The Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade Policy

Global value chains (GVCs) are a defining feature of the current wave of globalization and a reflection of the increased degree of interconnectedness of economies. But not all countries, nor all firms within countries, participate in and benefit equally from GVCs.

The OECD is exploring the determining factors, economic effects and policy implications of global value chain participation across developing countries in five sub-regions in Asia, Africa and the Middle East[1] covering seven key sectors: agriculture, processed foods; plastics and rubber; textiles; metal products; electrical and electronic equipment and motor vehicles.

The study found that many developing countries are increasingly involved in GVCs and connectivity between the different regions in the study has increased over time. For example Southeast Asia is an increasingly important destination for exports of intermediates from Africa while MENA has become a major destination for intermediates produced in South Asia. At the same time North America and Europe are less important as sources of intermediate inputs for many developing countries.

Participation in GVCs is also found to bring about economic benefits, in terms of productivity, sophistication and diversification of exports, although the benefits do not accrue evenly across countries. Many of the success stories across the sub-regions are linked to positive effects from sourcing imported goods that are used to produce exports.

The study also looked specifically at the question of "upgrading" in GVCs. Often this concept has been seen as the need to capture a growing share of domestic value added in exports or as targeting more "sophisticated" products or production stages. However, the volume of the activity matters as much, or even more, than the domestic value added share or sophistication – important benefits can accrue from specializing in less sophisticated assembly activities and performing them on a large scale. The evidence tends to show that countries which have grown their domestic value added in exports have been those where foreign value added has also grown the most. This suggests that the role of policy is not to increase the share of domestic content in particular industries. Rather it is to support a general commercial environment that increases the value of exports into GVCs, including through enabling access to imports of intermediate inputs.

What determines participation in GVCs?

Understanding how a country integrates into production networks requires more than just looking at relative participation rates. Indeed, larger countries tend to have lower participation rates, with this often attributed to the larger size of the domestic markets from which they draw intermediates. Natural resource based economies as well as the highly technologically developed ones also tend to be a source of intermediate inputs rather than international purchasers of these. Therefore country specific characteristics are likely to be strong determinants of participation rate differences.

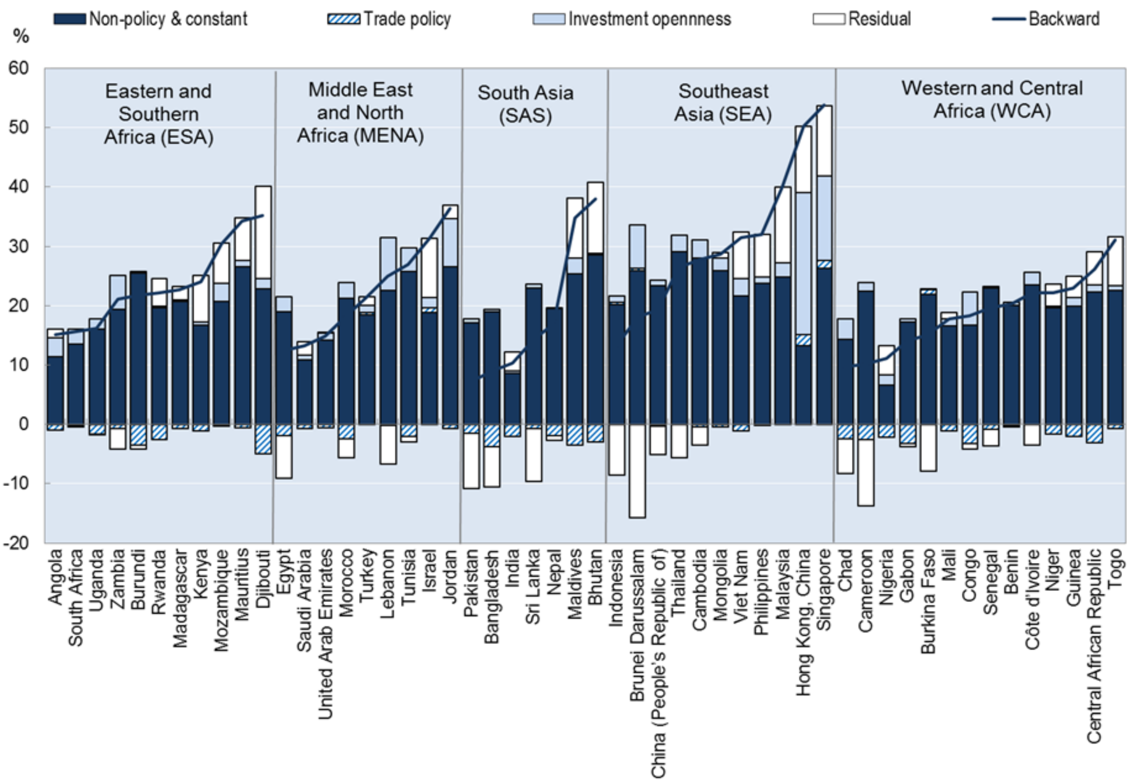
Recent studies using harmonised inter-country input-output tables have enabled more accurate measurement of value chain activity, where countries either source foreign inputs for export production (backward linkages), or provide inputs to foreign partners for their export production (forward linkages). A number of factors, both structural and policy related, can influence the degree and type of integration into GVCs for both types of engagement.

Structural characteristics

A key finding is that structural characteristics of countries are important determinants of GVC participation - the size and geographical location of countries, as well as their manufacturing share in GDP appear to explain most of the variation in participation rates between countries.

[1] The sub-regions covered are: Southeast and Eastern Asia; South Asia; Eastern and Southern Africa; Western and Central Africa; Middle East and North Africa.

Backward GVC Participation ratio – relative contribution of non-policy and policy factors



Source: OECD (2015), "Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-Related Policies", *Trade Policy Paper,* No. 179, OECD Publishing, Paris.

Policy factors

Policy can play a significant role. As fragmented modes of production entail multiple border crossings, even modest tariffs can be magnified. While the removal of these tariffs would be a step in the right direction, it may not be sufficient for further integration to occur if products are held back at the border by onerous customs procedures or if it is difficult to engage in regional cumulation due to burdensome rules of origin. The policy measures that are likely to be most conducive to value chain integration are those that promote deep integration, including trade facilitation, services liberalisation, competition policy, investment openness, intellectual property protection and dispute settlement.

Southeast Asia, the region where the most comprehensive and deepest regional integration agreements can be found among the regions covered, has the highest average share of intra-regional GVC participation (58% in 2011 and 56%in 2001). In Eastern and Southern Africa this share was 16% in 2011, down from 21% in 2001. The Middle East and North Africa, Western and Central Africa and South Asia regions lag behind with intra-regional GVC participation below 10% in 2011.

In this respect it is important to note that competitiveness is more strongly associated with global rather than regional sourcing of intermediate inputs, implying that regional initiatives aimed at facilitating access to intermediate inputs should not come at the expense of sourcing competitive inputs more globally.

Another important determinant of GVC integration is openness to inward foreign direct investment. For some developing country economies, FDI openness is found to increase participation by over 20 percentage points, while in other countries which are less open to inward FDI the contribution is found to be much smaller.

Other trade-related policies, including trade facilitation and logistics performance, intellectual property protection as well as the quality of infrastructure and institutions are all estimated to have important impacts on GVC integration in developing countries.

Region-specific policy findings and recommendations

The empirical analysis presented in this report provides a starting point for policymakers in the regions to assess their countries' GVC engagement, and to consider policy options.

Southeast Asia

In Southeast Asia deeper regional integration and growing intra-regional trade have been the driving force that has allowed countries to specialize and has created favourable conditions for trade in intermediate goods within the region, with more than 30% of intermediate inputs sourced regionally. Nevertheless, competitive pressures are likely to grow as other developing countries increase their GVC participation, strengthening the case for ongoing reform.

There is further scope for bigger ASEAN economies to offshore parts of their production processes to their CLMV neighbours (Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam) and therefore "upgrade" within the value chain. However, such ambitious plans will need to be supported by appropriate policies, some of which are already contained in the ASEAN Economic Community (AEC) regional integration blueprint.

In particular, the elimination of intra-regional tariff barriers to trade and reduction of the MFN tariff (so as to avoid costly trade diversion) will support greater trade in imported intermediates. Likewise, greater liberalisation of services and investment via finalisation of the internal market would support efforts aimed at strengthening levels of integration.

The continued push for the finalisation of an ASEAN single market is also likely to help reduce the current gaps between ASEAN members in areas such as logistics performance, infrastructure, and quality of institutions. For countries such as Thailand, Indonesia and the Philippines domestic reforms in these areas would complement regional efforts.

South Asia

South Asia has low levels of intra-regional trade in intermediate inputs and is less dependent on coordinated regional partnerships and more reliant on access to inexpensive labour. This has supported the establishment of export-oriented industries such as textiles.

There is scope for countries in the region to further integrate regionally, including by fully eliminating intra-regional tariffs. These efforts could be complemented by MFN tariff liberalisation – South Asia continues to have high tariffs relative to other regions – and further liberalisation of services and investment regimes.

Improved coordination on regional trade facilitation initiatives for both physical and institutional infrastructure would also help. The OECD Trade Facilitation Indicators suggest that a key common weakness in Bangladesh, India, Nepal and Pakistan is the need to further streamline border procedures. South Asia could potentially reference the *Master Plan on ASEAN Connectivity* as a guiding framework to identify ways to increase logistics performance to the levels seen in Southeast Asia. This may help countries such as Nepal and Afghanistan, both landlocked and small economies, to exploit benefits from economies of scale and tap into regional value chains for their development. These efforts could also benefit India and the regions located close to these countries, insofar as they too may achieve greater market access.

Where domestic reform is concerned, several issues are important to note. The quality of infrastructure in South Asia is below world average in all countries except Sri Lanka, and this is likely to hamper integration not just domestically (connecting more remote regions), but also regionally and internationally. Here, investment in the maintenance and upgrading of existing and new infrastructure could provide an important boost to economic activity, particularly in countries such as Nepal, Bangladesh and Pakistan, where the quality is lowest. Beyond connectivity issues, the South Asia region faces additional challenges, including energy shortages that may impede the smooth functioning of GVCs. Electricity supply in the region is amongst the lowest of all regions.

Efforts to this end could help attract foreign investment, and therefore new technologies complementary to the labour abundance of the South Asian countries. In many respects, and particularly in terms of labour endowments, South Asian countries resemble many Southeast Asian countries, and therefore should be able to attract important GVC activity, which may help further regional development objectives.

Africa

While Africa still accounts for a very low share of world trade, the region has exhibited remarkable dynamism over the last decade, with trade rising faster than in most developed and developing economies. Nevertheless, there is as yet little sign of a "factory Africa" emerging along the lines of that seen with "factory Asia", with intra-regional exports accounting for approximately 10% of total exports. There is instead a greater propensity to trade with extra-regional partners. This is mainly due to Africa's rich endowments in natural resources, weak industrial production, and a relatively low-income base.

Many African countries face important challenges in terms of scale and productivity that are necessary to integrate successfully into GVCs. These are exacerbated by fundamental problems related to the quality of infrastructure and institutions. International firms often put forward the absence of corruption, political stability, the credibility of reforms, and policy initiatives as pre-conditions to doing business, which taken together, lower the risk faced by suppliers, investors and exporters.

Additional policy measures could be pursued in parallel, such as increasing the scope and depth of regional integration. Experience elsewhere in terms of levels of diversity of exports and the sustainability over time of export flows in intermediates suggests that regional integration may be a way of learning by doing and preparing for competition in global markets (while remaining open to more global trade to avoid trade diversion and reduce the costs of sourcing competitive intermediates).

The different regional economic communities in Africa have made progress in reducing barriers to trade, although intra-regional trade still suffers from relatively high tariffs, incompatibility of rules of origin across the different trading blocks, and implementation issues. Benefits are most likely to emerge from trade facilitation efforts, both in terms of soft and hard infrastructure since the African regions have the highest trade costs of all regions (both in terms of intra- and extra-regional trade).

What's next?

The OECD is currently extending this work to cover Latin America, and deepening the analysis on Southeast Asia, where the work will also look more specifically at the participation of SMEs in GVCs. Results of this work are expected to be available in early 2016.

Further Reading

Read the full paper on participation of developing countries in global value chains, available on our website at http://oe.cd/trade-papers. A shorter summary paper can be found at http://oe.cd/gvc-summary.

» The Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-Related Policies (OECD Trade Policy Paper No. 179, 2015)

More Information

3. Global Value Chains
   http://oe.cd/gvc
4. Trade Facilitation Indicators
   http://oe.cd/tfi
1. OECD Trade Policy Papers
   http://oe.cd/trade-papers
2. Trade and Agriculture Directorate
   http://oe.cd/tad