



WIDER Working Paper 2019/89

Competitiveness and diversification of service exports in sub-Saharan Africa

The case of the East African Community

Maureen Were¹ and Maureen Odongo²

November 2019

Abstract: Growth in service exports has improved countries' per capita incomes, reduced over-reliance on goods exports, and promoted economic diversification. However, the growth has not been uniform across regions and countries. Africa lags behind in service exports. This paper examines the competitiveness of service exports in sub-Saharan Africa (SSA), focusing on the East African Community (EAC). The analysis shows that SSA, and particularly EAC countries, has a revealed comparative advantage in only two sectors—transport and travel services—and lags behind in modern commercial services. Notwithstanding its comparative advantage in traditional travel services, SSA is less competitive than other regions globally, and its share of world service exports is negligible. The expansion of services trade is constrained by various factors such as non-tariff barriers, protectionist regulatory frameworks, and infrastructure constraints. There is significant room for service export growth, including unexploited service opportunities in cultural diversity, sports, business, and conferencing.

Key words: Service exports, competitiveness, diversification, revealed comparative advantage, sub-Saharan Africa.

JEL classification: F10, F15, O10, O55

Acknowledgements: The authors are grateful for the vital comments of an anonymous reviewer on the initial research proposal, participants in the 2018 collaborative research review workshop Rethinking Regional Integration in Africa for Inclusive and Sustainable Development, organized by the African Economics Research Consortium (AERC), and the 2019 UNU-WIDER development conference, Transforming Economies for Better Jobs. The authors also acknowledge and thank the AERC for its support. The views reflected in this paper are those of the authors.

¹ UNU-WIDER, corresponding author: were@wider.unu.edu ² Central Bank of Kenya, Nairobi.

This study has been prepared within the UNU-WIDER project [Sustainable development solutions for Tanzania—strengthening research to achieve SDGs](#)

Copyright © UNU-WIDER 2019

Information and requests: publications@wider.unu.edu

ISSN 1798-7237 ISBN 978-92-9256-725-5

<https://doi.org/10.35188/UNU-WIDER/2019/725-5>

Typescript prepared by Merl Storr.

The United Nations University World Institute for Development Economics Research provides economic analysis and policy advice with the aim of promoting sustainable and equitable development. The Institute began operations in 1985 in Helsinki, Finland, as the first research and training centre of the United Nations University. Today it is a unique blend of think tank, research institute, and UN agency—providing a range of services from policy advice to governments as well as freely available original research.

The Institute is funded through income from an endowment fund with additional contributions to its work programme from Finland, Sweden, and the United Kingdom as well as earmarked contributions for specific projects from a variety of donors.

Katajanokanlaituri 6 B, 00160 Helsinki, Finland

The views expressed in this paper are those of the author(s), and do not necessarily reflect the views of the Institute or the United Nations University, nor the programme/project donors.

1 Introduction

Services play a dominant role in the growth and development of economies globally. The service sector is estimated to account for about 70 per cent of global gross domestic product, 60 per cent of global employment, and 46 per cent of global exports in value-added terms (Nasir and Kalirajan 2014; World Trade Organization 2016). Trade in services has become the most dynamic segment of world trade, growing more rapidly than trade in goods. Integration of services into every stage of the value chain has helped to improve not only competitive advantage in tourism, transport, and other commercial services, but also productivity in other economic sectors, such as agriculture and manufacturing.¹

The increased tradability of services has been facilitated by rapid advances in information and communication technologies (ICT), including the development of the Internet, electronic commerce, and financial innovations. In addition, increased globalization and trade liberalization has enhanced the connectivity of economies and the trading of goods, services, and investments (Goswami, Mattoo, and Sáez 2012; International Monetary Fund 2009). Consequently, international trade in services has become the new frontier for expanding and diversifying exports, and hence it provides significant opportunities, especially for developing countries. If global demand for one sector drops, a country with diversified exports can rely on other service-exporting sectors. Moreover, there are positive externalities between goods exports and service exports (Hoekman 2017). Additionally, increased service exports from developing economies have a role to play in the economic transformation of Africa, and in meeting the Sustainable Development Goals.

However, although the dynamics of global trade are changing, both inter- and intra-regional trade in Africa continues to be dominated by merchandise trade. This is in spite of the fact that globally, the falling costs of travel and ICT, and increasing access to the Internet, are making it easier to produce services in one location and consume them in another without face-to-face contact between buyer and seller, thus creating new opportunities for trade in services. Services trade is not only an avenue for export diversification for African economies, but can also act as a cushion against the global commodity price volatility that African economies generally face. However, there is a paucity of research on the analysis and deeper understanding of services trade competitiveness in Africa, despite changing trade dynamics.

Against this background, this paper seeks to examine the competitiveness and diversification of service exports in sub-Saharan Africa (SSA), with specific focus on the East African Community (EAC). It explores some of the factors that constrain services trade in the region, and it provides policy insights in relation to the promotion of services trade and regional integration initiatives. The EAC is a regional economic community composed of Kenya, Rwanda, Tanzania, Uganda, Burundi, and more recently South Sudan.²

¹ Services as defined by the International Monetary Fund (2009) include manufacturing, repair and maintenance, transport, travel, construction, insurance and pensions, financial services, telecommunications, other business services, and personal, cultural, recreational, and government services not included elsewhere. Commercial services as defined by the World Trade Organization (2011) include all services other than government services not included elsewhere.

² The analysis is largely based on the first four member states, due to data challenges with respect to the last two. South Sudan joined recently and is not yet a very active member of the community.

The analysis is mainly based on three forms of services—travel, transport, and financial services—largely focusing on inter services trade. Unlike trade in goods, data on trade in services, especially intra services trade, is limited and not easily available. Our quantitative analysis of services export competitiveness is mainly based on the period 2005 to 2016. This also coincides with the period during which the regional integration initiative among EAC countries made notable progress from a customs union (2005) towards a common market following the establishment of the Common Market Protocol (CMP) in 2010.³ Besides the elimination of barriers to the movement of goods, the CMP aimed to enhance the movement of services and capital in a bid to promote regional integration and accelerate economic growth and development. The elimination of internal and external barriers to trade and investment was expected to help EAC businesses to achieve economies of scale, boost competitiveness, expand opportunities for the private sector, raise citizens' living standards, and help the region to move closer to becoming a single investment destination (World Bank and EAC 2016).

In general, despite the growing importance of the service sector in the global economy, the tradability of Africa's services remains minimal in comparison with developing countries elsewhere. Africa's share of service exports to the global economy has remained minimal at about two per cent since 2005, compared with developing countries elsewhere, whose share of service exports increased from 24 per cent in 2005 to 32 per cent in 2015. Moreover, despite the shifting trend from traditional services to modern service exports, Africa's service exports continue to be dominated by the former.

Africa continues to be a net importer of commercial services, with its services trade deficit having widened to US\$60.3 billion in 2015, up from US\$20.2 billion in 2006. Trade in services remains concentrated within a few African economies, with the top 10 leading exporters accounting for more than two thirds of the continent's service receipts, a proportion largely unchanged since 2005. The bulk of service exports continues to be dominated by low- to middle-skilled service sectors such as travel and transport, which account for about 45 per cent and 23 per cent of total service exports respectively. Despite efforts to promote exportable services, diversification into modern services such as ICT, professional, and financial services remains low (World Trade Organization 2016).

The rest of this paper is organized as follows. Section 2 highlights trends in service exports in Africa, focusing on the SSA countries. Section 3 provides an overview of theoretical and empirical literature, while section 4 outlines the methodology. Results of the analysis are discussed in section 5, and section 6 gives conclusions and policy insights.

2 Trends in service exports in Africa

Services trade covers more than the cross-border exchange of a service; it also includes consumer movements and factor flows (investment and labour). According to the General Agreement on Trade in Services (GATS), international trade in services can be classified into four modes of supply of services. Mode 1 is cross-border supply, where the service is supplied from one country to another; the supplier and consumer remain in their respective countries, while the service crosses the border. Mode 2 is consumption abroad, where the consumer physically travels to another country to obtain the service. Mode 3 is commercial presence, where a service is supplied by a firm in one country via its branch, agency, or wholly owned subsidiary located in another

³ The EAC partner states entered into the CMP in November 2009; the CMP became effective in July 2010.

country. Mode 4 is the presence of natural persons, which covers the supply of services by a service provider through the presence of natural persons of a member in the territory of any other member.

Trade in commercial services has increased over time: world exports rose to US\$5,358 billion in 2017 from US\$2,600 billion in 2005, while imports increased to US\$5,108 billion from US\$2,533 billion over the same period. The rapid increase has largely been attributed to advances in ICT and the growth of global value chains (GVCs), which have expanded both the level and range of services that are tradable across national borders (World Trade Organization 2016, 2018). Over the years, developed countries have remained the major exporters and importers of services in global markets, with their exports and imports respectively accounting for 67.7 per cent and 59.3 per cent of global commercial services in 2017 (Table 1).

Table 1: Trade in commercial services (% share of world trade)

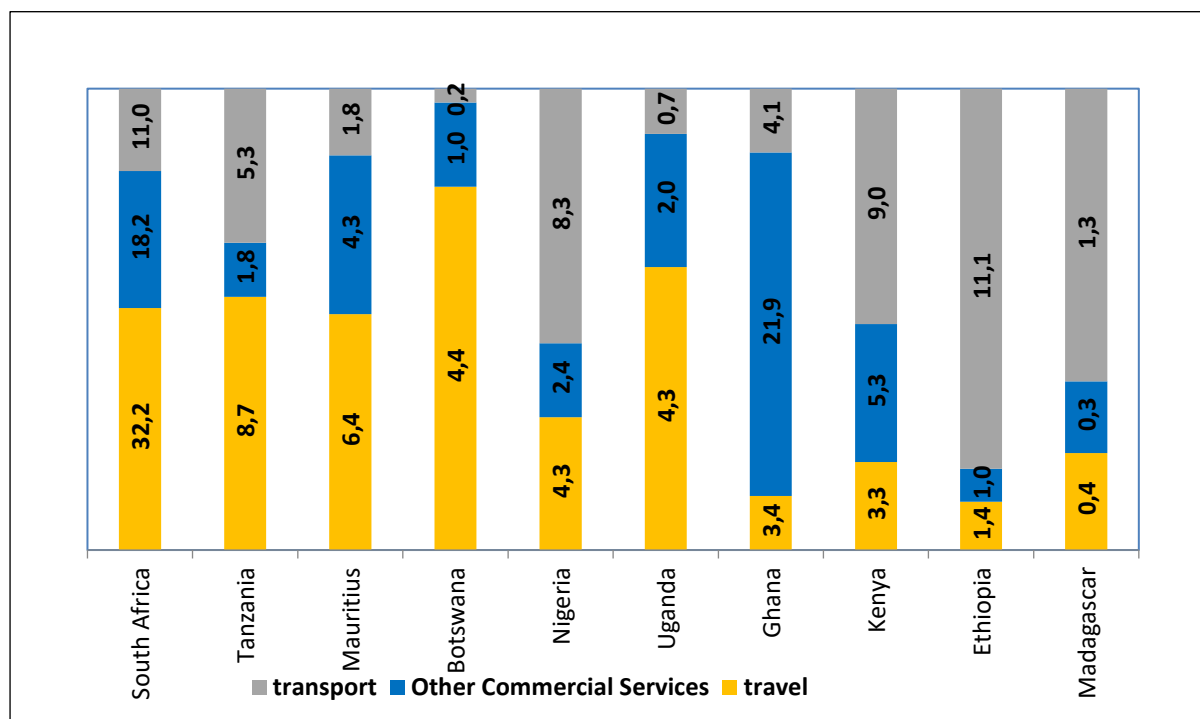
		2005-2009	2010-2014	2015	2016	2017
Developed Economies	Exports	72.9	68.1	67.5	68.0	67.7
	Imports	66.8	59.9	58.9	59.9	59.3
Developing and Emerging Economies	Exports	27.1	31.9	32.5	32.0	32.3
	Imports	33.2	40.1	41.1	40.1	40.7
Africa	Exports	2.2	2.1	1.9	1.8	1.9
	Imports	3.3	3.7	3.2	2.8	2.9

Source: authors' calculations based on World Trade Organization data.

Developing and emerging economies' supply of and demand for commercial services has thrived over the years: their share of world exports rose from 27.1 per cent in the period 2005 to 2009, to about a third (32.3 per cent) in 2017, while their share of imports increased from 33.2 per cent to 40.7 per cent over the same period. The Asian economies dominate developing economies' trade in commercial services, accounting for over 70 per cent of exports. This expansion in services transactions largely reflects the impact of GVCs for manufactured goods in the Democratic Republic of Korea, China, Japan, and Malaysia. In addition, the enlargement of European markets has helped to promote intra-regional trade among countries in the European Union (World Trade Organization 2018).

Africa, on the other hand, has not experienced significant change in services trade—its share of world exports has stagnated at around two per cent. The increase in developing countries' share is limited to emerging and other developing economies. Africa's share of exports of commercial services remained negligible at 1.9 per cent (US\$101.7 billion) in 2017 compared with 2.2 per cent (US\$57.7 billion) in 2005. Africa's service export trade is mainly dominated by low- to middle-skilled service sectors such as travel and transport (Figure 1). In addition, the widening deficit in services trade in Africa over the years is a clear indication of the reliance on imported services, which increased by 52 per cent (US\$78 billion) to US\$149,516 billion in 2017 from US\$71.2 billion in 2005.

Figure 1: Service exports by sector and top 10 countries, 2016 (% share of SSA)



Source: authors' calculations based on World Trade Organization data.

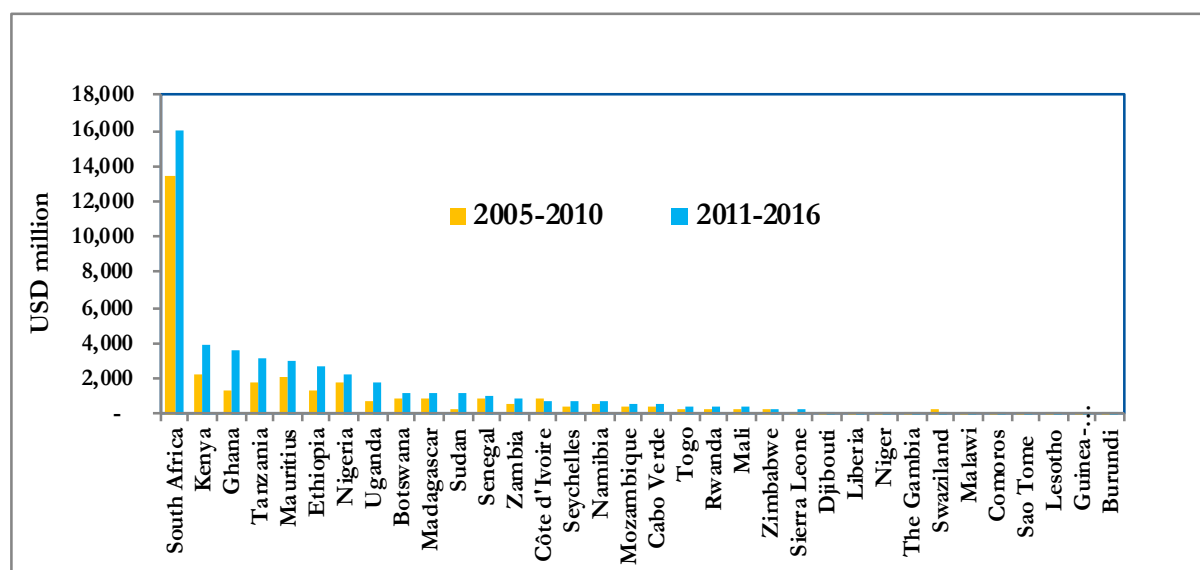
Travel and transport account for the bulk of exports of commercial services in developing countries, totalling 37 per cent and 20.2 per cent respectively in 2017. Other business services comprised 20 per cent of developing economies' total service exports in 2017. This category includes research and development, professional and management consulting services, and technical, trade-related, and other business services.

In SSA, trade in commercial services continues to be dominated by a few countries that mainly export traditional services, such as travel and transport.⁴ High-skilled modern services such as financial services, insurance and pension services, and charges for the use of intellectual property continue to lag behind. Whereas developed countries have taken advantage of technological progress to promote the export of modern services, developing countries have lagged behind in terms of both investing in new technology and training a skilled workforce.

South Africa has continued to dominate commercial service exports in SSA, having remained a top exporter of services over the years (Figure 2). In 2016, South Africa's travel services accounted for 32.2 per cent of SSA service exports, transport services accounted for 18.2 per cent, and other commercial services accounted for 11 per cent (Figure 1). Other countries with significant contributions to travel services included Mauritius and Tanzania, while Ethiopia, Kenya, and Nigeria accounted for a notable share of transport services in SSA.

⁴ Besides travel and transport services, 'other commercial services' comprise construction services, financial services, insurance and pensions, charges for the use of intellectual property rights, ICT, and other business services. These are also largely considered to be modern services. Travel and transport are considered to be traditional services (World Trade Organization 2016).

Figure 2: Exports of commercial services in SSA



Source: authors' calculations based on World Trade Organization data.

The limited tradability of services among SSA countries is mainly attributed to barriers to trade in services. According to the World Trade Organization (2016) and Goswami, Mattoo, and Sáez (2012), explicit restrictions on entry, and other policies and regulations, affect market providers' ability to penetrate domestic markets. These regulations exist, in principle, because services markets are characterized by market failures such as imperfect and asymmetric information—especially in such knowledge-intensive sectors as professional and financial services—as well as a lack of competition and natural barriers to entry, particularly in sectors with significant network externalities, such as communications and transport.

Generally, unlike with trade in goods, the liberalization and elimination of trade restrictions and discrimination against services has lagged behind. GATS mandates World Trade Organization member countries to progressively liberalize trade in services through successive rounds of negotiation. However, negotiations to improve market conditions for trade in services and market access, including the enactment of necessary rules and disciplines (e.g., domestic regulation, safeguard measures, government subsidies) with relevant special provisions to boost trade in services for developing and least developed countries, have been slow and winding.

3 Literature review

Despite the growing economic importance of services, services trade does not feature prominently in the economic growth and development literature, which might be partly attributed to the conventional view that service activities are largely non-tradable. Trade in services has only recently been highlighted in the trade literature, with the existing body of literature on the competitiveness of the service sector focusing more on the emerging economies in Asia, Europe, and Latin America in comparison with more developed countries (e.g., Hisanaga 2007; Hizirolu et al. 2012; Hoekman and Mattoo 2008; Igawa 1997; Nasir and Kalirajan 2014).

According to the traditional theory of comparative advantage developed by Ricardo (1817) and further advanced by Heckscher and Ohlin (Salvatore 2002), international competitiveness (comparative advantage) is determined *inter alia* by the relative endowment of factors of

production, innovations in products and production processes, and the intensity of entrepreneurial activity. The theory further postulates that international competitiveness is secured when production is in line with a country's comparative advantage. However, new trade theories assert that a country's competitiveness depends on the capacity of its industry to innovate and upgrade. Companies gain advantage against the world's best competitors because of pressure and challenge. They benefit from having strong domestic rivals, aggressive home-based suppliers, and deliberate government interventions (Brander and Spencer 1985; Krugman 1980, 1983; Porter 1990).

Krugman (1983) argued that international competition may arise because companies engage in monopolistic competition through product differentiation, large-scale production, and increasing returns to scale. Brander and Spencer (1985), on the other hand, produced a model which showed that strategic intervention by governments—through, for example, the granting of export subsidies—results in the profitable use of excess capacity to increase output produced, and hence to increase domestic producers' share of the international market. In this way, local firms (production) are favoured (promoted) vis-à-vis foreign competition. Porter (1990) argued that a nation's advantage lies in four broad attributes: factor endowment, domestic demand conditions for firms' products or services, the presence of supporting industries, and firms' strategies.

Empirical studies examining the competitiveness of international trade in services have relied on both traditional and modern trade theories. The comparative advantage theory formed the basis for Balassa's (1965, 1977) revealed comparative advantage (RCA) indices, which analyse both inter-industry and intra-industry trade in services. According to Balassa (1965), the RCA index is defined as the ratio of a country's share in world exports of a given industry divided by its share in overall world trade.

Hindley and Smith (1984) and Deardorff (1985) examined the applicability of the law of comparative advantage to trade in services, and confirmed its applicability at each examination. Studies by Igawa (1997), Langhammer (2004), and Hisanaga (2007) have used RCA to analyse the competitiveness of the services industry in developed countries, while studies focusing on developing countries include Seyoum (2007), Kuznar (2007), Wu and Lin (2008), Mohammadi and Yaghoubi (2008), Fourie and Fintel (2009), and Hiziroglu et al. (2012).

Seyoum (2007) analysed the competitiveness of selected services in developing countries in comparison with the world. Using RCA indices, the results showed that whereas important comparative advantages existed for many developing countries in transport and travel services, financial and business services had weak comparative advantage, which could be related to low levels of trade liberalization and preparedness. Kuznar (2007) examined the international trade in services focusing on developing countries, and found that low- and middle-income economies were competitive in trade in services, especially in labour-intensive activities. Wu and Lin (2008) used the Balassa index to analyse the competitiveness of India's commercial ports, determining whether they presented a comparative advantage. Their study, which covered transport and freight services for the period 2000 to 2005, showed that whereas India had a comparative advantage in freight services between 2000 and 2003, it lost its advantage in subsequent years.

The study by Mohammadi and Yaghoubi (2008) analysed competitiveness in ICT, financial, transport, and travel services. Their results highlighted that many developing countries had revealed comparative advantages in travel/tourism and transport services. According to the analysis by Fourie and Fintel (2009), which focused on 147 countries and 10 sectors, developing countries had strong comparative advantage in travel, construction, personal, cultural, and recreational service exports. Similar finding by Hiziroglu et al. (2012) revealed the competitiveness of Turkey's service exports relative to the European Union in construction services, tourism, and transport services.

To conclude, it can be noted that studies on developing countries tend to focus on Eastern Europe and Asia. Studies on African countries, especially SSA, are limited. This paper makes a contribution to the literature by using comprehensive disaggregated services trade data for both traditional and modern services to analyse the competitiveness and diversification of selected service exports in selected SSA countries. Secondly, it provides an indicative analysis of intra-EAC services trade—specifically travel services based on tourist arrival data,⁵ and also financial services—and it highlights some of the key constraints on promoting services trade in the region.

4 Methodology and data

Following Gümüş and Hızıroğlu (2015), the RCA index is used to assess the competitiveness of service exports in SSA and the EAC relative to world service exports. The analysis is conducted using disaggregated service export data on travel, transport, and financial services. The RCA compares the share of total exports of sector-specific exports in a country, relative to the share of the same sector in a reference country or region's exports (Balassa 1965). Thus, it helps to determine the country's key export-promoting sector(s). The measurement of international competitiveness using the RCA index is based on the idea that an economy that improves its degree of competitiveness will be able to enhance the size of its service exports to a certain market. Conversely, a country that reduces its degree of competitiveness will increase the size of its imports from other countries. The degree of competitiveness of a sector or country is determined by the degree or extent of its participation through exports in the imports of the reference market—i.e. one country improves its competitiveness when another country increases its imports from the former.

Based on the above, trends in international competitiveness are analysed using the RCA index. The index has two components: the relative weight of each exporting sector in a country's total exports, which relates to the composition or structure of that country's service exports; and the market share, which measures the portion of the market that is accounted for by a certain country or sector, e.g., in the regional or world market.

The RCA measure is derived using the following formula:

$$RCA = \left(\frac{X_{ij}}{X_{it}} \right) / \left(\frac{X_{nj}}{X_{nt}} \right) \quad [1]$$

where X represents service exports, i is a country, j is a commodity (or industry), t is a set of commodities (or industries), and n is a set of countries. RCA measures a country's exports of a commodity (or industry) relative to its total exports and to the corresponding exports of a set of countries, e.g. SSA. A comparative advantage is 'revealed' if $RCA > 1$, meaning that country i 's competitiveness in commodity j is greater than its average competitiveness. If RCA is less than unity, the country is said to have a comparative disadvantage in the commodity/industry.

Data used for the RCA analysis is drawn from the World Trade Organization database covering the period 2005 to 2017. It covers service exports as defined by the International Monetary Fund (2009). Government services are excluded from this analysis, as they are usually considered non-

⁵ Although the analysis is constrained by data, these services make a significant contribution to services trade in the EAC.

tradable. The sample used for analysis covers 12 SSA countries that jointly account for about 60 per cent of total SSA trade in services. Three major service sectors are analysed: transport services, travel (tourism), and other commercial services, mainly financial services.

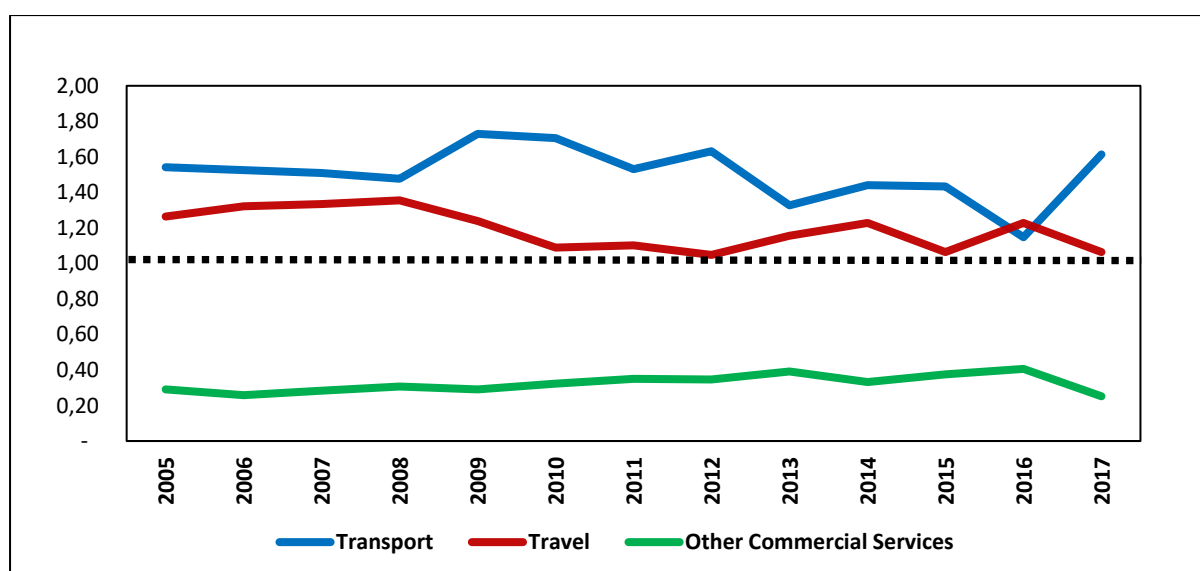
For robustness, the analysis of travel services, which account for the highest share of service exports in SSA, is further complemented by other indicators: tourist arrivals data, which was used to analyse intra tourism services trade, and the Travel and Tourism Competitiveness Index (TTCI) published by the World Economic Forum. According to the World Economic Forum (2017), the TTCI measures a broad set of factors and policies for the sustainable development of the travel and tourism sector, which in turn contributes to a country's competitiveness. The aim is basically to enable stakeholders to improve the industry's competitiveness in their respective economies. Data on tourist arrivals was sourced from the United Nations World Tourism Organization (2018).

5 Results and discussion

5.1 Competitiveness of service exports in SSA and the EAC

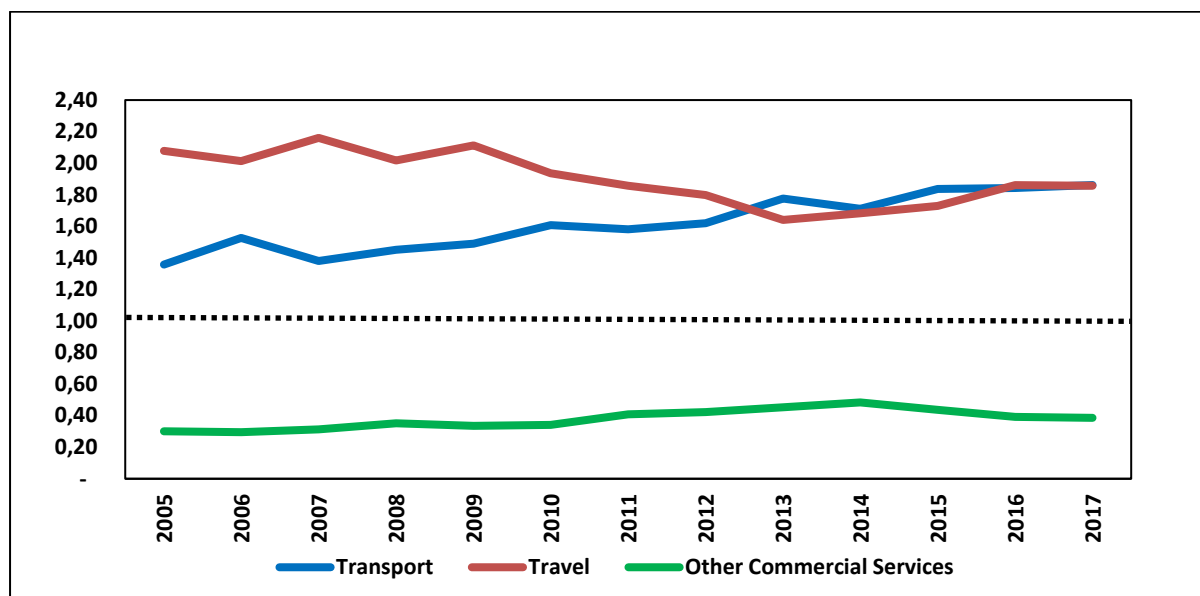
SSA's share of world service exports is quite minimal, at an average of 1.2 per cent over the period 2011 to 2016. The market shares of commercial service exports across SSA countries are reported in Table A1 in the Appendix. South Africa had the lion's share (about 27.7 per cent) of SSA's service exports, and accounted for about a third of the world's service exports over the period 2011 to 2016. Figures 3 and 4 show the competitiveness index for the three main commercial services in SSA and the EAC over the period 2005 to 2017, based on the RCA methodology. The analysis shows that over the study period, SSA as a region had a comparative advantage in transport and travel services, and a comparative disadvantage in other commercial services (construction services, insurance and pensions, financial services, ICT, charges for the use of intellectual property rights, other business services, and personal, cultural, and recreational services).

Figure 3: Revealed comparative index for SSA by sector



Source: authors' calculations based on World Trade Organization data.

Figure 4: Revealed comparative index for the EAC by sector



Source: authors' calculations based on World Trade Organization data.

Despite SSA having a global comparative advantage in the two traditional service sectors, the index shows a gradual decline, especially in the competitiveness of transport services, and particularly from 2010. This might be partly attributed to weak global demand following the global financial crisis of 2008. According to the World Trade Organization (2017), receipts from global transport exports continued to fall following subdued trade and overcapacity, which affected the prices of shipping and airfreight transport. With respect to travel services, the Ebola health scare affected the cross-border movement of people, especially in West African countries, while reports of terrorist attacks had a negative impact on tourist arrival in parts of Eastern African countries, especially Kenya. However, the RCA index shows a recovery in 2017, as concerns regarding security, safety, and health in several locations stabilized.

RCA indices for the EAC as a region show a slightly different pattern, with a gradual increase in the export competitiveness of transport services (Figure 4). From around 2009, the region seems to have lost its competitiveness in the export of travel services, although the index shows a gradual recovery in later years. The results show that the EAC has a comparative advantage in travel and transport services, and a comparative disadvantage in other commercial services.

The comparative advantage index for other commercial services reveals that both SSA and the EAC have remained uncompetitive over the years, with very minimal improvement in recent years. The region's comparative disadvantage in exports of other commercial services, which mainly comprise modern services, can be attributed to a variety of factors. For instance, most of these services are relatively high-skilled knowledge-based services that require not only investment in technology, but also continuous research and innovation—which is lacking in most SSA countries. Budgetary allocations in research and development still remain very low, while investment in high-skilled technology is limited to high-end foreign companies.

While mobile phone subscriptions have surged, with a significant proportion of the world's population having a subscription (99.7 per 100 inhabitants in 2016), mobile phone subscriptions in SSA have been limited to mainly domestic transactions. In addition, infrastructure constraints within SSA—including low rates of access to the Internet and poor connectivity, as well as a lack of technological knowledge—have hindered the participation of African economies in the most dynamic segment of services trade (World Trade Organization 2017). A digital divide regarding

access to and use of ICT persists between developed and developing regions. As a result, developing countries have been marginalized in world trade in modern commercial services, hindering them from entering fully into new ways of trading goods and services, such as e-commerce and participation in GVCs.

Table 2: RCA index for selected SSA countries

	2005				2010				2016			
	Transport	Travel	Other Commercial Services	Financial	Transport	Travel	Other Commercial Services	Financial	Transport	Travel	Other Commercial Services	Financial
SSA	1.5	1.3	0.3	0.1	1.7	1.1	0.3	0.1	1.1	1.2	0.4	0.1
EAC	1.4	2.1	0.3	0.3	1.6	1.9	0.3	0.2	1.8	1.9	0.4	0.6
Nigeria	4.2	0.1	0.1	0.1	3.5	0.9	0.1	0.1	2.9	1.3	0.3	0.9
Ethiopia	2.7	0.8	0.4	0.4	2.9	1.1	0.2	0.0	4.3	0.6	0.1	0.0
Kenya	2.2	1.4	0.3	0.7	2.5	1.1	0.4	0.4	2.7	0.9	0.5	1.2
Madagascar	1.2	2.0	0.4		1.6	1.4	0.6		1.2	2.6	0.3	
Mauritius	1.1	2.0	0.5	0.1	0.7	1.9	0.7	0.2	0.7	2.2	0.6	0.2
Rwanda	0.9	3.0	0.1		1.4	2.6	0.1		0.9	2.6	0.3	
Tanzania	0.8	2.5	0.3	0.0	1.1	2.5	0.3	0.0	1.6	2.3	0.2	0.1
South Africa	0.8	2.4	0.4	0.6	0.9	2.3	0.4	0.6	0.9	2.3	0.5	0.6
Ghana	0.6	2.9	0.2		1.3	1.8	0.5		0.7	0.5	1.4	
Botswana	0.5	2.6	0.4	0.1	0.2	3.3	0.3	0.0	0.1	3.3	0.3	0.0
Sudan	0.1	3.2	0.3	1.1	0.1	1.6	1.2	0.6	1.8	2.4	0.1	0.1
Uganda	0.1	3.0	0.4	0.3	0.2	3.0	0.4	0.2	0.5	2.6	0.5	0.2

Source: authors' calculations based on World Trade Organization data.

Results of the RCA analysis by country, including EAC countries, are reported in Table 2. Consistent with the above, virtually all the main service-exporting countries in SSA have comparative advantages in travel services, although for some countries, such as Ethiopia, Ghana, and Kenya, the analysis shows a decline in the level of competitiveness in 2016. According to the results, only Kenya has a comparative advantage in financial services as of 2016.

Further discussion of the competitiveness of key service export sectors, including transport and travel services, is given below.

5.2 Transport services

Analysis of the competitive index by country shows that Ethiopia, Kenya, Madagascar, Nigeria, Sudan, and Tanzania have revealed comparative advantages in the transport sector. This might be attributed to the improvement not just of infrastructure networks within the countries, but also of their connectivity with other countries in the region. Most of these countries have invested in the regional connectivity of air transport, railways, and road networks. Examples include Ethiopia's rail network from the port of Djibouti on the Red Sea to the hinterland; the connectivity of Kenya's standard-gauge railway network from the port of Mombasa to the hinterland, and its anticipated extension; and Nigeria's railway network. These infrastructure projects have not only opened up the region by improving connectivity, but have also resulted in the faster and more efficient movement of freight across regions. Ethiopia, Kenya, and Mauritius have also invested in air transport, increasing connectivity within Africa.

5.3 Financial services

Financial services play a vital role in fostering economic development and regional integration. Efficient financial services lower search and transaction costs, and thus facilitate trade (the exchange of goods and services), mobilization of savings, financial intermediation, and the allocation of investment funds. Globally, financial services trade has gone through a period of significant change over the last few decades, largely shaped by an interplay of factors such as technological development, financial-sector reforms, and the internationalization of financial services. In particular, the technological revolution is rapidly changing the nature of the financial system and continues to challenge the dominance of traditional distribution channels in Africa.

Financial services according to GATS include insurance and insurance-related services, and banking and other financial services (excluding insurance). Key actors in the provision of financial services include institutional investors (insurance companies, pension funds, mutual funds), retail investors, and intermediaries (brokers, commercial banks). The actors use different market infrastructures such as stock exchanges, payments, and clearing and settlement systems, all of which are overseen by various regulators. The role of regulators, which include central banks, capital markets, and other financial service regulatory authorities, is thus essential in promoting financial services trade.

The results of the RCA analysis show Kenya to be the SSA and EAC country with the comparative advantage in financial services. This is not surprising given Kenya's investment and its notable progress in financial innovations such as mobile financial services. Moreover, whereas EAC member countries' financial sectors are relatively small, Kenya's financial sector is considered to be relatively developed by regional standards. Its commercial banking industry, for instance, is the fourth largest in SSA after South Africa, Nigeria, and Mauritius, with 43 commercial banks.

The role and importance of financial integration in the EAC's quest to form a monetary union cannot be ignored. The East African Monetary Union Protocol, signed by EAC member states in 2013, lays the groundwork for a monetary union. Being a dominant player in the financial sector, the banking sector has a key role to play in propelling regional financial integration in the EAC. The main objective of EAC policies regarding the banking sector is to attain a single market in banking services, as a means to promote sustainable economic growth. Regulators, particularly central banks, have been instrumental in facilitating financial integration. Measures undertaken include the East African Payment System, which is a funds transfer mechanism used to transfer money from one bank to another across borders within the EAC. Payment systems and related infrastructures are vital in fostering and deepening financial and economic integration, with the ultimate objective of spurring development in the region.

Kenya's strong financial service export performance is in the area of banking services under mode 3, that is, in the form of offshore commercial presence (Government of Kenya 2018). Cross-border banking has been expanding since the early 2000s, with Kenyan banks at the forefront in inter-regional banking and enhancing trade activities (Table 3). As at 31 December 2017, there were nine Kenyan banks with a total of 306 subsidiaries operating across the region, including in South Sudan and the Democratic Republic of the Congo (Table 4). Equity, Diamond Trust Bank, and Kenya Commercial Bank dominate cross-border banking in terms of size and subsidiaries.

Table 3: Cross-border banking in the region

	Uganda	Tanzania	Rwanda	Burundi	South Sudan	Democratic Republic of the Congo	Totals
2011	113	56	29	4	23	0	225
2012	125	70	51	5	31	0	282
2013	123	79	50	5	31	0	288
2014	131	89	57	6	32	0	315
2015	140	96	55	9	33	0	333
2016	99	77	55	9	26	31	297
2017	102	81	55	9	20	39	306

Source: authors' compilation based on Central Bank of Kenya (2017).

Table 4: Cross-border banking: Kenyan banks with subsidiaries, 2017

Bank	Uganda	Tanzania	Rwanda	Burundi	South Sudan	Democratic Republic of the Congo	Totals
Equity	32	15	13	-	5	39	104
DTB	38	28	-	4	-	-	70
KCB	16	14	14	5	11	-	60
I&M	-	8	14	-	-	-	22
GT	8	-	13	-	-	-	21
CBA	2	11	1	-	-	-	14
NIC	2	5	-	-	-	-	7
ABC	4	-	-	-	-	-	4
COOP	-	-	-	-	4	-	4
Totals	102	81	55	9	20	39	309

Source: authors' compilation based on Central Bank of Kenya (2018).

Generally, however, benefits are yet to materialize markedly in SSA as a whole, an outcome that has been attributed to efficiency barriers, currency differences, political instability, a weak legal environment, and a lack of regulatory coordination (Ngwu et al. 2019). Additionally, trading opportunities in insurance and insurance-related services are yet to be fully utilized.

5.4 Travel services

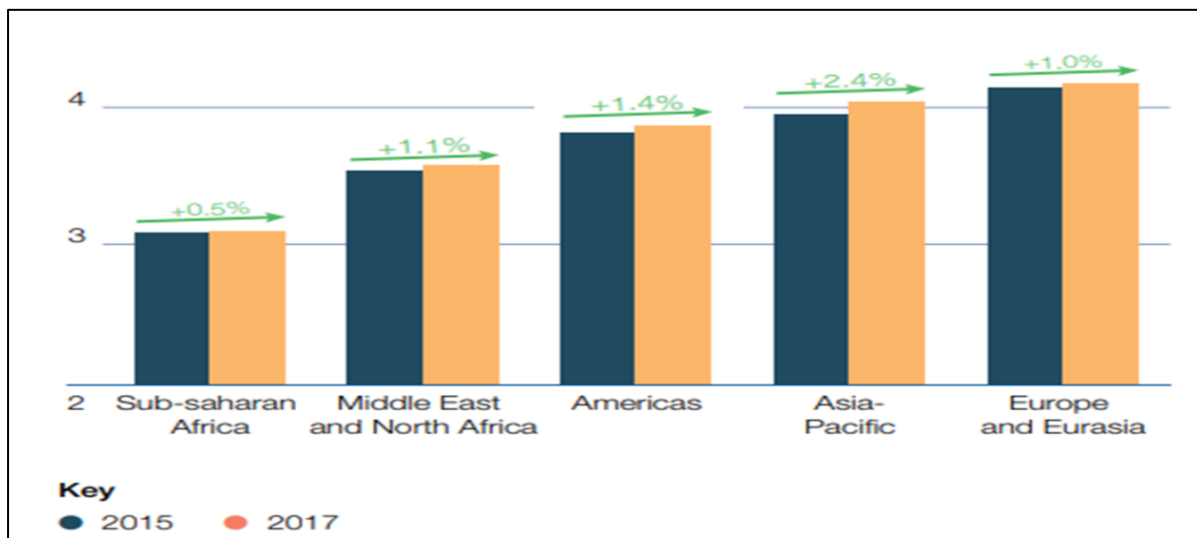
Most countries in SSA have a comparative advantage in travel services. Based on the RCA for 2016, these include Botswana, Madagascar, Mauritius, Nigeria, Rwanda, South Africa, Sudan, Tanzania, and Uganda. The RCA analysis, however, shows a deterioration of Kenya's competitiveness in travel services in the later period, which can be mainly attributed to the impact of terrorist attacks⁶ that led to travel warnings and a decline in tourist numbers. Botswana, Mauritius, Rwanda, South Africa, and Tanzania stand out in terms of relative stability of the index

⁶ These included the al-Shabab attack on Westgate shopping mall in September 2013, the attacks in Mpeketoni in 2014, and the Garissa University attack in 2015.

over the years. This might be due to domestic policies that are geared towards promoting tourism, as well as the general political stability.

Despite having a comparative advantage in travel services, the TTCI shows that SSA as a region still lags behind in travel and tourism competitiveness (Figure 5). The TTCI 2017 report (World Economic Forum 2017) analysed the performance of 136 economies, thus enabling cross-country comparison. According to the report, the Europe and Eurasia region had the strongest overall performance in travel and tourism competitiveness, with six economies in the top 10. This strong performance was attributed to the region's cultural richness, excellent tourism service infrastructure, and international openness. The SSA region ranked last.

Figure 5: TTCI, performance by region, 2017



Source: World Economic Forum (2017: 8).

With respect to regional performance within SSA, Southern Africa remained the strongest subregion, followed by Eastern Africa and Western Africa. Eastern Africa was the most improved region. The countries that ranked top in SSA were South Africa (53rd), Mauritius (55th), Kenya (80th), and Namibia (82nd). To a great extent, the ranking mimics the performance of these economies in the export of commercial services, with South Africa being at the top. While good infrastructure to boost competitiveness in services remains a challenge in most SSA countries, the region has not fully exploited the richness and diversity of African culture to revamp its travel service exports.

Globally, growth in the travel and tourism industry has remained resilient, outperforming the growth of the global economy in the face of global uncertainty and economic volatility. International arrivals reached 1.2 billion in 2016, 46 million more than in 2015 (World Economic Forum 2017). Travel services include services acquired by non-residents during their short-term visits. Arguably, travel receipts and arrivals are correlated, since travel receipts include payments for services such as accommodation, restaurants, and transport acquired or consumed in the supplying country. An increase in tourist arrivals could imply an increase in travel receipts linked to travel service exports. The cross-border movement of people is essential for business operations, particularly trade in business services. Since travel services are a significant component of service exports in SSA, the study uses tourist arrivals to complement the analysis of travel services.

Analysis of intra tourist arrivals

The advantage of tourist arrival data is that it can be used to analyse intra tourism within SSA and the EAC. Table 5 shows tourist arrivals for the top travel service exporters. South Africa still leads in terms of the number of tourist arrivals—between 2015 and 2016, arrivals increased by 12.8 per cent to 10 million. Moreover, three quarters of these tourist arrivals were from within Africa. Whereas the increase in tourist arrivals cuts across countries, Rwanda, Uganda, and South Africa were the countries with the highest shares of arrivals from Africa, at 84.6 per cent, 78.9 per cent, and 74.6 per cent respectively. The share of arrivals from within Africa for Kenya, Nigeria, and Mauritius was less than 30 per cent. These countries have an opportunity to spur growth in travel service exports through the promotion and exploitation of regional tourism within Africa.

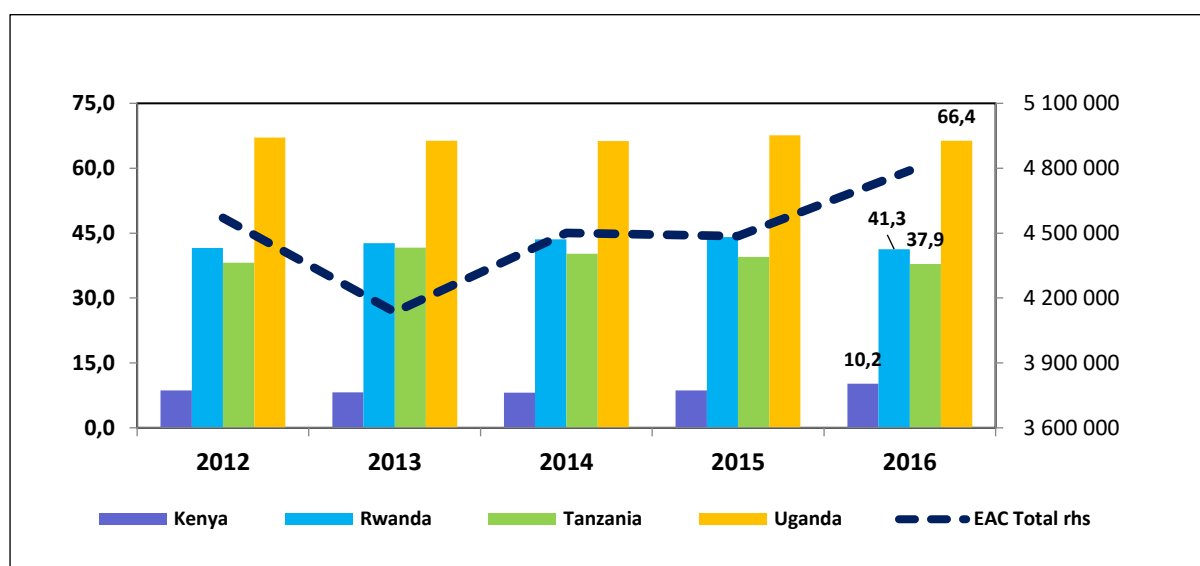
Table 5: Non-resident tourist arrival numbers

		2012	2013	2014	2015	2016
Ethiopia	Total Arrivals	596,641	681,249	770,428	863,742	872,597
	Of which from Africa	168,909	216,787	233,416	260,568	262,486
	% Share	28.3	31.8	30.3	30.2	30.1
Uganda	Total Arrivals	1,196,765	1,206,334	1,266,849	1,302,802	1,322,522
	Of which from Africa	927,481	933,226	985,888	1,044,175	1,043,608
	% Share	77.5	77.4	77.8	80.1	78.9
Rwanda	Total Arrivals	1,061,308	1,122,135	1,219,529	1,298,479	1,306,656
	Of which from Africa	935,743	987,882	1,087,574	1,153,797	1,105,721
	% Share	88.2	88.0	89.2	88.9	84.6
Tanzania	Total Arrivals	1,077,058	1,095,884	1,140,156	1,136,749	1,284,279
	Of which from Africa	488,744	521,876	525,937	530,354	568,641
	% Share	45.4	47.6	46.1	46.7	44.3
Mauritius	Total Arrivals	965,441	992,503	1,038,338	1,151,252	1,275,227
	Of which from Africa	269,957	227,252	273,706	284,126	291,256
	% Share	28.0	22.9	26.4	24.7	22.8
South Africa	Total Arrivals	9,188,366	9,536,568	9,549,236	8,903,773	10,044,163
	Of which from Africa	6,648,201	6,846,702	7,271,947	6,738,202	7,492,013
	% Share	72.4	71.8	76.2	75.7	74.6
Nigeria	Total Arrivals	4,673,136	4,037,806	4,803,213	6,017,338	5,265,453
	Of which from Africa	1,091,802	1,280,784	1,087,574	1,153,797	1,105,721
	% Share	23.4	31.7	22.6	19.2	21.0
Kenya	Total Arrivals	1,235,541	711,094	874,937	748,773	876,013
	Of which from Africa	299,746	153,844	204,505	194,884	251,670
	% Share	24.3	21.6	23.4	26.0	28.7

Source: authors' compilation based on UN World Tourism Organization data.

Analysis using bilateral tourist arrival data shows that within the EAC, Uganda has the highest intra travel services, with over 60 per cent of total tourist arrivals from the EAC (Figure 6). Kenya has the smallest share of tourist arrivals from the EAC among the four countries analysed (i.e. Kenya, Rwanda, Tanzania, and Uganda). In terms of magnitude, i.e. total numbers of tourist arrivals, Rwanda, Tanzania, and Uganda are almost at par, recording 1.306 million, 1.284 million, and 1.322 million tourist arrivals in 2016 respectively. Total tourist arrivals for each of the three countries surpassed Kenya, which experienced a general decline from 1.235 million in 2012 to 876,000 in 2016.

Figure 6: Intra-EAC tourist arrivals (% share)



Source: authors' illustration based on UN World Tourism Organization (2018) data.

5.5 Constraints to services trade in the EAC

The EAC is considered to be the most integrated regional bloc in Africa. The CMP is the fundamental framework for economic integration among EAC partner states. The EAC seeks to progressively transform into a single market that allows the free movement of goods, persons, services, labour, and capital (EAC 2009). The CMP commits partner states to progressively remove all trade barriers to services trade with a commitment not to introduce new restrictions, but it allows the regulation of service sectors as long as they are consistent with the protocol.

Generally, the service sector plays a major role in EAC economies, accounting for over half of output in some cases. Travel services account for the largest component of service exports from EAC countries. However, gauged by global rankings and indicators of export competitiveness, travel services from the EAC are still relatively low and less competitive. The outcome is partly attributed to protectionist regulatory frameworks that enhance barriers to trade in services (Mbiti and Chekwoti 2014). In general, trade in goods and services is still riddled with various non-tariff barriers (NTBs) to trade (Calabrese and Eberhard-Ruiz 2016).

Table 6: Number of service subsectors committed by EAC partner states

Service subsectors	Burundi	Kenya	Rwanda	Tanzania	Uganda
Business	31	15	32	7	33
Communications	6	17	21	17	21
Distribution	3	3	4	2	4
Education	4	4	5	4	5
Finance	9	12	15	16	11
Tourism and travel	4	3	4	4	4
Transport	17	9	20	9	20
Total subsectors committed	74	63	101	59	98

Source: based on World Bank and EAC (2016: 10).

With regard to trade in services under the CMP, EAC partner states undertook a set of commitments across modes of supply, and set themselves a deadline of December 2015 to open up markets for their citizens within the regional bloc. Commitments varied, and different member

states committed to liberalize different subsectors: Rwanda had the highest number of commitments (101), while Tanzania had the lowest (59) (Table 6). Under business services, for instance, Kenya committed to liberalize key professional services such as engineering science, physical science, teaching, legal services, health services, and business professional services.

However, according to the Common Market Scorecard (CMS) for 2016, all EAC partner states remained largely non-compliant with their services trade liberalization commitments. The CMS is a monitoring tool for the implementation of the CMP, and it measures legal compliance with commitments. Countries are assessed on whether they are meeting their obligations in the sectors where they made commitments. The CMS for 2016 showed the greatest number of non-conforming measures—about two thirds were noted in professional services, followed by road transport. Under professional services, engineering had the most non-conforming measures (38 per cent), followed by accounting (29 per cent), legal services (19 per cent), and architecture services (14 per cent). In terms of overall progress, Kenya undertook the most reforms, according to the assessment of CMS 2016 compared with CMS 2014.

Generally, although the CMP enables the free movement of labour, persons, and services, measures to facilitate the cross-border exchange of labour and services have largely been unsuccessful. Moreover, the CMP only assigns rights to professionals as natural persons, yet most professionals, such as engineers, work as consulting firms.

While members have implemented the EAC tariff schedule, eliminating tariffs on each other's goods, non-tariff protectionist measures remain a key concern. According to a study by Calabrese and Eberhard-Ruiz (2016), the degree to which EAC member countries have been either responsible for establishing NTBs or affected by NTBs varies. NTBs have affected Kenya and Uganda more than they have affected Burundi, Rwanda, and Tanzania; Tanzania has generated the greatest number NTBs that have been resolved, followed closely by Kenya. This implies varied degrees of commitment.

Tax-related measures such as value-added tax (VAT) on the export of services also remain a constraint. The different VAT rules for the export of services across the EAC make the taxation of services under the EAC common market complex, sometimes leading to double taxation and cascading effects. Decisions related to cross-border services, whether imported or exported, are influenced not just by commercial factors, but also by taxes. Calabrese and Eberhard-Ruiz (2016) noted that tax-like measures accounted for the largest share (40 per cent) of unresolved NTBs across the EAC. Hence there is a need for the harmonization of tax rules and suitable VAT policies in the EAC, not only for the effectiveness of the common market, but also for positioning the EAC as a single market.

Besides regulatory and protectionist constraints, there is a general lack of awareness of the opportunities for exporting services such as professional services in line with the various concluded regional, bilateral, and multilateral agreements, coupled with burdensome requirements including qualifications and licensing in import markets.

With respect to travel and tourism, the state of infrastructure, air connectivity, and travel costs in Africa remain a general challenge. Moreover, tourism in the region is still largely driven by traditional natural tourism, but there is significant room for growth and unexploited opportunities in relation to Africa's rich history and cultural diversity, conferencing, medical tourism, etc.

6 Conclusions and policy insights

Trade in services holds great potential to spur trade and economic transformation in Africa. However, SSA still lags behind in service exports, and has been less competitive compared with other regions globally. Service exports largely remain skewed towards traditional services, i.e. travel and transport services. South Africa has remained the dominant exporter of commercial services. Most SSA countries have a comparative advantage in travel services, followed by transport services. However, notwithstanding the comparative advantage in these traditional services, air connectivity and high travel costs across Africa still pose a challenge. Infrastructural constraints, including access to the Internet and poor connectivity, contribute to SSA countries' limited participation in the most dynamic segment of services trade. Additionally, protectionist policies and regulatory frameworks also impede the growth of services trade within SSA and with the rest of the world.

As in the rest of the SSA countries, service exports in the EAC countries are largely oriented towards travel services. Besides travel and transport services, the RCA index for 2016 shows that Kenya has distinguished itself as the SSA and EAC country with a comparative advantage in financial services. This can be attributed to regulatory reforms in the financial sector that have promoted financial innovations such as the mobile financial services for which Kenya is widely known, as well as cross-border banking services in the region. On average, Uganda has the most intra-EAC tourist arrivals, while Kenya has the fewest. The performance of Uganda's intra-EAC arrivals is partly attributable to social, cultural, and religious tourism, especially around the celebration of Uganda Martyrs' Day. However, in general, despite the comparative advantage in traditional services, the competitiveness and growth of travel and transport services trade within the EAC and across Africa are still relatively low by global standards. While members have implemented the EAC tariff schedule, eliminating tariffs on each other's goods, non-tariff protectionist measures and non-compliance with service commitments still pose a challenge to intra and inter trade in services.

Overall, there is significant room for travel service export growth, especially with regard to unexploited opportunities such as Africa's cultural diversity, sports, and medical and business conferencing, which will help to promote intra and inter travel service exports in the EAC and SSA in general. In addition, initiatives and efforts towards eliminating protectionist NTBs, as well as the harmonization of regulatory frameworks including trade-related tax policies, will go a long way in enhancing regional integration initiatives and promoting growth expansion in service exports.

References

- Balassa, B. (1965). 'Trade Liberalization and "Revealed" Comparative Advantage'. *Manchester School*, 33(2): 99–123.
- Balassa, B. (1977). 'Revealed Comparative Advantage: An Analysis of Export Share in Industrial Countries'. *Manchester School*, 45(4): 327–44.
- Brander, J.A., and B.J. Spencer (1985). 'Export Subsidies and International Market Share Rivalry'. *Journal of International Economics*, 18: 83–100.
- Calabrese, L., and A. Eberhard-Ruiz (2016). 'What Types of Non-Tariff Barriers Affect the East African Community?' Briefing Paper. London: Overseas Development Institute.

- Central Bank of Kenya (2017). 'Bank Supervision Annual Report 2011–2017'. Nairobi: Central Bank of Kenya.
- Central Bank of Kenya (2018). 'Bank Supervision Annual Report 2017'. Nairobi: Central Bank of Kenya.
- Deardorff, A.V. (1985). 'Comparative Advantage and International Trade in Investment Services'. In R.M. Stern (ed.), *Trade and Investment in Services: Canada/US Perspectives*. Toronto: University of Toronto Press.
- EAC (2009). 'Protocol on the Establishment of the East African Community Common Market'. Arusha: EAC Secretariat.
- Fourie, J., and D.V. Fintel (2009). 'World Rankings of Comparative Advantage in Service Exports'. Economic Working Paper 03/09. Stellenbosch: University of Stellenbosch.
- Goswami, A.G., A. Mattoo, and S. Sáez (2012). *Exporting Services: A Developing Country Perspective*. Washington, DC: World Bank.
- Government of Kenya (2018). *National Export Development and Promotion Strategy*. Nairobi: Government of Kenya, State Department for Ministry of Industry, Trade, and Cooperatives.
- Gümüş, A., and M. Hızıroğlu (2015). 'Measuring and Explaining Turkey's Competitiveness in Services Using Balassa Index and Diamond Model'. *Journal of Business Research*, 7(2): 195–213.
- Hindley, B., and A. Smith (1984). 'Comparative Advantage and Trade in Services'. *World Economy*, 7(4): 369–89.
- Hisanaga, M. (2007). 'Comparative Advantage Structure of US International Services'. KIER Discussion Paper 633. Kyoto: Kyoto Institute of Economic Research.
- Hızıroglu, A., H. Mahmut, and H.K. Abdullah (2012). 'Competitiveness in Services: Turkey Versus European Union'. *Procedia: Social and Behavioral Sciences*, 62: 436–40.
- Hoekman, B. (2017). 'Trade in Services: Opening Markets to Create Opportunities'. Working Paper 2017/31. Helsinki: UNU-WIDER.
- Hoekman, B., and A. Mattoo (2008). 'Services Trade and Growth'. In A.M. Juan and M. Roy (eds), *Opening Markets for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*. Cambridge: Cambridge University Press.
- Igawa, K. (1997). 'A Note on International Trade in Services'. *Kokumin-Keizai Zasshi*, 175(4): 1–13.
- International Monetary Fund (2009). *Balance of Payments and International Investment Position Manual*, sixth edition. Washington, DC: International Monetary Fund.
- Krugman, P.R. (1980). 'Scale Economies, Product Differentiation, and the Pattern of Trade'. *American Economic Review*, 70(5): 950–59.
- Krugman, P.R. (1983). 'New Theories of Trade and Industrial Countries'. *American Economic Review*, 73(2): 343–47.
- Kuznar, A. (2007). 'International Trade in Services in Developing Countries—Threats and Opportunities: Are Developing Countries Competitive?' Paper presented at European Trade Study Group annual conference, Athens, 13–15 September.
- Langhammer, R. (2004). 'Revealed Comparative Advantages in Service Trade of the USA, EU, and Japan: What Do They Tell Us?' *Journal of World Investment and Trade*, 5(6): 887–96.
- Makoto H. (2008). 'Revealed Specialization: Evidence on US International Services'. *International Trade Journal*, 22(4): 378–414

- Mbithi, M., and C. Chekwoti (2014). 'Assessment of Services Sector in the East African Community Partner State Countries'. *International Journal of Education and Research*, 2(5): 283–98.
- Mohammadi, S., and P. Yaghoubi (2008). 'Analysis of Revealed Comparative Advantage in the E-Service Market'. *International Conference on System of Systems Engineering (SoSE '08)*, 148–53.
- Nasir, S., and K. Kalirajan. (2014). 'Modern Services Export Performances Among Emerging and Developed Asian Economies'. Working Paper 143. Abidjan: African Development Bank.
- Ngwu, F.N., C. Ogbegie, and K. Ojah (2019). 'Growing Cross-Border Banking in Sub-Saharan Africa and the Need for a Regional Centralized Regulatory Authority'. *Journal of Banking Regulation*, 20(3): 274–85.
- Porter, M.E. (1990). *The Competitive Advantage of Nations*. London: Macmillan.
- Ricardo, D. (1817). *On the Principle of Political Economy, and Taxation*. London: John Murray. Available at: www.gutenberg.org/ebooks/33310 (accessed 21 October 2019).
- Salvatore, D. (2002). *International Economics*, third edition. New York: Macmillan.
- Seyoum, B. (2007). 'Revealed Comparative Advantage and Competitiveness in Services'. *Journal of Economic Studies*, 34(5): 376–88.
- United Nations World Tourism Organization (2018). *Compendium of Tourism Statistics, Data 2012–2016*. Available at: www.e-unwto.org/doi/abs/10.18111/9789284420421.1 (accessed 21 October 2019).
- World Bank and EAC (2016). 'East African Common Market Scorecard 2016: Tracking EAC Compliance in the Movement of Capital, Services and Goods'. Arusha: East African Community Secretariat.
- World Economic Forum (2017). *The Travel & Tourism Competitiveness Report 2017: Paving the Way for a More Sustainable and Inclusive Future*. Geneva: World Economic Forum. Available at: www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf (accessed 21 October 2019).
- World Trade Organization (2011). 'Composition, Definitions and Methodology'. Geneva: World Trade Organization. Available at: www.wto.org/english/res_e/statis_e/its2011_e/its11_metadata_e.pdf (accessed 30 October 2019).
- World Trade Organization (2016). *World Trade Statistical Review*. Geneva: World Trade Organization. Available at: www.wto.org/english/res_e/statis_e/wts2016_e/wts2016_e.pdf (accessed 21 October 2019).
- World Trade Organization (2018). *World Trade Statistical Review*. Geneva: World Trade Organization. Available at: www.wto.org/english/res_e/statis_e/wts2018_e/wts2018_e.pdf (accessed 21 October 2019).
- Wu, Y.C.J., and C.W. Lin (2008). 'National Port Competitiveness: Implications for India'. *Management Decision*, 46(10): 1482–1507.

Appendix

Table A1: Commercial service exports

	USD Million		Share to SSA		Share to World	
	2005-2010	2011-2016	2005-2010	2011-2016	2005-2010	2011-2016
South Africa	13,491	15,940	34.69	27.68	0.40	0.34
Kenya	2,279	3,852	5.86	6.69	0.07	0.08
Ghana	1,394	3,580	3.59	6.22	0.04	0.08
Tanzania	1,713	3,084	4.41	5.36	0.05	0.07
Mauritius	2,145	3,012	5.52	5.23	0.06	0.06
Ethiopia	1,297	2,723	3.34	4.73	0.04	0.06
Nigeria	1,800	2,293	4.63	3.98	0.05	0.05
Uganda	670	1,805	1.72	3.13	0.02	0.04
Botswana	807	1,216	2.08	2.11	0.02	0.03
Madagascar	805	1,208	2.07	2.10	0.02	0.03
Sudan	288	1,133	0.74	1.97	0.01	0.02
Senegal	914	1,094	2.35	1.90	0.03	0.02
Zambia	573	835	1.47	1.45	0.02	0.02
Côte d'Ivoire	921	782	2.37	1.36	0.03	0.02
Seychelles	423	750	1.09	1.30	0.01	0.02
Namibia	543	729	1.40	1.27	0.02	0.02
Mozambique	394	615	1.01	1.07	0.01	0.01
Cabo Verde	439	576	1.13	1.00	0.01	0.01
Togo	218	445	0.56	0.77	0.01	0.01
Rwanda	219	441	0.56	0.77	0.01	0.01
Mali	340	383	0.87	0.67	0.01	0.01
Zimbabwe	264	329	0.68	0.57	0.01	0.01
Sierra Leone	63	204	0.16	0.35	0.00	0.00
Djibouti	118	183	0.30	0.32	0.00	0.00
Liberia	124	166	0.32	0.29	0.00	0.00
Niger	99	158	0.25	0.27	0.00	0.00
The Gambia	109	142	0.28	0.25	0.00	0.00
Swaziland	275	105	0.71	0.18	0.01	0.00
Malawi	70	102	0.18	0.18	0.00	0.00
Comoros	49	71	0.13	0.12	0.00	0.00
Sao Tome	9	50	0.02	0.09	0.00	0.00
Lesotho	38	39	0.10	0.07	0.00	0.00
Guinea-Bissau	27	34	0.07	0.06	0.00	0.00
Burundi	5	21	0.01	0.04	0.00	0.00
SSA	38,885	57,583	84.7	83.5	0.97	1.01
World	3,396,841	4,740,056			1.14*	1.21*

Note: * Share of SSA's commercial exports to the world.

Source: authors' calculations based on data from World Trade Organization.