generate better employment for the poor. Partnerships between firms, government, trade unions and NGOs are needed in order to meet standards, enhance skills and knowledge, improve labour conditions, and raise incomes.

• Building regional partnerships is key to future upgrading in the South.

The rise of regional production networks led by firms within Africa, Asia and Latin America, combined with expanding South-South trade, points to the importance of regional GVC/GPN partnerships. Shifting end markets towards large emerging economies heightens the changing role of international standards in regional as well as global production networks.

• Better measurement of value creation and capture is needed in GVCs.

Existing trade statistics, based on traditional trade measures, do not grasp changing patterns of global trade and production. Employment data by sector are insufficient to measure jobs in diversified value chains. The World Trade Organization (WTO), the OECD and the World Bank, are developing new ways to measure trade across GPNs. Related measures need to be improved on jobs (regular and casual) in value chains to capture the links between economic and social dimensions of global production and trade.

#### **Online resources**

Capturing the Gains website (<u>http://www.capturingthegains.org/</u>) Center on Globalization, Governance & Competitiveness, Duke University (<u>http://</u>www.cggc.duke.edu/)

Microlinks, US Agency for International Development (USAID) (<u>http://www.microlinks.org/ev\_en.php</u>)

Global Value Chains website (<u>http://www.globalvaluechains.org/</u>)