Trade Policy Implications of Global Value Chains

Global value chains (GVCs) have become a dominant feature of world trade, encompassing developing, emerging, and developed economies. The whole process of producing goods, from raw materials to finished products, is increasingly carried out wherever the necessary skills and materials are available at competitive cost and quality. The growing fragmentation of production across borders highlights the need for countries to have an open, predictable and transparent trade and investment regime as tariffs, non-tariff barriers and other restrictive measures impact not only foreign suppliers, but also domestic producers.

The OECD is currently undertaking comprehensive statistical and analytical work that aims to shed light on the scale, nature and consequences of international production sharing. This note explores just one aspect - the implications of GVCs for trade policy and trade agreements.

Global value chains magnify the costs of tariff protection

After more than a half a century of trade liberalisation, nominal tariffs on manufactured products in developed economies are generally low, and bound in the WTO at or close to those levels. Although the case is somewhat more mixed for developing countries, the general trend has also been towards lower tariffs. But in a world characterised by GVCs things are not so clear-cut: tariffs are cumulative when intermediate inputs are traded across borders multiple times. Downstream firms pay tariffs on their imported inputs and then face tariffs again on the full value of their exports, including on those same inputs. Tariffs can add up to a significant level by the time the finished good reaches customers, stifling demand and affecting production and investment at all stages of a value chain. As shown on Figure 1, which illustrates the potential impact of cumulative tariffs, nominal duties on gross exports are an incomplete measure of effective tariff barriers.

Figure 1: Tariffs on the gross value and the domestic value-added of exports, 2009*

![Chart showing tariff impacts on gross and domestic value-added exports.](chart)

* Applied AVE tariffs, weighted by the share of each sector and destination market in the country's agricultural or manufacturing exports. For EU countries tariffs are calculated on extra-EU exports.

Tariffs on the domestic value added of exports estimate the effective burden for the exporter. The larger the share of foreign inputs in production, as in China, Vietnam or the Netherlands for manufactured goods, the higher the relative costs faced by exporters from tariffs in their target markets. The interpretation however differs from country to country depending on the value chain: Dutch imports for instance are mostly from within the EU, suggesting lower cumulative tariff effects than in China and Vietnam. In agriculture, the share of domestic content is often larger but effective tariffs can also be high as the pace of nominal tariff liberalisation in this sector has been slower. Thus, in a world dominated by GVCs, the cost of protection is higher than generally understood and this is particularly the case in those economies that have a large share of intermediate imports in their exports.

Success in international markets today depends as much on the capacity to import world class inputs as on the capacity to export. Protection measures against imports of intermediate products increase costs of production and reduce a country's ability to compete in export markets: tariffs and other barriers on imports are a tax on
exports. Policies that restrict access to foreign intermediate goods and services also have a detrimental impact on a country’s position in regional and global supply chains. Where foreign investment is a driver of export capacity, the cumulative effect of a number of seemingly small costs may discourage firms from investing, or from maintaining investment, in the country – and may lead them to bring production facilities, technologies, and jobs elsewhere.

Beyond tariffs, what trade policies for engagement in GVCs?

The globalisation of supply chains calls for a comprehensive view of trade policy. The fragmentation of production has created potential new opportunities for small and medium-sized firms to access global markets as components or services suppliers, without having to build the entire value chain of a product. At the same time, GVCs place new demands on firms, in particular as regards the need for strong coordination and efficient links between production stages and across countries.

Trade facilitation: Addressing border bottlenecks

As goods now cross borders many times, first as inputs and then as final products, fast and efficient customs and port procedures are essential to the smooth operation of supply chains. To compete globally, firms need to maintain lean inventories and still respond quickly to demand, which is not possible when their intermediate inputs suffer unpredictable delays at the border. A country where inputs can be imported and exported within a quick and reliable time frame is a more attractive location for foreign firms seeking to outsource production stages. As such, trade facilitation measures are crucial to foster integration into global production networks and global markets.

Figure 2: Trade facilitation measures: Potential reduction in trade costs

Streamlining administrative procedures at the border helps countries reap the full benefits of GVCs. As shown here, the most effective steps are simplifying procedures in particular through single windows and pre-arrival processing, providing advance rulings on goods classification and applicable duties, and automating the submission and processing of customs declarations. Together, these measures can reduce trade costs by an estimated 10% in OECD countries. Potential cost reductions are expected to be much larger in developing countries.

Standard setting: Avoiding unnecessary restrictions

The rising number of quality and safety standards is in part driven by concerns about information, coordination and traceability which are more acute in a world dominated by GVCs. While the need to protect final consumers through appropriate quality standards should not be understated, their complexity and above all their heterogeneity has become one of the main barriers to insertion into GVCs, in particular for small and medium-sized enterprises. Upstream firms supplying components to several destinations may have to duplicate production processes to comply with conflicting standards, or to incur burdensome certification procedures multiple times for the same product. In food value chains, process standards adapted to one country’s suppliers may render exporting to another country all but infeasible. Promoting the convergence of standards and certification requirements and encouraging mutual recognition agreements can go a long way to alleviate the burden of compliance and enhance the competitiveness of small-scale exporters.

Efficient services markets: Improving competitiveness behind the border

Global production networks rely on the logistics chain, which requires efficient network infrastructures and complementary services. There would be no GVCs without well-functioning transport, logistics, finance, communication, and other business and professional services to move goods and coordinate production along the value chain. Trade flows in value-added terms reveal that services play a far more significant role than
suggested by gross trade statistics. As shown in Figure 3, the value created by services as intermediate inputs represents over 30% of the total value added in manufactured goods. Liberalisation of services trade would allow for more efficient and higher quality services, thus enhancing the competitiveness of manufacturing firms and allowing them to better participate in global production networks.

**Figure 3: Services share of value added in manufacturing trade, all countries, 2009**

Looking at where the value added is generated reveals the high importance of services inputs in what appears to be “core” manufacturing sectors. Distribution and transport services are the main contributors as they provide the necessary links in supply chains; financial and business services improve the efficiency of goods production.

How can trade agreements help firms enter and grow in GVCs?

Global value chains are changing the patterns and structure of international trade, and reaping their full benefits will require adjustments that go beyond the realm of trade policy to include policies aimed at promoting increased competition and investment. Multilateral and regional trade and investment agreements will need to reflect the fact that goods and services are now from “everywhere,” rather than, as they are defined today, from “somewhere.”

**A stronger case to move from reciprocal “concessions” to unilateral responses**

With the emergence of GVCs, the mercantilist approach that views exports as good and imports as bad, and that views market access as a concession to be granted in exchange for access to a partner’s market, is even more clearly counterproductive. Domestic firms can of course benefit from export opportunities, but they also depend on reliable access to imports of world class goods and services inputs in order to improve their productivity and their competitiveness. Responses to this reality can be undertaken unilaterally, and have indeed led to unilateral liberalisation in recent years. “First movers” in liberalisation can also be the first to gain from specialisation and improve their position on international markets in downstream industries.

**And a stronger case for multilateral and plurilateral agreements**

But the gains are even greater when more countries participate and markets are opened on a multilateral basis. GVCs strengthen the economic case for advancing negotiations at the multilateral level, as barriers between third countries upstream or downstream matter as much as barriers put in place by direct trade partners and are best addressed together. A good illustration of this approach is the 1997 Information Technology Agreement (ITA), whose success lies in covering as many products and as many countries involved in the IT value chain as possible. The ITA also highlights the benefits of applying the Most Favoured Nation principle in plurilateral agreements, which eliminates “red tape” related to rules of origin and their potential distorting impact on trade.
The ITA removed tariffs on key technology and telecommunications products for 75 countries covering 97% of trade in IT products. Over a decade later, ITA members are more involved in GVCs in the sector than non-signatories. The GVC participation index accounts for the import content of exports and for exports of domestic intermediate inputs used in third countries’ exports. Before the agreement entered into force, it was under 6% of gross exports on average for all countries. It then increased significantly for signatories, up to over 9% in 2005 before declining slightly during the crisis, while non-members remain at the sidelines of IT value chains.

Designing regional agreements for GVCs

Sound economics is one thing; political feasibility is another. While multilateral agreements are widely accepted as the best way forward, most of the liberalisation outside of purely unilateral opening has occurred at the regional level in the past two decades. To promote the expansion of GVCs, regional trade agreements (RTAs) are more effective when their membership is consistent with regional production networks. They also have a role to play in deepening integration provisions: the convergence of standards or the recognition of qualifications can start bilaterally or regionally. But the RTAs of the future should be careful to avoid the pitfalls of distorting firms’ choices and losing the connection with the rest of the value chain. More liberal rules of origin, for example, would make RTAs more GVC-friendly and increase their impact on firms’ productivity. In the longer term, consolidating and multilateralising RTAs would help turn the “spaghetti bowl” of preferential agreements into a clearer and more efficient trading regime for all actors in GVCs.

Building on policy complementarities

Trade agreements have the largest impact if they cover as many dimensions of GVCs as possible. While abolishing tariffs is a starting point to offer companies new trade opportunities, the value chain also requires efficient services as well as the possibility to move people, capital and technology across countries. Policy should thus address obstacles at all points of the value chain and remain neutral between trade and investment, letting firms decide which mode is better for accessing foreign inputs and foreign markets. Multilateral agreements covering not only goods but also services, investment, competition, intellectual property and the temporary movement of workers are likely to create an environment where firms can build efficient supply chains. Such a comprehensive approach would amplify the impact of trade liberalisation on investment, growth and job creation.

Of course trade policy is a necessary but not a sufficient condition to draw the benefits from global value chains for inclusive employment and income growth. Public and private investments to upgrade supply side capabilities, and the ability to exploit new market opportunities generally, are also needed. Investments in people are particularly important – education and skills training, active labour market policies, and social safety nets are key ingredients in an effective package of complementary policies.

Concluding comments

This note reflects the conclusions of OECD work on the trade policy implications of GVCs, based on the preliminary Trade in Value-Added database. Taking into account the origin of value-added is, however, only the beginning. A comprehensive report on the wider policy implications of GVCs will be released at the time of the OECD Ministerial Meeting in May 2013, covering various policy domains (trade, investment, development, competitiveness, etc) and highlighting opportunities and challenges to firm engagement in GVCs. The OECD will also estimate the employment and skills content of trade flows and highlight the implications for the design of trade policy. A better understanding of where jobs are created in GVCs and how various policy instruments can improve inclusive growth and job creation would benefit all countries.