Value Chains and Connectivity in Sub-Saharan Africa

Draft Paper

The Commonwealth

Value Chains and Connectivity in Sub-Saharan Africa

Draft Policy Brief

Ben Shepherd, Principal.[1]

The Commonwealth

Contents

# 1. Introduction: Trade and Trade Costs in Sub-Saharan Africa

Sub-Saharan Africa[2] (SSA) has, with differing experiences across countries, generally found it challenging to integrate into the regional and global trading systems. Relative prices remain insulated from the changes that integration with world markets can bring; consumers and firms that use imported intermediate inputs are limited in the range of goods to which they have access at competitive prices. In addition, local exporters are held back, which in turn limits dynamism in the labour market that can create good jobs, and contribute to increases in domestic value added.

One metric that provides an overall indication of a country's degree of integration with world markets comes from the ESCAP-World Bank Trade Costs Database (Arvis et al., Forthcoming). The Database provides a comprehensive measure of bilateral trade costs. It incorporates all factors that drive a wedge between factory gate prices in the exporting country and consumer prices in the importing country. It therefore covers the full range of trade frictions, including tariff and non-tariff barriers, regulatory measures, standards, differences in cultural and legal institutions, and geographical and historical factors. Bilateral data can be aggregated into a single number per country by calculating "average" trade costs, in the sense of a constant value for trade costs that, if applied to all bilateral partners, would result in the same level of total trade as is actually observed in the data.

Results for SSA as defined in this note, along with the two major international markets of the UK (as a proxy for the EU) and the USA, are in Figure 1. The first point to note is trade costs in SSA are around twice as high as in the comparator markets, with the exception of South Africa, where they are around 1.5 times as high. The second important point comes from that comparison: although South Africa is geographically more distant from major markets than some other countries in the region, its trade costs are substantially lower. In other words, although geography and history are determinants of trade costs, they do not tell the full story. Policy must also play a role, both in terms of pure trade policy, and also the set of measures surrounding infrastructure development and utilization—particularly air and maritime transport, a subject that will be returned to later in this Policy Brief.

---

[2] This Policy Brief, prepared for the Commonwealth Secretariat, limits consideration to the following countries that are also Commonwealth member countries: Botswana, Cameroon, Ghana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Uganda, and Zambia.

Figure 1: Trade costs in agriculture and manufacturing, percent ad valorem equivalent, selected countries, latest available year (2012).
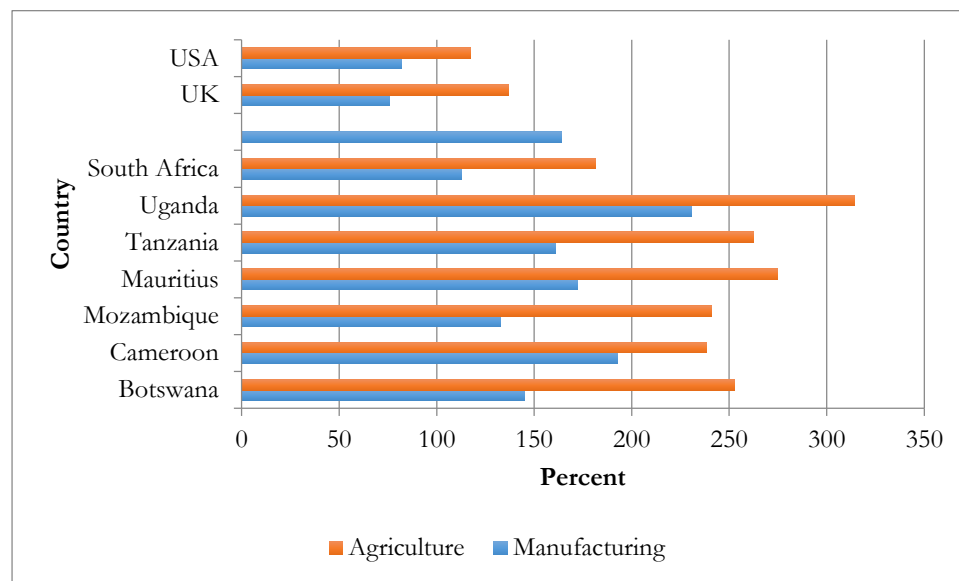
Note: Data are not available for the remaining Sub-Saharan African countries, as defined in this Policy Brief.

Another significant finding that emerges from Figure 1 is that trade costs in agriculture are higher than in manufacturing for all countries. This facet of the data is something that SSA has in common with the rest of the world (Arvis et al., Forthcoming). Policy is an important part of the reason why trade costs in agriculture are elevated compared with manufacturing: world markets for primary products, as well as processed goods, are subject to a range of tariff and non-tariff barriers, as well as domestic regulatory measures such as product standards and health requirements. Not all of these measures holding back agricultural trade are protectionist in intent, but the point remains that their effects can be serious, in particular for small developing economies like those in SSA, where only South Africa and Nigeria can be considered to be relatively large economies.

Aggregate numbers such as the ones in Figure 1 are important for giving general context to the observed pattern of trade in SSA. But there is also insight to be gained from looking at the underlying bilateral data. Using a broader definition of the region, which is nonetheless applicable in to this work, Arvis et al. (Forthcoming) produce a matrix of intra- and extra-regional trade costs, which is reproduced below for SSA.

Table 1: Trade costs matrix for SSA, manufacturing, percent ad valorem equivalent, 2012.

	Trade Costs with Sub-Saharan Africa
East Asia & Pacific	161%
Europe & Central Asia	238%
Latin America & Caribbean	232%
Middle East & North Africa	225%
South Asia	166%
Sub-Saharan Africa	120%

As is the case for all developing regions except South Asia, intra-regional trade costs in SSA are in all cases lower than trade costs with other regions. This finding suggests that some degree of regional integration has, on average, taken place, although experiences differ widely from one part of the continent to the other. Also, these figures are limited to manufacturing. Agricultural markets are typically highly segmented (Maur and Shepherd, 2015).

To provide further detail, Table 2 considers selected bilateral data for Tanzania, the country that has aggregate manufacturing trade costs closest to the SSA average under this Brief's definition. The impression of considerable intra-regional trade potential is confirmed by these data: manufacturing trade costs with Kenya and South Africa are low by global standards, which suggests that these markets—particularly the latter—can play an important role as sources of demand for Tanzanian exports. However, it is worth noting that trade costs with the UK and even more distant USA are sometimes lower than trade costs with regional partners. The overall picture that emerges is therefore one of promise for regional integration in SSA, but tamed by a recognition that conditions around the continent differ significantly, and often there are significant roadblocks in the way of greater intra-regional trade.

Table 2: Bilateral trade costs for Tanzania in manufacturing and agriculture, percent ad valorem equivalent, selected countries, 2010.

	Manufacturing	Agriculture
Botswana	243%	1148%
Cameroon	424%	NA
Ghana	283%	616%
Kenya	56%	147%
Malawi	133%	229%
Mauritius	254%	252%
Mozambique	137%	404%
Namibia	128%	386%
Rwanda	123%	238%
South Africa	78%	192%
Uganda	104%	242%
Zambia	NA%	204%
United States	226%	211%
United Kingdom	178%	343%

Note: Data are not available for the remaining SSA countries.

The sources of trade costs in SSA—looking beyond geography to consider policy and institutions—need to be understood so that appropriate actions can be taken to better integrate the regional economy, and develop a solid basis of intra-regional, as well as extra-regional, exchange. The remainder of this Policy Brief addresses the issues that arise in this context from the perspective of value chains, a business model that is well established in some parts of the world, but only now starting to develop in many smaller economies. The issue is one that has recently gained prominence in Africa, with the recognition that many economies in the region are in fact more involved in value chains than might have been expected based on prior beliefs (African Development Bank, 2014).

2. Value Chains as Networks of Trade in Value Added

A value chain is a set of economic activities needed to bring a product to market, from conceptualization and research and development, to manufacturing, to marketing and sales, to post-consumer recycling. Over the last two decades, some lead firms have internationalized to the point where global and regional value chains (GVCs), in which activities are split across multiple national territories, are now common in many parts of the world, at least in some sectors. Most concentrated in "factory Asia" as well as in developed Europe and the United States, the intensification of GVCs have transformed our understandings of global trade today. Recent work suggests that value chains may be more developed in Africa than was previously thought (African Development Bank, 2014).

Analytical and policy work is still catching up with this new reality, as it offers a number of challenges. On the one hand, it is important to develop measures of trade in value added, as

opposed to measuring trade on a gross shipments basis, so as to emphasize the activity of value addition that is core to the relationships among actors in value chains. Secondly, trade in tasks rather than final goods is becoming more pronounced in many parts of the world, but realities differ from region to region and from sector to sector, so it is important to reach a nuanced understanding of the way in which value chains operate internationally, as well as within specific country contexts.

Value chain development is at a relatively early stage in SSA compared with East and Southeast Asia in terms of developing the firm level linkages and relationships that characterize GVCs, in particular the forging of connections between large lead firms active in international markets and local suppliers of goods and services (tasks). However, there is some evidence of the development of agricultural value chains in some parts of the continent (e.g., West Africa, albeit primarily at a national level: Maur and Shepherd, 2015), as well as in textiles and clothing (e.g., East Africa: McKinsey, 2015).

Although value chains are better known in manufacturing sectors, there are many similarities with the organisation of the modern high-value agricultural export sector. The more recent GVC literature itself has evolved from world systems theory, with its historical antecedent including the Global Commodity Chain literature (Keane, 2014). Value chain analysis for an agricultural commodity would emphasize all of the steps required to get the product to market, from obtaining seeds and other inputs, through harvesting methods, post-harvest treatment and storage, processing at various stages into transformed agricultural goods, logistics and handling, transport, and distribution to the final consumer including via intermediaries or direct through retailers. In this context, intermediate inputs include services, such as transport, logistics, and distribution, as well as goods such as seeds, fertilizers, and packaging products used for food processing.

In textiles and clothing, the concept of a value chain again incorporates all steps needed to get a garment from the conceptual stage to acquisition by a consumer, and post-consumer stages. Activities involved include design, component manufacture (yarn, fabric, etc.), assembly of finished garments, transport to the market of the final consumer, marketing, and sales and distribution. Intermediate inputs in this case include textile products and related products (such as buttons and zippers), as well as transport, logistics, design and distribution services.

Traditional trade statistics reported on a gross shipments basis, do not net out intermediate input use. This situation is in contrast to the national accounts, where inputs are subtracted before calculating GDP and other aggregates. Recent developments in empirical international trade analysis have enabled researchers and international agencies to develop measures of the value added embodied in a country's exports, accounting for the fact that part of the gross shipments value is comprised of intermediate goods, some of which are imported. Accounting for these kinds of transactions is crucial in the GVC context: modern business models can be viewed as the coordination of value addition and the movement of intermediate inputs across national boundaries in the context of production of final goods and services.

This Policy Brief uses the Eora input-output matrices to calculate measures of value added in exports for SSA and two significant trading partners, the UK and the USA. Consideration is given to two sectors in particular: (raw, unprocessed) agriculture, and textiles and clothing.[3] These sectors are important in the value added exports of a number of SSA economies. Agriculture is a major source of employment in SSA, and a number of commodities, such as tropical products, horticultural goods, cut flowers, and others have achieved considerable success in export markets. Considering SSA excluding South Africa and Nigeria, agriculture was the largest contributor to value added in exports in 2012, while textiles and clothing was the third largest in 2000, behind (raw) agriculture and (processed) food and beverages. The two sectors were chosen to highlight the fact

---

[3] Eora treats textiles and clothing as a single aggregate sector. It is not possible to distinguish between the two subsectors. For many SSA countries, it is clothing that is most important in the immediate term, as it is relatively labour intensive; production of textiles is more capital intensive, and is most efficiently undertaken in economies with greater relative abundance of capital.

that value chains can be active in primary and secondary sectors, based on existing trade patterns observed in SSA.

Although the trade in value added statistics used here can be informative, they come with major caveats regarding data quality for SSA. Input-output tables are estimates based on national sources, along with assumptions made as to use of imported intermediates. Often, it is necessary to convert national sources to a standardized classification using a concordance, but doing so can introduce statistical noise. Finally, it is generally recognized that trade in value added statistics are most accurate at the aggregate level, and for large economies. Accuracy is more of an issue for small economies, which is the case here, and when the analysis is undertaken at the sectoral level. Nonetheless, the approach is potentially fruitful in terms of highlighting general tendencies in SSA value chains, and is useful to policymakers because of the novelty of the entire analysis.

To emphasize that value chains are networks of coordinated transactions rather than a linear series of point-to-point movements, Figures 2 and 3 represent the value added in exports data in network form for agriculture and textiles and clothing respectively, taking 2000 and 2012 as the base years. For each country, only its largest export flow among regional partners and the UK and USA is considered, in order to lay bare the most basic structure of the SSA value added trade network. Each country is represented as a box, and its largest trade flow is a line connecting it with the destination market. There is no unique graphical representation of data such as these, but the interpretation of the diagrams is that more central countries in the trading network tend to appear as central hubs in the diagram, while more peripheral countries appear as less well-connected spokes. The reason for only considering the largest export flow of each country is that from a graphical point of view, the diagrams become overly complex and difficult to interpret when trade flows with all partners are considered.

Together, the two figures highlight the key role played by the UK and USA as sources of demand for SSA's value added in both sectors. Both networks are quite stable over time, although in agriculture Mozambique moves from the UK-centric cluster to the USA-centric cluster, via a connection with South Africa. The data suggest that this particular country has developed stronger links with its large neighbour in agriculture, which in turn has led to an indirect linkage to the US market.

For agriculture, only two SSA countries have their largest export flows with another SSA country (South Africa). For textiles and clothing, the picture is somewhat different with large chains connecting African countries to the USA. In terms of sources of final demand, in agriculture the UK plays a relatively stronger role than the USA, perhaps due to in part to a restrictive sanitary and phyto-sanitary system in the latter for products like fruits and vegetables, which are of export interest to some SSA countries (Jouanjean et al., Forthcoming).

The network diagrams are suggestive of different dynamics at play in the two sectors. In agriculture, it appears that value chains are relatively short in an international sense, with countries moving their goods relatively directly to sources of final demand, most often the UK. By contrast, in textiles and clothing, there is a long chain connecting SSA countries to the USA, which is the primary source of final demand. This difference perhaps reflects the fact that textiles and clothing require intermediate inputs like fabric and yarn from various sources. The diagram is suggestive of an emerging "trading in tasks" structure in this sector, with countries specializing in different parts of the value chain, and moving their goods on to other countries for the performance of different tasks. The role of rules of origin—relatively liberal under the US African Growth and Opportunity Act—may have something to do with this emerging structure, and deserves further attention beyond the scope of this study.

Figure 2: Network representation of value added trade in agriculture in SSA, largest export flow only among the partners considered, 2000 (top) and 2012 (bottom).
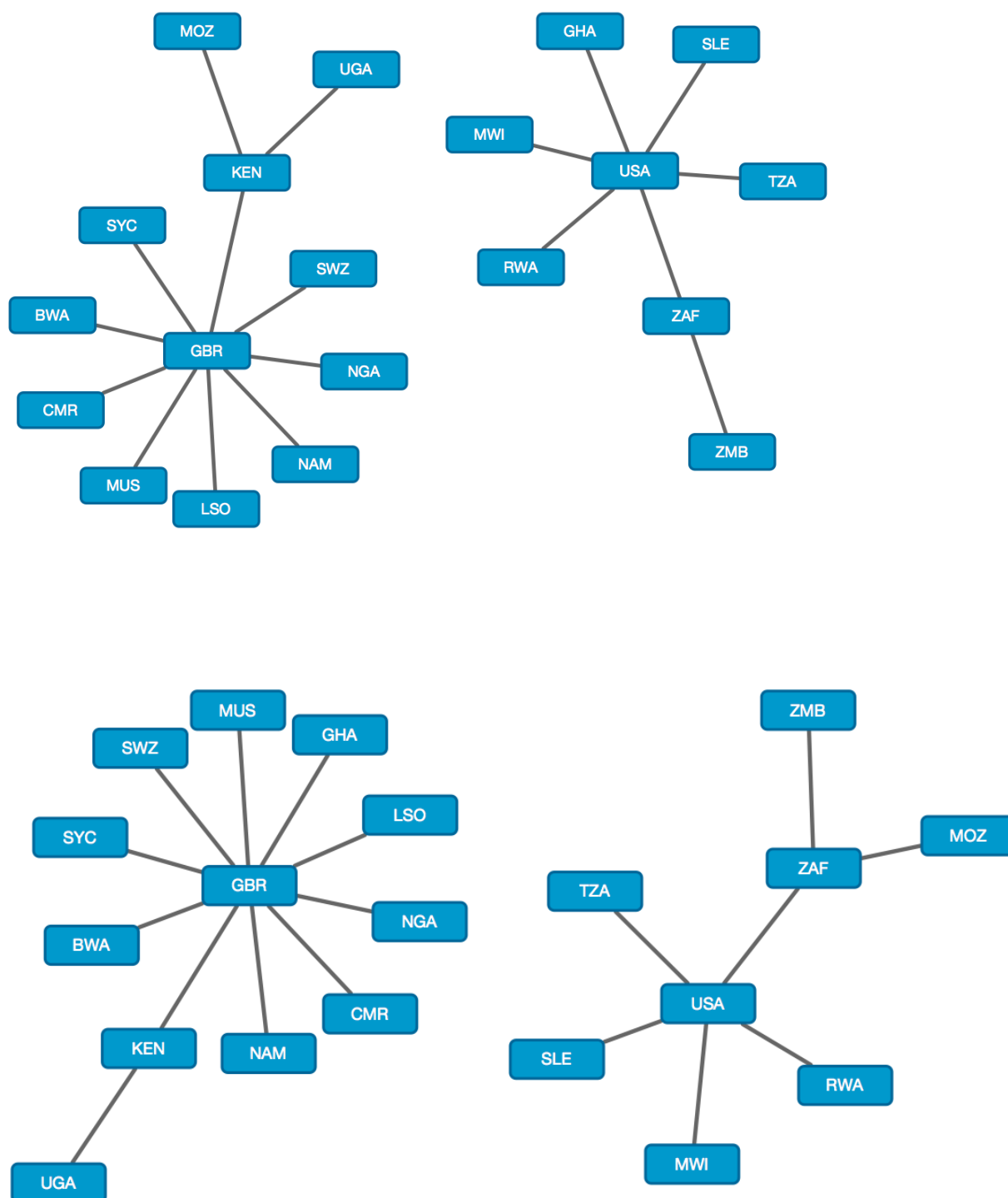
Note: Country codes are Botswana (BWA), Cameroon (CMR), Ghana (GHA), Kenya (KEN), Lesotho (LSO), Malawi (MWI), Mauritius (MUS), Mozambique (MOZ), Namibia (NAM), Nigeria (NGA), Rwanda (RWA), Seychelles (SYC), Sierra Leone (SLE), South Africa (ZAF), Swaziland (SWZ), Tanzania (TZA), Uganda (UGA), Zambia (ZMB), United Kingdom (GBR), and the United States (USA).

Figure 3: Network representation of value added trade in textiles and clothing in SSA, largest export flow only among the partners considered, 2000 (top) and 2012 (bottom).
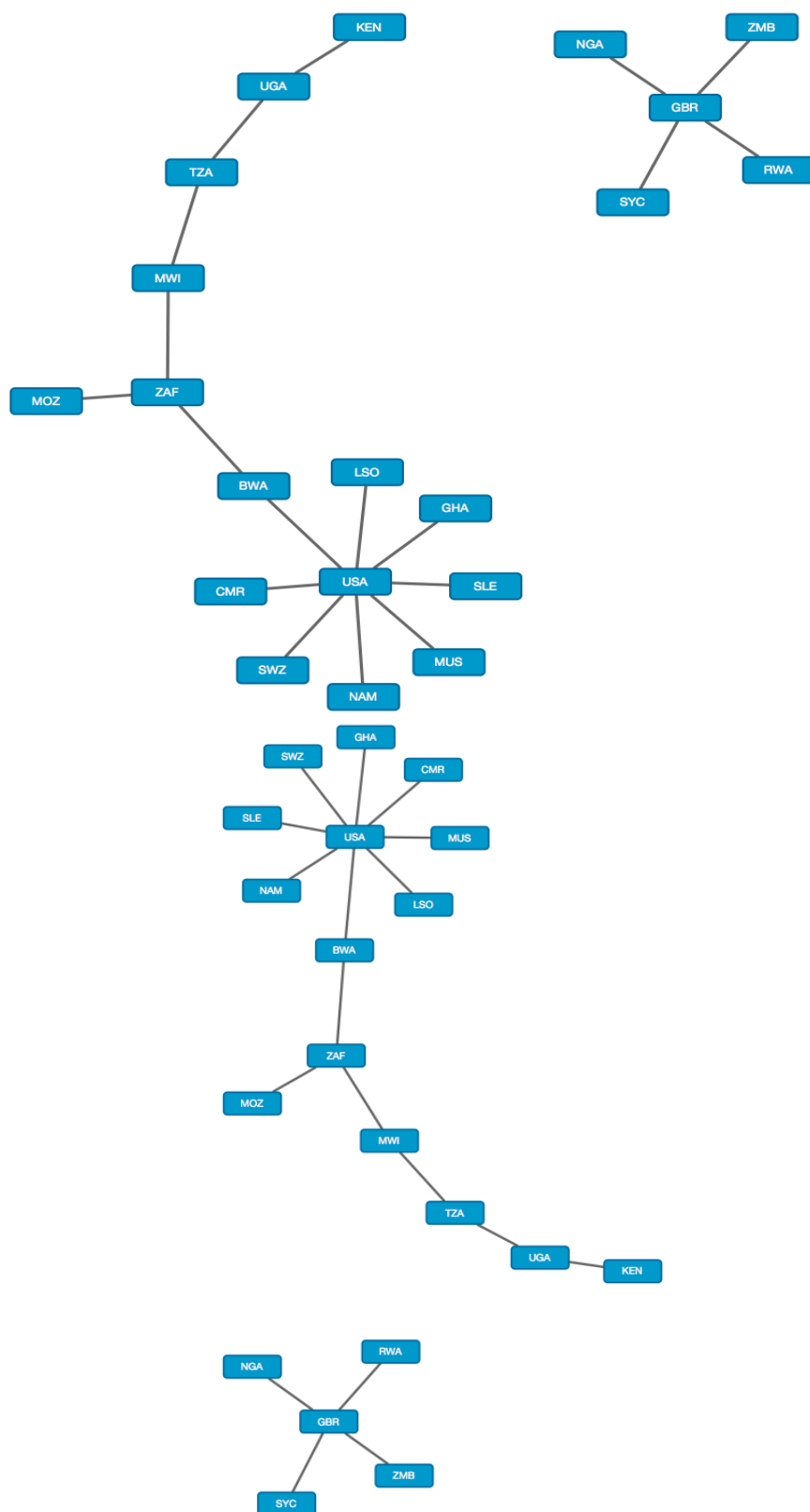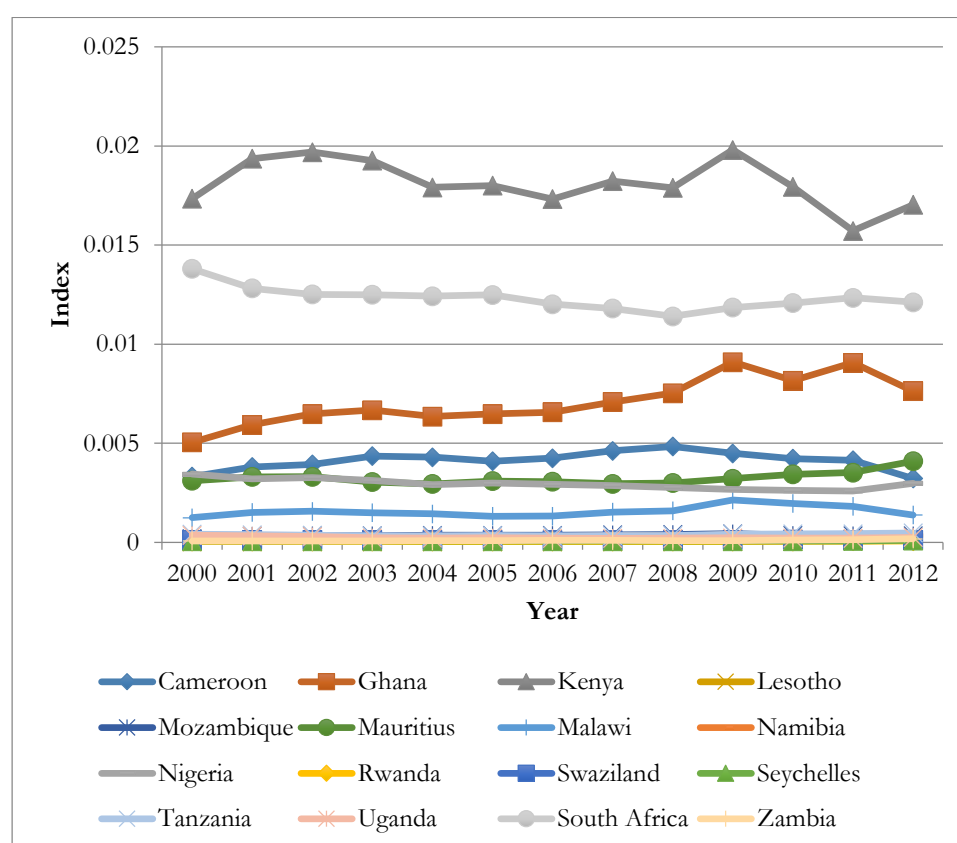
Note: Country codes are Botswana (BWA), Cameroon (CMR), Ghana (GHA), Kenya (KEN), Lesotho (LSO), Malawi (MWI), Mauritius (MUS), Mozambique (MOZ), Namibia (NAM), Nigeria (NGA), Rwanda (RWA), Seychelles (SYC), Sierra Leone (SLE), South Africa (ZAF), Swaziland (SWZ), Tanzania (TZA), Uganda (UGA), Zambia (ZMB), United Kingdom (GBR), and the United States (USA).

One way of measuring a country's ability to connect to value chains is to use the lens of centrality, a concept that is well defined in the network science literature (Shepherd and Archanskaia, 2014; Shepherd, Forthcoming). A country is more central to a network if it is strongly connected to other countries that are themselves relatively central. It is less central if it is connected only weakly to countries that are themselves relatively peripheral. Centrality is closely related to the concept of connectivity as it is operationalized within the networks of value added trade that are referred to as GVCs.

Figures 4 and 5 present value chain connectivity (centrality) scores for SSA countries over the 2000-2012 period for agriculture and textiles and clothing respectively. In global context, SSA countries have very low scores in both cases. The UK's connectivity score in 2012 was over 600% higher than that of the highest placed SSA country in agriculture, and over 800% higher for textiles and clothing. The USA's scores were even higher. Clearly, many SSA countries are extremely isolated from value chain activity, as indicated by their scores close to zero on the connectivity index. On the other hand, Kenya, South Africa, and Ghana have considerably higher scores in the case of agriculture—a point that sits well with the qualitative literature on agricultural value chains in the region: Kenya is often an example in point, with exports including horticultural goods and cut flowers. In textiles and clothing, scores are generally lower, with South Africa standing out as the leading performer, followed by Mauritius and Nigeria. This sector is one with considerable potential for SSA, but the connectivity analysis presented here suggests that there are significant barriers to expansion in some countries in the region.

Figure 4: Connectivity (centrality) in agriculture, selected countries, 2000-2012, index between zero and one.
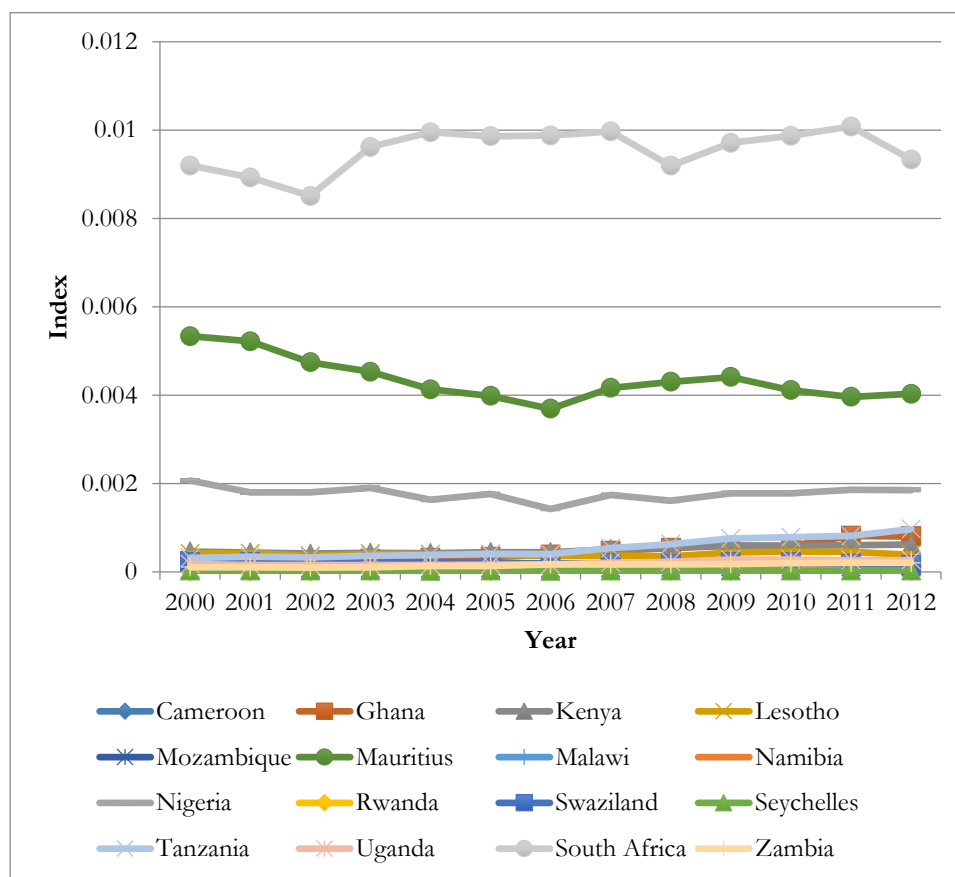
Note: The UK and USA are omitted from the figure because their scores are so much larger than those of the SSA countries that the latter become unreadable.

Note: The UK and USA are omitted from the figure because their scores are so much larger than those of the SSA countries that the latter become unreadable.

3. Connectivity and Value Chains

What are the drivers of the relative isolation of some SSA countries from GVCs in key sectors like agriculture and textiles and clothing? One factor is geography. However, its influence is mediated through the ability of countries to connect to global transport networks in the maritime shipping and airline sectors, which in turn is affected by market institutions and regulations. It is important to see what the connections are between these two areas, so that appropriate transport sector policies can be designed to promote GVC integration.

Figure 6 takes the case of maritime connectivity, using UNCTAD's Liner Shipping Connectivity Index, and highlighting the UK and USA in addition to the SSA countries, to provide a point of comparison with major markets. For reasons of space, only the case of textiles and clothing is considered, but little turns on this choice as the underlying dynamic is the same for agriculture. The upward sloping line of best fits shows that countries that are better connected to sea lanes are also better able to connect to GVCs in agriculture. SSA countries are in green, and the UK and USA are in orange. SSA countries are more or less clustered around the regression line, which suggests that their performance in GVC connectivity is approximately in line with what would be expected given their ability to connect to global shipping markets. However, there are some cases of SSA countries below the regression line, which suggests that they are not taking full advantage of the opportunities offered by their maritime connectivity. Clearly, work is needed to mobilize policy responses and private sector resources, covering transport but also going beyond, to help SSA better connect to international markets. Incremental improvements, in collaboration with development partners, may be possible. It is noteworthy that the UK and USA have much higher

scores on maritime connectivity, and also on value chain connectivity. The SSA countries are largely clustered in the bottom left corner of the diagram, which suggests relative isolation from transport and trade networks.

Figure 6: Liner shipping connectivity vs. value chain connectivity in agriculture, 2012, index numbers.
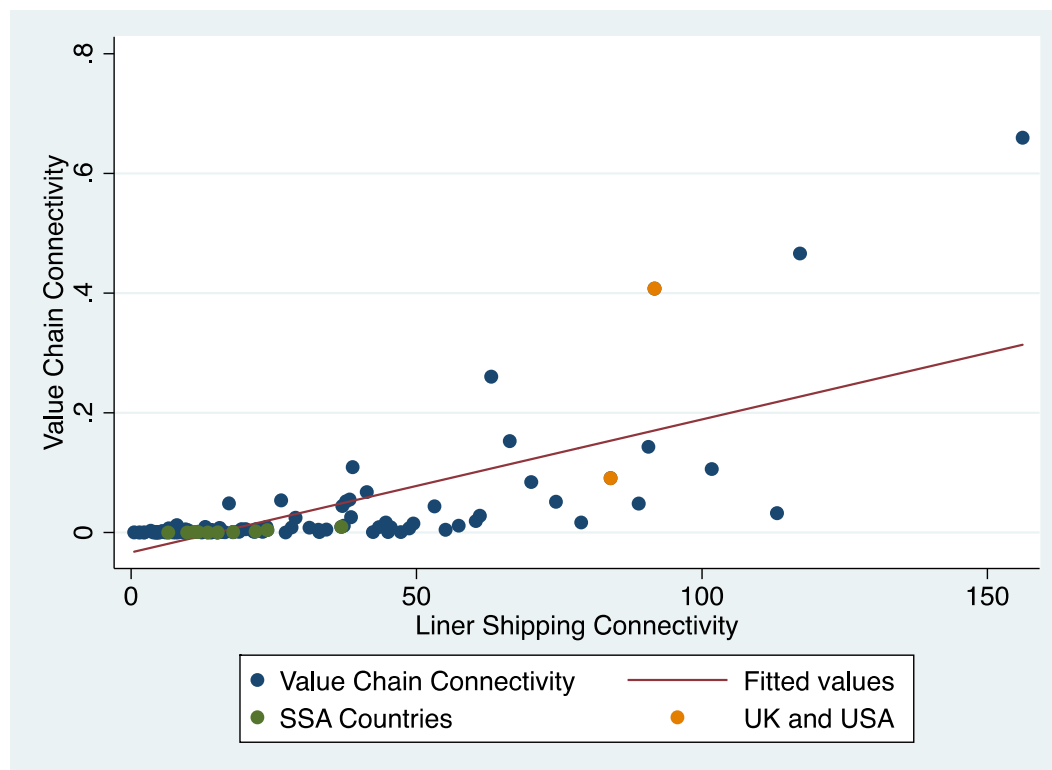
Note: The USA is the orange point to the right of the UK.

Figure 7 presents a similar analysis for air transport connectivity, using the World Bank's Air Connectivity Index. Again, the upward sloping line of best fit shows that countries that are better connected to global air transport markets are also better connected to GVCs in textiles and clothing. Again, the GVC connectivity performance of the SSA countries is essentially in line with what would be expected given their ability to connect to global air transport corridors, but it is important to note that they are again clustered in the bottom left corner of the figure, which suggests relative isolation from transport and trade networks. The UK and USA perform much more strongly on both metrics, as indeed would be expected given their development status. Nonetheless, policy is a key determinant of air transport connectivity, in particular the number and quality of Bilateral Air Services Agreements. Although geography can be an obstacle in some cases, there may be scope to mitigate its negative impacts by developing appropriate policy and private sector responses in the air transport sector.

Figure 7: Air transport connectivity vs. value chain connectivity in agriculture, 2012, index numbers.
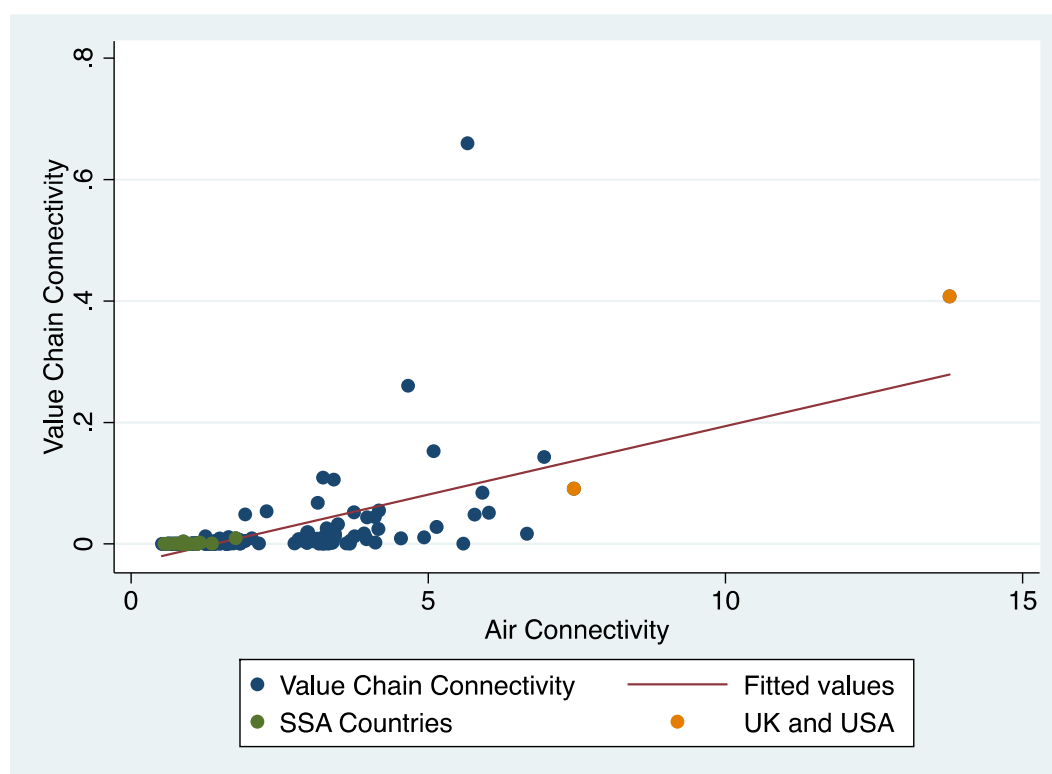
Note: The USA is the orange point to the right of the UK.

Finally, Figure 8 consolidates the available information on connectivity performance by examining the association between value chain connectivity and the World Bank's Logistics Performance Index (LPI). The LPI is a weighted average of six indicators, and is based on a survey of around 1,000 logistics professionals. It takes into account performance on trade and transport-related infrastructure, customs clearance, the ease of arranging competitively priced shipments, the ability to track and trace consignments, timeliness of delivery, and the competence and quality of logistics services. By contrast with the LSCI and the ACI, SSA's scores on the LPI are more dispersed, with one country (South Africa) performing relatively well in global context. Nonetheless, it is evident from the figure that a number of SSA countries lie below the regression line, which indicates that they are not taking full advantage of their logistics sector to connect to GVCs. The positive association between the LPI and value chain connectivity suggests that regional value chains could be strengthened, and the SSA countries' competitive position improved, by upgrading overall trade facilitation performance through measures such as regulatory reform and private sector development.
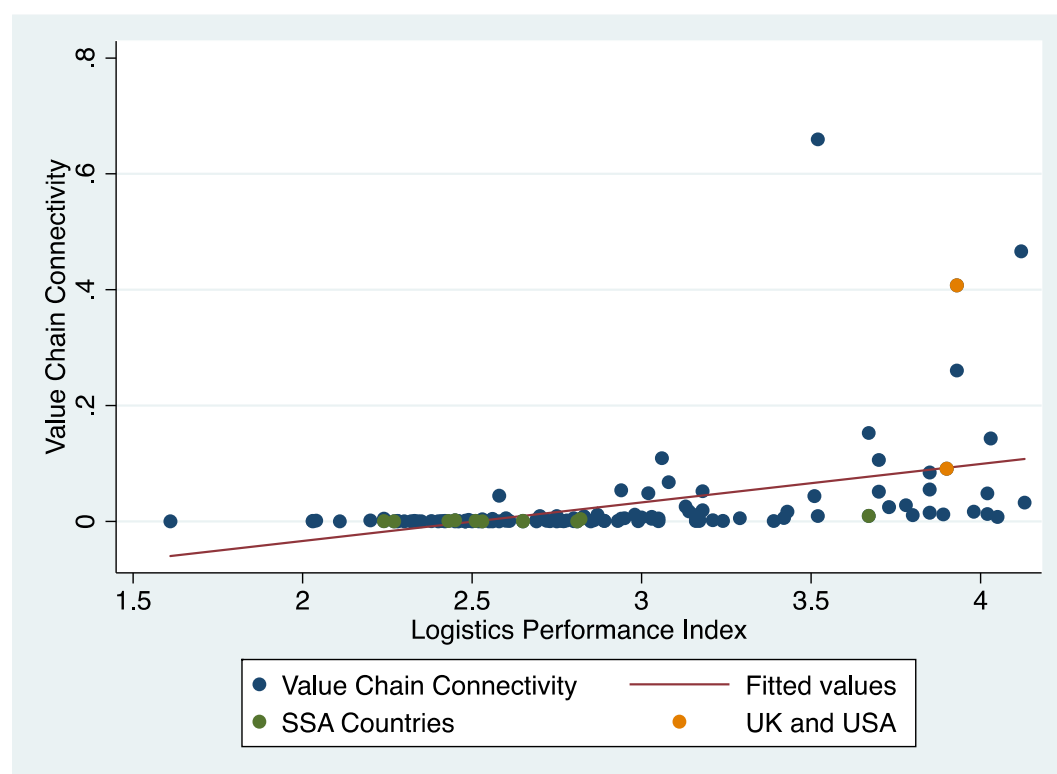
Note: The USA is the orange point to the right of the UK.

4. Policy Implications

This Policy Brief has analysed the trading position of SSA countries through the lens of value chain analysis, based on an understanding of GVCs as network businesses. It has mobilized new data on trade costs and trade in value added to better understand the relative position of SSA, focusing on two key sectors: (raw, unprocessed) agriculture, and textiles and clothing. These sectors were chosen for analysis based on their importance in the value added exports of SSA countries, after excluding sectors with high levels of distortions, like mining and petroleum-related activities.

Textiles and clothing is dealt with as an integrated sector including inputs like yarn and fabric, as well as finished products (clothing). Future work on a country level could usefully distinguish between these two sub-sectors, as they operate quite differently in terms of resource use and business organization. This would require different research methods, however, as analysis is not possible using cross-country data on value added in exports.

Key findings include the fact major markets like the UK and the USA are important for most SSA countries as sources of final demand in both sectors, although the nature of the relevant value chains is quite different in both cases: they appear longer in the case of textiles and clothing, perhaps due to favourable rules of origin in the US, which is the major source of demand for African exports of value added in the sector.

The finding that some SSA countries are only very weakly connected to global networks of trade in value added is likely due to their correspondingly weak performance on metrics of air and maritime transport connectivity. Nonetheless, there is evidence that countries like Kenya, South Africa, and Mauritius are forging ahead with GVC integration for the sectors analysed in this paper. It will be important for other countries in SSA to learn from regional experiences, so that relationships with global lead firms can be forged and managed appropriately so as to stimulate other value chain sectors to emerge.

Looking forward, what can policymakers do to try and improve the situation? One priority includes the development of stronger linkages with key nodes in global transport networks. These networks are the lifeblood of GVCs, which increasingly demand flexibility and "just in time" delivery. There is scope for SSA countries to reduce their very high trade costs by at least a certain amount by examining policies—including liberalization—that could help boost connectivity and help develop the private sector in these areas. Air transport is a particular priority, for two reasons. First, experience in Kenya shows that agricultural value chains that link with developed country markets often involve perishable products, so moving them quickly to their final destination is important. Second, maritime shipping linkages depend more on having high volumes for the development of links between countries. A substantial amount of air cargo in fact travels on passenger flights, so there is scope to leverage development of the tourism sector—which depends on air transport connections—to also develop cargo transport capacity that could be used to develop agricultural value chains.

Closely linked to transport is the logistics sector, and there is much work suggesting that logistics performance is a key determinant of a country's ability to be competitive in global markets, including through joining and moving up in GVCs. This sector therefore also deserves attention. Although attracting foreign investment to small economies is difficult, it may be that improvements in the business climate can help mobilize the private sector to improve SSA's ability to connect to global markets, or at least the key external markets of Europe and the USA, and emerging Asian markets. Logistics performance in SSA is weaker than that of the UK and USA, although South Africa is a solid performer on a global basis. In terms of regional knowledge sharing, it will be important to build on the South African experience to boost logistics performance within the region and then to look at ways in which the logistics sector can be leveraged to boost value chain development. There is clear scope to boost economic integration by developing the logistics sector, including through leveraging international integration of key services markets such as transport, freight forwarding, and express delivery services.

Concretely, the development of additional maritime and especially air linkages with Europe and the USA could be beneficial to SSA, in addition to the reinforcement of links among those states themselves. GVCs rely on being able to move goods across borders quickly and reliably, multiple times during the production process. Air transport is often used for the shipment of component parts with a relatively high value to weight ratio. As such, development of the sector has the capacity to provide a basis for the development of value chains in traditional sectors like agriculture and textiles and clothing, as well as in more advanced manufacturing sectors as local capacity develops.

Second, it is important to recognize that the development of value chains is primarily a private sector agenda. Policy therefore needs to be accommodating to private sector development. A climate of certainty, and a strong business environment, are key considerations for investors, foreign and domestic alike. There is clearly room to improve in terms of the ease of doing business in some countries in SSA. For example, the large regional economies of South Africa and Nigeria do not perform particularly well in the World Bank's Doing Business ratings: the former ranks 120th in the ease of starting a business, and 130th in trading across borders, compared with 139th and 182nd in the latter. There is considerable room to use sensible regulatory reforms to boost these rankings and make it easier for the private sector to connect to global markets for goods, services, people, and ideas. Easing these burdens will incentivize local businesses to develop and expand, and could potentially help them move gradually into foreign markets.

Part of the private sector development agenda should include measures to help local businesses overcome common export barriers faced by small and medium sized enterprises, including a lack of information on foreign market opportunities, and the need to comply with often costly standards and regulations, particularly in sectors like agriculture. Working with international partners and donor agencies will be important in the context of building up private sector capacity in this area. It may be appropriate to consider targeted interventions such as export promotion and bolstering network between business associations so as to overcome coordination failures and information barriers. The interventions require a qualitatively different approach and do not equate to large-

scale subsidization of exports, but instead to the correction of common market failures that particularly affects small-scale firms and constrain their growth.

Although SSA faces considerable challenges, it will be important for policymakers to look at ways in which interventions and regulatory reform can be leveraged to help local businesses enter GVCs, and then move up to higher value added activities with important spillovers for the economy. The immediate priority should be the development of the African market through the elimination of burdensome border requirements and improvement in trade facilitation, accompanied by the extension of these improvements to major international gateways that enable trade to take place with more distant partners like Europe, the USA, and increasingly emerging Asia and China.

In addition to strengthening links with current markets, it is important to develop stronger linkages with developing Asia, a particularly dynamic region with increasing demand for some SSA products. A central part of this overall agenda should be improvement of the trade facilitation and logistics environment through appropriate regulatory reform and private sector development, to boost competition and service quality, as well as the quantity and quality of infrastructure.

A starting point is the WTO's new Agreement on Trade Facilitation—SSA countries would be well served by being ambitious in their Category A notifications, and should in any event conduct needs assessment exercises to identify obligations that will require technical and financial assistance from development partners to implement. Of course, the Agreement is only the starting point for trade facilitation reforms, but coupled with other interventions to address infrastructure deficits and the enhancement of service sector competitiveness could bear fruit soon.

References

African Development Bank. 2014. *Global Value Chains and Africa's Industrialization: African Economic Outlook 2014*. Tunis: African Development Bank.

Arvis, J.F., Y. Duval, B. Shepherd, C. Utoktham, and A. Raj. Forthcoming. "Trade Costs in the Developing World: 1996-2010." *World Trade Review*.

Jouanjean, M-A., J.-C. Maur, and B. Shepherd. Forthcoming. "US Phytosanitary Restrictions: The Forgotten Non-Tariff Barrier." *Journal of International Trade Law and Policy*.

Keane, J. (2014) The Governance of Global Value Chains, Upgrading Processes and Agricultural Producers in sub-Saharan Africa, in Takahiro, F. (2014) *Delivering sustainable growth in Africa: African farmers and firms in a changing world,* Basingstoke, Hampshire: Palgrave Macmillan.

Maur, J.-C., and B. Shepherd. 2015. *Connecting Food Staples and Input Markets in West Africa: A Regional Trade Agenda for ECOWAS Countries*. Washington, D.C.: World Bank.

McKinsey. 2015. "East Africa: The Next Hub for Apparel Sourcing?" http://www.mckinsey.com/insights/consumer_and_retail/east_africa_the_next_hub_for_apparel_sourcing.

Shepherd, B. Forthcoming. "Infrastructure, Trade Facilitation, and Network Connectivity in Sub-Saharan Africa." Paper prepared for the Overseas Development Institute.

Shepherd, B., and E. Archanskaia. 2014. "Evaluation of Value Chain Connectedness in the APEC Region." Publication No. 214-SE-01.28, APEC.

Commonwealth Secretariat
Marlborough House, Pall Mall
London SW1Y 5HX
United Kingdom

thecommonwealth.org

The Commonwealth