trade
policy brief

Trade Policy Implications of Global Value Chains

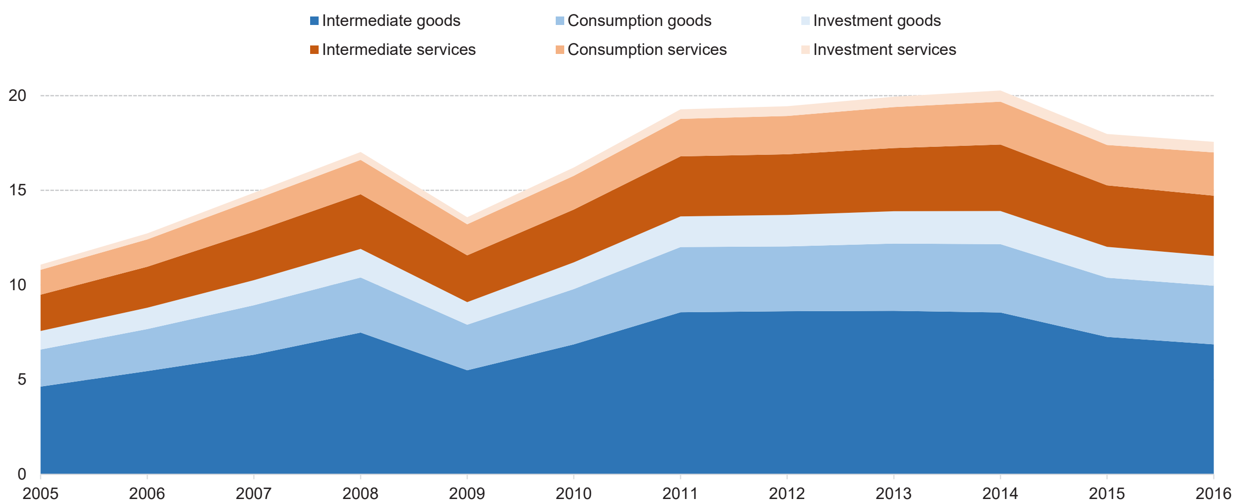
December 2018

- Today, 70% of international trade is for production in global value chains (GVCs), where services, raw materials, parts and components are exchanged across countries before being incorporated into final products that are shipped to consumers all over the world.
- This shift has implications for trade policy, as border barriers result in cumulative costs for firms, and exports require access to imports.
- As such, trade agreements should cover as many dimensions of GVCs as possible, from customs barriers to rules of origin to trade facilitation to services.
- Although the overall level of GVC integration (fragmentation of production) remains high, GVC integration has been decreasing since it peaked in 2011.

What's the issue?

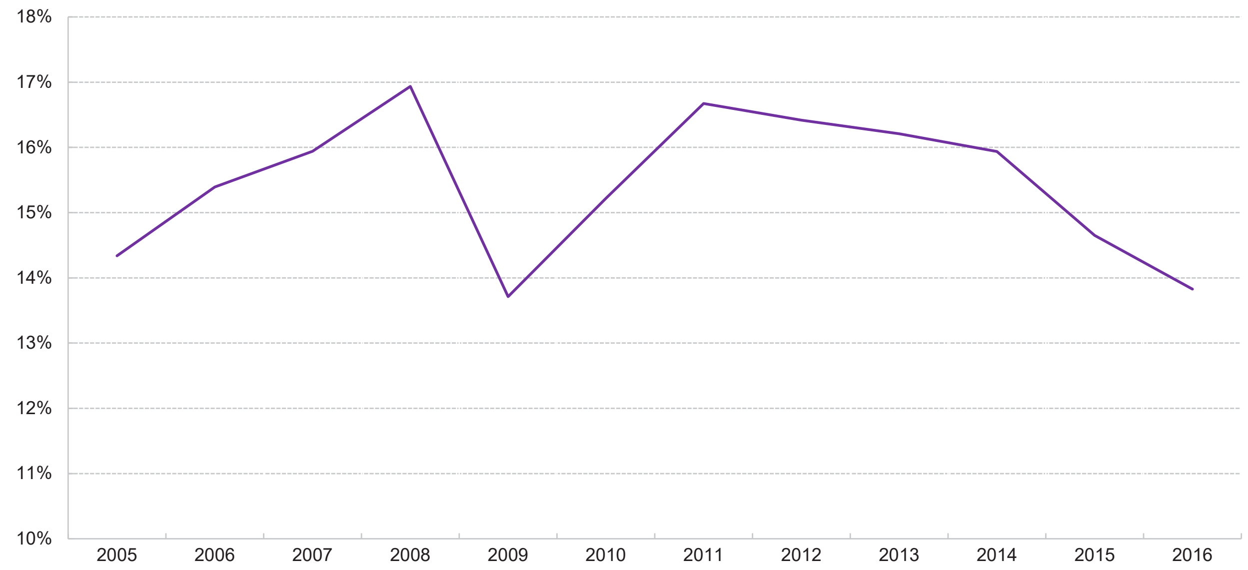
Over the last two decades, both the structure and patterns of trade have changed. The traditional view of international trade is that each country produces finished products that are then exported to consumers in another country. This type of trade, however, represents only 30% of total trade in goods and services. Today, 70% of international trade involves a variety of transactions where services, raw materials, parts and components are exchanged in global value chains (GVCs) across countries, before being incorporated into final products that are shipped to consumers all over the world. (Figure 1).

Figure 1. Decomposition of world gross exports, USD trillion (2005-2016)



Source: TiVA database 2018

Figure 2. Global import intensity of production, % (2005-2016)



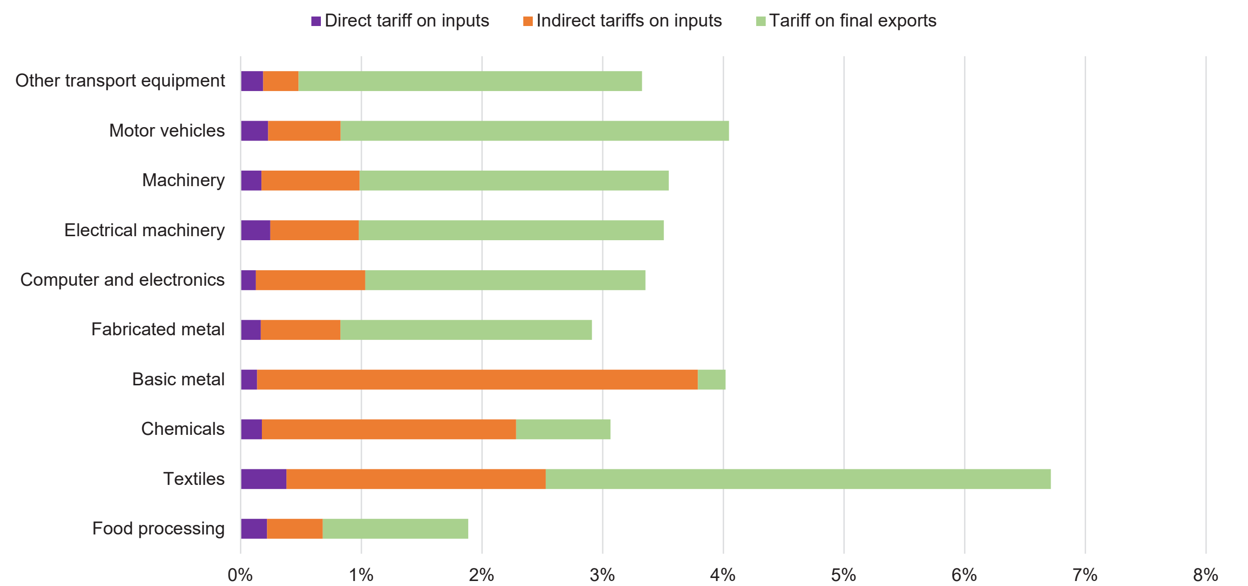
Source: TiVA database 2018 *Note*: This indicator takes into account all trade flows of intermediates inputs used in any stage of the value chain, and expresses their overall value as a share of the final output. Calculated for the world, it measures the overall level of fragmentation of production

The fragmentation of production has peaked

More than ever before, trade is determined by international strategies of firms that engage in cross-border production, foreign investment and strategic partnerships to carry out their activities wherever the necessary skills and materials are available at competitive cost and quality. To better account for these transformations, the OECD has developed the Trade in Value Added (TiVA) indicators that can identify where value is created along each stage of these global value chains, painting a more complete picture than gross trade measures alone.

Global value chains became a dominant feature of world trade over the past several decades in part due to technological innovations allowing firms to split production processes across countries (the ICT revolution). Driven further by the accession of China to the WTO in 2001 and the emergence of 'factory Asia', new TiVA data show that GVCs reached a peak in 2008 – right before the 2008-2009 financial crisis, which affected trade finance and led to a consolidation of GVCs.

Figure 3. Average ad valorem tariffs along the value chain, selected industries, 2015



Source: TiVA database 2018 and TRAINS. Based on applied and preferential tariffs.

Starting in 2011, different structural factors appear to have slowed the pace of GVC expansion, including the shift in China from export-driven manufacturing to its domestic markets and rising wages in Asia. Further transformations in firm strategies related to the digital economy, robotisation and servicification, suggest a downward trend.

Although the pace of growth is slowing, the overall level of GVC integration (fragmentation of production) remains high and only slightly below what it was in 2005; thus confirming the need for trade policy makers to ensure that firms of all sizes can take advantage of cross-border business opportunities.

Trade policy implications

Coherent trade and trade-related policies create new opportunities for developing economies and for small and medium-sized firms to access global markets as suppliers of intermediate goods and services, without having to build the entire value chain of a product. At the same time, firms face new challenges as regards the need for strong co-ordination and efficient links between production stages and across countries.

Border barriers result in cumulative costs

As goods now cross borders many times, first as inputs and then as final products, barriers at the border become costlier and have a cumulative impact along the value chain. On average, tariffs on most manufactured products are low in developed countries and have been declining in developing countries; but small tariffs that are repeated along the value chain can still accumulate into significant costs for firms. As shown in Figure 3, the average *ad valorem* tariffs become significantly higher in some industries when adding the direct tariffs on imported inputs and other indirect tariffs from inputs used upstream to the tariff on the final product.

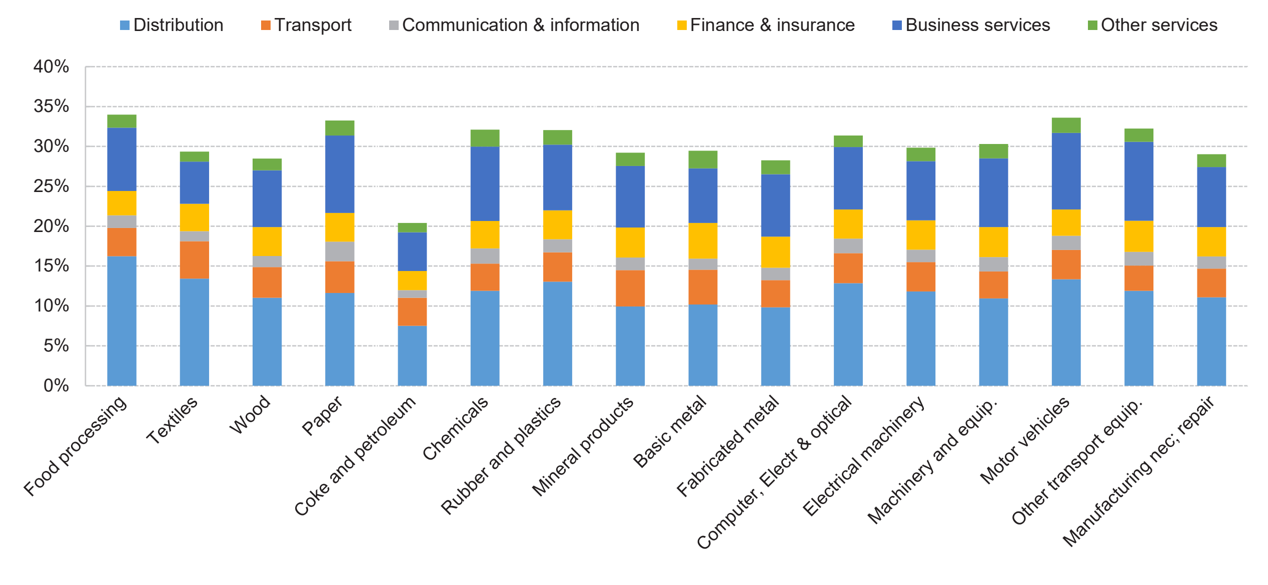
Beyond tariffs, fast and efficient customs and port procedures are essential to the smooth operation of supply chains. To compete globally, firms need to maintain lean inventories and still respond quickly to demand, which is not possible when their intermediate inputs suffer unpredictable delays at the border. As such, trade facilitation measures are crucial to foster integration into global production networks.

The cumulative impact of trade barriers also applies to all types of non-tariff measures. Among them, quality and safety standards are particularly important for operations of GVCs. Standards are needed to protect consumers, and concerns about information and traceability are even more acute in a GVC world. However, the complexity and heterogeneity of standards can become one of the main barriers to participating in GVCs, particularly for small-scale exporters. Increasing international regulatory co-operation, including via the convergence of standards and certification requirements and mutual recognition agreements, can go a long way to alleviate the burden of compliance.

Exports require imports

Domestic firms can only seize export opportunities if they have access to imports of world-class goods and services inputs. Imports help firms to become more productive and competitive in their export markets. Responses to this reality can be undertaken unilaterally and have indeed led to unilateral liberalisation in recent years, but trade agreements allow countries to create disciplines collectively and to address some of the externalities related to activities of firms in GVCs.

Figure 4. Services shares of value added in manufacturing trade, all countries, 2016



Source: TiVA database 2018.

Services are the key to competitiveness

Global production networks rely on the logistics chain, which requires efficient network infrastructure and complementary services. Trade flows in value-added terms reveal that transport, logistics, finance, communication, and other business and professional services play a significant role in exports of goods. As shown in Figure 4, the value created by services as intermediate inputs represent over a third of the total value-added in manufacturing exports. More efficient service sectors enhance the competitiveness of manufacturing firms.

Comprehensive trade agreements grow global markets

Trade agreements should cover as many dimensions of GVCs as possible, from customs barriers to rules of origin to trade facilitation to services. Because there are network and scale effects in GVCs, the gains and the success of agreements in implementing disciplines will be 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.

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. 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.

Not all economies are equally prepared for the changes that firms and workers have to face in GVCs. The process of GVC-induced growth can entail reallocation of workers to more productive activities and some workers may experience unemployment or may see their real wage decline. Facilitating the adjustment process is crucial and requires well-designed social policies and a well-functioning labour market. Effective re-employment services and training programmes can help dislocated workers take advantage of new job opportunities.

Further reading

- OECD Trade in Value Added website, https://oe.cd/tiva