



Trade Hot Topics

Modes of Service Delivery and Global Value Chain Participation

Patrick Low*

Background

There is growing recognition of the vital role played by services in economic growth and development, both as separate sources of value and in conjunction with production, trade and consumption linked to manufacturing and commodities. Trade and foreign direct investment enables economies to specialize in a variety of services activities on the basis of comparative advantage.

This issue of *Commonwealth Trade Hot Topics* delves more deeply into the key role of services in economic activity, particularly in the context of global value chains (GVCs). A solid literature already exists on the GVC phenomenon, its origins, its trajectory, and its implications for development and growth in developing economies. Less is known, however, about how services fit into the picture and therefore what needs to be done on the policy front. This is important to ensure that they fulfil their potential to support the participation of developing countries in GVCs.

One key element of services trade is the creation of opportunities to upgrade and add high-quality value in upstream and downstream segments of value chains. This paper first outlines the key features of GVCs that have increased the significance of services trade over time. This is followed by a discussion of data challenges that are particularly acute in the services field. Because alternative

modes of service delivery shape the nature of engagement of suppliers in GVCs and their scope for upgrading, this paper closely examines these aspects of participation. Finally, a number of conclusions on services-related opportunities are outlined with a view to promoting domestic value addition and upgrading.

Servicification

The intensified reliance on services observed in GVCs – from the conception of production to final consumption – has increased services' share of GDP. The word 'servicification' has been in vogue since around 2010, following ground-breaking work on the role of services in manufacturing by the Swedish Board of Trade (Kommerskollegium, 2010). This term aims to capture the intensified use of services that has followed the fragmentation of production, both domestically and internationally. While it was coined in relation to the greater use of services linked to manufacturing, it can also be applied to value chains that comprise services as their final output.

As specialisation in international production has intensified, there has been a marked tendency for less and less of the production process to be performed in-house. Reliance on external suppliers has spiralled, whether they are offshore or domestic producers, and whether they are part of conglomerates or fully independent third-party suppliers. This fragmentation of production has

* The author is currently a Visiting Professor in the Faculty of Business and Economics, University of Hong Kong, and formerly Chief Economist at the Secretariat of the World Trade Organization from 1997 to 2013. The views expressed in paper are those of the author and do not necessarily reflect those of the Commonwealth Secretariat. This output forms part of a larger programme of work ongoing within the Secretariat on Global Value Chains, Small States and Cost/Capability considerations. We are grateful to the external peer reviewer for their constructive comments on initial drafts.

boosted demand for services of all kinds, at all stages of production processes.

Demand for services in production and consumption-related services is a mixed bag. Some are high-tech, high value-added activities, such as design, plant and equipment repairs, advertising, marketing and selling. Others add less value, such as cleaning services in production facilities and packaging, though can greatly expand formal employment opportunities.

The explosion of demand for services on the supply side has been accompanied by increased demand for services in the consumption basket – a natural accompaniment to income growth. Increased service demand linked to GVC-type production and growing incomes has created new opportunities for developing countries to take part in value chains and, perhaps, upgrade their value contribution.

An important caveat here, however, is that a number of demand side services relating to such functions as advertising, marketing and retailing may in some cases be location-specific, so the opportunity to add value locally and upgrade will depend on where the market is situated. A second source of possible concern is that added value provided by local suppliers is limited to the low-skill, low-value end of production. This could happen either because local service providers are prevented from upgrading their offerings, or are incapable of doing so. These issues are set out in the following sub-sections.

The data challenge

The intangibility of services and their increasing customisation have resulted in more scarce and less reliable data on services in production and trade. This has contributed to a dearth of research, less careful policy-making, as well as a tendency to take the contribution of services for granted without enough concern for the risks of ignoring them.

The measurement of trade in the same way as GDP, for example, has only recently become feasible, moving away from the uncomfortable juxtaposition of gross numbers for trade and value-added estimates of GDP. A statistical shift, powered by advances in computing power and major data management efforts, has allowed value-added estimates of trade to transform our appreciation of the contribution made to total trade by services. It transpires that the real contribution of services is far higher when their value is identified separately from the goods in which they are embodied. We

used to report services' share as less than 25 percent of exports, while the true value is around 50 percent – a figure much closer to what we already knew to be services' content of GDP.

In separating out the net import content of recorded exports, it is also possible to identify the true domestic sources of value in exports. As a result, bilateral trade balances look markedly different; the technology content of trade is revealed more accurately; finally, the true degree of global interdependence through trade becomes apparent.

Modes of services delivery

When scholars and government officials began to think of building an international system of rules for services trade in the 1980s, they referred to the model adopted decades earlier by the General Agreement on Tariff and Trade (GATT). The very nature of services, however, made it necessary to build something a little different. This can be seen in the adoption of four modes of delivery under the General Agreement on Trade in Services (GATS).

A range of services can only be produced and consumed simultaneously. This implies the need for physical proximity (with a haircut being one well-known example). Other services, such as live entertainment, may not require physical proximity but still require simultaneous production and consumption. The need for physical proximity and simultaneous production and consumption have been lessened by modern digitised technologies, making services more storable and easier to produce and consume at a distance. The GATS is structured to cover these eventualities.

The GATS structure of four alternative modes of delivery also skirts the challenge of providing a definition of services by identifying them in terms of transactions.

- Mode 1 is cross-border trade in services, and is similar to the way goods are normally traded. Most Mode 1 transactions are assumed to be digital in nature.
- Mode 2 is consumption abroad, covering such services as tourism and attendance at foreign educational or medical establishments. In terms of a trade transaction, consumption abroad means that the receiving country is the exporter and the country from which the consumer originates is the importer. Here, the importing country is agreeing not to block

the displacement of its residents to consume somewhere else: in essence, a commitment to refrain from restrictions on imports.

- Mode 3 covers business establishment (in other words, investment).
- Mode 4 covers the temporary movement of people, referred to in the Agreement as 'natural persons'. These are people who move to another country to work as service suppliers.

It has been argued that the coverage of these four modes is incomplete, given that services incorporated into the export of goods are not identified separately or recorded as services trade. A case has been made to incorporate a new 'Mode 5' into services agreements to cover services trade that would not otherwise be identified properly because it is currently embedded in goods trade (Cernat and Kutlina-Dimitrova, 2014). Leaving aside the practical challenges of identifying such trade, the argument is flawed because services imports incorporated in goods or in other services are effectively Mode 1 transactions. If these are counted, the assumption that most Mode 1 transactions are digital no longer holds.

What does the GATS structure imply for vertical production arrangements spread across multiple jurisdictions, as is the case for many types of GVC? Regarding, Mode 2, this becomes less important, as it is about the rights of consumers to cross frontiers. In the case of Mode 1, when services are identified and sold separately, the terms of market access can usually be identified without much difficulty. These are often intermediate services, such as telecommunications, transport and financial services. It should be borne in mind, however, that if such services can either be supplied cross-border (Mode 1) or through commercial presence (Mode 3), the question of 'modal neutrality' becomes important.

In other words, governments may design policies that make access easier or less costly through one mode rather than another; this means they are not necessarily allowing a market-neutral option to suppliers. Therefore, with respect to Mode 1 services (as well as the Mode 5 notion) it is the goods regime that needs to be looked at to determine how far GVCs are affected by policies that impact on services.

Policy has the greatest impact via Modes 3 and 4. While data are not always readily available, evidence from surveys of firms suggests that service suppliers often find it harder to establish a

commercial presence than enterprises supplying goods. This means that either services are supplied less competitively or conveniently via Mode 1, rather than Mode 3, or GVC operators must rely on less competitive domestic suppliers. From a long-term development perspective, a government may want to make its domestic suppliers more competitive. However, in the short-term, Mode 3-type investment barriers can hamper wider opportunities to participate in GVCs.

Relatively little use has been made of the GATS as a commitment mechanism under Mode 4. There are virtually no examples of Mode 4 commitments involving unskilled workers, and only a limited number for professional personnel. Mode 4 covers only temporary presence and takes care to avoid touching on immigration policy or the right of abode.

From a developmental perspective, Mode 4 trade is useful to impart skills and as a source of foreign exchange via remittances for the country supplying the personnel. But when a temporary presence becomes more permanent, there is a potential national trade-off between the remittances sent home and the impact of a brain drain. Some developing countries have strong interests in promoting higher levels of commitment under Mode 4 among their trading partners. In terms of their own commitments, developing countries seeking enhanced GVC participation and the learning to be gained from skilled foreign personnel may find it worthwhile to facilitate foreign access for skilled labour under Mode 4.

To sum up, it is useful to consider what a neutral services regime would look like in terms of the modes of supply when exploring services trade regimes and their potential contribution to GVCs in ways that promote development and upgrading. This would provide a benchmark for consideration of the developmental implications of any departures from modal neutrality. Some departures, perhaps temporary, may enhance GVC participation and upgrading opportunities. Others that linger and that serve less development-oriented purposes may frustrate GVC participation by reducing the attraction of a particular location.

The GATS modes, as well as preferential trade agreements that cover services, may provide less effective support for GVC participation that enhances development when there is a gap between legal commitments and actual policies. This increases policy uncertainty and can result in lost opportunities.

Global Value Chains

The recent explosion of GVCs has altered the way we think of trade. The fragmentation of production, as well as related processes, among different countries has increased opportunities for specialisation and growth through trade. The growth of modern industry is no longer considered a process which entails complete production processes to take place in one country. The growth of production sharing offers many more opportunities for outsourced suppliers to link to GVCs. This integration process fosters specialisation and can pave the way for greater competitiveness. Over time, outsourced suppliers can become lead firms in their own right.

The services aspect of GVC operations is arguably even more important for emerging and developing economies. This is because small and medium-sized enterprises (SMEs) are a significant part of the production base and are, in most cases, service providers. Compared with much of manufacturing, entry costs (physical capital requirements) tend to be lower for SME service providers; economies of scale are rarely part of the equation. The question is how successful SME service providers can be in securing their participation with GVCs.

The geographical configuration of some GVCs (and the way in which this configuration has changed over time) is influenced by the markets in which they operate. It is useful here to distinguish different kinds of GVCs. Back in the 1980s, for example, buyer-driven chains – value chains producing mass-consumption consumer goods, such as textiles and clothing – tended to be controlled and owned in the West, while components and parts tended to be produced both in the West and, to some extent, the East. End-of-line assembly would take place in Eastern economies with low labour costs. Since the 1980s, however, this final stage has tended to shift to countries with lower wages as incomes have risen in countries such as China. This has opened up new opportunities for lower-income developing and least-developed countries.

These shifting patterns are less obvious in the case of GVCs built on agricultural commodities and natural resources: their starting point is determined by the location of the resource; end markets for output are more numerous. For developing countries hosting these kinds of GVCs, the challenge is to acquire a growing share of added value between the raw material production

or extraction stage and final consumption. Here, services can be a key factor. However, in addition to the domestic challenges of creating propitious conditions to foster this process, a tendency for importing countries to structure tariffs in an escalating pattern based on the degree of value-added embodied in the imports in question can greatly complicate such efforts.

For producer-driven value chains, such as those making capital goods where sunk costs cannot be recovered and the production process is complex, the location of a large share of the production process is likely to be less footloose and located in higher income economies. If the output is bulky and involves high transport costs, chosen locations may be nearer end markets.

Understanding the dynamics behind decisions on the configuration, location and operation of GVCs, as well as what might influence and shape these over time, matters for the identification of new opportunities to participate in international production arrangements. A GVC-centred analytical approach emphasises the interdependency of imports and exports. It also sheds light on the opportunities to participate in internationally fractured production structures and the range of factors that influence the choice of location.

Services in GVCs

Fragmentation and international specialisation have not only raised the share of services in economic activity, they have also emphasised the integrated nature of goods and services in production processes. The involvement of services in GVCs is not always directly comparable to that of goods: it all depends on the function that particular services perform in GVCs.

Services merit attention because they are multifunctional. First, they play an intermediation role. They become part of the glue that holds the constituent parts of a value chain together. The services involved here include transport, communications, financial services, management, accounting, information and communication technologies, and advertising. Second, they play a coordination role, linked to some 'producer services', such as logistics. Third, they may be incorporated more directly into goods, such as packaging and labelling, where the services concerned change the presentation of the product but not necessarily its physical characteristics.

Another reason to focus on services is because the location where they are provided is not always a matter of free choice. The post-production downstream segments of GVCs, such as branding, marketing and distribution, are often specific to the consumption location. As the consumption destination of GVCs conforms to reconfigured sources of demand, opportunities emerge for specialisation and increased output across a whole range of services, beyond those linked to traditionally to production, opening up new space for local service suppliers to link into GVCs. These opportunities may also arise over time in the upstream, pre-manufacturing segments of GVCs. For example, as large markets in new locations tend to require different products to cater for local conditions and tastes, giving rise to localised R&D and other aspects of production.

Finally, linkages between trade and investment are particularly important for services provision because of the need for physical proximity for the supply of a range of services. Even when this is not a technical requirement, as it is in the case of distribution services for goods, it may reflect a preference related to business relationships between producers and consumers.

Services and outsourcing

Recent firm-based research carried out mostly in Asia by the author and colleagues on the role of services in GVCs points to a significant degree of outsourcing (Low and Pasadilla, 2016). Because the research relied on case studies rigorous statistical analysis was not possible, hence the findings tend to be hypotheses that deserve further investigation, rather than firm generalisable conclusions.

The research undertaken produced 38 case studies across a variety of goods and services sectors. These were chosen on account of access to information considerations. Comparability among the case studies was further complicated by the practical need, in a joined-up world, to define the GVC under consideration in terms of where it begins and ends. These cut-offs were determined by the extent of a lead firm's involvement in the GVC concerned. For reasons of tractability, only first-tier outsourced inputs were considered. That is, only the direct services inputs contracted externally; not those used by the first-tier suppliers.

A surprising number of services were required for most of the GVCs examined. The smallest number was 26 and the largest was 80. These were

defined and identified according the UN Central Product Classification (Revision 2). These services ranged from the simplest of tasks to the most sophisticated and knowledge-intensive tasks.

Perhaps even more surprising still was the degree to which services were outsourced. Taking all 38 firms in the sample, an average of 63 per cent of all service inputs were outsourced fully or partially (38 per cent and 25 per cent respectively). This left only 37 per cent provided fully in-house. Many of the outsourced inputs were procured from local suppliers, suggestive of significant opportunities to link into GVCs through services provision.

Formal models of firms' outsourcing decisions tend to attribute the choice to cost and risk factors (Costinot et al., 2013; Milberg and Winkler, 2013). The advantage of more granulated case study analysis is that it offers more detailed explanations of why firms do or do not outsource. This, in turn, offers more scope for understanding what policies are likely to maximise domestic opportunities for GVC involvement as well as for upgrading.

The academic literature around the boundaries of a firm – and what gives rise to the establishment of a firm in the first place – is useful in systematising the analysis of outsourcing (Slater, 2006). This literature points to a variety of factors at work. These range from considerations regarding transactions costs (arising from information and coordination problems) to various forms of market and bargaining power (often emanating from property rights). Finally, considerations associated with principal-agent problems, hurdles to knowledge transfer, as well as issues associated with monitoring and reputation can all matter. A parallel literature from business analysis focuses on what is referred to as a 'make or buy' decision. Some of the reasons for making "in-house" include reputation and monitoring costs, coordination costs (timing, sequencing and technical specifications), information asymmetries, proprietary information, as well as liability considerations (including policy risk). Reasons for buying include economies of scale and scope, learning economies and network effects, including external economies of scale.

Upgrading and the role of policy

A growing literature has emerged in recent years on upgrading in GVCs. The term refers to the trade and developmental aspirations associated with higher value participation in GVCs (Staritz et al., 2011; Gereffi et al., 2001). The analysis of upgrading is based on the proposition that even if GVC host

economies are not as well positioned as others to influence some outcomes, they can maximise other aspects of economic empowerment. This includes consideration of policies that allow them greater scope for bargaining on aspects of value chain governance over time.

A useful and widely referred to taxonomy for upgrading activity in GVCs distinguishes among the following categories (Humprey and Schmitz, 2000).

- process upgrading (improving a production process)
- product upgrading (improving and end product)
- functional upgrading (undertaking a new activity on a value chain)
- inter-sectoral upgrading (changing the area of activity or industry) and
- channel upgrading (expanding participation to different markets – that is expansion along the extensive margin).

The challenge is how to benefit from these different upgrading opportunities, some of which remain under-researched, even in the case-study literature. When it comes to services, one immediate question is how the different functions of the services that enter GVCs can contribute to upgrading. This is particularly important because services are an increasingly dominant source of value, are multifunctional, and are capable of contributing to innovation, as well as adaptation.

Effective action requires recognition of the intimate linkages across goods, services, trade and investment that enable the effective operation of GVCs. To ensure that services can make the most effective contribution possible, the policy environment should not create wedges between these different elements of production and consumption processes. It follows that some of the policy disadvantages imposed on services industries cited in our case-study research should be addressed.

In particular, the concentration of cost-augmenting restrictions in factor markets appears to present problems. These include: restrictions on foreign and (sometimes) local investors, and labour market constraints related to visas, work permits, professional qualifications, certification, practising licences and employment-contract restrictions. Interviewees also listed other avoidable policy costs, such as local content requirements (use

of local suppliers with skill deficits at high cost), conformity assessment procedures for standards, overlapping regulatory jurisdictions, and issues around intellectual property protection.

Another basic factor cited by virtually all interviewees related to policy stability and predictability. Frequent and often unannounced policy changes, inconsistencies among jurisdictions within the same economy, and the misuse of discretionary authority were often cited as negative factors in outsourcing decisions.

Addressing some of these issues, and doing so in a way that is consistent with national development policies, could enhance opportunities for GVC-related activity in the domestic economy through a more enabling environment. Other actions that enhance domestic capabilities across-the-board relate to the quality of physical infrastructure, the nurture of human capital and the quality of governance.

In short, decisions about location do not depend only on market-driven price and cost advantages. Crucially, they also rely on policies. Operating costs are influenced heavily by the regulatory environment including, for example, whether government-administered regulation and government-supplied services are provided in ways that avoid unnecessary costs. Another part of the policy landscape is enabling support. The quest for greater and higher value participation in GVCs can be assisted by multiple mechanisms; these range from subsidies to measures to address appropriation problems, coordination externalities and information deficiencies. Maintaining such a policy framework, however, requires well-honed governance capabilities, full transparency, in addition to continuous monitoring and accountability.

Concluding remarks

Seven main conclusions emerge from this discussion on the critical importance of services for economic growth and development.

1. As services have become more important in production, consumption and trade, so too have the developmental costs of the failure to factor services into economic and policy analysis.
2. The national and international fragmentation of production has created many new opportunities to embed services inputs in GVCs across a range of activities of varying levels of value content and technological sophistication.

3. Despite the challenges, the use of improved data on services – particularly in relation to services' value attributed incorrectly to goods production and trade – is essential to an understanding of services-related opportunities to add domestic value and upgrade within GVCs.
4. The assignation of policies individually to modes of supply reduces policy neutrality on the choices made about how to supply services. This can serve development objectives in certain cases, but can also undermine them.
5. Policy impediments that affect services-related participation in GVCs tend to crop up more often in relation to investment (Mode 3) and the movement of people (Mode 4), with the potential for negative effects on GVC participation and upgrading.
6. A tendency to define regulatory structures which affect goods, services and investment in separate policy compartments interferes with the more seamless nature of interaction among these aspects of GVC activity. Rules should be defined and applied with an eye to replicating this interconnectedness, rather than being formulated in silos.

Both the opportunities to participate in GVCs and to upgrade participation over time depend on the policy environment. Businesses rely on predictability, consistency and transparency. An environment conducive to GVC participation and upgrading opportunities depends, therefore, on approaches to policy that focus on facilitation and that minimise deadweight costs. Another element of successful policy may involve the temporary use of support measures such as subsidies. Success here depends crucially on governance capabilities, including consideration of "good governance" as well as transparency and accountability.

References

- Cernat, Lucian and Zornitsa Kutlina-Dimitrova 2014. "Thinking in a Box: A 'Mode 5? Approach to Service Trade", Chief Economist Note, Trade Directorate European Commission http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152237.pdf
- Constinot, Arnaud, Jonathan Vogel and Su Wang 2013. "An Elementary Theory of Global Supply Chains" *The Review of Economic Studies*, 80, 109-144
- Gereffi, Gary, John Humphrey, Raphael Kaplinsky and Timothy J. Sturgeon. 2001. "Introduction: Globalisation, Value Chains and Development". *IDS Bulletin* 32.3, University of Sussex
- Humphrey, John and Hubert Schmitz. 2000, *Governance and Upgrading: Linking Cluster Analysis and Global Value Chain Research*, IDS Working Paper 120, University of Sussex
- Kommerskollegium 2010. *Servicification of Swedish Manufacturing*, Stockholm. Low, Patrick and Gloria Pasadilla (Eds-). 2016, *Services in Global Value Chains: Manufacturing-Related Services*. World Scientific
- Milberg, William and Deborah Winkler. 2013. *Outsourcing Economics: Global Value Chains in Capitalist Development*, Cambridge University Press
- Slater, Martin. 2006. "The Boundary of the Firm" in Andrew Campbell and David O. Faulkner, *The Oxford Handbook of Strategy: A strategy Overview and Competitive Strategy*, Oxford University Press
- Staritz, Cornelia, Gary Gereffi and Olivier Cattaneo (Guest Editors) 2011. "Special Issue on Shifting End Markets and Upgrading Prospects in Global Value Chains" in *International Journal of Technological Learning, Innovation and Development*, Vol. 4, Nos 1/2/3

Previous Ten Issues of the Commonwealth Trade Hot Topics Series

Issue 134: Graduation from LDC Status: Potential Implications for the Pacific Fisheries Sector

Issue 133: Trade Implications of Brexit for Commonwealth Developing Countries

Issue 132: Global Trade Slowdown, Brexit and SDGs: Issues and Way Forward

Issue 131: The Changing Global Trade Architecture: Implications for Sub-Saharan Africa's Development?

Issue 130: Trade Implications of Climate Policy after the Paris Outcome

Issue 129: The Paris Climate Agreement: What Implications for Trade?

Issue 128: Trade and the SDGs: Making 'Means of Implementation' a Reality

Issue 127: AGOA-IV and the Trade Prospects of Sub-Saharan Africa

Issue 126: International Trade in the Health Sector: Forgotten Frontier?

Issue 125: Participation of Small Economies in Global Value Chains: Evidence and Policy Issues



Trade Hot Topics

ISSN: 2071-8527 (print) ISSN: 2071-9914 (online)

Commonwealth Trade Hot Topics is a peer-reviewed publication which provides concise and informative analyses on trade and related issues, prepared both by Commonwealth Secretariat and international experts.

Series editor: Dr Mohammad A Razzaque

Produced by Trade Division of the Commonwealth Secretariat

For further information or to contribute to the Series, please email m.razzaque@commonwealth.int