



STRENGTHENING THE GLOBAL TRADE SYSTEM



Global Value Chains: The New Reality of International Trade

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Development Challenges and Policy Options

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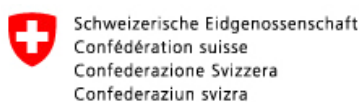
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ABSTRACT

The phenomenon of global value chains (GVCs) is one of the manifestations of globalization, which is changing many aspects of economic and trade relations. The policy ramifications of these changes are only now starting to be debated and better understood. Current trade rules were designed for the 20th century, where goods were made and exported either fully or primarily by one country. They may thus be out of synch for disciplining and monitoring current patterns of international trade. Global value chains have brought about important changes for the world trading system, not just in the structure and composition of trade but also in their implications for the role of the WTO. The speed of change in the 21st century is accelerating. More statistical and analytical information on how world trade and investment is being carried out, together with the implications of these changes for individual countries and their trade and development paths, is needed to understand these changes better. At present a gulf exists between the trade policy community in Geneva and the business community at home in dealing with these issues. More dialogue and policy research is needed. This publication is one step in the direction of starting to close the gap between trade and investment practices and the normative framework within which they take place so that it does not widen further.

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LIST OF ABBREVIATIONS

BPO	business process outsourcing
ETI	Enabling Trade Index
GDP	gross domestic product
GVCs	global value chains
ICT	Information and Communications Technology
IDE-JETRO	Institute of Developing Economies of the Japan External Trade Organization
ISA	International Services Agreement
ITO	information technology outsourcing
KPO	knowledge process outsourcing
LPI	Logistics Performance Index
MNCs	multinational corporations
NTBs	non-tariff barriers
OECD	Organisation for Economic Co-operation and Development
RoO	rules of origin
RTAs	regional trade agreements
SMEs	small and medium-sized enterprises
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

INTRODUCTION

The pattern of world trade has witnessed remarkable changes over the past 25 years, not least because of reductions in transport costs, the information technology revolution, and more open economic and trade policies. Today companies divide their operations across the world, from the design of the product and manufacturing of components to assembly and marketing. This has created international production chains that have altered the functioning of the world's production and trade patterns. As a result, more and more products are "Made in the World" rather than "Made in a Specific Country" as noted by the World Trade Organization (WTO) and the Institute of Developing Economies of the Japan External Trade Organization (IDE-JETRO) in a ground-breaking report on trade patterns in Asia (WTO and IDE-JETRO 2011).

The phenomenon of global value chains (GVCs) is one of the manifestations of globalization. It is a product of the lowering of transport costs and the information technology revolution whose advances have given firms the ability to coordinate their production needs on a real-time basis, no matter what the geographical location of the producer. The importance of global value chains will continue to increase in our increasingly interdependent economic world, and the need to have a better understanding of all of its implications, including in particular for trade policy, is a critical task for policymakers.

The emergence of GVCs has promoted a sharp increase of trade flows in intermediate inputs, which now represent more than half of the goods imported by Organisation for Economic Co-operation and Development (OECD) economies and close to three-fourths of the imports of large developing economies, such as China and Brazil (Ali and Dadush 2011). Services are playing a key role in the operation of these GVCs and international production networks, especially transport, communications, and other business services, the fastest-growing component of world trade. Goods and services are now fully intertwined and inseparable in production, and investment decisions are pushing international trade flows and patterns.

This new reality of international trade is starting to be reflected in international trade statistics, which until recently had attributed the full commercial value of a good (or service) to the last country of export, thus overstating the commercial importance of the final producer in the value chain. In recognizing the need to adapt to reflect the new trade relationships, the WTO and OECD have jointly undertaken an effort to produce international trade statistics on a value-added basis, so as to be able to disaggregate the value that is added at each stage of the production chain and measure the contribution made by each trading partner.¹

These new value-added trade statistics, first published in January 2013, allow for a much better understanding of the phenomenon of fragmented production and trade that constitutes GVCs. They also allow policy-makers to better appreciate the heightened importance of services, which are shown to represent nearly half of the value of world trade, thus further underlining the interdependence of goods and services in modern economies.² The eventual publication of trade statistics on a regular basis, not only in gross terms but also in value-added terms, will help to drive home the reality of the new trade patterns that is taking place on the ground. We are at the beginning of the process of moving toward greater statistical accuracy for trade flows.

Global value chains are changing many aspects of economic and trade relations, and the policy ramifications are only now starting to be debated and better understood. The discussion of GVCs evokes many types of issues, including a better understanding of the motivations and operations of firms, the use of industrial policies, an awareness of the heightened importance and essential role of services and logistics in the operations of GVCs, the intimate link between investment and trade that is manifested even more in the operation of GVCs, and the influence of regional trade agreements and preferential rules of origin on the patterns of trade that have been developed by GVCs.

Importantly as well, developmental consequences can arise from participating—or not participating—in GVCs, affecting those countries that are inside the value chains as well as those countries that are outside. Smaller developing countries may view the operation of GVCs very differently from larger countries, and land-locked countries may view this differently from coastal states. This is because the impacts of GVCs may differ as well, depending upon the product line in question and the relative location on the value chain where firms are able to break into these patterns. Value chains that operate in mass consumption products

1 OECD-WTO database on trade in value added, <http://www.oecd.org/industry/industryandglobalisation/measuringtradeinvalue-addedanoecd-wtojointinitiative.htm>.

2 Ongoing statistical improvements to capture the reality of GVCs will continue to be undertaken by the WTO-OECD at two levels: first, to improve world input-output tables; and second, at the level of the firm, to match firm-level data with the world input-output database. Other statistical efforts that are being taken to capture the way in which contributions to trade are made up through value added are being carried out by the US International Trade Commission, the World Bank and the IMF working with the Global Trade Analysis Project (GTAP) database. UNCTAD has also published trade in value added indicators from a new database initiative they have created called EORA. The UNCTAD-EORA GVC Database is part of UNCTAD's FDI-TNC-GVC Information System, and provides new perspectives on trade links between economies in the trade-investment nexus. Like the WTO-OECD database, the UNCTAD EORA database focuses on the distribution of value added between countries in international trade patterns and on how global investment drives patterns of value-added trade. See UNCTAD (2013), *Global Value Chains and Development: Investment and Value-Added Trade in the Global Economy*, http://unctad.org/en/PublicationsLibrary/diae2013d1_en.pdf. These parallel efforts should allow for further expansion and refinement of the methodology for the value-added data base and will improve and eventually standardize measurement methodologies.

(often electronics) may have very different development consequences from value chains that involve agricultural or natural resource products, or those that are technology-intensive. Services can also constitute value chains of their own, which are only now beginning to be identified. The potentially more favorable developmental implications of moving to supply “services” tasks within GVCs rather than intermediate products is under debate.

Given the above, not only trade statistics but also trade policies, must be re-evaluated and updated to reflect the new structure of world trade and the operation of GVCs. Current trade rules were designed for the 20th century, where goods were made and exported either fully or primarily by one country. They may thus be out of synch for disciplining and monitoring current patterns of international trade. GVCs have created a dichotomy between the reality of trade and the existing normative framework that governs it at the WTO level, which needs to be addressed. Likewise, international cooperation in trade policy issues must be rethought in the light of GVCs.

The following sections summarize some of the issues raised by GVCs. The concluding section looks at the major trade policy implications and sets out a few suggestions in terms of what is important for the members of the trading system to consider.³

GLOBAL VALUE CHAINS ARE REALLY “REGIONAL”

The myth should first be dispelled that GVCs are “global.” The operation of GVCs is “regional” in nature and focused on three hubs—North America, Europe, and East Asia. The first two regions are primarily centers of demand and the latter is a center of supply, although this may be changing as China moves to reform its economy toward more consumer-driven demand growth. Other developing regions of the world have been largely left out of the GVC picture for the time being, with a few exceptions of countries that are participating in certain aspects of supply chain functioning through off-shoring activities. Contributing to create this structure have been the factors of transportation costs, distance, communication, and the quality of infrastructure. However, the regional trade agreements (RTAs) that have been negotiated, particularly with major trading entities, have also played a key role in creating value chains through the way that their rules of origin (RoO) and cumulation provisions have influenced investment flows and production sharing.⁴

Rules of origin, especially in preferential RTAs, may have had a particularly important influence over the creation and pattern of operation of GVCs. With respect to goods, differing RoO matter a great deal and can strongly impact investment and trade flows, though this is less the case for services.⁵ Economists at the Inter-American Development Bank have argued that although factors such as distance and differences in languages and cultures may explain part of the difficulties that countries in the periphery have in linking up to GVCs in other regions, a large part of the explanation for the current pattern of GVCs may be attributed to the existence of RTAs and the preferential RoO that they entail. Such RoO may create important limitations for countries outside a given trading block. And the more dynamic the preferential arrangement in question, the harder it may be to break into a GVC. Regional trading arrangements, and particularly those

3 The policy-related suggestions are a result of the preliminary reflections of the E15 Expert Group.

4 In several studies by economists at the Inter-American Development Bank on rules of origin, including the latest one by Estevadeordal et al. (2013) on global value chains and rules of origin, the authors argue that rather than trying to harmonize RoO (an extremely complex and difficult exercise), it would be more feasible to lower tariffs on a worldwide basis, which would bring greater benefit to the world economy and would stimulate the operation of GVCs in a more efficient manner without the distortions that accompany RoO.

5 There is much less of a regional bias created by RoO for services. For services the benefits of a preferential trade agreement are usually granted to any firm having invested and carrying out “substantive business operations” within the territory of one of the members of the agreement. The nationality or origin of the firm in question is not of relevance.

that contain deep disciplines, often address behind-the-border regulatory issues and create more efficient logistical arrangements that are critical for the functioning of supply chains.

However, location in a GVC may also reflect regional comparative advantage; countries in regions that are not part of GVCs are often not producing a large amount of manufactures for themselves either. Several other factors may account for this, with GVCs just one aspect of a bigger picture.

THE DRIVERS OF GLOBAL VALUE CHAINS

It is the investment decisions of multinational corporations (MNCs), through their outsourcing and off-shoring activities, that are driving the creation of GVCs worldwide. Operation of GVCs stems from the changed behavior of firms and should be understood as part of the changed microeconomics of firm behavior. There are strong incentives at present for a firm within the world economy to “de-verticalize” its output. This process has fundamentally altered the nature of competition. The main motivations of the large firm in today’s world are to reduce its transactions costs and lower its risks, in a context of globalized output. Within these MNC decisions, GVCs are not uniform—some are created by research-driven companies looking for high research-value added, while others are propelled by marketing-driven companies looking to source inputs in low-cost locations.

Smaller firms are drawn into GVCs through providing intermediate inputs or “tasks” in the case of services. The usual pattern is for MNCs from developed economies to source from small and medium-sized enterprises (SMEs) in developing countries. So while MNCs are the driver, SMEs can tap into the opportunities created by this demand. A key question in this context is how the benefits are divided between MNCs and SMEs. Also important is to differentiate between the various motives for off-shoring and the types of off-shoring activities that take place.

The barriers at the firm level that influence its ability to participate in GVC networks also may differ according to firm size (USITC 2010).⁶ Size may be an important determinant of firm behavior in the GVC context. Often overlooked is the fact that SMEs are by far the most numerous participants in GVCs. But they face different types of barriers than do larger firms, including primarily: i) access to trade financing; ii) identifying partners for GVC operations; and iii) payment processing. For MNCs, barriers to GVC operation are of a different nature.

This fact is relevant for development considerations, as most of the firms that participate in GVCs from developing countries are SMEs. Additionally, the location of SMEs vs. MNCs in the GVC (that is, the positioning upstream or downstream in the chain) can have different implications and influence the type of benefits realized by both the firm and the host economy. This is an area where little is known because a huge amount of activity is not captured in statistics, such as the sales of subsidiaries abroad for many countries.

Influencing the ability of MNCs and SMEs to position themselves and operate within the value chain structure are other variables as well, such as relative prices and macroeconomic factors. There is interdependence between macroeconomic variables and price/cost variables in the value chain. For example, Latin America is currently divided between countries with undervalued and overvalued exchange rates because of the importance of commodities in their exports, which has had a large influence in determining their participation and position in GVCs.

Services cannot be overlooked in their important role as both embodied and embedded activities along the whole gamut of the value chain for manufactured, agricultural, and natural resource products, as well as for other services activities. The service sector has been particularly important for the “capture” of tasks of offshore investment in activities feeding into value chains, for goods and for services (Drake-Brockman and Stephenson 2012). Firms from developing economies can access these tasks equally as well as those from developed economies, with often a cost advantage in addition, making services activities an attractive and important vehicle for SMEs from the former to insert themselves into global production networks (Box 1).

6 The report finds that services SMEs are more export-intensive than large services exporters for the US, while trade barriers disproportionately affect SMEs relative to large firms, as do many business impediments, such as high transportation costs.

THE IMPORTANCE OF LOGISTICS COSTS/TRADE FACILITATION IN GVC OPERATION

GVCs can only operate efficiently if the business and trade environment they face “enable” them to do so. In this context, transport costs and efficient border operations are key. Distance is an important factor in explaining why GVCs actually operate as “regional production patterns”—what matters is not only the distance between suppliers of inputs but also the distance to markets. The distance factor can be overcome, however, but only if the operation of port/airport facilities and accompanying services (ICT services, customs

clearance procedures, low inventory cost systems, among others) can compensate for the greater distance with greater efficiency.

“Logistics” are thus critical. These include all aspects of border management—speed, automation in clearance procedures through customs, efficient port operations and cargo handlers, as well as the trade-related infrastructure in place and quality of transport services. Going further, distribution, telecommunication and express delivery services could be added to a broader logistics package. These factors, all of which contribute to the logistics dimensions of supply chain performance are often not put together as a focus for GVC operation by policy-makers. But they can make all the difference. For example, manufacturing a typical airplane today needs over 50,000 suppliers whose inputs of goods and services from around the world need to be combined in the most cost- and time-efficient way possible. Firms in countries with inefficient logistics infrastructure and operation will not be called upon to participate in such networks.

BOX 1:

Services and Global Value Chains

The role of services in GVCs is twofold—services provide the linkage points across the goods supply chains, and are also emerging as supply chains in their own right. As a result, there is now greater scope for a pro-trade alliance between goods and services firms, as goods firms understand that their own competitiveness is dependent on competitiveness in their services inputs.

Services GVCs encounter their own distinct challenges to efficiency and growth. For instance, Information and Communications Technology (ICT) inputs to services activities are becoming more important every day. This translates into an increasingly urgent e-commerce negotiation agenda and a heightened focus on facilitating cross-border data flows as well as modern telecom infrastructure.

The World Bank and OECD have measured the height and prevalence of obstacles to trade and investment in several services sectors. These obstacles are impeding the growth of services GVCs and also impeding the development of local and global service industries. The challenge is that there is no body of literature on how to grow a services industry. Few governments have explicit services development strategies.

Developing any services GVC is about nurturing and branding a cluster of talent and expertise, along with a customer focus, to which foreign clients can be attracted as an investment destination. Governments can, therefore play an important role in fostering for inputting into GVCs. Since many services are skill-intensive, governments need to focus on national education and innovation policy. Governments also need to provide infrastructure required for services GVCs to operate, which includes all forms of transportation and broadband Internet. Governments can also adopt international services standards and quality assurance processes to attract investment in services GVCs.

The negotiations in Geneva for the Trade in International Agreement (TiSA) could help move in this direction. However, some reluctance on the part of many developing countries to engage in this effort to negotiate down the barriers to trade and investment in services may be due to uncertainty as to where their commercial interests lie. A greater understanding of the role and importance of services in the modern trading system and in GVCs could foster greater interest, understanding, and participation in services reform efforts, including the TiSA.

For governments, improving logistics/trade facilitation is a key challenge, not least for its implications for GVC operation. The Logistics Performance Index (LPI) produced by the World Bank every two years for 155 countries captures different dimensions of the determinants of their supply chain performance.⁷ In a similar manner, the World Economic Forum's Enabling Trade Index (ETI) captures four major aspects relevant to the operation of supply chains: i) market access; ii) border administration; iii) transport and telecommunications infrastructure; and iv) business environment, and ranks 132 countries according to their aggregate performance on each, as well as on all four aspects collectively (World Economic Forum 2012). These two different but complementary indices underscore the main inefficiencies in supply chain operations today and, in corollary, the main areas needed for improvement on a country basis, as further discussed in Box 2.

To be most effective, it is suggested that governments approach logistics in a "holistic" manner. In the WTO context, a proposal has been made to focus on logistics, bringing together a variety of relevant services sectors and sub-sectors (cargo handling, storage, warehousing, agency services and related ancillary services, as well as freight services—air, road, rail, maritime, express/courier) and to negotiate these services in a "bundle", with negotiations on trade facilitation issues including customs and border procedures in a parallel package. However, this proposal for a "logistics" approach to negotiations in order to facilitate supply chain operations has not found resonance in the WTO.

DERIVING BENEFIT FROM PARTICIPATING IN GLOBAL VALUE CHAINS

The nature of a value chain may vary by economic sector, carrying with it developmental implications. For instance, natural resource GVCs are very different from industrial GVCs. Services, however, are an integral part of all GVCs, providing inputs at the origin, throughout the production process, and at the end of the GVC, as embodied and embedded services. Participating in such services activities should be accessible to all countries, no matter what their resource endowment, as capturing a services "task" is dependent primarily on skills level, education, and training, as well as general policy environment. These factors can be influenced by governments.

7 The LPI is based on a worldwide survey of trade operators on the ground (global freight forwarders and express carriers), who provide information on the relative efficiency/barriers of the countries in which they operate and those with which they trade, supplemented with quantitative data on the performance of key components of the logistics chain for each country.

BOX 2:

Logistics and Global Value Chains

One of the key factors for a firm to participate in GVCs is the efficiency of logistics services in its economic environment. For instance, economists have estimated that every day it takes a consignment in Africa to get to its destination is equivalent to a 1.5 percent additional tax (Freund and Rocha 2011). Even if tariffs on exports are low, when firms confront high cost and inefficiency logistics, they will not be able to compete with firms that benefit from an efficient logistics environment.

The LPI illustrates how customs-clearance procedures and trade-related infrastructure affect the performance of logistics services providers. This includes timeliness of delivery and the ability to track and trace consignments. Over-restrictive policies of various types can impede the supply chain operation by introducing discontinuity and affecting reliability.

An important element to progress is agreeing on regulatory principles, consultation processes that allow the identification and elimination of chokepoints, and specific performance targets (for example, time-to-release commitments, a common list of data requirements for shipments). The business community has advocated a "whole of the supply chain approach," addressing inefficiencies in a variety of connected sectors and sub-sectors (for example, cargo handling, storage, agency services, freight services, and so on).

Many of the policies that artificially "break" the supply chain are regulatory in nature. Until progress can be made in improving logistics through international cooperation, there is much that national governments can and should do to improve logistics in their countries. The very large differences in logistics performance documented by the LPI are mostly a reflection of domestic factors that can be addressed by each country, which it is in its own self-interest to do.

Developed and developing countries should be able to derive value from GVCs. A recent United Nations Conference on Trade and Development (UNCTAD) report has shown that as countries increase their participation in GVCs, their gross domestic product (GDP) growth rates tend to rise as well. A statistical analysis correlating GVC participation and per capita GDP growth rates is seen to show a significant and positive relationship for both developed and developing economies (UNCTAD 2013).⁸

However, some policymakers have voiced doubts and have posed the critical question of “who captures the value in global value chains?” particularly as these are driven by large MNCs. Many developing countries fear that this agenda is driven by OECD countries to try and make the world “safe” for the operation of their MNCs and ask what value they can derive. They fear that developed economies are using GVCs to institutionalize what they perceive to be an advantage on world markets. And the question also arises as to what type of benefits may be derived from GVCs—those that can touch a large number of economic actors, or those benefits that may be more narrowly focused.

The spatial and distributional consequences of GVCs and their “regional” operation can advantage some countries and disadvantage others, depending on their geographical location. For instance, not many land-locked developing countries have been successful in breaking into GVCs. And many countries in more remote locations in Latin America or Africa are currently outside of the GVC structure. Such fragmentation of the world economy between “participants” and “non-participants” could undercut the multilateral nature of the trading system and create poles of divergent opportunities. Some regions may feel left behind, and consequently be reluctant to support future trade liberalization, accentuating existing inequities and creating the possibility for political backlash. Both would undermine the multilateral trading system.

POSITIVE SPILLOVERS FROM GVCs

Responding to the above skepticism are those that underline the important role that GVCs can play as a source of jobs and growth. While this has been fairly well documented, the other positive spillovers they can generate are less well appreciated, for example, the opportunities that they open up for women, which are broader than their traditional role in the economy. This is because much of the intermediates and “tasks” flowing into GVCs are found in the services sector where the majority of women are employed.

It is also important to differentiate between entering the “value chain” per se and “capturing value in the chain.” GVC participation depends upon upstream and downstream links in the value chain. Low value-added jobs can nonetheless be quite important, especially for developing countries, as they often represent the first step toward entry into a supply

chain. Only later is it possible to begin moving up the value-added ladder. The Intel experience in Costa Rica is a case in point (World Bank Group MIGA 2006). Fifteen years ago, Intel created an assembly plant for microchips; now operations have evolved into research and development, and constitute an important source of new designs. Intel’s presence led to the training of a new generation of engineers, leading to positive spillover effects throughout the economy. As a result, new investors such as Hewlett Packard, have entered the market and are adding to the demand for locally trained engineers in cloud computing. The Costa Rican example also illustrates how governments can collaborate with MNCs in creating a new cadre of skilled workers. The IBM training center in San Jose examines the curricula taught in universities to make sure it is relevant for future industry needs. This example highlights how governments can make use of GVCs to advance their own development, starting at the lower end of the value chain and eventually scaling up with respect to both skills creation and innovation. Box 3 considers some development aspects of GVCs.

However, not all the potential benefits of GVCs materialize automatically. For countries to take advantage of participation in GVCs, they must be able to develop appropriate productive capacities, technology, and workplace skills. Importantly, it is necessary to have a more in-depth debate on whether there is a trade-off between GVC participation and lowering domestic value added, as well as the development paths that countries may take when they participate in GVCs, not all of which may yield the same benefits or results. Some of the questions to be further researched deal with how to engage in GVCs; how to compete within GVCs; how to possibly leap-frog over stages of development through participating in GVCs; and how to upgrade along the value chain once inside in order to maintain the relevant tasks within the economy.

THE HUMAN IMPACT OF GVCs

Often, the advent of GVCs can mean the elimination of a “task” or an intermediate input. GVCs magnify and accelerate skills-biased technological change, and countries need to adapt. In this context, the challenge for governments is also to focus on appropriate social policies, education and skills policy/training as well as on creating an appropriate “enabling competitive environment” in order to mitigate negative impacts and maximize the benefits to be realized from this new economic structure.

Global value chains bring with their potential benefits elements of concern that governments need to be aware of and address through appropriate accompanying policies.

⁸ However, the report points out that these results only demonstrate a correlation between the variable of GVC participation and economic growth but do not necessarily show causality. For this to be demonstrated, the report advocates that more research be undertaken.

There is a concern that GVCs create a race to the bottom. Footloose industries, especially those operating in the lower value part of the value chains, are constantly looking for cost savings and are willing to relocate rapidly, causing the danger of losing one's position in the chain. This can create the perception for governments of not being in control of their country's own economic environment and future.

At the global level, MNCs can quickly shift their demand and their sourcing strategy, imparting a dynamic quality to GVCs, which are never fixed but ever evolving. Governments and firms need to be reviewing and adapting their policies accordingly. Innovation is key to being able to maintain a competitive edge and position in a GVC. Services firms, in particular, are big innovators. Firms need the flexibility to move people and ideas. Businesses today are project based, and often produce for clients rather than for a specific destination. A high-value added activity in services, such as KPO (knowledge process outsourcing) can be off-shored, but the control is usually retained at home by the MNC when it is very close to the core competence. This is in contrast to BPO (business process outsourcing) or ITO (information technology outsourcing) services activities, which may be sourced from any global location outside the parent company as they are more standardized and less core sensitive, thus easier to "capture" by foreign firms.

THE INTERFACE BETWEEN TRADE AND INDUSTRIAL POLICY AND GVCs

Given the globalized nature of production, investment, and trade, governments must ask themselves what kind of policies facilitate or inhibit participation in GVCs, keeping in mind that not everything that is useful will fall under the category of trade policy. Trade policy is a part of a broader package; it can do some things but not everything. And trade policy may have indirect, as well as direct, effects on the operation of firms in GVCs, which are important to understand. For example, the cost of a protectionist measure undertaken in a globalized context is higher than appreciated because such a policy impacts not only on final goods but on intermediate inputs that can be components of production elsewhere, thus magnifying their negative effect. Maintaining open markets for both goods and services as well as for data flows and FDI is critical for the operation of GVCs.⁹

⁹ These points were made in the report of the World Economic Forum 2012, which was one of the first studies to delve more deeply into the policy ramifications of the operation of GVCs from a trade perspective.

BOX 3:

Development Considerations and Global Value Chains

The debate on GVCs in many development quarters has become highly politicized—GVCs are sometimes seen by policy-makers and officials in developing countries as a tool of developed countries to maintain their economic edge. Countries therefore need to openly discuss how to best make use of GVCs in advancing their economic interests.

The debate needs to be depoliticized and should focus on the benefits that GVCs can bring to a host of issues—employment, growth, innovation, and skills development. In addition, GVCs can offer greater specialization opportunities for developing country firms in specific economic activities, reduce information costs, help firms to develop niche strategies, and allow them to tap into the international production network of MNCs. All these issues need to be stressed in policy formation.

An assessment of these benefits must be nuanced by sector—the benefits are quite different, say, in retail, IT, textiles, and manufacturing. There is a need for sector-specific discussions and country-specific discussion in this context. For example, land-locked developing countries' participation in GVCs is different from those with access to the sea. A key element for the former to participate in GVCs is efficient logistics operations and agreements for transportation corridors. Developmental implications for equity distribution within national economies must be addressed by governments as well, as GVCs can create winners and losers at home, similar to the effects of other trade and sectoral policies.

The highly competitive and fluid trading environment brought about by GVCs means that portions of the value chain may leave one market and quickly relocate to another, which can negatively impact one developing country while positively impacting another. Innovation here is key, along with the flexibility to adapt to rapidly changing demand. This creates an even greater need for an open and predictable trading system, one with clear and coherent international rules.

Other policies are also important, particularly those affecting investment and competitiveness in the broadest sense. Many policy-makers feel that the GVC agenda is primarily a “domestic” one, and that governments will be more likely to make progress through better national policies rather than focusing on multilateral ones. In particular, the quality of institutions and infrastructure, the incentives in place for investors and firms operating in the local economy, and the level of corruption all play a role in decisions on investment for sourcing into GVCs. These opinions were expressed by those businessmen surveyed in the World Economic Forum Executive Opinion Survey (2012c).¹⁰ This speaks once again to the importance of logistics and the trade facilitation agenda in this overall picture, as well as to improvements in the quality and access to services markets (both of which can indeed be addressed by trade policy).

Although not without controversy, many analysts feel that industrial policy can play a role in shaping the ability of a country to participate in GVCs. Comparative advantage can even be influenced, and sometimes created, by policy decisions. For example, Korea and Brazil’s use of targeted industrial policy in the past has resulted in the trade patterns they demonstrate at present. The debate on “revitalizing industrial policy” is currently under way. The question is whether or not these considerations may also be relevant in a

similar way to GVCs; should governments try to choose tasks or promote sectors for involvement in value chains? These questions are addressed in Box 4.

Key in this discussion is to encourage innovation and highlight the spread of capital and ideas, much of which can be brought in through foreign direct investment. Other policies such as education and training can help to create this comparative advantage on a “home-grown” basis, particularly in the services area where human capital and skills are the key to competitiveness. When designed on the basis of revealed comparative advantage—always a challenge—industrial policies can play a positive role in promoting the globalization of firms. Particularly with regard to the constraints impacting the participation of SMEs in GVCs (namely, access to trade finance, information on potential MNC and other partners, and payment processing), government policies can play a useful and needed role.

¹⁰ The Executive Opinion Survey is a major component of the WEF Global Competitiveness Report (www.weforum.org/gcr) and provides information on a broad range of variables for which hard data sources are scarce or non-existent.

BOX 4:

Industrial Policy and Global Value Chains

Industrial policies, in the sense of policies designed to promote participation in GVCs, can play a significant role in a country’s development strategy. However, as was true even before GVCs became understood as a new concept, industrial policies can play a useful role only if they are done well; they can also be expensive and have many unintended consequences if they are done badly. This is most likely in weak governance environments, but can also happen in the world’s most advanced countries (for example, ethanol support policies in the United States).

Industrial policies play a positive role when they are designed on the basis of revealed comparative advantage, prioritize the removal of distortions, and are deployed within the ambit of the traditional government role, such as infrastructure or education investments that favor a sector or task of interest. More intrusive interventions, such as providing information and coordination services that promote a particular cluster, should be small and continuously evaluated.

In considering industrial policies, it is vital that countries understand the full extent—downstream and upstream—of the GVCs that are critical to their economy. This knowledge is needed to identify what is most important so that they situate their operations on the GVC, and then design policies to foster innovation in order to move up the value chain.

For instance in Africa, many countries are looking for opportunities to facilitate their resource exports, reduce service and transactions costs, and diversify into the downstream. Current infrastructure and education constraints may limit access to some GVCs, and industrial policy can promote investment in those areas that can facilitate participation in existing GVCs.

Industrial policy should also be tailored to the dynamic quality of GVCs. For instance in Asia, shifting labor costs and competitiveness means that new countries can begin to participate. Some assembly activity has been moving out of China into parts of South East Asia, while China has been focusing on moving into higher value-added activities within the GVC structures.

EVOLUTION OF THE WTO IN THE CONTEXT OF GVCs

Global value chains have brought about important changes for the world trading system, not just in the structure and composition of trade but also in their implications for the role of the WTO. Governments in the GATT/WTO have traditionally been focused on unwinding barriers to trade and creating a set of disciplines to ensure that liberalization commitments are respected. The objective of the multilateral trading system and its member states in the past was to avoid the adoption of actions that would restrain trade, so trade policy has traditionally been aimed at inhibiting governments from intervening in the market through establishing and enforcing agreed disciplines in various areas including tariffs, quotas, local content requirements, subsidies, and so on.

However, the approach to trade that is needed now with the advent of GVCs goes well beyond the earlier trade agenda. Rather than being "at the border," the new thinking that is required must also encompass "behind the border" policies of a regulatory nature, namely all of those aspects that affect the functioning of the supply chain at every point of its operation.

The operation of GVCs cuts across many current WTO disciplines. GVCs highlight the inadequacies of the WTO institutional and legal structure, which is still dealing with issues in silos rather than in one integrated framework, though production, investment and trade are all taking places in a bundled fashion. Likewise, the single-undertaking negotiating modality followed in the Uruguay Round and currently in the Doha Development Agenda may not be the right one for dealing with GVCs, as it makes it difficult to make progress on issues without numerous and complex economic and political trade-offs. In this context several complex questions arise.

ARE WTO RULES AND NEGOTIATIONS NEEDED FOR GVCs?

Do countries need binding WTO disciplines to make progress on GVCs? Where do GVCs fit into trade rules or new trade rules since so much of the necessary agenda is a domestic one? The WTO's greatest assets are often considered to be its rules on trade policy and its dispute settlement mechanism to enforce them. But if the large majority of the GVC agenda is outside the WTO, then it will involve national and

regional steps at the center of necessary action rather than multilateral negotiations, or will somehow require a way to intertwine the two.

Is it desirable for the WTO to play a negotiating role in the context of GVCs, and if so, what kind of a role, in what areas? At present it is unclear what might constitute the basis of a deal for all the different groups in the WTO with respect to the GVC issue—and what would be the tradeoffs. Though this is a compelling new phenomenon, the focus of the examination should be maintained in that the question asked is what GVCs can do for the WTO, not what the WTO can do for GVCs. How can frameworks for international trade adapt to this new reality?

The need for new WTO negotiations at this point may be premature. As the world economy has been living through a paradigm shift, underlined in the 2011 WTO/JETRO Report "Made in the World," more understanding of this change could be required first. It is possible that countries are not ready for another set of negotiations at present and that more statistical and analytical information on how world trade is being carried out and how its structure is changing is needed.

The WTO will and should continue to carry out its traditional functions and to inhibit and sanction proscribed government intervention in trade-related areas, which will help to allow the operations of GVCs. However, the WTO Work Programme that is to be developed in 2015 following the December 2013 WTO Bali Ministerial Meeting, should ideally be a forward-looking document, conceived with the linkages created by GVCs in mind and with a focus on a holistic approach to trade.

Although the role of trade policy in the total GVC picture is limited, it can still be important. Trade policy can have a direct as well as an indirect role in certain areas; however, in many areas key to the successful functioning of GVCs (such as human skills formation, innovation, firm behavior), it has no role at all. But though its role is limited, trade policy can still be very important for GVCs.¹¹ The world is different today from 2001 when the Doha Round was launched and the Singapore Issues were controversial in discussions. No longer is the North-South divide of relevance. Several developing economies have become part of RTAs with deeper disciplines that go well beyond WTO rules. Many emerging economies are net services exporters. And many emerging economies have amassed substantial capital holdings and become international net investors; they may soon be demanding multilateral rules on investment, which is a big part of what is driving the creation and operation of GVCs. This includes not just China, but also India, Brazil, and South Africa. WTO discussions, debates, and negotiations may need to be rethought along new and more integrated and complementary lines—services, investment, and GVCs as a package.

DOES THE WTO NEED TO HAVE A BROADER FOCUS TODAY?

A new focus might be needed for the WTO today—rather than target the nation state or commercial region, the WTO should instead think more from a “firm” point of view; how do firms operate; what do they need to invest; how do they produce successfully? This would imply that the WTO needs to become more in tune with the reality of business and, in corollary, possibly find ways to involve the private sector more in its governance functions.

In this 21st century world, different types of certainty are important for firms. For example, one of the biggest beneficial impacts on world trade was the establishment of the UN Convention on Contracts for the International Sale of Goods, which successfully unified a broad area of commercial law (contracts) at the international level. The uniformity it brought about created certainty for firms, which had a big impact in opening up opportunities for trade.¹² Similar types of harmonized rules in areas of commercial importance to firms could be considered.

The WTO does not have an advantage in adopting rules that matter for business since it has always adopted rules that were decided by government. The question is whether it will be capable of adapting to the new governance requirements brought about by GVCs within an institutional structure where the political economy decision-making process is far from functioning well at present. Incorporating new approaches and/or rules to take account of GVCs may need to be taken hand in hand with rethinking the governance and functioning of the WTO.

Already the WTO is facing a dual system in trade whereby several RTA members have adopted deep disciplines for trade through preferential agreements, some of which are beginning to address issues relevant to the operation of GVCs more directly (such as the ongoing Trans-Pacific Partnership or TPP negotiations, the Trans-Atlantic Trade and Investment Partnership or TTIP negotiations, and the Trade in International Services Agreement or TISA negotiations on services). On the other hand, lighter WTO disciplines are applied by all WTO Members, creating effectively a two-tiered system of trading rules. The question at present is whether it is possible that recognition of the reality of GVCs will help to change this dual system of trading rules to move to a more modern framework of trade governance within the WTO as all governments face similar policy challenges in a world of integrated production networks. Since GVCs are currently regional and not global, the WTO could have a role to play in reducing the current fragmentation in the multilateral trading system through designing policies to cut across and incorporate regions into this new structural phenomenon. Box 5 further discusses the nature of this challenge.

CONCLUSIONS

In an era of integrated investment, production and trade networks, GVCs will continue to increase in prominence and will define the global landscape of the 21st century. This will require governments and firms to review and adapt their policy stance on the one hand and their participation on the other. Only recently have trade policy and other policies come under scrutiny in terms of the implications of global value chains.

The GVC agenda requires a distinct debate from that on the global trade agenda since it goes well beyond it, though trade policy can also have an important impact on the operation of GVCs. There is a need, however, for a complementary policy agenda to cover important infrastructure, education, and other behind-the-border issues. Making the case to harness opportunities for GVCs requires differentiating between types of GVCs and the benefits they may bring. In this context, governments may need to think about sector-specific policies as well as overall policy objectives and prescriptions.

At the multilateral level, logistics, services, and trade facilitation issues should be viewed and discussed as a holistic package. This implies a need to revisit the WTO institutional and legal structure, which currently places cross-cutting issues in silos (Trade in Goods; Trade in Services; Trade-Related Aspects of Intellectual Property Rights) and leaves out the critical area of investment within multilateral disciplines, which is so central to the operation of GVCs.

Likewise, the single-undertaking negotiating modality may need to be re-examined so that progress can be made rather than important issues such as services being sidelined for years due to political impasse.

A gulf exists at present between the trade negotiators in Geneva and policy-makers at home in understanding these issues. More dialogue and policy research is needed on the actual operation of GVCs, the benefits they may bring, and the experiences of countries that have been able to successfully engage in these activities, together with the types

¹¹ See the policy recommendations contained in the report prepared by the OECD, WTO and UNCTAD for the G-20 Leaders Summit held in St. Petersburg, Russia on 6 Aug. 2013, which touch on trade policy and investment, as well as job creation, <http://www.oecd.org/trade/G20-Global-Value-Chains-2013.pdf>.

¹² The UN Convention on Contracts for the International Sale of Goods (CISG), concluded in 1980, now has more than 70 members that account for over two-thirds of world trade in goods (as of 2010). This self-executing treaty aims to reduce obstacles to international trade, especially those associated with choice of law issues, by creating rules governing the rights and obligations of parties to international sales contracts, <http://untreaty.un.org/cod/avl/ha/ccisg/ccisg.html>.

of benefits that GVCs may have brought and the challenges in realizing these benefits.

Trade officials are still at the beginning of the process in terms of understanding the policy ramifications of GVCs. Key questions about trade policy and the role of the WTO urgently need further examination. These include:

- What are the direct effects and indirect effects that trade policy has on GVCs?
- Is participating in GVCs an end in itself in terms of trade policy? Should this objective drive reform? Or should a national policy focus instead on participating in global markets?
- What is the most effective role for the WTO, given the operation of GVCs?
- Do WTO trade rules need to be adapted in light of 21st century globalized production networks? If so, in what way?
- How should the post-Bali WTO Work Programme should be designed to best take into account the operation of GVCs?

It is to be hoped that the challenge of reflecting on these questions will be taken seriously. The speed of change in the 21st century is accelerating, and the gap between trade and investment practices and its normative framework should not be allowed to widen further.

BOX 5:

The WTO and Global Value Chains

GVC issues cut across several multilateral trade disciplines within the WTO—tariffs, non-tariff barriers (NTBs), customs and licensing procedures, trade in services, and intellectual property, to name a few. The WTO is the only forum that can set multilateral policies that cut across sectors. GVCs are also regional, centered around hubs, and seem to be moving in the direction of a few mega-regionals that could leave the most needy developing countries out of the trading picture. The WTO is the only forum that can set multilateral policies cutting across regions and ensure that all regions and economies have the opportunity to participate in GVCs. The WTO, therefore, has an important role in reducing fragmentation and the formation of exclusive production zones.

A large part of the GVC agenda is outside of the WTO, as it involves national and regional steps at the center of necessary action. However, there is a need for a complementary trade policy agenda at the WTO. GVCs represent a new structure of international trade and, therefore, can breathe fresh life into the WTO. Explicitly considering GVCs within the WTO could make the organization more responsive and relevant to the needs of Members in the context of a stymied Doha Round.

To date, discussions on GVCs have highlighted the inadequacies of the multilateral trade agenda and modalities. The agenda is incomplete, and policy issues pertinent to GVCs have been dealt with in silos when they should be dealt with together. The WTO's decision-making principle of a single undertaking is likewise very confining and makes it very hard to get meaningful progress.

There may be lower-hanging and higher-hanging fruit in considering GVCs within the context of the WTO. The lower-hanging fruit is less political and involves the "hardware" of integration—logistics services and trade facilitation. It also includes less controversial policies, such as reducing certification costs for SMEs to become suppliers to multinational firms or enhancing opportunities for dialogue among developing nations on the best ways to enter GVCs.

The higher-hanging fruit include multilateral rules on investment, multilateral disciplines on NTBs, and an ambitious Aid for Trade package, along with further complementary policies that facilitate globalization of GVCs. A change to the WTO's single undertaking modality would allow issues pertinent to GVCs to be negotiated among coalitions of the willing.

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