

## Trade in Value Added

- ▶ Because inputs to many goods are produced in more than one country, barriers to trade and other factors can drive up the cost of intermediate components, damaging competitiveness.
- ▶ Trade in value added (TiVA) is a way of measuring the value added-by country and industry-to a good or service produced for export or consumed in the domestic economy.
- ▶ To attract high value added, policymakers should improve and maintain infrastructure, homogenise international standards, and maintain efficient service markets.
- ▶ Even unilateral trade concessions can benefit an economy's global competitiveness.
- ▶ TiVA calls for a new understanding of trade policy and investment and the impact of economic shocks.

### What's the issue?

A car manufactured in one country may actually include a large number of components made in other countries. Even those components may rely on inputs from still other countries. Exports increasingly rely on imports, that is to say intermediate goods and services. This means that they consequently rely on value added in the countries that manufacture inputs into their export goods and services. Trade in value added (TiVA) is an approach used to estimate a breakdown of the value added-by country and industry-to a good or service produced for export or consumed in the domestic economy. It considers the entire production process, taking into account where the different inputs have been produced. To follow the above example, a motor vehicle exported by Country A may require significant parts, such as engines, seats or electronic components, produced in other countries. In turn, these countries will use intermediate inputs imported from still other countries, such as steel or rubber, to produce the parts exported to A. The TiVA approach traces the value added by each industry and country in the production chain and allocates the value added to these source industries and countries.

### Why is this important?

**Trade, growth and employment.** Jobs are increasingly created as part of global value chains (GVCs). Trade flows in value-added terms indicate where jobs are created and highlight

the benefits of trade for all economies involved in the value chain. Understanding interdependencies within GVCs are essential to explaining the competitiveness of countries and the productivity gains that can be made.

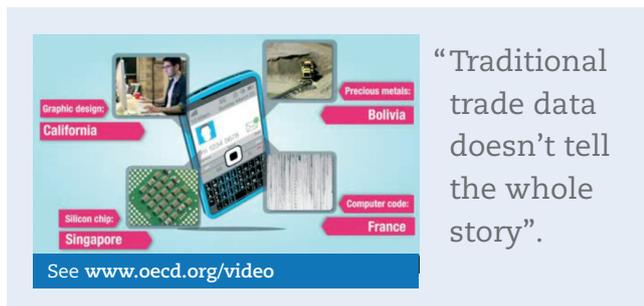
**Global imbalances.** A country's overall trade surplus or deficit with the rest of the world is the same whether measured with gross trade flows or using value added-based measures. However, measures of bilateral trade flows based on gross concepts can present a misleading picture of who ultimately benefits from the trade and exaggerate the importance of producing countries at the end of value in chains. Value-added measures of bilateral trade better reflect who benefits, both in monetary terms and also, by extension, employment terms.

**Trade disputes.** Conventional measures may create a risk of protectionist responses that target those countries at the end of GVCs, on the basis of an inaccurate perception of the origin of trade imbalances. This means that "beggar thy neighbour" strategies can turn out to be "beggar thyself" miscalculations. For example, if Country C exports goods worth \$90 to Country A, which in turn uses them to produce \$100 of exports to Country B, which then uses them to produce \$110 of final goods for export to C, then any protective policies initiated by C in response to a deficit with B would hurt its own initial \$90 export to Country A.

**Managing economic shocks.** The 2008-2009 financial crisis was characterised by a synchronised trade collapse in all economies, as the effects of a drop in demand fed through to countries located upstream in the GVC. A better understanding of value added trade flows would provide tools for policymakers to identify the transmission of macroeconomic shocks and adopt the right policy responses.

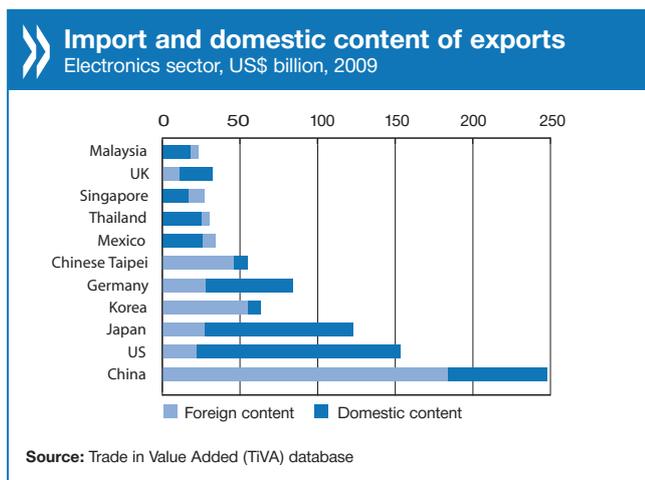
### What should policymakers do?

The growing fragmentation of production across borders highlights the need for countries to have an open, predictable



“Traditional trade data doesn't tell the whole story”.

See [www.oecd.org/video](http://www.oecd.org/video)



and transparent trade and investment regime as tariffs, non-tariff barriers and other restrictive measures impact not only on foreign suppliers, but also on domestic producers. It also highlights the importance of an ambitious complementary policy agenda to leverage engagement in GVCs into more inclusive growth and employment.

**Avoid protective measures as GVCs magnify the costs of protection.** Tariffs and other protection measures are cumulative when intermediate inputs are traded across borders multiple times. Protective measures against imports of intermediate products increase costs of production and reduce a country's ability to compete in export markets. 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, as do currency interventions, since any export advantage gained from a cheaper currency is at least partially offset by the cost of more expensive imported inputs.

**Facilitate trade.** 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. 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.

**Avoid unnecessary restrictions and standards.** 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. Increasing international regulatory co-operation, including via the convergence of standards and certification requirements and mutual recognition agreements, can alleviate the burden of compliance and enhance the competitiveness of small-scale exporters.

**Improve competitiveness behind the border through efficient services markets.** Services play a far more significant role than

suggested by gross trade statistics. Well-functioning transport, logistics, finance, communication, and other business and professional services to move goods and co-ordinate production along the value chain are vital. More efficient service sectors enhance the competitiveness of manufacturing firms and allow them to participate better in global production networks.

**Promote comprehensive trade agreements.** Multilateral and regional trade and investment agreements need to reflect the fact that many goods and services are now from "everywhere", rather than, as they are defined today, from "somewhere". 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.

**Move away from reciprocal "concessions".** 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. While regulatory co-operation and trade negotiations may be needed to address some of the challenges domestic firms face, there are also reforms that can be undertaken unilaterally to facilitate their insertion in global production networks.

### What's next?

The OECD, in co-operation with the WTO, will continue to update the TiVA database and improve the quality, coverage, timeliness and industry detail of its indicators. But there is also a need to go beyond TiVA. For example, while the new statistics accurately reflect the value added generated by firms in producing exports, we are not yet fully able to answer the question of who benefits from international trade and investment flows. By looking at income flows, jobs and skills, the approach can be extended to other policy domains and has the potential to bring further insights that can improve policymaking.

For further information see: [www.oecd.org/trade/valueadded](http://www.oecd.org/trade/valueadded). Or contact: [tiva.contact@oecd.org](mailto:tiva.contact@oecd.org)



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