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Trade Governance Frameworks in a World of Global Value Chains

Policy Options Paper

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Trade Governance Frameworks in a World of Global Value Chains

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on behalf of the E15 Expert Group on Global Value Chains: Development Challenges and Policy Options

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Note

The policy options paper is the result of a collective process involving all members of the E15 Expert Group on Global Value Chains: Development Challenges and Policy Options. It draws on the active engagement of these eminent experts in discussions over multiple meetings as well as an overview paper and think pieces commissioned by the E15Initiative and authored by group members. Sherry Stephenson was the author of the report. While a serious attempt has been made on the part of the author to take the perspectives of all group members into account, it has not necessarily been possible to do justice to the entire range of views expressed on this multidimensional topic. The policy recommendations therefore remain the responsibility of the author. The list of group members and E15 papers are referenced below.

The full volume of policy options papers covering all topics examined by the E15Initiative, jointly published by ICTSD and the World Economic Forum, is complemented with a monograph that consolidates the options into overarching recommendations for the international trade and investment system for the next decade.

The E15Initiative is managed by Marie Chamay, E15 Senior Manager at ICTSD, in collaboration with Sean Doherty, Head, International Trade & Investment at the World Economic Forum. The E15 Editor is Fabrice Lehmann.

E15Initiative

Jointly implemented by the International Centre for Trade and Sustainable Development (ICTSD) and the World Economic Forum, the E15Initiative was established to convene world-class experts and institutions to generate a credible and comprehensive set of policy options for the evolution of the global trade and investment system to 2025. In collaboration with 16 knowledge partners, the E15Initiative brought together more than 375 leading international experts in over 80 interactive dialogues grouped into 18 themes between 2012-2015. Over 130 overview papers and think pieces were commissioned and published in the process. In a fast-changing international environment in which the ability of the global trade and investment system to respond to new dynamics and emerging challenges is being tested, the E15Initiative was designed to stimulate a fresh and strategic look at the opportunities to improve its effectiveness and advance sustainable development. The second phase of the E15Initiative in 2016-17 will see direct engagement with policy-makers and other stakeholders to consider the implementation of E15 policy recommendations.

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Abstract

The nature of international economic interdependence and competition has undergone fundamental changes as a result of the emergence and operations of global and regional value chains. Today we live in a networked economy led by investment flows. Promoting a better understanding of GVC implications from a sustainable development and trade governance perspective has become a critical task. Global value chains are the product of globalization and particularly the lowering of transport costs and the information and communications technology revolution, whose advances have given firms the ability to efficiently unbundle their production processes across locations. GVCs, however, are not uniform in terms of governance or incentives. The implications of participating, or not, in a value chain will depend highly on their type and structure. Recent years have seen a slower pace of GVC expansion, which has been invoked as one of the structural causes behind the trade slowdown observed since the 2008 financial crisis. This does not mean, however, that the potential for fragmentation is exhausted or that all sectors are affected equally. Following an overview of the emergence of GVCs and their implications for development and trade governance, the present paper identifies policy options to enable the efficient functioning of supply chains while promoting the sustainable participation of countries in these fragmented production networks. The first set of recommendations centres on options to inform the design of domestic policies for GVC integration and upgrading. They aim to contribute to a better understanding of the operation of GVCs, promote dialogue on their developmental dimensions and strengthen government capacities. The second set of options, of a more systemic nature, envisages possible steps towards a supply chain informed agenda for future trade negotiations. This focuses primarily on the WTO but also preferential trade agreements. The paper concludes with an outline of the sequencing in which the options could be applied and the process through which they could be carried forward.

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Abbreviations

ECLAC	Economic Commission for Latin America and the Caribbean
FDI	foreign direct investment
G20	Group of Twenty major economies
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GVC	global value chain
ICT	information and communications technology
IDB	Inter-American Development Bank
ITA	Information Technology Agreement
ITC	International Trade Centre
LDC	least developed country
MNC	multinational corporation
OECD	Organisation for Economic Co-operation and Development
PTA	preferential trade agreement
RCEP	Regional Comprehensive Economic Partnership
SME	small and medium-sized enterprise
SPS	sanitary and phytosanitary
TBT	technical barriers to trade
TFA	Trade Facilitation Agreement
TiSA	Trade in Services Agreement
TiVA	Trade in Value Added
TPP	Trans-Pacific Partnership
TTIP	Transatlantic Trade and Investment Partnership
UNCTAD	United Nations Conference on Trade and Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WTO	World Trade Organization

Executive Summary

Today we live in a globalized and networked economy led by investment flows. Global Value Chains (GVCs) involve a wide range of actors and institutions and span a broad number of trade and investment disciplines. This complexity has made GVCs a challenge for policy-makers. Promoting a better understanding of GVC implications from a sustainable development and international governance perspective is thus a critical task. As a contribution to this process, the E15 Expert Group, convened by ICTSD and the World Economic Forum in partnership with the Inter-American Development Bank, has examined the challenges and opportunities that the expansion and consolidation of GVCs has created for global trade governance and economic development. The outcome of this expert dialogue process is a set of forward-looking policy options presented herein.

New Challenges

Global value chains are a product of trade policy reforms combined with the lowering of transport costs and the information technology revolution whose advances have given firms the ability to coordinate their production needs internationally. GVCs, often driven by the investment decisions of multinational corporations, typically involve a collection of firms located in different countries jointly forming a production line of upstream and downstream linkages. While GVCs allow firms to concentrate on specific tasks, they also increase interdependence. GVCs, moreover, are not uniform in terms of governance or incentives. The implications of participating (or not) in a value chain depend on their type and structure.

The international fragmentation of production is creating new opportunities for developing countries by eliminating the need to gain competency in all aspects of a particular good. Integration in GVCs is also frequently associated with enhanced foreign direct investment (FDI) and knowledge spillovers to the local economy. But these opportunities come with new challenges. First, existing evidence tends to show that most production networks are regionally oriented and concentrated around three hubs: North America, Europe and East Asia. This poses a challenge for developing countries located far away from industrial clusters. Second, trade policy, particularly preferential trade agreements (PTAs), plays an important role in shaping GVCs. While PTAs can create cost and regulatory incentives to source among members, strict rules of origin tend to disincentivize the use of cheaper inputs from third countries Third, a major concern for developing country governments seeking to maximize benefits from GVC participation has been to capture domestically a higher share of value-added by moving up the chain.

Two important policy implications can be put forward. First, integration and upgrading in GVCs depends largely on domestic policy reform, and these policies go beyond narrowly defined trade policy instruments. For countries willing to use the “GVC technology” as an engine for development, an open import regime is important, minimizing trade frictions and improving connectivity are critical, and boosting absorptive capacities to generate dynamic benefits from FDI attraction is key. Second, in a globalized economy there will be international spillovers brought about by domestic policies or by the operation of value chains themselves. Such spillovers may include lead firms abusing dominant positions or they can result from competition between national incentive schemes designed to attract FDI.

Analysts generally concur that the current normative structure of many trade agreements may be insufficiently equipped to optimally respond to the reality of fragmented production networks. WTO rules still operate in vertical silos. A more integrated approach that considers the horizontal application of disciplines in various areas such as transparency, standards, competition, procurement and investment in both goods and services may offer an alternative approach to trade governance more in line with the world of networked production and trade.

In addition, the absence of a coherent set of multilateral disciplines on investment represents an increasingly glaring weakness in the international system. Other horizontal disciplines are also lacking, in particular relating to the movement of natural persons as well as competition policy. Meanwhile, major initiatives of a plurilateral nature, with potentially significant impacts on the development of GVCs, have been initiated. These include negotiations on the plurilateral Trade in Services Agreement and ambitious mega-regional schemes such as the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership.

Policy Options

In view of these developments, the paper puts forward policy options for enhanced trade governance relevant to global value chains. The first set of recommendations centres on options to inform the design of domestic policies for GVC integration and upgrading. They aim to contribute to a better understanding of the operation of GVCs, promote dialogue and strengthen government capacities. The second set of policy options envisages possible steps towards a supply chain informed agenda for future trade negotiations.

Informing the design of domestic policies for GVC integration and upgrading
Knowledge tools should be further developed and refined in order to promote a more empirical and sophisticated understanding of GVC operations in international trade. Trade in Value Added (TiVA) indicators should be expanded and could form the basis for closer collaboration between OECD-WTO, international organizations and development banks in analysing the impact of GVCs on trade and investment patterns.

An independent and neutral "Global Value Chain Development Platform" could be established and designed as a clearinghouse mechanism on the trade and development dimensions of GVCs and as a forum for policy dialogue. The platform could serve four functions: operate as a portal for research on the developmental impacts of GVCs; provide information to policy-makers on the operation of GVCs; identify barriers faced by firms in developing countries; and establish a worldwide network of developmental GVC experts.

Specific "supply chain councils" could be established to analyse supply chains in particular sectors. The councils, composed of private firms, trade officials and regulators, would be tasked with two main areas of work: carrying out mapping studies in specific production networks; and identifying its governance structure and the regulatory constraints.

Building on the above proposals, an option would be to convene a regular "Supply Chain Summit" bringing together governments and private sector actors to share experiences and analysis generated by the "GVC Development Platform" and the "supply chain councils."

Towards a supply chain informed agenda for future trade negotiations
A horizontal work programme on GVCs could be established in the WTO to explore areas where trade disciplines might be adjusted or further developed. This would help to focus discussions in the WTO on the system-wide set of issues surrounding the operation of supply chains from a trade policy governance perspective.

Another recommendation would be to explore the need for new international cooperative arrangements to address possible negative externalities or spillovers resulting from unilateral action and domestic policies that seek to foster GVC integration.

Finally, future trade negotiations should adopt a supply chain informed approach that integrates goods, services and investment under specific clusters of productive activities associated with a particular sector or value chain. The paradigm changes in world trade and investment brought about by supply chains and globally networked economies will need to be reflected in the adoption of a holistic approach to future rule-making.

Priorities and Next Steps
The first set of policy options do not require any institutional changes in the WTO or other trade agreements but would contribute to the exchange of ideas around a structured agenda. The second set on a supply chain informed agenda imply changes in the way existing international negotiating fora work or undertake negotiations. These options of a more systemic nature could be aimed at over a longer time horizon.

Short-term options
Developing and refining knowledge tools would require a commitment by organizations such as the WTO, OECD, UNCTAD, ITC, World Bank and regional development banks to expand the TiVA dataset, work with national authorities to develop input-output data, and develop regular reports on the functioning of GVCs. The creation of a "GVC Development Platform" is slightly more ambitious and would need to be driven by a consortium of policy research institutions or intergovernmental organizations (or a combination of both).

Medium-term options
The "supply chain councils" could be led by trade analysts but should be primarily comprised of private firms whose input and business insights would be essential in mapping how the networking process operates in a particular sector. A consortium of intergovernmental organizations could establish and convene the "Supply Chain Summit." The summit should obtain the buy-in and support from the private sector.

Regarding the second set of options, the first step to set in motion a supply chain informed agenda for future trade negotiations would consist in systematic and system-wide discussion in the WTO on the implications of GVCs for international trade governance through the creation of a work programme on value chains and development. The process would have to be initiated from inside and led by a group of interested WTO members.

Long-term options
The options on new international cooperative arrangements and the adoption of a supply chain approach in negotiations are more ambitious and would require broad consensus among WTO members. Given the diversity of views, moving forward on a plurilateral basis may be a viable route. Alternatively, some countries may choose to use preferential agreements as a testing ground for new disciplines.

1. Introduction

The fragmentation of production processes through international supply chains, often referred to as global value chains (GVCs), is changing the nature of world trade and investment. As coordination and trade costs continue to fall, firms are increasingly outsourcing certain stages of their production in various locations. This has led to the formation of regional and global production networks, reflected in the importance of trade in intermediate goods and the foreign value-added content of exports. Today we live in a globalized networked economy led by investment flows. Business-to-business intermediate trade accounts for over two-thirds of the goods and nearly three-quarters of the services traded worldwide.

GVCs involve a wide range of actors and institutions, and span a broad number of trade and investment disciplines that have traditionally been treated in a fragmented manner. It is precisely this complexity and ubiquity that has made global value chains such a challenge for policy-makers. Yet, the importance of GVCs is likely to grow in the future with potentially significant implications for the way we design and implement trade and investment policies. Promoting a better understanding of GVC implications from a sustainable development and international governance perspective is therefore a critical task for policy-makers.

As a contribution to this process, the E15 Expert Group has examined the challenges and opportunities that the expansion and consolidation of global supply chains has created for global trade governance and development. The objective is to provide fresh and evidence-based thinking on critical issues facing the global trade system, and identify options to promote the effective integration and upgrading of countries in a global economy increasingly relying on GVCs.

What policies enhance opportunities or restrict possibilities in the operation of GVCs? How should individual countries at different levels of development position themselves to integrate into GVCs and maximise welfare gains? How can governments ensure effective international institutional and legal frameworks to manage growing economic interdependencies resulting from GVCs? What are the implications for future international trade negotiations at the regional or multilateral level? These are some of the questions addressed by the Group.

This paper is the authors' synthesis drawn from that examination. It is anchored in the broad considerations made by the Expert Group and builds on a series of think pieces and overview paper produced by members (referenced below). Section 2 summarizes the main points discussed by the Group with regards new issues raised by GVCs and section 3 builds on that analysis to focus on policy options. Section 4 then identifies in conclusion the next steps and provides a sequential timescale for implementation of the policy options.

2. Global Value Chains: The New Reality of International Trade

2.1. The Phenomenon of Global Value Chains

The phenomenon of GVCs is one of the manifestations of globalization. It is a product of the lowering of transport costs and the information and communications technology (ICT) revolution whose advances have given firms the ability to co-ordinate their production needs on a real-time basis, no matter what the geographical location of the producer. A GVC usually involves a collection of firms located in different countries and jointly forming a production line. Depending on the location of a firm in a production network, participation may either involve forward linkages—where a firm produces an output that is used in production for export in another nation—or backward linkages where a firm uses imported parts or components used as input into production that is exported (Hoekman 2015). While GVCs permit enterprises in different locations to concentrate on specific tasks and activities without having to worry about producing the final good and marketing it, they also increase interdependence. Each link in the chain relies on upstream producers delivering their output on time and meeting the required quality and safety standards. As firms unbundle their production processes, logistics costs and efficient border operations therefore become crucial. This includes all aspects of clearance procedures, port operations, cargo handlers, storage facilities, as well as transport and trade-related infrastructure. Services also play a key role in the operation of international production networks, especially transport, communications, and other business services—the fastest-growing component of world trade. Services are 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.

GVCs are essentially driven by investment decisions of multinational corporations (MNCs), through their outsourcing and offshoring activities. The main motivation of the lead firm, in a context of globalized output, is usually to reduce its transaction costs and lower its risks. Yet GVCs are not uniform. Some are created by research-driven companies looking for high research value-added. Others are propelled by marketing-driven companies looking to source inputs in low-cost locations or by resource-seeking investment focusing on extractive industries and securing access to raw material. This in turn affects the structure of the value chain: its governance and opportunities for outsourcing. Overall, as described by Draper and Freytag (2014), not all GVCs are created equal and the implications of participating (or not) in a value chain depend highly on the type and structure of the supply chain.

GVCs are not static either. The 1990s witnessed in a surge in trade in parts and components for the reasons outlined above. In the 2000s, however, this process decelerated with the average share of intermediate goods in world non-fuel exports stagnating at around 50%. This slower pace of GVC expansion has in fact been invoked as one of the structural causes behind the trade slowdown observed since the 2008 financial crisis (Hoekman 2015b). In China, the share of imports of parts and components in total exports declined from its peak in the mid-1990s of 55% to a current 35%, implying a diminished fragmentation of the production process. China also appears to have gradually generated a higher share of domestic value addition and reduced its dependence on foreign produced inputs across a range of industries (Francis and Morel 2015).

Another explanation for this deceleration lies in the need to create efficiency gains and rationalize the cost of managing highly fragmented value chains by consolidating or grouping intra-regional chains. This does not mean, however, that the potential for fragmentation is exhausted or that all sectors are affected equally. The slowdown in vertical specialization seems to have affected particularly the manufacturing sector and much less services where fragmentation is only beginning to occur. In a similar vein, ICT innovation might well result in further incentives for specialization in the future.

2.2. The Development Dimension of Global Value Chain Participation

Many GVC analysts are of the opinion that the international fragmentation of production is creating new opportunities for developing countries by eliminating the need to gain competency in all aspects of a particular good and allowing enterprises to concentrate on one or a few specific stages of the production line. This type of specialization offers opportunities for firms, including smallholder farmers, small and medium-sized enterprises (SMEs) providing specific inputs, as well as service and logistics providers, to participate in the international division of labour. Furthermore, integration in global supply chains is frequently associated with enhanced foreign direct investment (FDI), technology transfer and upgrading, knowledge spillovers from global firms to local suppliers, and higher economic growth (Estevadeordal et al. 2013). But these opportunities come with new challenges.

2.2.1. Are global value chains really global?

GVCs have not spread evenly across the world. They tend to concentrate around what Baldwin (2012) calls "Factory North America" centred on the United States; "Factory Europe" centred primarily on Germany; and "Factory Asia" centred on Japan. This is not to suggest the absence of truly global supply chains, but existing evidence tends to support the claim that the majority of international production networks are regionally oriented. This regional bias stems partly from transport and logistic costs that discourage value chains spanning long distances. Firms will only unbundle their production as long as the saved costs arising from the fragmentation process compensate for the additional cost of coordinating remotely located production and the cost of moving inputs across borders (Hoekman 2015).

This reality poses a challenge for countries located far away from industrial clusters even if the quality of logistics can compensate for the cost associated with long distance travel. In this respect, Estevadeordal et al. (2013) point to the fact that many developing countries, notably in Africa and Latin America, have remained on the sidelines of cross-border production sharing. Draper and Freytag (2014), argue however that the geography of GVCs is not written in stone. In recent decades, China has served as the key location for processing and assembling of manufactured goods. But as Chinese labour costs increase, production has started to relocate to other countries—e.g. Vietnam, Cambodia or Mexico. This trend could present opportunities for other developing countries, including in Africa where costs are likely to be lower than in emerging economies.

2.2.2. The role of trade policy in shaping global value chains

Beyond distance, trade policy also plays a role in shaping GVCs. This is particularly the case for preferential trade agreements (PTAs) formed among neighbouring countries (Estevadeordal et al. 2013). The fact that trading across borders in the same PTA does not add extra duties creates an incentive to source part of the production process from countries that have formed a PTA. More specifically, Estevadeordal et al. estimate, after controlling for the effect of distance, that, on average, countries will source 15% more of their foreign value-added from members of the same PTA than from non-members. For Aldonas (2013), PTAs that have gone beyond the WTO to embrace deeper trade-related disciplines, in areas such as procurement, investment, competition policy, standards and intellectual property rights, have been able to set conditions of competition that have allowed firms to operate within a networked global economy.

However, PTAs also have limitations, not least because strict rules of origin tend to disincentivize the use of cheaper parts and materials from third countries. While being a member of a trade agreement does not necessarily impede a country from developing supply chains with non-member countries, rules of origin have significant implications in the way firms choose the location in which they fragment production, typically restricting outsourcing from countries with which they share a PTA. In this context, Estevadeordal et al. (2013) underline the current suboptimal functioning of GVCs and the potential to increase efficiency through multilateral solutions or, alternatively, more flexible rules of origin. Preliminary evidence suggests, for example, that instruments like diagonal cumulation across PTAs—that allow for cumulation with third parties with which both trading partners have PTAs in force—can be quite effective in reducing the strictness of rules of origin and in spurring cross-border production sharing among PTA members.

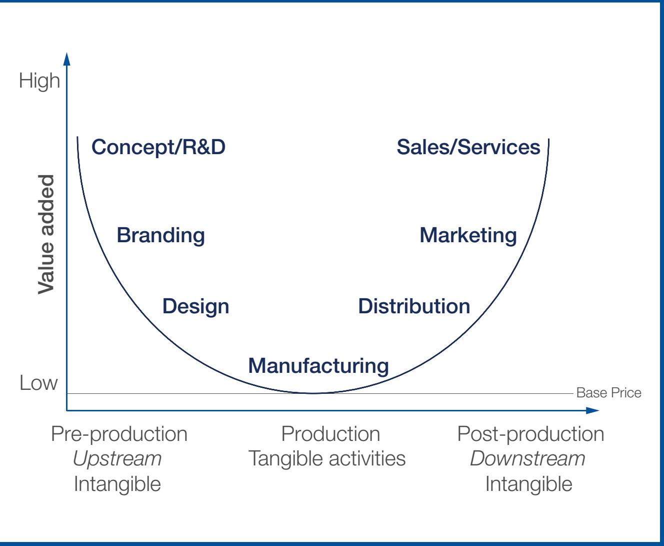
2.2.3. Maximizing the gains from value chain participation

For developing country governments seeking to maximize benefits from value chain participation, a major concern has been to capture domestically a higher share of value-added in existing chains to promote objectives such as enhanced productivity, the deployment of new technologies, increased employment, and more diversified and resilient economies (see Box 1). Achieving these objectives is not automatic. As highlighted above, GVCs tend to be led by large multinational companies that decide where to locate plants, where to invest and who to source from based on their strategy to maximize profits. This may or may not offer participatory or upgrading opportunities for particular countries (Low and Tijaja 2013).

Box 1: Moving up the Value Chain

From a development perspective, a major challenge often associated with participation in global value chains consists in moving progressively to higher value-added segments of the chain through upgrading or by engaging with other supply chains. This concern is best illustrated by the famous "smiling" curve developed by Stan Shih. Using the information technology industry as an example, the curve shows how higher value-added segments of the chain tend to be either upstream or downstream while manufacturing and assembling—the stage at which most developing countries enter the value chain—often result in comparatively lower value addition.

Figure 1: Stan Shih's Smiling Curve



Source: adapted from Stan Shih (1992)

Some policy-makers and analysts have stressed the need for active policies to promote development outcomes through GVC integration and upgrading. Draper and Freytag (2014) highlight some of the main arguments developed by these proponents. They argue that central to the critique is a certain scepticism about the purported benefits of foreign direct investment by MNCs for host countries, and hence the need for industrial policy to secure development outcomes from such investments.

More specifically, in the absence of backward linkages with the rest of the economy, critics point to the footloose nature of efficiency-seeking investments, especially those operating in the lower value part of the value chains (e.g. clothing industry), which are constantly looking for cost savings and are willing to relocate rapidly. Critics also caution against the risk for resource exporting countries of being caught in the "resource trap" when the main purpose of FDI is to extract natural resources with limited incentives to invest in ancillary activities. Others suggest that in the absence of active policies, low- and middle-income countries often lack sufficient absorptive capacity to effectively benefit from technology upgrading as a result of GVC integration. Finally, some are concerned about a possible race to the bottom as countries compete to attract FDI by providing generous incentive packages such as tax holidays or even by eliminating regulatory requirements (e.g. environment, labour, safety).

Box 2: Global Value Chains and Industrial Policies

For Low and Tijaja (2013), industrial policies can be broadly or narrowly focused. Broad-based or horizontal policies are targeted at removing inefficiencies and dead-weight losses, thereby creating competitiveness. These may include streamlining administrative procedures, lowering the costs of doing business, strengthening institutions, investing in human capital or developing infrastructure. By nature, these policies tend to have economy-wide implications and carry fewer risks in terms of unforeseen consequences in policy-induced relative price relationships. Industry-specific policies, on the other hand, seek to change incentive structures and stimulate activities in particular areas. A typical justification for such policies is the need to address market failures that result in resource misallocation. In a value chain world, Hoekman (2015) argues that there may be additional efficiency reasons for governments to intervene in a targeted manner—e.g. to address information or coordination failure—and that such interventions could benefit the chain as a whole, including foreign plants, their workers and local communities.

A major argument of those opposing industry-specific policies is that government failures more often than not substitute for market failures and may end up generating adverse effects. For Draper and Freytag (2014) however, recent approaches to industrial policies tend to be more sophisticated than those prevailing in the 1960s and 1970s in which crude import substitution combined with "picking the winner" tended to deliver poor outcomes. Central to them is the notion of "deliberative targeting" or "self-discovery" in which governments and industry participate in an iterative process aimed at identifying revealed comparative advantages as well as bottlenecks or binding constraints that block industrial development.

Addressing these concerns requires effective policy design. Innovation is key here, together with the ability to adapt to rapidly changing demand. Starting from existing domestic value chains is critical. But policies also need to take into account a wide range of country variables such as: its geographical location; its position as a resource or industrial goods or services exporter; the type of FDI it is able to attract; and at what point along a supply chain does its firms provide inputs into the network—upstream or downstream. Finally, in addition to broader horizontal policies, some analysts argue that there is likely to be a need for very specific types of government interventions to address market failures of different kinds.

2.3 Domestic Policies and International Governance Frameworks

Two main policy implications can be drawn from this discussion. First, integration and upgrading in GVCs depends largely on domestic policy reform, and these policies go beyond narrowly defined trade policy instruments. The quality of institutions and trade infrastructure, the level of education, the incentives in place for investors and firms operating in the local economy, and the level of corruption all play a role in investment and sourcing decisions in GVCs. Furthermore, policy in a supply chain world is more complex than in one where trade is of a "ship and forget nature" and where traded goods are produced using only local factors of production (Hoekman 2015). For countries willing to use the "GVC technology" as an engine for development, an open and predictable import regime becomes more important, particularly for intermediate goods, as competitiveness is increasingly defined by both country imports and exports. Minimizing trade frictions such as delays in border clearance or low quality distribution facilities is critical. Another key factor is connectivity, including transport, logistics services, and information and communications technology (ICT) networks. From an FDI attraction perspective, policies have to address constraints that impede FDI entry while targeting, at the same time, first tier suppliers of lead firms and providing support for the creation of backward linkages.

All this calls for more effective strategic collaboration between governments and the private sector. It also accentuates the importance of government capabilities for policy effectiveness. The World Bank and the regional development banks have a critical role to play in this regard, and they are actively working to help developing countries address these challenges. The Aid for Trade process can also be instrumental in helping to leverage assistance for needed GVC-induced reforms, through the formation of better linkages between domestic reforms and capacity building in trade.

Second, although the agenda for GVCs is largely a unilateral one, in a globalized economy there will be negative externalities, or international spillovers, brought about by domestic policies or by the operation of value chains themselves. Such spillovers may include lead firms abusing dominant positions and thus extracting a disproportionate amount of the profits from GVC operation, or they can result from competition between national incentive schemes (e.g. subsidies) designed to attract FDI, ultimately leading to a race to the bottom. Addressing these concerns calls for international cooperation. International governance frameworks can play a vital role in managing growing economic interdependencies resulting from GVCs by establishing a fair, transparent and predictable trade environment.

2.4. Are Existing Trade and Investment Regulatory Frameworks up to the Task?

Existing international disciplines on trade and investment provide the foundations on which GVCs have developed. Granted, with the expansion of supply chain trade, in conjunction with associated flows of FDI, incentives to use traditional trade policy instruments like tariffs are decreasing. But tariff barriers are only one of a number of factors determining transaction costs for firms and are often low in comparison to other issues that inhibit participation of firms in GVCs. Today, international trade and investment policy frameworks at the multilateral and regional level increasingly touch upon a much broader set of rules and disciplines ranging from standards, to intellectual property, services, subsidies, government procurement and investment. Assessing the extent to which existing frameworks are adequate to respond to the reality of GVCs, while providing opportunities for participation and upgrading, is a central question.

In this area, the relevance of PTA and WTO work in a wide range of areas can be highlighted (see Box 3). However, analysts generally concur that the current normative structure of many trade agreements may be insufficiently equipped to optimally respond to the reality of fragmented production networks.

Box 3: Selected WTO Initiatives and their Relevance to GVCs

Besides ongoing negotiations under the Doha Round or regular committee work in areas such as on non-tariff measures including technical barriers to trade (TBT) and sanitary and phytosanitary (SPS) standards, several recent initiatives at the WTO are likely to have a direct bearing on GVCs. Some of them are briefly listed here for illustrative purposes.

Trade Facilitation Agreement
Supply chains do not exist without efficient logistics. The WTO has not negotiated a “full logistics” package that would cover transport costs, ICT services, customs clearance procedures and all aspects of border management. However, the Trade Facilitation Agreement (TFA), approved by WTO Trade Ministers at the Bali Ministerial Conference in December 2013, contains important provisions for more efficient customs and importing procedures, together with provisions for technical assistance and capacity building in this area. Full implementation of the TFA could generate sizable gains to the world economy, and will serve to make trade flows, including through GVCs, operate more efficiently.

Information Technology Agreement (ITA II)
Given the importance of information technology in the operation of supply chains, the recently completed expansion of the Information Technology Agreement’s product coverage under the ITA II is a welcome step that should assist in the smooth operation of GVCs. Low-cost ICT goods are essential for an efficient communications sector, which is one of the main channels through which services tasks are inputted into global value chains. Efficient ICT infrastructure and services enable the existence and operation of globalized production networks.

Duty-Free and Quota-Free Market Access and Rules of Origin
The cost of protection in a globalized world of interdependent production and trade is high. Tariffs impact not only final goods but also intermediate inputs that can be key components of production elsewhere, thus magnifying their negative effects. In this context, extending duty-free and quota-free treatment for goods and services to least-developed countries (LDCs) would facilitate their ability to supply “inputs” or “tasks” to global value chains. In the same vein, efforts to operationalize the services waiver by granting LDC services and service providers effective preferences could facilitate the integration of LDCs in global supply chains. Finally, as highlighted above, simplifying rules of origin and making them more flexible by inter alia allowing for cumulation across PTAs could have a significant impact in improving the optimal functioning of GVCs.

Aid for Trade
Given that the bulk of relevant policies regarding global value chains are domestic in nature and involve infrastructure improvements, institutional strengthening and human capital formation, the Aid for Trade initiative launched in 2005 could help support the achievement of domestic objectives that best serve heightened competitiveness in developing countries and LDCs by targeting policy weaknesses that impede their participation in GVCs. A mechanism to better tie the objectives of achieving more competitive markets with a focus on areas that contribute most to reducing trade costs, as suggested by Hoekman (2014), would be beneficial to increase the competitiveness of low-income and developing countries and, in a corollary fashion, their ability to draw potential benefit from greater participation in GVCs. This would include, in particular, measures targeted toward: regulatory reforms in service sectors so as to improve the quality of service inputs; reducing the trade-impeding effects of non-tariff measures; and institutional strengthening for trade facilitation and border management. Such a discussion could be initiated within the annual Aid for Trade Review.

2.4.1. A multilateral system that operates in vertical silos

At the broadest level, WTO rules still operate in vertical silos—with parallel and dissimilar rules for goods, services and intellectual property—linked only by the organization's institutional framework and its dispute settlement mechanism. Such policy fragmentation no longer corresponds to the way in which trade and investment happens in a GVC world. A more integrated approach that considers the horizontal application of disciplines in various areas such as transparency, standards, competition, procurement and investment in both goods and services may offer an alternative approach to trade governance more in line with the world of networked production and trade.

In this respect, services play a centrally important role in the operation of global value chains. The process of "servicification" has become widespread in the world economy and has seen firms produce and embed an increasing amount of services in their products. Services now account for the majority of trade in intermediate products, 60% of world FDI flows, and nearly half of world trade on a value-added basis. Services make the operation of GVCs possible by allowing for various production nodes to be connected in a seamless manner. The integration of services and goods in GVCs has yet to be properly articulated in trade policy discussions and negotiations, a fact highlighted by Hoekman (2014).

Breaking down such silos in the future to move towards an integrated governance approach for trade would appear desirable as a long-term objective. In the meantime, however, more holistic policy discussions within existing bodies and the incorporation of more systematic and comprehensive supply chain analysis in WTO publications, including through its annual reports, would help in broadening the understanding of GVC dynamics and contribute to better overall policy awareness.

2.4.2. Are there missing pieces in the puzzle?

For many experts, the absence of a coherent set of multilateral disciplines on investment and investment incentives represents an increasingly glaring weakness in the international system. Foreign direct investment flows are a powerful driver of world trade in the 21st century and a major determinant of the operation of supply chains. The fragmented governance of FDI hinders the ability to tackle impediments and distortions affecting investment, while also fuelling competition between governments to attract investment through a variety of incentives such as tax exemptions or relaxed regulations ultimately leading to a race to the bottom. Likewise, other important horizontal disciplines are at present lacking, in particular those relating to the movement of natural persons as well as competition law and policy. The latter is important as it disciplines the behaviour of key firms, particularly large multinational corporations in their worldwide operations, thus providing protection from market abuse and domination for firms from smaller economies, including those that participate in GVCs.

Meanwhile, initiatives of a plurilateral nature have been initiated and are moving forward within and beyond the WTO. The Trade in Services Agreement (TiSA) negotiations have been ongoing since 2013 among 28 countries accounting collectively for nearly 70% of world services trade. The objective is to reach a plurilateral agreement containing more open market access commitments, enhanced disciplines in the WTO General Agreement on Trade in Services (GATS), and a larger number of sectors with specific regulatory obligations including new issues such as cross-border data flows, regulatory coherence and disciplines on state-owned enterprises. In a similar vein, new mega-regional negotiations such as the Trans-Pacific Partnership (TPP), the Transatlantic Trade and Investment Partnership (TTIP) and the Regional Comprehensive Economic Partnership (RCEP) represent ambitious attempts to move towards economic integration at a far greater scale than previous initiatives, with potentially significant impacts on the development of GVCs.

For Hoekman (2014) and Draper and Freytag (2014), groups of countries with shared interests in enhanced trade governance should be able to advance these trade initiatives on a plurilateral or regional basis. If done outside the WTO, a "linking" mechanism could be explored that would allow the WTO to extend on an most-favoured-nation basis some of the new disciplines and market opening commitments emerging from new plurilateral agreements relevant to the operation of GVCs. Another option would be to allow WTO members willing to sign into the agreement to do so and apply it among signatories, as in the case of the WTO plurilateral agreements on government procurement and information technology. Countries wishing to apply this broader focus of trade rules should be able to do so by choice when they feel that it is appropriate for their economies.

3. Policy Options for Enhanced Trade Governance Relevant to Global Value Chains

Based on the considerations highlighted above, this section outlines various policy options with the purpose of promoting the effective integration and upgrading of countries in a global economy increasingly relying on GVCs. These policy options fall into two broad categories and cover different time frames.

The first set of recommendations centres on short and medium-term options to inform the design of domestic policies for GVC integration and upgrading. These do not require any institutional changes in the WTO or other trade agreements but would contribute to a better understanding of the operation of global value chains in the context of international trade and strengthen the capacity of governments to design effective domestic policies. The second set of policy options envisages possible steps in the medium and longer-term towards a supply chain informed agenda for future trade negotiations focusing on the WTO as well as negotiations in the context of mega-regional trade agreements and other PTAs.

3.1. Informing the Design of Domestic Policies for GVC Integration and Upgrading

3.1.1. Policy option 1: Develop and refine knowledge tools

This option aims at promoting a more empirical and sophisticated understanding of GVC operations in international trade by further developing and refining knowledge tools.

The WTO has already taken some important steps in this regard, beginning with the publication of a seminal report in 2011, together with IDE-JETRO, entitled "Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks," which focused on the factors that helped shape global production patterns. The report coined the phrase "made in the world." The WTO has also actively collaborated with the OECD to create the Trade in Value Added (TiVA) database, released in 2013, which allows governments and analysts to better understand trade linkages in an interdependent globalized economy and the real value-added that various countries actually generate in trade flows (OECD-WTO 2013). Other international institutions such as UNCTAD, the International Trade Centre, the World Bank, regional development banks and several think tanks are also generating empirical analysis. However, this still happens on an *ad hoc* and partial basis.

To further refine existing knowledge tools, the TiVA database should be continued on a permanent basis, expanding its coverage, when possible, to additional WTO members, industries and more recent years. To promote evidence-based GVC policy analysis, the two organizations, in partnership with other institutions and the international statistical community in general, should support efforts to develop and improve the quality of national supply-use (input-output) data and trade statistics, particularly in smaller developing countries. Extensions should also consider the aggregation of firms that better reflect "made in the world" production as well as linking TiVA to FDI flows. This may help to provide new insights on the policy sustainability of trade and development strategies.

These extensions could form the basis of closer collaboration between the WTO/OECD and UNCTAD, ECLAC, UNESCAP, the World Bank and regional development banks in analysing the impact of GVCs on trade patterns, the importance of trade in value-added terms and the role of FDI in GVCs. It would allow for the cementing of ongoing collaborations such as the joint reports prepared for the G20 Summits in 2013 and 2014. The relevant international or regional organizations should also be encouraged to team-up in launching a more regular joint publication on value-added trade, with corresponding analysis based on the context of the TiVA database, to encourage further analysis by policy-making and research communities on GVCs. Different countries, sectors, firm types and regions could be featured in this regular analysis

In addition to the above meta-approach, international organizations, think tanks and research institutions could collaborate with national statistical authorities to produce sufficient detail for supply-use tables together with trade by enterprise characteristics (e.g. size class, ownership). This would allow for a more complete analysis of firm heterogeneity and trade involvement for both goods and services. Incorporating GVC perspectives into the country analyses of other think tanks and international organizations as has been done by the World Bank, the OECD and several regional development banks, would also be a useful support to expanded international focus on the operation of supply chains and their implications.

Finally, in order to permeate thinking about a networked world of production and trade, the WTO Annual Report could feature a discussion of the latest developments in supply chain activity, along the lines of that presented in the WTO World Trade Report of 2013. These discussions could emphasize the growing trade in intermediates associated with expanding production networks and the linkages between economies at all levels (trade, FDI, labour mobility, etc.) as well as the implications of GVCs for trade policy formulation. A supply chain perspective could be included in WTO research reports and, where possible, in the work of WTO councils and other bodies. In a similar vein, interested developing countries could engage in a collaborative reflection on the role of GVCs in their economies through the Trade Policy Review Mechanism.

3.1.2. Policy option 2: Establish an independent GVC development platform

An independent and neutral "Global Value Chain Development Platform" could be established and designed as a clearinghouse mechanism on the trade and development dimensions of GVCs. The platform could also operate as a forum for policy dialogue.

Given the need to address the uneven participation of countries in GVCs, a "Global Value Chain Development Platform" could be created outside of trade governance frameworks. It could be based in an independent organization(s) and coordinated by dedicated institutions. The latter could host relevant policy research initiatives on GVCs, document their developmental implications, and develop and refine relevant metrics of GVC policy analysis. Currently there is no GVC platform gathering insights on how GVCs may offer a path to economic development and what type of developmental benefits might be gained from participating in these networks—with a view to assisting awareness and adoption of relevant strategies on the part of developing country officials.

A GVC platform as presented above could serve four functions:

- Create a portal for all relevant policy research on the developmental impacts of global value chains;
- Provide information to developing country policy-makers and interested stakeholders on the operation of global value chains and their trade and development implications, so as to assist them in formulating appropriate strategies that will maximize the developmental benefits of participating in such networks;
- Identify barriers faced by firms in developing countries that impede their participation and upgrading in value chains, particularly for SMEs; and
- Establish a worldwide network of developmental GVC experts and provide a forum where ideas can be exchanged, comparative scholarship reviewed and advice provided.[1]

Although considerable research has been devoted of late to GVCs, a review of existing platforms and websites reveals that there is no focal point that addresses the concerns that many developing countries harbour about the operations of GVCs, their developmental implications, and the ways in which they might best benefit from participating in globalized production networks, as well as how they might upgrade within them once they have gained a foothold. This is particularly pertinent for SMEs in developing countries that face a number of hurdles in trying to penetrate GVC networks for various reasons, as well as for developing country governments trying to design the most effective policies to facilitate the greater participation of their firms in GVCs.

The policy objective of the platform would be to identify and generate objective information and research that would explore the developmental implications of global value chains. The information contained in the platform could serve the interests of developing country policy-makers with respect to the most appropriate policies to be adopted at the national and regional levels, including trade and investment policies, which would assist the insertion and upgrading of their firms into global production networks. Such information could also assist developing country officials in their participation in the negotiation and operation of regional trade agreements, as well as in the formulation of their national development strategies and the execution of their policy agendas.

The information hosted by the platform could also be fed into the various regional integration processes, the deliberations of the development community, Aid for Trade strategies and donor assistance decisions. It could thus facilitate the meeting of minds and joint discussions of the trade and the development communities. Online discussions and training could be organized on the platform, which would bring together analysts on the developmental aspects of GVCs and interested government officials.

3.1.3. Policy option 3: Establish specific supply chain councils

Specific "supply chain councils" could be established to map supply chains in particular sectors, identify inputs used and where they are sourced, and describe the most binding regulatory policy constraints affecting their functioning.

The private sector plays a key role in the operation of supply chains and there is a need for governments and policy-makers to better understand exactly how supply chains operate in practice. The creation of "supply chain councils" could serve thus purpose, along the lines

[1] In the line of this policy recommendation, it is of note that a new Research Center for Global Value Chains (RCGVC) is currently being established in Beijing, China, under the initiative of the Chinese Government. It will be dedicated to research and analysis of GVCs from a developmental perspective and will enjoy the institutional collaboration of many international organizations, think tanks, and universities from around the world in this effort. The Center will begin operations in 2016.

proposed by Hoekman (2013). These councils could focus on a selected number of specific production networks and would be composed of private sector firms, trade officials and regulators working within the sector in question. The councils would be tasked with two main areas of work:

- Carrying out mapping studies of the supply chains in specific production networks, identifying inputs used and locations from where they are sourced, as well as the "bundling" of inputs involved in the production process; and
- Identifying the functioning of the GVC, its governance structure and most binding regulatory policy constraints that impact the operation of the supply chain in question.

This initiative could help move beyond the current *ad hoc* and often superficial analysis of the functioning of specific value chains, while promoting a better understanding in policy circles of the constraints faced by the private sector, particularly in developing countries. The implementation of mapping studies within the "supply chain councils" would allow firms to lend their expertise to help policy-makers concretely understand how the fragmentation of production is taking place in practice. The results of these mapping studies could feed into discussions in various policy contexts, both internationally and domestically.

3.1.4. Policy option 4: Convene a regular supply chain summit

Another option to consider, which feeds on the above proposals, would be to convene a regular supply chain summit bringing together governments and private sector actors to share experiences and analysis generated by the "GVC Development Platform" and the "supply chain councils."

Given the limited space for dialogue and experience sharing on GVC functioning, as well as the manner in which developing countries can promote entry and upgrading in supply chains, the WTO, together with a consortium of interested international organizations including UNCTAD, the World Bank and regional development banks, could organize a regular "Supply Chain Summit." The summit could usefully focus on issues involving GVCs. Topics of discussion could include: the regulatory policy constraints affecting GVC operations; the developmental implications of GVCs; and how to enhance developmental objectives through steps to induce a more inclusive operation of GVCs and a more equal distribution of gains. The information assembled by the GVC Development Platform would usefully serve to provide content and focus for such discussions. The summit could direct relevant councils within the WTO to work together in a WTO-wide and horizontal working group that would coordinate input into the Aid for Trade process.

3.2. Towards a Supply Chain Informed Agenda for Future Trade Negotiations

3.2.1. Policy option 5: Establish a horizontal work programme in the WTO

A horizontal work programme on GVCs could be established in the WTO to explore areas where international trade disciplines might be adjusted or further developed.

A work programme on global value chains could be created within the WTO, similar to the work programme on electronic commerce, which would help to focus discussions in the WTO on the system-wide set of issues surrounding the operation of supply chains from a trade policy governance perspective. The GVC work programme could be taken forward on a horizontal basis and embedded into the work of all WTO councils (goods, services and intellectual property) as well as the Committee on Trade and Development. As a precedent, the WTO work programme on small, vulnerable economies already includes a discussion of GVCs. This could be broadened.

The creation of an institution-wide work programme on global value chains would help break down the walls between the silos of WTO disciplines by carrying out discussions under a horizontal supply chain lens. It would provide a space to discuss a broad range of issues such as non-tariff measures, rules of origin, services, trade facilitation and subsidies to list but a few. All WTO bodies involved could be required to report on their GVC discussions every two years. If launching an institution-wide work programme on GVCs is not feasible, then alternatively the WTO Council for Trade in Services and/ or the Council for Trade in Goods and/or the Committee on Trade and Development should take up such a suggestion based on an initiative from one or more interested WTO members.

3.2.2. Policy option 6: Explore new international cooperative arrangements

Another recommendation would be to explore the need for international cooperative arrangements to address possible negative externalities or spillovers resulting from unilateral action and domestic policies that seek to foster GVC integration.

Current WTO disciplines were not designed to respond to today's realities and are not necessarily in line with the constraints faced by the new organization of production and trade. Similarly there may be a need to address possible negative externalities or spillovers resulting from domestic policies that seek to foster GVC integration. Several of the policy areas that impact GVC functioning are at present outside of the WTO ambit. These include, among others, competition policy, electronic commerce, data transfers, and localization requirements. In other areas of critical importance to GVCs, such as the movement of natural persons, existing commitments are at most embryonic. Investment is an area that strongly impacts on GVC decisions and operations as GVCs have been driven by cross-border investment activity. Currently, investment governance is fragmented and overlapping with little overall coherence in rule-design or implementation. Different forms of regulatory impediments affecting investment are one of the main barriers relevant to the operation of GVCs. At the same time, the risk of a race to the bottom resulting from unilateral investment incentives should not be underestimated. Likewise, competition policy can have an impact on the benefits that developing countries are able to derive from GVCs. At present there are no multilateral disciplines in this area.

In this context, it might be advisable for the system to undertake a "reality check" exercise by reviewing existing disciplines while exploring the need and rationale for further international cooperative arrangements, without pre-empting the result of such an exercise. The main objective should be to ensure that the system has effective international institutional and legal frameworks to manage growing economic interdependencies resulting from GVCs.

3.2.3. Policy option 7: Adopt a supply chain informed approach in negotiations

Future trade negotiations should adopt a supply chain informed approach that integrates goods, services and investment under specific clusters of productive activities associated with a particular sector or value chain.

It is difficult to predict when members of the world trading system may be ready for the next round of multilateral trade negotiations, given the difficulties confronted in completing the Doha Round. However, if and when this time comes, the paradigm changes in world trade brought about by supply chains and globally networked economies will necessarily need to be reflected in negotiating approaches, rules and outcomes. Frictions to the smooth functioning of trade at the borders identified in the implementation of the Trade Facilitation Agreement, approved at the WTO 9th Ministerial Conference, will help to underscore the importance of logistics in supply chain operations. The impact of the TFA should be leveraged to support the adoption of a holistic approach to future rule-making. However, many of the essential policies for supply chain operation lie outside the scope of the TFA.

Should a new round of multilateral trade negotiations be initiated at some point in the future, WTO members should adopt a supply chain informed approach, negotiating issues or sectors in relevant clusters of associated networked activities. The standard GATT/WTO approach of negotiating separately on goods and services should be reconsidered, and the areas relevant to the operation of a given global value chain should be treated as much as possible under a holistic and horizontal approach. Adopting a supply chain approach to trade negotiations would imply negotiating disciplines for goods, services and investment with respect to a cluster of productive activities associated with particular supply chains rather than with specific sectors. As Aldonas (2013) suggests, this could be applied, for example, to agri-food value chains as a possible cluster. Negotiating in clusters has not been attempted on a significant scale in the WTO or in other negotiating fora, but arguably represents a promising route for adapting global trade and investment governance to a world characterized by GVCs.

4. Next Steps and Priorities

The first set of policy options (1 to 4) concerns awareness building, capacity building and the promotion of a purposeful dialogue on the development dimensions of GVC integration and upgrading. These recommendations will not only enhance transparency but also serve as a platform for the exchange of ideas, experiences and good practices around a structured agenda to deepen the discussion—moving sector-by-sector and issue-by-issue, including on highly technical issues. Ultimately, such a process could lead to the identification of priorities for action and governance reform. These options will not require any institutional changes in the WTO or other trade agreements and could be carried forward within a short to medium-term time horizon under the leadership of international institutions.

Specifically, policy option 1 on knowledge tools would require a commitment by relevant international organizations such as the WTO, OECD, UNCTAD, ITC, World Bank and regional banks to expand the TiVA dataset, work with national authorities to develop input-output data and develop regular reports on the functioning of GVCs. Progress would also require engaging with interested developing countries in a collaborative reflection on the role of GVCs in their economies (e.g. through the Trade Policy Review Mechanism).

The initiative to create a "Global Value Chain Development Platform" is slightly more ambitious and would need to be driven by a consortium of policy research institutions or intergovernmental organizations or a combination of both (e.g. OECD, UNCTAD, ITC, WTO, World Bank, universities, think tanks). This would ensure high quality standards, independence and continuity in the process. The organizations in the consortium could fund the creation and operation of the platform and could take on the responsibility of keeping it up to date and facilitating the dissemination of relevant information. The buy-in of regional development banks would be critical to the platform's successful operation.

The "supply chain councils" could be led by international trade analysts but should be primarily comprised of private firms whose input and business insights would be essential in understanding how the networking process actually operates in a particular sector. The councils should have the ability to closely engage with the private sector as well as regulators and trade officials in the mapping exercise. In practical terms, the councils could be hosted within an interested organization with strong participation of the international business community, such as the World Economic Forum or the International Chamber of Commerce.

Finally, a consortium of intergovernmental organizations (e.g. UNCTAD, World Bank, WTO, ITC and regional banks) could carry forward the "Supply Chain Summit." The summit should obtain the buy-in and support, including financial, from the private sector, as well as the participation of government representatives. From a substantive perspective, the summit could build on the content generated by the "GVC Development Platform."

The second set of policy options (5 to 7) will imply changes in the way existing international negotiating fora work or undertake negotiations, either by expanding the scope of the talks or by rethinking the manner in which negotiations are structured. These could be aimed at within a medium to longer-term time frame. The first step will consist in systematic and system-wide discussion in the WTO on the implications of GVCs for international trade governance through the creation of a work programme (or work stream) on GVCs and development (option 5). Such a mechanism would provide a space for exploratory discussions and deliberations following the model of existing schemes (e.g. the work programme on small economies which already touches upon GVC-related elements). As with any initiative in the WTO, the process would have to be initiated from inside and led by a group of interested WTO members. At some point, the initiative would have to be discussed at ministerial level.

Policy options 6 and 7 are more ambitious and would require broad consensus among WTO members, which may be difficult to achieve in the short-term. Given the fact that different members will have diverse views, moving forward on a plurilateral basis may be a viable route (Nakatomi 2013). Such an approach would have to be transparent, inclusive, open to new members, and (ideally) designed in a way that would ultimately facilitate the incorporation of these plurilateral agreements within the purview of the multilateral trading system. Alternatively, some countries may choose to use PTAs as a testing ground for new disciplines as a first step (e.g. TPP, TTIP, RCEP, Pacific Alliance, Caribbean Free Trade Area). Avenues could then be explored to either incorporate or link such agreements to the WTO and, where possible and desirable, multilateralize effective practices that may emerge from these PTAs.

References and E15 Papers

Baldwin, Richard. 2012. “WTO 2.0: Global Governance of Supply-Chain Trade.” *CEPR Policy Insight* 64

Francis, Michael and Louis Morel. 2015. “The Slowdown in Global Trade.” *Bank of Canada Review* Spring 2015

Global Agenda Council on Global Trade and FDI. 2012. *The Shifting Geography of Global Value Chains: Implications for Developing Countries and Trade Policy.* Geneva: World Economic Forum.

Global Agenda Council on Global Trade and FDI. 2013. *Foreign Direct Investment as a Key Driver for Trade, Growth and Prosperity: The Case for a Multilateral Agreement on Investment*. Geneva: World Economic Forum.

Hoekman, Bernard. 2013. “Adding Value.” *Finance and Development* 50(4): 22-24. Washington: International Monetary Fund.

Hoekman, Bernard. 2014. *Supply Chains, Mega-Regionals and Multilateralism: A Roadmap for the WTO*. London: CEPR Press. http://www.voxeu.org/sites/default/files/file/WTO_Roadmap.pdf

Hoekman, Bernard. 2015. *Subsidies and Spillovers in a Value Chain World: New Rules Required?* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Hoekman, Bernard. 2015b. *The Global Trade Slowdown, A New Normal.* VoxEu.org e-Book. London: CPER Press

IDE-JETRO and WTO. 2011. *Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks.* https://www.wto.org/english/res_e/booksp_e/stat_tradepat_globvalchains_e.pdf

Nakatomi, Michitaka. 2013. “Plurilateral Agreements: A Viable Alternative to the World Trade Organization?” *ADBI Working Paper* 439. Tokyo: Asian Development Bank Institute.

OECD-WTO. 2015. *TiVA Database*. http://stats.oecd.org/Index.aspx?DataSetCode=TIVA2015_C1

OECD, WTO and UNCTAD (2013). *Implications of Global Value Chains for Trade, Investment, Development and Jobs.* www.oecd.org/trade/G20-Global-Value-Chains-2013.pdf

OECD, WTO and World Bank Group. 2014. *Global Value Chains: Challenges, Opportunities, and Implications for Policy.* http://www.oecd.org/tad/gvc_report_g20_july_2014.pdf

Stephenson, Sherry. 2015. *Trade Policies and Sustainable Development in the Context of Global Value Chains*. OECD-ICTSD (forthcoming).

UNCTAD (2013). *Global Value Chains and Development: Investment and Value-Added Trade in the Global Economy.* New York and Geneva: United Nations Publications.

WTO. 2013a. “Trade in Value Added.” *International Trade Statistics* 181-87. Geneva: World Trade Organization.

WTO. 2013b. *World Trade Report: Factors Shaping the Future of World Trade* 55-89. Geneva: World Trade Organization.

Overview Paper and Think Pieces
E15 Expert Group on Global Value Chains

Aldonas, Grant. 2013. *Trade Policy in a Global Age*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Draper, Peter, and Andreas Freytag. 2014. *Who Captures the Value in the Global Value Chain? High Level Implications for the World Trade Organization*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Estevadeordal, Antoni, Juan Blyde, Jeremy T. Harris, and Christian Volpe Martincus. 2013. *Global Value Chains and Rules of Origin*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Estevadeordal, Antoni, Kati Suominen, and Juan Blyde. 2013. *Are Global Value Chains Really Global? Policies to Accelerate Countries' Access to International Production Networks.* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Low, Patrick, and Julia Tijaja. 2013. *Global Value Chains and Industrial Policies*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Stephenson, Sherry. 2013. *Global Value Chains: The New Reality of International Trade.* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

The papers commissioned for the E15 Expert Group on Global Value Chains can be accessed at http://e15initiative.org/publications/.

Annex 1: Summary Table of Main Policy Options

Policy Option	Timescale	Current Status	Gap	Steps	Parties involved
Informing the design of domestic policies for GVC integration and upgrading					
1. Develop and refine knowledge tools.	Short Term	TiVA database. *Ad hoc* analysis by IGOs and think tanks/universities.	Limited coverage of TiVA. Limited empirical analysis of GVC functioning and their relation to trade and investment. Limited country specific statistics.	Expand TiVA. Work with national authorities to develop input-output data. Develop regular reporting by WTO Secretariat. Use TPRM to explore role of GVCs in interested countries.	IGOs (e.g. WTO Secretariat, OECD, UNCTAD, ITC, World Bank (WB), and regional banks) and think tanks
2. Establish an independent GVC development platform.	Short Term	Dispersed and uncoordinated analysis on the developmental implications of GVCs. No comprehensive clearinghouse mechanism on the trade and development dimension of GVCs.	No single platform gathering all existing information. Limited space for dialogue and experience sharing. Limited and disperse training and capacity building opportunities.	Creation of a consortium of institutions to develop and maintain an online platform for gathering developing and disseminating analysis. Establishment of a forum for dialogue and exchange of experience.	IGOS (e.g. OECD, UNCTAD, ITC, WTO, WB) and/or think tanks and universities
3. Establish "supply chain councils" to map sector specific supply chains.	Medium Term	Ad hoc and often superficial analysis of the functioning of specific value chains. Lack of understanding by policy-makers of the constraints faced by private sector.	Need to map specific supply chains identifying inputs used, locations, and structure. Need to identify binding regulatory policy constraints affecting the functioning of GVCs.	Councils to be hosted in interested organizations enjoying participation from the private sector. Engage with private sector, regulators, and trade officials in the mapping exercise.	Led by independent analysts but primarily comprised of private firms (e.g. World Economic Forum)
4. Convene a regular Supply Chain Summit.	Medium Term	Same as above.	Limited space for dialogue and experience sharing on GVC functioning and how to promote entry and upgrading of developing countries in supply chains.	Obtain buy-in, support, and participation of private sector and governments. Build on the content generated by the GVC development platform and the supply chain councils.	Consortium of institutions (e.g. UNCTAD, WB, and regional banks) with participation of governments and private sector actors

Policy Option	Timescale	Current Status	Gap	Steps	Parties involved
Towards a supply chain informed agenda for future trade negotiations					
5. Establish a horizontal work programme on GVCs in the WTO to explore areas where international disciplines might be adjusted or further developed.	Medium Term	*Ad hoc* and highly fragmented debate on GVCs in the WTO.	No systematic and system-wide discussion in the WTO on the implications of GVCs for international trade governance.	Process to be initiated and led by a group of interested WTO members. Build on and broaden GVC discussion already included under the WTO Work Programme on Small, Vulnerable Economies.	WTO members.
6. Explore the need for new international cooperative frameworks to address possible spillovers.	Long Term	Current WTO disciplines are not designed to respond to the new organization of production and trade. Unilateral action fostering GVC integration and lead firm practices can induce negative externalities.	Key policy areas outside the WTO ambit that impact GVC functioning include investment, competition policy, digital trade, and data transfers.	Use RTAs and plurilateral initiatives as testing ground for new disciplines as a first step (e.g. TPP, TTIP, RCEP). Explore opportunities for multilateralizing best practices.	Governments in multilateral, plurilateral, or bilateral negotiations.
5. Adopt a supply chain informed approach in future trade negotiations.	Long Term	Current trade negotiations happen in silos, dealing separately with goods, services, or investment.	Need for a more horizontal and integrative approach matching the way in which investment, output, and trade processes are organized. A cluster approach could be a promising route.	Same as above.	Governments in multilateral, plurilateral, or bilateral negotiations.

Annex 2: Members of the E15 Expert Group

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The experts all participated in their personal capacity. The views and recommendations expressed in the policy options paper are not attributable to any institution with which members of the E15 Expert Group are associated.

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