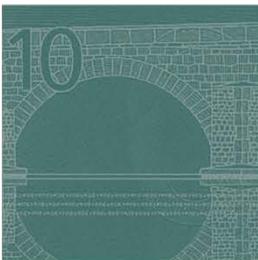
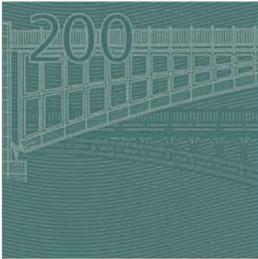




EUROPEAN CENTRAL BANK

EUROSYSTEM



COMPNET POLICY BRIEF NO 6

Global value chains reshape our policy thinking

Koen De Backer, OECD
Sébastien Miroudot, OECD



In 2014 all ECB publications feature a motif taken from the €20 banknote.

May 2014

© European Central Bank, 2014

Address	Kaiserstrasse 29, 60311 Frankfurt am Main, Germany
Postal address	Postfach 16 03 19, 60066 Frankfurt am Main, Germany
Telephone	+49 69 1344 0
Internet	http://www.ecb.europa.eu

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

ISSN	2315-0084 (online)
ISBN	978-92-899-1365-2 (online)
EU Catalogue No	QB-BK-14-001-EN-N (online)

ABSTRACT

The international fragmentation of production in global value chains (GVCs) challenges the way we look at the global economy. It is essential to understand how global value chains work, how they affect economic performance, and how policy can help countries to derive benefits from their participation in GVCs. The policy implications are diverse and include trade policy, investment policies, innovation policies, and framework and structural policies that directly affect how, and to what extent economies can benefit from global value chains.

Note on data on Cyprus by Turkey: the information in this document with reference to ‘Cyprus’ relates to the southern part of the island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus. Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the ‘Cyprus issue’.

Note on data on Cyprus by all the European Union member states of the OECD and the European Union: the Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

ACKNOWLEDGEMENT

This is a condensed version of material originally published under the title OECD (2013), *Interconnected Economies: Benefiting from Global Value Chains*, OECD Publishing, <http://dx.doi.org/10.1787/9789264189560-en>



INTERCONNECTED ECONOMIES THROUGH GVCs

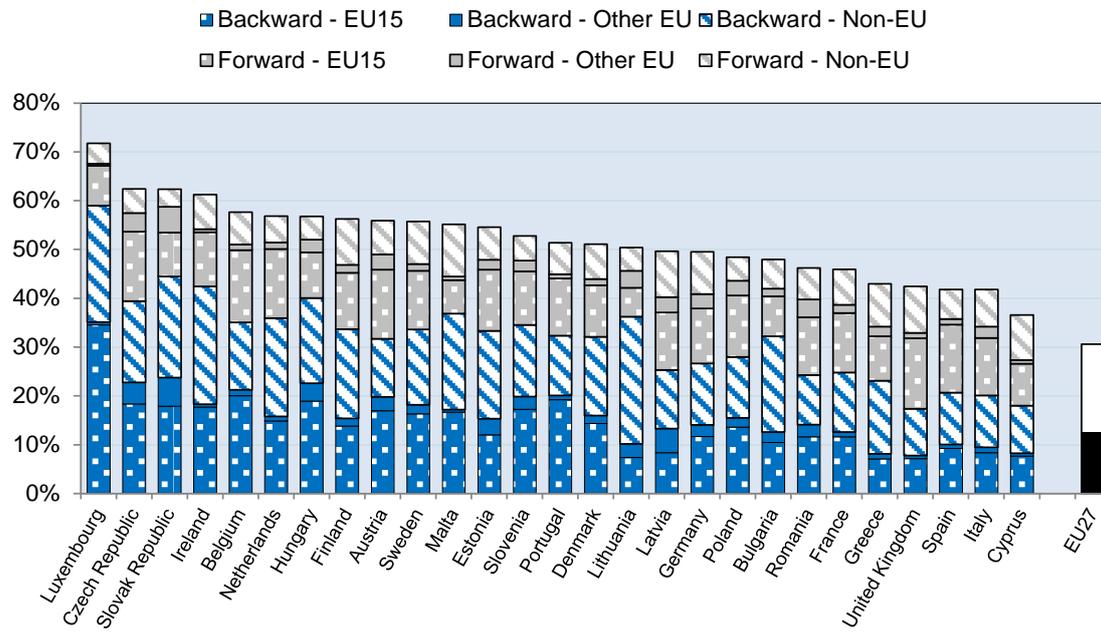
International production, trade and investment are nowadays increasingly organised within global value chains (GVCs). Production processes have become more geographically fragmented and production is ‘sliced and diced’ into separate fragments that are dispersed globally (OECD, 2007; WTO and IDE-JETRO, 2011). A value chain can be described as the full range of activities that firms engage in to bring a product to the market, from conception to final use. Such activities range from design, production, marketing, logistics and distribution to support to the final customer. They may be performed by the same firm or shared among several firms; as they have spread, value chains have become increasingly global.

While GVCs are largely driven by firm strategies, they are significantly changing the nature and interconnectedness of the world economy with differential impacts across countries. A process of vertical specialisation has occurred between countries, i.e. a vertical division of labour with countries specialising along the value chain. As value is added in different countries throughout the production process within GVCs, most goods and a growing share of services are “made in the world”, with different firms and countries specialising in the specific functions and tasks that collectively constitute a GVC. The pattern of trade accordingly shows that a good produced in one economy and exported to its market of final consumption includes inputs supplied by producers in other economies who themselves source their inputs from third economies, etc.

Economies are not all equally engaged in GVCs, just as they are not equally engaged in international trade. Economies participate in GVCs both as users of foreign inputs (i.e. backward participation) and as suppliers of intermediate goods and services that can be used in other economies’ exports (i.e. forward participation -Figure 1). Overall, EU member states are strongly integrated into European value chains, concentrated around the EU15 (with Germany as a central player)¹. Extra-EU linkages of individual member states within GVCs seem to be more important when it comes to the sourcing of intermediates in particular, not surprisingly in member states at the borders of the EU27 (De Backer et al., 2013).

¹ The strong regional focus of GVCs is also observed in the NAFTA region and South –East Asia (‘Factory Asia’) and is directly related to the importance of distance and trade costs; although transport costs have consistently fallen, they still matter, particularly for products characterised by a large weight-to-value ratio. Furthermore, timely deliveries of intermediates are crucial for the smooth functioning of GVCs

Figure 1 GVC participation, EU member states

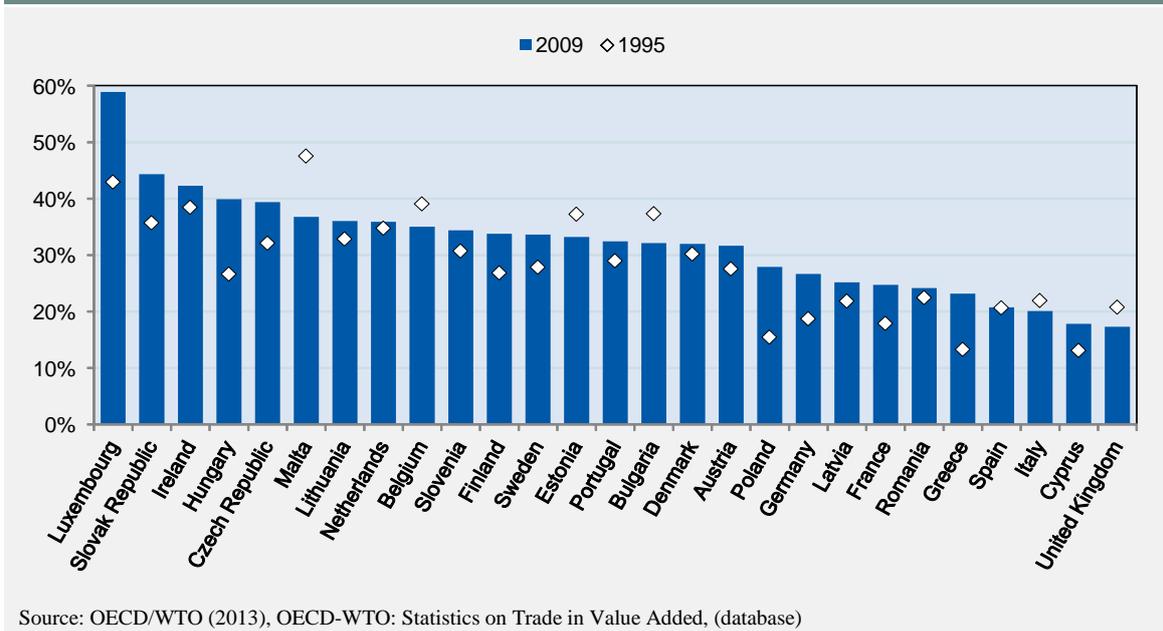


Source: OECD/WTO (2013), OECD-WTO: Statistics on Trade in Value Added, (database).

WHAT DOES NATIONAL COMPETITIVENESS MEAN WITHIN GVCs?

GVCs challenge the prevailing policy thinking about competitiveness within and outside Europe. The rise of GVCs profoundly changes the notion of what economies do and what they produce; exports no longer represent domestic activities but increasingly also foreign value added through intermediates produced in other countries (Figure 2). As exports today increasingly rely on technology, labour and capital embodied in intermediate goods imported from other countries, the drivers of competitiveness increasingly include factors that are outside the scope of national policies. This limits the direct influence of policy on growth and job creation within national borders.

Figure 2 Foreign value added content of exports by country, EU member states



A growing tension emerges between the global character of individual firm strategies that include international activities in GVCs and government policies that target local jobs and value added. In an era when some MNEs’ operations are larger than some national economies, the contribution of domestically owned firms to the national economy is no longer easy to pinpoint. Likewise, the returns to investments by domestic firms in the national economy – and the support that governments provide to that investment – may partly “leak” to other countries through linkages to GVCs. This leakage may be compounded by the tax planning strategies of multinational firms.

It is against this background that governments are looking for new ways to position economic activities in these global networks of production and innovation with a view to safeguarding growth and employment at home. The focus in such policies is on strengthening production factors that are “sticky” and less likely to cross borders. They include investment in people and skills and high-quality infrastructure and encouraging strong industry-university linkages and forms of tacit knowledge. The quality of institutions and government also plays a role and can be a major factor in the decision of firms to invest and engage in economic activities in a country.

Nevertheless, in a world of GVCs, firms require imports from abroad and will need to offshore some of their activities in order to remain competitive at home. Defensive policies aimed at supporting activities and companies ignore the realities of today’s global economy; relocating some activities abroad leads to important productivity increases at home that enhance

competitiveness and support job creation throughout the economy. New OECD work shows that outsourcing and offshoring enhance the export competitiveness of countries in GVCs, by providing access to cheaper, more differentiated, and better quality inputs.

GVCs are also at the heart of the discussion on “making things instead of making ideas”, which relates to the debate on the future of manufacturing in developed economies. The fragmentation of production has so far led to a division of labour in which OECD countries have specialised in upstream activities such as R&D, design, innovation, etc., while emerging countries have specialised more in manufacturing and assembly activities. The highest level of value creation in a GVC is often found in certain upstream activities such as new concept development, R&D or the manufacturing of key parts and components, as well as in certain downstream activities such as marketing, branding or customer service. Such activities involve tacit, non-codified knowledge in areas such as original design, the creation and management of cutting-edge technology and complex systems, as well as management or organisational know-how.

Investment in knowledge-based capital is an important source of competitiveness and plays a major role in supporting upgrading in global value chains. In countries like the United States and the United Kingdom, investment in intangible assets (i.e. knowledge-based capital) have become larger than investments in tangible assets (factories, machines, etc.) during the past decade. Different types of knowledge-based capital (KBC) play a role in GVCs and there are three main categories: computerised information (software and databases); innovative property (R&D and non-R&D innovative expenditures including copyrights, designs and trademarks); and economic competencies (brand equity, firm-specific technological and managerial skills, networks, and organisational structures). Supporting investments in knowledge also requires new policy thinking including a much broader notion of innovation (than only R&D), a stronger emphasis on new business models and organisational forms, and new approaches to the financing of entrepreneurial firms (OECD, 2013b).

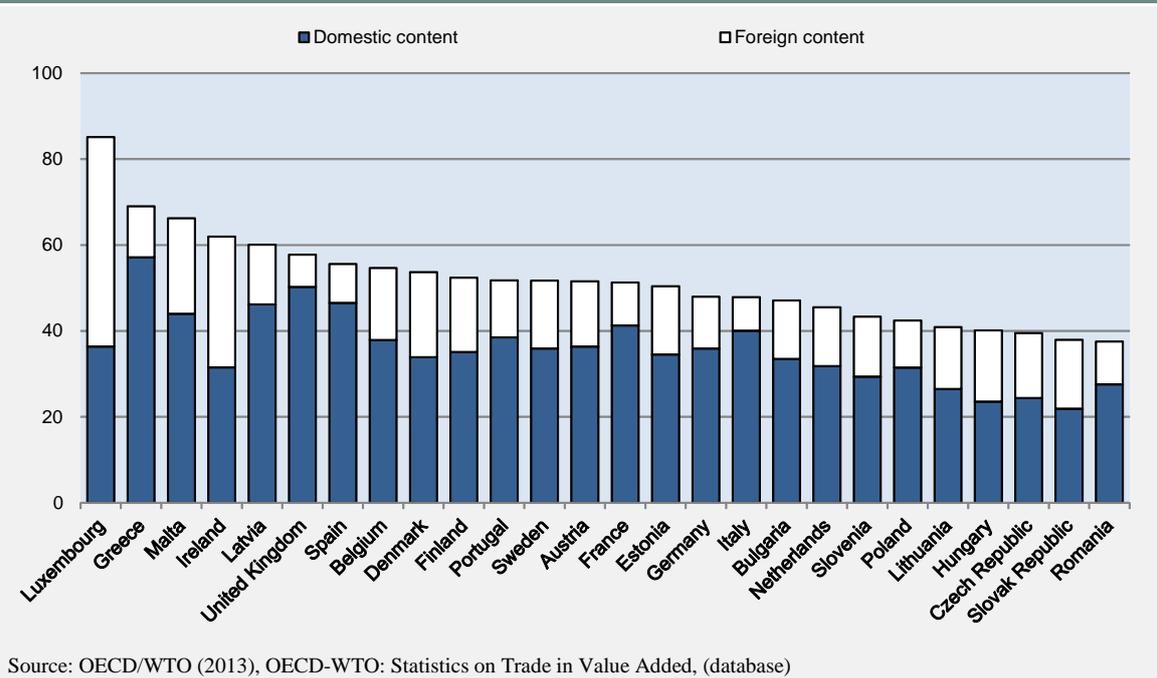
THE IMPORTANCE OF OPEN BORDER POLICIES – EVEN MORE IMPORTANT THAN WHAT TRADITIONALLY THOUGHT

The positive impacts of open trade and investment on economic growth and prosperity have been discussed since decades. This is even more so in GVCs because of the growing intertwined character of imports and export; as such, tariffs and other barriers to imports have effectively become a tax on exports. Measures against imports of intermediate products directly increase the costs of production and reduce a country’s ability to compete in export markets.

Therefore, policies that restrict access to foreign intermediate goods and services also have a detrimental impact on a country's position in the regional or global supply chain.

Likewise, trade facilitation by addressing border bottlenecks and avoiding unnecessary restrictions becomes highly beneficial in GVCs; new OECD evidence shows that there is scope to reduce trade costs by about 10% in OECD countries. As goods cross borders many times in GVCs, first as inputs and then as final products, fast and efficient customs and port procedures are essential to the smooth operation of supply chains. In addition, streamlining administrative procedures at the border (e.g. simplification of procedures through single windows, pre-arrival processing and advance rulings on goods classification and applicable duties) helps countries reap the full benefits of GVCs. The convergence of standards and certification requirements and mutual recognition agreements can go a long way towards alleviating the burden of compliance and enhancing the competitiveness of small-scale exporters.

Figure 3 Share of services value added in total gross exports, EU member states, 2009 states



As global value chains change the patterns and structure of international trade, reaping the full benefits will require adjustments that go beyond trade policy to include policies aimed at promoting competitiveness, efficiency, attractiveness to investment as well as development and sustainability. Multilateral and regional trade and investment rules and disciplines will also need to reflect the fact that goods and services are now often from “everywhere”, rather than, as they

are generally considered today, from “somewhere”. Given the important role MNEs play in creating GVCs, lowering investment barriers is among the most efficient ways for a country to become more deeply integrated in GVCs. By the same token, by inhibiting the creation or the efficient functioning of GVCs, impediments to cross-border investment can have negative welfare impacts beyond the home and host country.

A BROAD NEED FOR A DIFFERENT POLICY THINKING

The fragmentation of production across countries is not a completely new phenomenon, but GVCs have become these days a defining feature of modern globalisation during the past decades. GVCs have been significantly changing the rules of the game and increasingly call for a rethinking of government policies in economic globalisation but also more broadly. The OECD (2013) publication ‘Interconnected Economies: Benefiting from Global Value Chains’ discusses in more detail a number of policy challenges.

For example, the international division of labour and the corresponding global reallocation of resources through GVCs are no longer taking place at the level of industries, but rather at the level of stages, activities and tasks. Winners and losers of globalisation have traditionally been described in terms of industries or skill groups, but GVCs and trade in tasks might affect individuals and firms within the same industry or skill group differently. Some employees and firms could suffer from globalisation if their activities are relocated within GVCs, while others might prosper. Government policies to ease the adjustment costs of globalisation may find it increasingly difficult to differentiate according to simple categories of workers.

By linking GVCs to economic development, the traditional approach of building a complete value chain is neither optimal nor possible in a world of GVCs. Instead of fostering industrialisation through the development of vertically integrated industries (and producing both intermediates and final products), countries can now become export-competitive by specialising in specific activities and tasks. The experience of EU member states like Hungary, the Czech Republic and the Slovak Republic demonstrates that participation in GVCs can offer a fast track to development and industrialisation. Once countries are integrated in GVCs, firms and countries will be challenged to move to other segments of the value chain and/or upgrade their existing position.

But the increased connectivity brought about by GVCs has made economies also more interdependent and increased the likelihood that a local disruption will lead to a system-wide failure. Because production is organised in a series of stages in different countries by specialised

suppliers who ship the goods produced further down the chain, adverse shocks run very rapidly through the value chain². Disruptions in GVCs can seriously damage national economies, and governments will benefit from more systematic insights on the position of their country in GVCs.

A major problem is that current statistics largely reflect the ‘old’ policy thinking where the measurement of economic globalisation are largely restricted to the economy and (sub-) industry level. Internationally comparable data at a more granular level are much more limited which complicates the measurement and analysis of GVCs. Policy makers are increasingly looking for better evidence to analyse the effects of GVCs on their national economies. The OECD/WTO work on ‘Trade in Value Added’ is providing data on GVCs that can underpin the design of better informed policies³.

REFERENCES

De Backer, K., Miroudot, S. and A. Ragoussis (2013), *Manufacturing global value chains in R. Veugelers* (ed.) *Manufacturing Europe’s Future*, Bruegel Blueprint 21, Brussels.

OECD (2007), *Staying Competitive in the Global Economy - Moving Up The Value Chain*, Summary Report, Paris.

OECD (2013a), *Interconnected Economies: Benefiting from Global Value Chains*, Paris.

OECD (2013b), *Supporting Investment in Knowledge Capital, Growth and Innovation*, Paris.

WTO – IDE/JETRO (2011), *Trade Patterns and Global Value Chains in East Asia: From Trade in Goods to Trade in Tasks*, WTO, Geneva.

2 For example, supply shocks due to natural disasters can rapidly spread in GVCs, as was demonstrated in 2011 following the Tohoku earthquake and tsunami in Japan and later following flooding in Thailand.

3 This database includes information on 57 countries thereby covering over 95% of world GDP and more than 90% of international trade; the graphs in this Policy Brief focus only on EU member states.