

## Barriers to Services Trade in Kenya and Rwanda

Report Prepared for the Commonwealth Secretariat

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## EXECUTIVE SUMMARY

Developing Trade Consultants (DTC) was retained by the Commonwealth Secretariat to conduct a study on barriers to services trade in two Commonwealth developing countries, Kenya and Rwanda; Rwanda is also a Least Developed Country (LDC). This study is a pilot to assess the feasibility of collecting and working with Services Trade Restrictiveness Indices (STRIs) in the context of low and lower-middle income countries. This report is the first major output for the project, and is designed to summarize our research and findings, and present initial results subject to validation by the two governments, and further input from stakeholders. Results presented here are based on data available as of April 2018.

Three sectors were identified for detailed study based on analysis of country strategy documents, as well as pertinent economic data and analysis: road freight transport; commercial banking; and distribution. As of 2015, transportation and financial services accounted for 48.1% of Rwanda's services imports, and 37% in the case of Kenya. The rationale for looking at these sectors in particular is that they are important inputs into other parts of the economy, particularly manufacturing, and they are extensively traded by the two countries in question. As a result, there is strong potential for large economic and development payoffs from regulating these sectors in an efficient and effective way. The STRIs we have constructed, based on a methodology developed by the OECD, provide a wealth of information to government and civil society alike on the measures that affect services trade in the selected countries and sectors, and enable for the first time a rigorous comparison with practices elsewhere in the world through data previously collected and disseminated by OECD.

Measuring trade restrictiveness for services is different from measuring it for goods. Goods encounter trade barriers from border taxes (customs duties), as well as quantitative restrictions (quotas) and other non-tariff measures (NTMs). These measures are typically applied at the border, but some NTMs can also be applied behind the border, in the form of regulatory measures and standards that affect trade. In services trade, frictions come primarily from regulatory measures, which are more akin to NTMs in goods.

Conceptually, three stages are involved in estimating the restrictiveness of trade policy settings in services. First, it is necessary to collect data on a wide range of regulations that affect the ability of service providers to contest markets (entry barriers), and the cost of doing business for providers in the market (ongoing conduct barriers). Individual regulatory measures need to be coded according to a pre-determined key so that the qualitative information contained in them can later be transformed into a quantitative scale, where a higher score indicates a more restrictive policy.

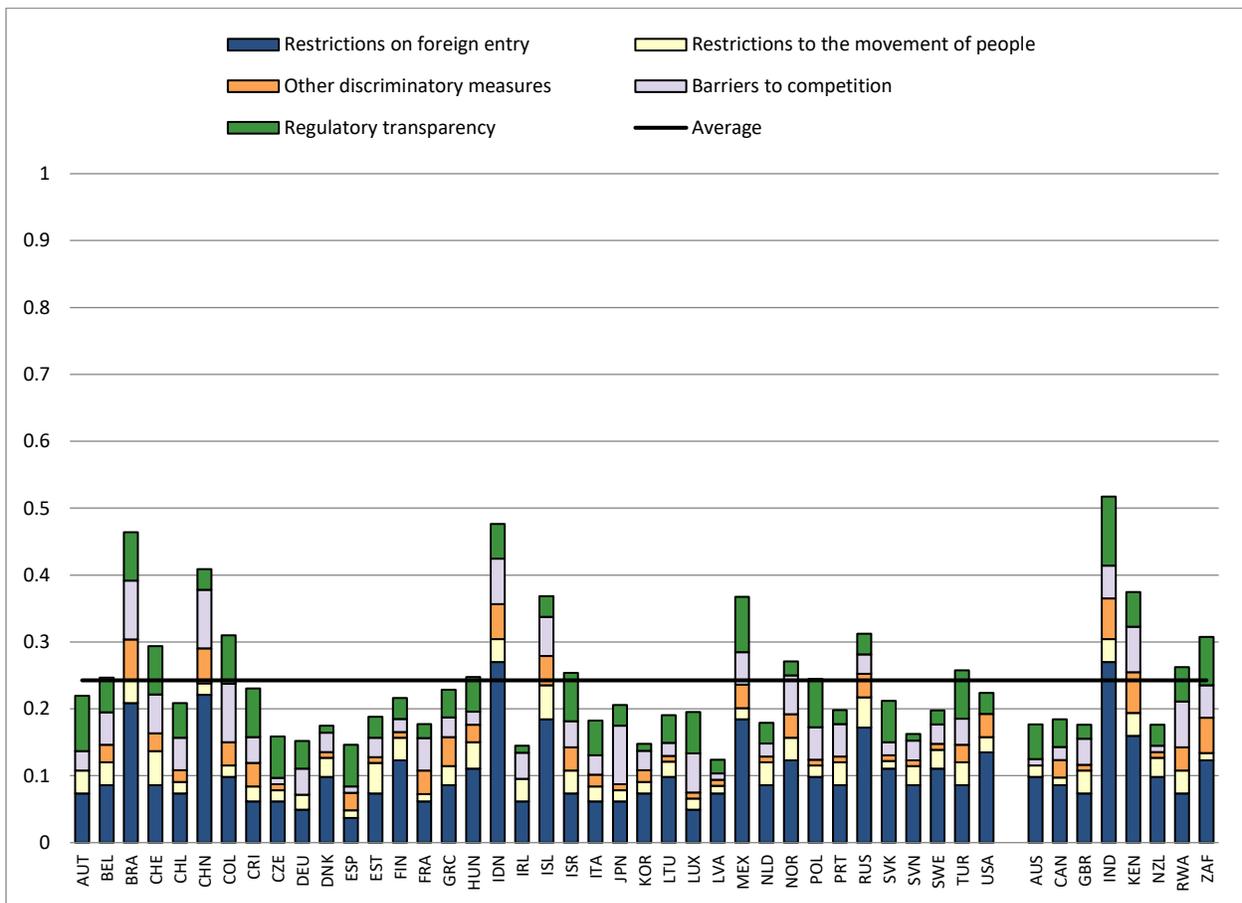
Once this data collection exercise has been completed sector by sector—because heterogeneity is more of a factor in services trade than is the case for goods—it is necessary to move to the second step of the methodology, namely aggregating individual policy measures to produce what has come to be termed a Services Trade Restrictiveness Index (STRI). STRIs are sector-specific, and summarize the level of restrictiveness of the full set of regulations affecting that sector, both horizontal measures (i.e., those that affect all sectors), and sector-specific measures. A key issue that arises in this kind of aggregation is weighting. Third, once the STRIs have been obtained, an econometric model can be used to relate them to economic outcomes of interest, such as prices, costs, or trade flows, to produce estimates of the economic impacts of restrictions on services trade.

Originally due to the Australian Productivity Commission, the STRI methodology has been deployed in two major projects by international organizations, one by the World Bank and the other by the OECD. This report adopts the OECD methodology, which already covers 44 countries and 22 sectors.

The OECD approach combines a rigorous approach to in-house primary data collection with a weighting scheme determined by expert judgment to produce measures of restrictiveness that are comparable across countries, and coherent with the types of measures known by economists to influence economic performance. STRIs calculated in this way are based on most-favored nation policies, and do not reflect bilateral or regional preferences—although that is an extension that further work could explore.

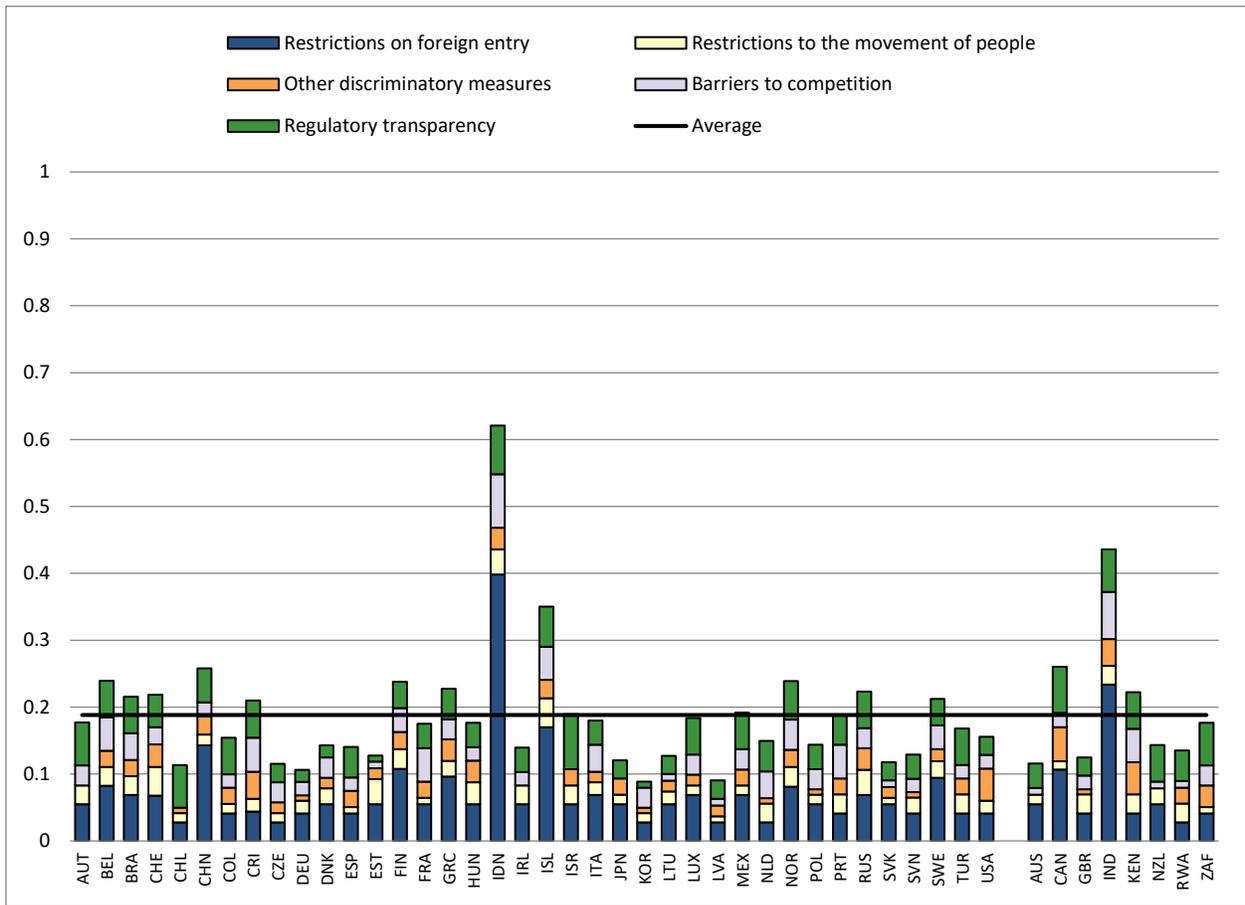
In all three sectors (see Figures below; the same information is repeated in numerical form in Appendix 1), we find that the restrictiveness of policies in Kenya and Rwanda is typically lower than what is observed in major developing countries for which data are available: the scores of both countries are more liberal than India within the Commonwealth, and Indonesia (all sectors), as well as Brazil and China (two sectors) outside it.. This evidence suggests that both countries have undertaken substantial liberalization over time. Rwanda and Kenya both have scores that are comparable to those of South Africa in commercial banking and distribution, although they are more restrictive in the case of road freight transport. In commercial banking, Kenya’s score is 0.37 and Rwanda’s is 0.26, compared with an average across all countries for which data are available of 0.24, and a maximum possible score (closed market) of 1.00. In distribution, Kenya’s score is 0.22 and Rwanda’s is 0.14, compared with an average of 0.19. Finally, in road freight transport, Kenya’s STRI score is 0.27, Rwanda’s is 0.21, and the average is 0.23.

Figure: STRIs in commercial banking, all countries, 2018 for Rwanda and Kenya, 2017 for others.



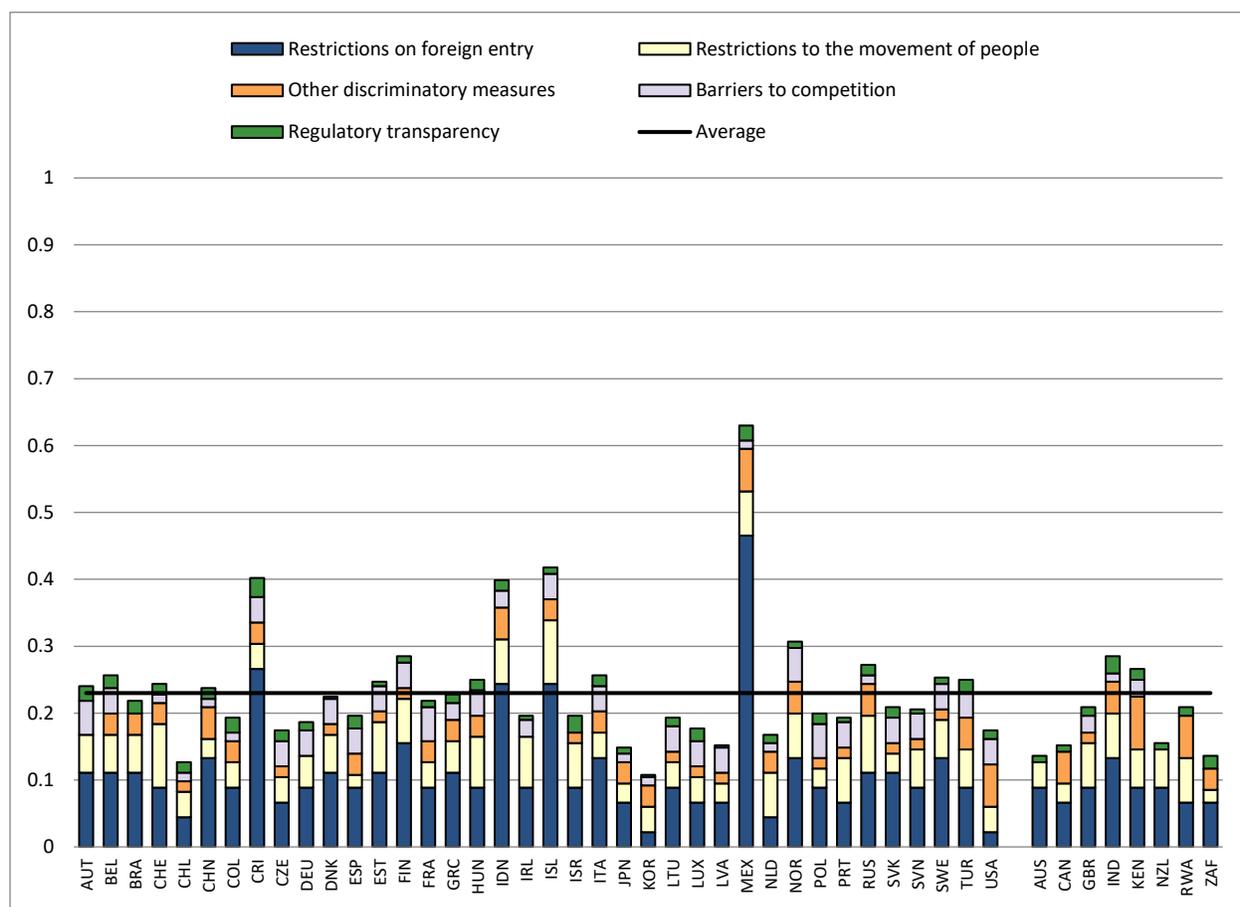
Source: OECD, based in part on data supplied by the authors.

Figure: STRIs in distribution services, all countries, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Figure: STRIs in road freight transport services, all countries, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Looking more closely at particular types of policies that affect services trade, we see that a number of the most important factors that push Rwanda’s and Kenya’s STRI scores above what is seen in high-income Commonwealth comparators are in fact cross-cutting issue, rather than sector-specific ones. While entry by foreign firms is not highly restricted in either country, Kenya applies a discretionary test for inward investments based on economic benefits to the host economy, which could have the effect of discriminating against foreign firms. Although inward investments are not typically blocked in practice, this measure remains in force and Kenya is coded in the same way as other countries that maintain similar measures that are rarely used, such as Australia and Canada. Kenya and Rwanda both allow repatriation of profits, so a key restriction historically in many developing countries has been resolved in these two cases. For movement of people, both countries apply labor market tests that require, for example, that a company is unable to fill a vacancy locally before it can resort to a foreign service supplier or intra-corporate transferee. Other cross-cutting discriminatory measures include public procurement in both countries, which is designed to favor local firms, and a difference in tax treatment of foreign and local businesses in Kenya. Regulatory transparency is an interesting point of contrast between the two countries: whereas licenses for activities like construction, which is a determinant of competitiveness in distribution services, are delivered quickly in Rwanda, much longer delays tend to be the norm in Kenya. The latter country could benefit from reducing these delays. In terms of sector-specific measures, commercial banking stands out as requiring commercial presence in both countries.

Whereas economists typically suggest that countries flatten and gradually reduce their tariff schedules in goods markets, advice for services markets is much more complex. The reason is that it is regulatory measures, not simple discriminatory taxes, that are in issue. This report has shown that both countries have some restrictive measures. But before reforms can be undertaken, it is important to arrive at a clear assessment of the costs and benefits of existing regulations relative to feasible alternatives. We do not conduct such an exercise here, but as a result of the data collection and coding process at the core of the STRI, both countries are now better placed to conduct it themselves. As a general proposition, cases of direct discrimination against foreign service providers may be seen by some as justified because they support local industrial development, or SMEs in particular—that is a traditional argument for protection. It is likely, however, that alternative policies with lower economic costs are available, such as SME-specific improvements in the business and investment environment, or even certain targeted subsidies. We are not suggesting a wholesale repeal of the measures coded in the STRI as restrictive, simply that they be assessed rigorously for the economic costs and benefits, including their effects on international trade.

Based on our analysis, we formulate a number of concrete recommendations for the consideration of governments and stakeholders in Rwanda and Kenya, as well as development partners:

1. **Trade statistics:** Develop the capacity to track services trade by partner country and sector. This information is a vital input into any serious analytical work on services trade, and is a necessary precursor to statistical analysis that could support policy change to facilitate trade, and enable analysis of trade effects induced through services trade policy changes.
2. **Expand STRI coverage:** The pilot has clearly established the feasibility and interest of calculating STRIs for developing Commonwealth countries. Expanding that initiative to cover additional sectors and countries would help improve the quality of economic policymaking, and facilitate trade both within the Commonwealth and more generally.
3. **Use the STRIs as a basis for regulatory audits:** This project has collected a large amount of data on regulatory measures affecting services trade in three sectors. Considerably more could be collected over time if the project is expanded. An important use of the data is to examine current regulatory measures, and undertake a rigorous cost-benefit assessment of them. The aim should be to develop a regulatory structure that is effective, in the sense that it achieves important social goals, and efficient, in the sense that it does so at minimum economic cost including disruptions to international trade. Looking at alternative regulatory measures that could achieve the same goals but with lower economic costs is an important part of the process. The OECD's STRI database provides a rich source of practice in other countries that can be drawn upon to inspire local reforms.
4. **Leverage regional initiatives:** The EAC has a well-established set of priorities in services, which in some cases can also support relaxation of MFN policy measures. The EAC Scorecard is a very positive initiative to promote transparency, so both countries should press forward with reforms aimed at eliminating the barriers identified in the Scorecard. The EAC CMP is also a positive platform for promoting regulatory harmonization. The data suggest that Kenya and Rwanda could both benefit more from reducing differences in key regulations with their trading partners, including intra-regionally.
5. **Address cross-cutting policies:** Some of the key policy restrictions we have identified are cross-cutting in nature, which is not unusual in the developing country context; indeed, compared with other developing countries for which data are available, Kenya and Rwanda

do not typically have overly restrictive cross-cutting measures, as a general rule. Engaging with stakeholders and partners to envisage ways of reducing discrimination against foreign service providers could yield significant economic benefits by facilitating additional investment, people movements, and cross-border trade. Policy areas like government procurement and tax could benefit from

6. **Engage with stakeholders to address sector-specific policies:** Our analysis has also highlighted some sector-specific policies that contribute to restrictiveness in the two countries. Reform requires detailed analysis and consultation. But we believe that issues like discriminatory tolls for road freight transporters, and public sector involvement in commercial banks and distribution companies could benefit from further consideration with the aim of ensuring effective and efficient sectoral regulations.
7. **Further incorporate the services dimension into development strategies:** Both countries already recognize the importance of services as an agent of structural change. But in the absence of trade in value added data, the contribution of services to exports in other sectors, particularly manufacturing, is not well understood. It is difficult to compete in world markets without competitive backbone services sectors. Developing this understanding and highlighting the ability of services to support structural change, income growth, and development will be key to moving forward on a broad based agenda to leverage services as one part of the two countries' overall economic strategies. Moving forward on this agenda item would also support future trade policy reforms, and would position the countries more actively in services negotiations in regional and multilateral forums.

## ACKNOWLEDGEMENTS

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This report was commissioned by the Commonwealth Secretariat, and the project team benefited from comments and suggestions at all stages. We are particularly grateful to Jodie Keane and Teddy Soobramanien for their constructive support. Ramesh Chaitoo was responsible for validating the report's findings with the governments of Kenya and Rwanda, and also provided comments. In addition, we acknowledge the funding generously provided by the UK government, Cabinet Office through a grant agreement provided for kickstarter assignments related to the forthcoming Commonwealth Heads of Government Meeting, April 2018.

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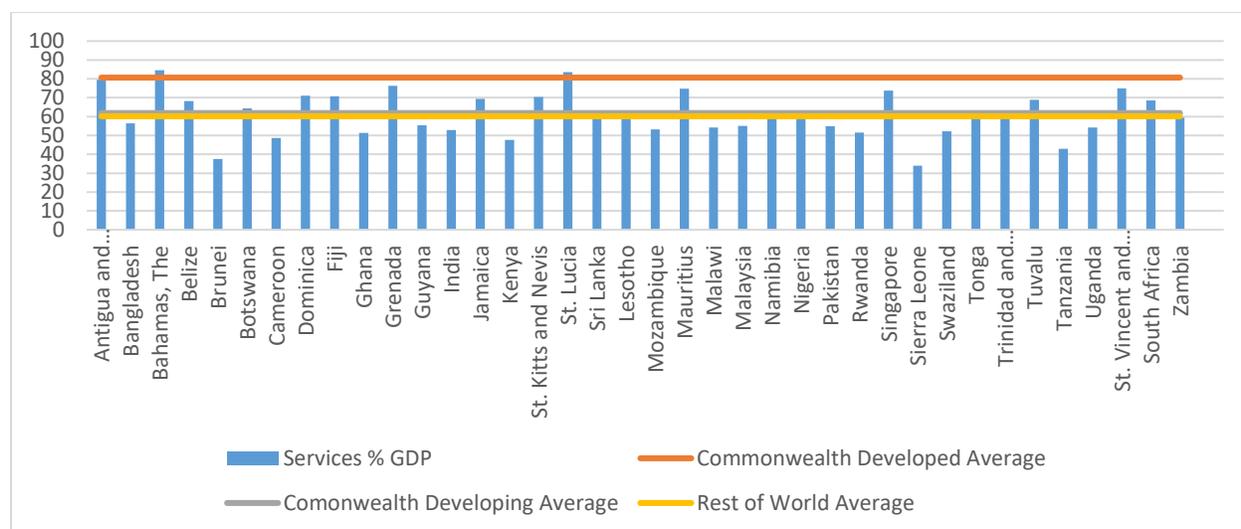
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# 1 INTRODUCTION AND PROJECT OVERVIEW

Developing Trade Consultants (DTC) was retained by the Commonwealth Secretariat to conduct a study on barriers to services trade in two Commonwealth developing countries, Kenya and Rwanda; Rwanda is also a Least Developed Country (LDC). This study is a pilot to assess the feasibility of collecting and working with Services Trade Restrictiveness Indices (STRIs) in the context of low income countries. We have selected three sectors for detailed study: road freight transport; commercial banking; and distribution. The rationale for looking at these sectors in particular is that are important inputs into other parts of the economy, particularly manufacturing, and they are extensively traded by the two countries in question. As a result, there is strong potential for large economic and development payoffs from regulating these sectors in an efficient and effective way. The STRIs we have constructed, based on a methodology developed by the OECD, provide a wealth of information to government and civil society alike on the measures that affect services trade in the selected countries and sectors, and enable for the first time a rigorous comparison with practices elsewhere in the world through data previously collected and disseminated by OECD.

The services economy is critically important for Commonwealth developing countries. On average, it accounts for just over 60% of GDP, although variation is considerable (Figure 1): in some cases, services make up over 80% of GDP. The two countries chosen for this pilot study, Kenya and Rwanda, have services sectors that constitute respectively 48% and 52% of GDP, numbers that are fairly typical for countries at their income levels, although they are below the Commonwealth developing country average due to the fact that the average includes economies that are highly dependent on services, such as Commonwealth members in the Caribbean.

Figure 1: Services, percent GDP, 2015, Commonwealth developing countries.



Source: World Development Indicators.

In addition to their standalone role in the economy, many services are also important inputs into the production of other types of economic output, in particular tradeable manufactured goods. At the local level, productivity spillovers from services to manufacturing are significant, which in turn means that services policies that promote productive upgrading can in turn spur manufacturing growth and increased trade (Hoekman and Shepherd, 2015). As such, services can be part of a broad-based approach to promoting structural change in developing countries—a point that is particularly true of “backbone” services like transport and logistics, finance, and telecommunications, which help link

local producers with global markets. Indeed, recent research shows that one factor contributing to the relative economic isolation of landlocked countries is restrictive services policies in sectors like transport and communication, which could connect them better to world markets (Borchert et al., 2017.)

In an increasingly globalized world, trade is a more important part of the equation for developing a competitive services sector. Whereas services were traditionally seen by economists as largely non-tradeable, the WTO's General Agreement on Trade in Services sets out four modes of supply whereby practically any service can be traded in principle, even if trade in fact rarely occurs for certain subsectors due to high levels of trade costs. Exporting services, either directly or indirectly through their embodiment as inputs in traded goods, can help diversify a country's economic base and increase its resilience to shocks. Indeed, research has shown that services trade was more resilient than goods trade during the Global Financial Crisis, even though the crisis itself originated in the US financial services sector (Borchert and Mattoo, 2010). It is also important to keep in mind, however, that importing services also offers major economic benefits, such as greater competition, higher investment, lower prices, higher quality, and increased productivity and competitiveness (EAC and World Bank, 2016).

Despite the significance of services in promoting structural change and economic development, as well as supporting employment, the impacts of policies on performance and trade are as yet poorly understood. The primary reason is that, unlike the case for goods, applied services policies are difficult to categorize and quantify, because they take the form of regulatory measures, not simple taxes (tariffs), and are often applied behind, not at, the border. Building on pioneering work by the Australian Productivity Commission, the World Bank and the OECD have both set out to collect regulatory databases that can form the basis of Services Trade Restrictiveness Indices (STRIs), disaggregated by GATS Mode of Supply, and by Sector. Kenya and Rwanda are both included in the World Bank's STRI, but data are now relatively old (around 2008-2010), although the World Bank is currently working with the WTO to update data. They are not included in the OECD STRI because that organization has no mandate to work on those countries. In the absence of up to date and accurate data on policy measures affecting services trade in countries like Kenya and Rwanda, it is simply impossible to undertake quantitative research on services. As a result, governments and stakeholders have little information at their disposal in relation to the development and poverty reduction potential of services, and which could help identify pro-active measures that could support productivity upgrading and structural transformation.

The rationale for this project is therefore threefold. First, we hope to demonstrate the feasibility of collecting rigorous, internationally comparable data on policies affecting services trade in a limited time, and with a restricted budget, in low income Commonwealth countries. Second, the project outputs will be global public goods, in the sense that the data and indices will be freely available, and fully comparable with existing OECD data on 44 developed and emerging economies. Third, we hope to spur research on trade in services in Commonwealth developing countries, and in particular in Rwanda and Kenya, not only by providing hard data that can be used in quantitative work, but also by raising issues of substance and methodology that deserve further investigation.

Against this background, the report proceeds as follows. Section 2 briefly presents the services economy in Rwanda and Kenya, focusing on recent developments in trade and production. Section 3 moves to the methodology for the project, and discusses in detail the rationale behind an STRI, as well as our view that the OECD approach is preferable to others. Section 4 presents an overview of results in comparative perspective. Finally, Section 5 concludes and offers policy recommendations.

## 2 SERVICES PRODUCTION AND TRADE IN RWANDA AND KENYA

This sector discusses some of the salient features of services in the two countries under study. The focus is on sectoral characteristics over time, as well as trade relations. We compare services trade integration to the case of goods, and look in detail at intra- and extra-Commonwealth trade flows.

### Box 1: Country Strategy Documents

In composing this section, we have referred to country strategy documents from Kenya and Rwanda to look at the role services play in their development programs. We have reviewed the following documents:

EAC and World Bank. 2016. *East African Common Market Scorecard 2016*. Washington, D.C.: World Bank.

Government of Kenya. 2010. “Vision 2030: First Medium Term Plan (2008-2012).” <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Kenya-Poverty-Reduction-Strategy-Paper-24065>.

Government of Rwanda. 2013. “Economic Development and Poverty Reduction Strategy.” <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Rwanda-Poverty-Reduction-Strategy-Paper-41127>.

State Department of Trade of Kenya. 2017. “Kenya – National Trade Policy,” <http://www.trade.go.ke/sites/default/files/Kenya%20National%20Trade%20Policy%20%282016%29%20.pdf>

UNCTAD. 2014. *Services Policy Review: Rwanda*. Geneva: UNCTAD.

Kenya’s Vision 2030, which seeks to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030, recognizes the importance of selected services sectors, specifically tourism, Business Process Outsourcing (BPO), information technology, financial services, and education and training as being among the key services that will drive the economic development of the country. Likewise, Kenya’s National Trade Policy (2017) recognizes the importance of trade in services and commits to facilitate improvements in the enabling environment for increased trade in services in selected sectors.

Both Vision 2030 and the National Trade Policy (State Department of Trade of Kenya, 2017) place particular emphasis on the distribution sector, which accounts for 15.7 percent of GDP, 10 percent of formal employment, and 58.7% of informal employment. The policy notes that the sector lacks a clear legal and regulatory framework, which has impeded its growth. Additionally, it is burdened by cumbersome licensing requirements. The Policy therefore commits to “providing an enabling legal and regulatory environment to support the growth and development of the distribution and wholesale sub-sector as well as a strong backward and forward linkage between the subsector and productive sectors of the economy”.

Under Vision 2030, the government’s aim is to “achieve a well-functioning financial system in order to accelerate economic growth by encouraging Foreign Direct Investment, safeguarding the economy from external shocks, and establishing Kenya as a leading financial center in Eastern and Southern Africa”. Financial service providers are diverse, including 42 commercial banks, 49 insurance companies, 12 deposit taking microfinance banks, and 199 registered savings and credit cooperatives (SACCO’s). Amongst the key targets under Vision 2030 is to facilitate the transformation of the banking sector to bring in fewer stronger, large scale banks.

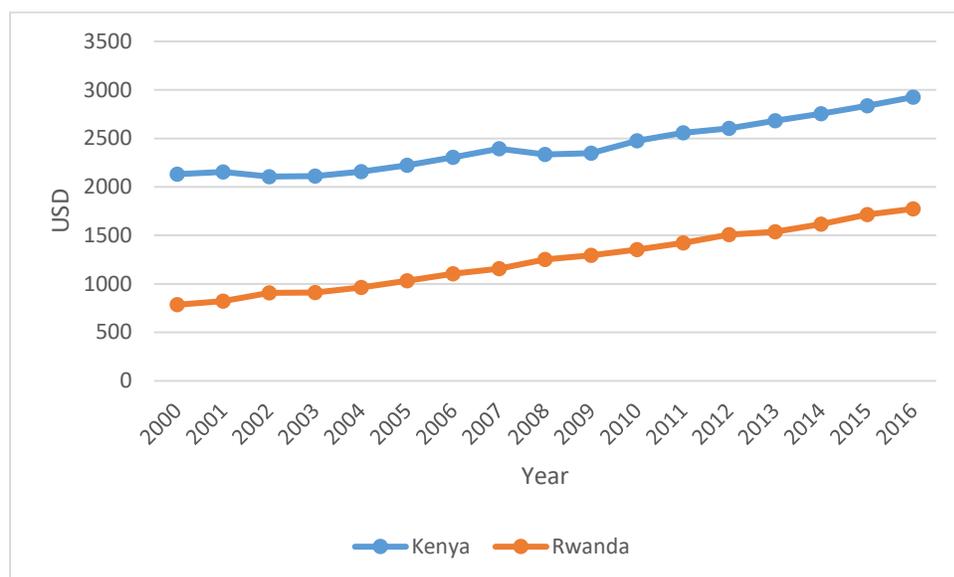
The Economic Development and Poverty Reduction Strategy II (2013-2018; Government of Rwanda, 2013) for Rwanda targets are heavily dependent on growth in exports from the services sector. The Revised National Export Strategy II has also prioritized export of services and has developed export strategies for the Tourism Services, ICT and BPO Services, Transport and Logistics, Distribution services, Health and Medical Services, Education Services and Financial Services. Rwanda is among the LDCs that are supposed to benefit from the WTO LDC Services Waiver as envisaged by Article IV of the GATS, but to date has not made use of it. Priority export services sectors in Rwanda that may benefit from this waiver include ICT services (Business Process Outsourcing), Tourism (Tours and travel operations), Professional services (accounting services), and Cultural services. While Rwanda has clearly done well in articulating sector-specific strategies for the development of the services sector, there is still a need for a holistic national services policy or trade-in-services strategy to boost services exports. Such a policy or strategy would identify overall services sector goals and measures to complement the existing sector strategies to ensure the overall development of services exports (UNCTAD, 2014).

## 2.1 Recent Trajectory of the Services Sector

The services sector generally tends to grow in line with per capita income. But that does not mean countries in the low and lower middle income groups, like Rwanda and Kenya, do not have important services sectors, or that services only matter for the economies of industrialized countries. This section reviews the recent evidence on the development of services in the two countries, focusing on production and aggregate trade, before breaking the picture down into more detailed relationships in the next subsection.

Both Kenya and Rwanda have experienced rapid economic growth in the 2000s, which has translated into higher per capita incomes (Figure 2). Income growth in turn is one factor that is promoting growth of the services sector. Another is technological change, such as the introduction and wide dissemination of cell phones, which has enabled the widespread use of mobile solutions such as payments systems, thereby increasing demand for and access to other types of services. For example, Argent et al. (2013) describe East African countries as “the most successful users of mobile money” (p. 4). They report that in a survey of 52 out of 129 mobile money operators, over 80% of all transactions worldwide occurred in East Africa, with Kenya alone accounting for 34% of transactions and 20% of users.

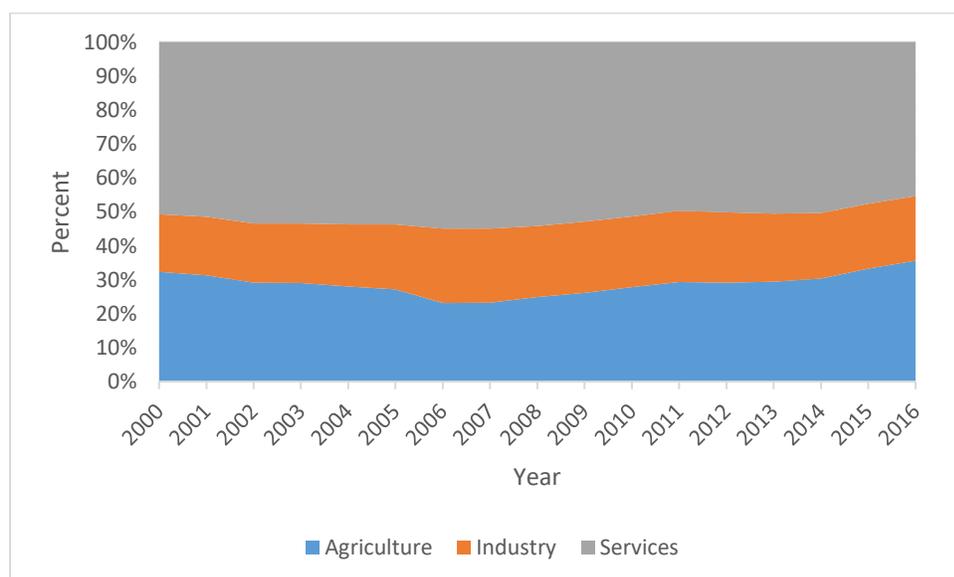
Figure 2: GDP per capita in Kenya and Rwanda, constant 2011 PPP dollars, 2000-2016.



Source: World Development Indicators.

Kenya is the largest services economy in the East African Community (EAC). The services sector amounted to 45% of GDP in 2016 (World Development Indicators). From a development perspective, it is usual to see a larger proportion of industry and services in GDP as the population transitions out of agriculture, and into higher value added activities. This pattern is evident in Kenya from 2000 through 2007, but changes in 2008: agriculture as a share of the economy is growing relative to the other two macro-sectors, largely at the expense of services (Figure 3). In 2008, agriculture was just under 25% of GDP, industry was 21%, and services were 54%; by 2016, those figures were 36% for agriculture, 19% for industry, and 45% for services, thus making clear the dynamic referred to in the previous sentence.

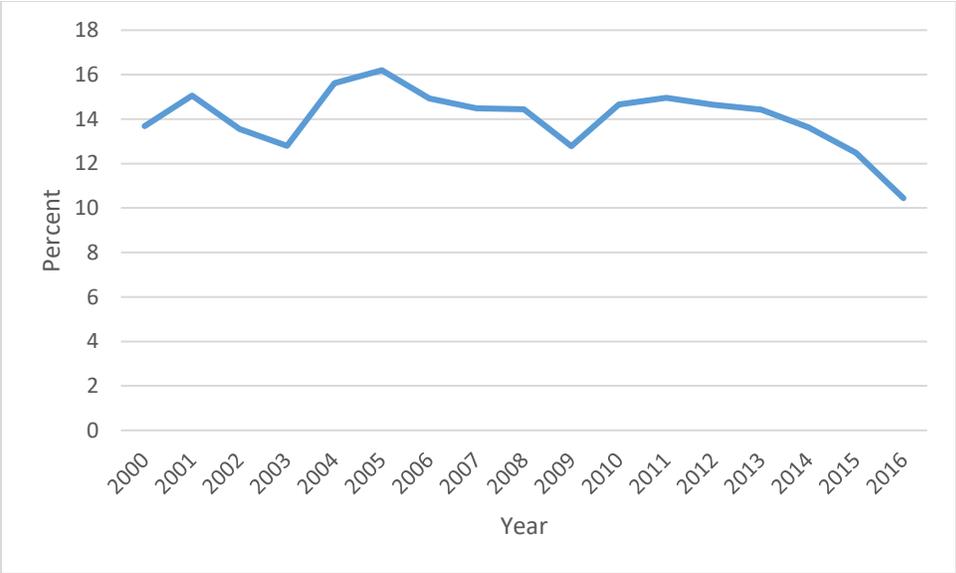
Figure 3: Breakdown of Kenya's GDP by macro-sector, percent, 2000-2016.



Source: World Development Indicators.

Although Kenya’s services sector accounts for a large share of total economic activity, international trade is relatively limited.<sup>1</sup> This result is in line with the findings of Miroudot et al. (2012), who showed that trade costs tend to be high in services sectors, particularly in lower income countries, which in turn can constrain trade. As a result, Kenya’s share in world services imports and exports came to only 0.06% and 0.07% respectively in 2016 (WTO, 2017). Total trade in services, i.e. aggregating across all sectors, relative to GDP has decreased from 13.7% in 2000 to 10.4% in 2016, the latest year for which data are available (Figure 4). These overall data do not distinguish growth patterns among different sectors, a point that we return to below. Kenya’s National Trade Policy aims to “promote expansion of trade in services targeting the regional and global market through measures that ensure Kenya remains competitive in the trade in services arena in the global market” (State Department of Trade of Kenya, 2017). The services sector has also been identified under the National Export Strategy (which is currently under discussion) as one of the key sectors targeted for export led growth.

Figure 4: Services trade relative to GDP, percent, Kenya, 2000-2016.



Source: World Development Indicators.

Although the above figure indicates that services trade has been growing slower than GDP in Kenya over recent years, it is important to nuance that perspective by comparing it with goods trade performance. Figure 5 does just that, by re-basing goods and services trade to be 100 in 2010, so that changes can be interpreted in percentage terms. Over the last decade and a half, goods and services trade have grown in tandem in Kenya, with 2016 showing significantly faster growth in services than in goods. The conclusion is that integration of services markets in Kenya has been proceeding in much the same way as for goods, with significant growth in trade over recent years, particularly since the early 2000s.

<sup>1</sup> See below for a discussion on the difficulties of measuring trade in services according to the GATS modes of supply in Rwanda and Kenya. The figures quoted in this section represent lower bounds on total services trade.

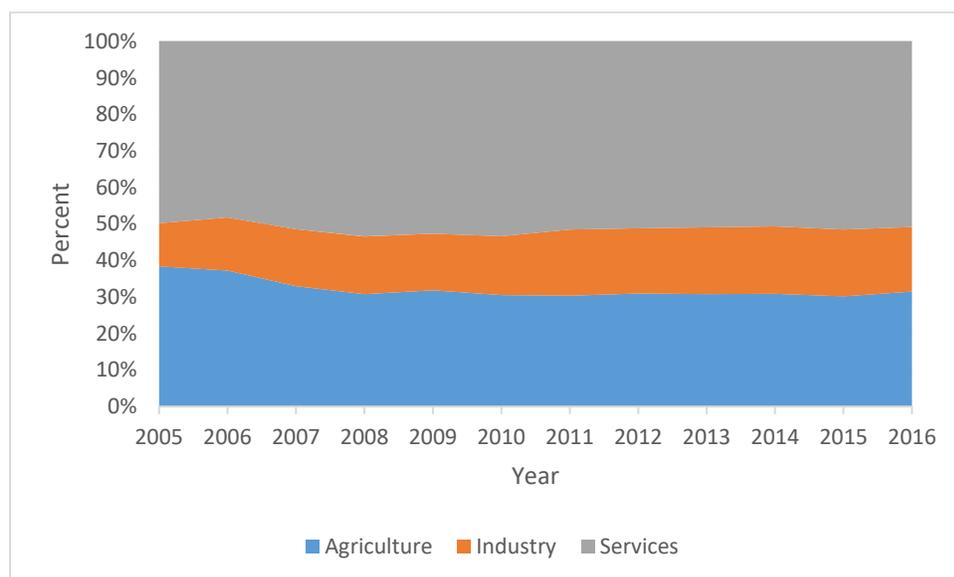
Figure 5: Kenya's trade in goods and services, 2000-2016, index (2010=100).



Source: World Development Indicators.

Unlike Kenya, where the services sector has been contracting relative to other activities in recent years, its share in total value added has remained essentially constant in Rwanda, at around 50% (Figure 6). Rwanda aspires to become a knowledge-based, services-led economy by 2020 through diversification of services, enhancing skill levels, investment in technology, and trading of services across the Eastern African region and beyond. The share of agriculture declined sharply between 2005 and 2008, in favor of industry. There is evidence of substantial structural change having taken place in Rwanda, but the pace seems to have slowed in recent years based on these aggregate data. From 2005 to 2010, the share of industry in GDP increased from 12% to 16%, and that of services increased from 50% to 53%. However, from 2010 to 2016, the share of industry only grew by two more percentage points, to 18%, while the share of services fell slightly, to 51%.

Figure 6: Breakdown of Rwanda's GDP by macro-sector, percent, 2005-2016.

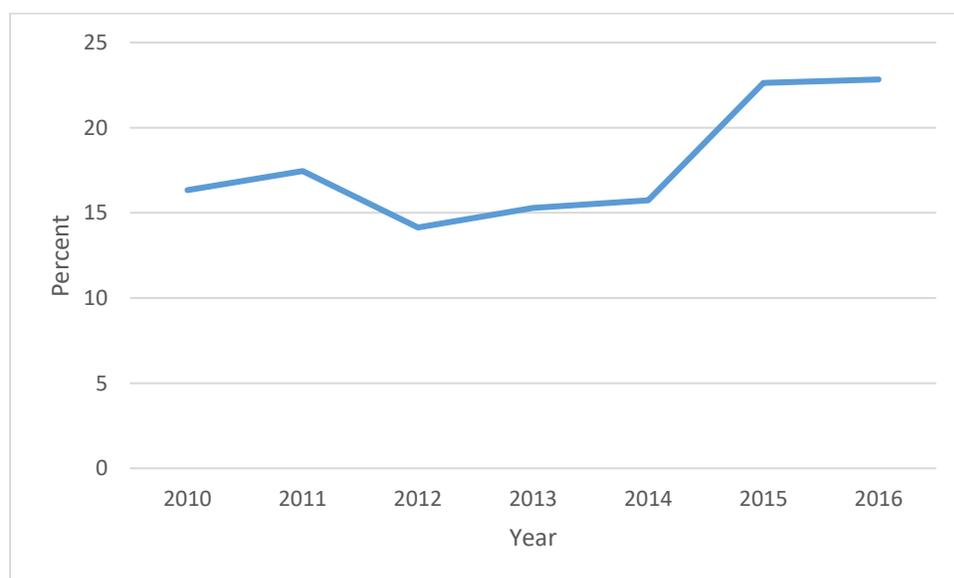


Source: World Development Indicators. Note: Data not available prior to 2005.

Rwanda's shares in world imports and exports in 2016 were 0.02% and 0.01% accordingly (WTO, 2017). Although Rwanda's trade share is more modest than Kenya's—in keeping with its smaller size—services account for a significant share of total economic activity.

Likely due to high trade costs in services sectors, services trade relative to GDP (Figure 7) is smaller than would be suggested by the sector's proportion in total value added. Nonetheless, services trade relative to GDP has been increasing over recent years, which is evidence of increasing integration between Rwanda and the global services economy. The issue of sectoral composition is important, and we return to that below.

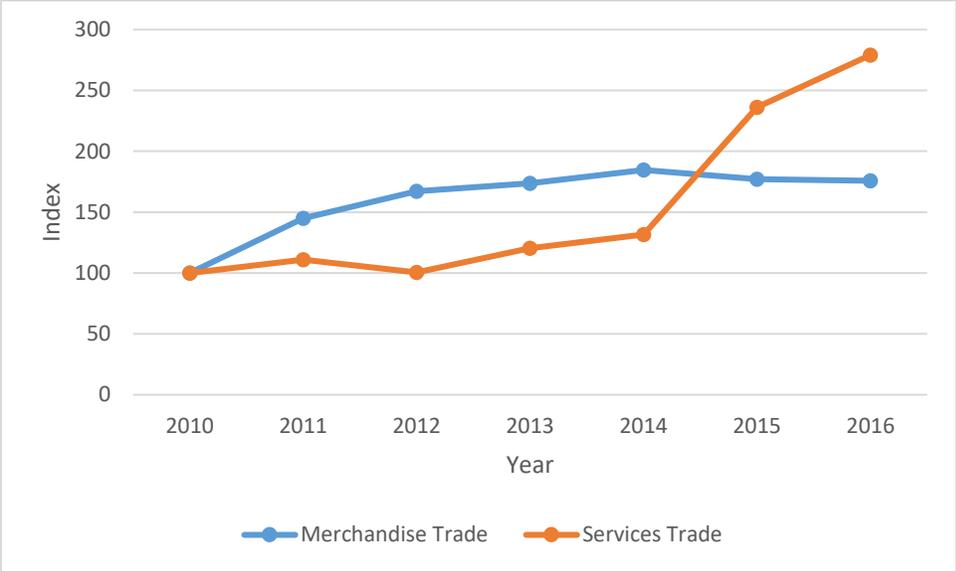
Figure 7: Services trade relative to GDP, percent, Rwanda, 2010-2016.



Source: World Development Indicators. Note: Data not available prior to 2010.

Figure 8 compares Rwanda’s growth in trade integration in goods and services. Although the growth rate of services trade was initially lower compared with goods, the position has inverted over the last few years, so that services trade is growing considerably more rapidly than goods. Rwanda has been leveraging trade integration to help promote its development objectives, and Figure 8 suggests the strategy has moved beyond goods to also include services.

Figure 8: Rwanda’s trade in goods and services, 2000-2016, index (2010=100).



Source: World Development Indicators; and authors’ calculations. Note: Data not available prior to 2010.

**2.2 Commonwealth and Non-Commonwealth Partnerships in Services Trade**

This section provides further details on Kenya’s and Rwanda’s services trade in terms of value, evolution, and main trade partners. It is worth mentioning that the data on services trade is captured from the Balance of Payments (BoP) statistics. Because these statistics record cross-border transactions of an economy with other countries, it can only reflect trade in services in some modes of supply. Mainly, it records services trade under cross-border supply (Mode 1) and consumption abroad (Mode 2) for some services, such as travel services. Therefore, BOP statistics do not allow for a comprehensive measurement of services supplied under Mode 3 or Mode 4 (WTO, 2010).

## Box 2: Trading Services Internationally Under the GATS

Under the WTO General Agreement on Trade in Services (GATS), trade in services is defined as ‘supply of services’ in four modes of supply. Mode 1 is cross-border supply from the territory of one country into the territory of another country. Mode 2 is consumption abroad, i.e. the service is supplied in the territory of one country to the consumer of another country. Mode 3 is commercial presence, i.e. the service is supplied by a service supplier of one country through commercial presence in the territory of another country. Finally, Mode 4 is the supply of a service through the presence of service suppliers from one country in the territory of another country. Service suppliers may act as independent suppliers or service supplier’s employees.

Some services can be provided in all four modes of supply depending on particular circumstances. For example, legal services may be supplied to clients in all four modes:

Mode 1: Legal advice to a client based abroad via electronic means;

Mode 2: A client coming from abroad receives legal advice in a lawyer’s office;

Mode 3: A law firm establishes a legal entity or a branch office abroad to provide legal services; and

Mode 4: A lawyer goes abroad to provide legal advice to a client based there.

On the other hand, other services cannot be supplied in some modes of supply due to lack of technical feasibility. For example, the services of maintenance and repair of transport equipment cannot be supplied in Mode 1 (Cross-border supply) because they would most probably require physical presence of service supplier near the equipment through Modes 2, 3, or 4.

Another aspect of trade in services is “servicification”. Servicification refers to the trend where manufacturers of goods are increasingly relying on services either as inputs (software installed in a technological product), activities within firms (in-house services that would belong to services industries had they been outsourced), or as output sold in connection with goods (some manufacturers also provide distribution, transport or maintenance and repair services for equipment) (see Miroudot, 2017; and National Board of Trade, 2016). This kind of trade does not constitute a separate mode of supply, but is frequently referred to as embodied services trade, in the sense that services are traded indirectly by being embodied in goods that move across borders.

Although trade data on the different modes of supply are very limited in terms of availability, it is possible to construct STRIs that cover all modes. That is because STRIs are based on regulatory data, not trade data. This project therefore covers all modes of supply in its regulatory analysis, even though our review of trade data is more circumspect in this section due to severe limitations of availability.

An additional limitation is that neither Kenya nor Rwanda maintain fully disaggregated data on trade in services in their BOP statistics. What this means is that they record exports and imports with an aggregate partner (the world), not individual countries. These data on total services trade are available through multiple sources, but we use the World Development Indicators for our most aggregate analysis. An additional problem is that sectoral disaggregation even with the world as trading partner is limited. While aggregate data can be useful for some purposes, such as tracking broad trends over time, they leave a significant gap in understanding in terms of the composition and destination of a country’s exports, and the composition and sources of its imports. To try and fill this gap, we use the OECD-WTO BATIS database, which was recently released on an experimental basis. It uses mirroring techniques and modeling to fill in missing observations either by sector or by partner in the bilateral services trade matrix. We use these data in full knowledge that for Rwanda and Kenya they

are largely constructed using econometric models, not via direct observation. That imposes severe limitations on how strictly they can be interpreted, but nonetheless they serve to shed some light on questions that have to date remained completely obscured.

### **Box 3: Trade Data Resources for Commonwealth Countries**

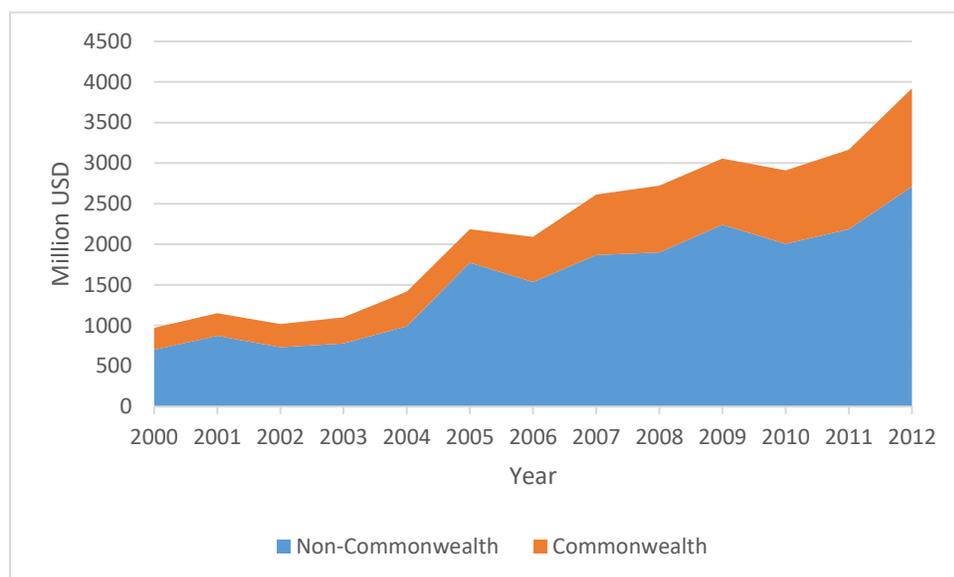
Trade data availability is a serious constraint for empirical work on services. The problem is acute in Commonwealth countries, particularly low income countries and small economies. For example, as of 2014, 40 Commonwealth countries reported some export data from their Balance of Payments statistics to UN Comtrade, the central international repository for trade data. However, only six—Australia, Canada, Cyprus, Malta, Singapore, and the UK—break down total exports into subtotals by trading partner. This kind of bilateral disaggregation is a crucial building block for nearly all empirical work on international trade. The absence of bilateral trade data for the vast majority of Commonwealth countries means that it is very difficult to conduct research that includes them, and takes account of their special characteristics.

A number of options are available to empirical researchers to try and loosen this constraint. First, they can apply mirroring: for instance, if Rwanda's bilateral export data are unavailable, they can be approximated using reported imports from trading partners. This solution is partial only, essentially capturing most North-South trade, but very little South-South or intra-regional trade. In addition, as of the end of 2017, OECD and WTO have made available an experimental dataset (BATIS) that applies mirroring but also uses econometric models to estimate missing data. This dataset gives the most complete picture currently available of services trade globally, but it is important to stress that for countries like Rwanda and Kenya, much of the data is modeled rather than directly observed.

Although data availability is limited for the Balance of Payments, which capture trade essentially in GATS Modes 1 and 2, the problem is much worse for the other modes of supply. Mode 3 data are generally only maintained by major economies that are members of the OECD. Mode 4 data are not systematically recorded anywhere. An effort is underway, led by WTO, to produce estimates of services trade by mode of supply for a large number of countries applying a simplified statistical approach, but the dataset is not yet available.

Kenya's services trade has been growing strongly over recent years. Thus, services imports almost tripled in the decade through 2012, the latest year for which disaggregated data are available in the OECD-WTO BATIS database. Figure 9 exploits the disaggregation of trade flows by country to show the development of imports from Commonwealth partners, and those from the rest of the world. Over the time period considered, intra-Commonwealth imports grew by 346%, while those from the rest of the world increased by 288%.

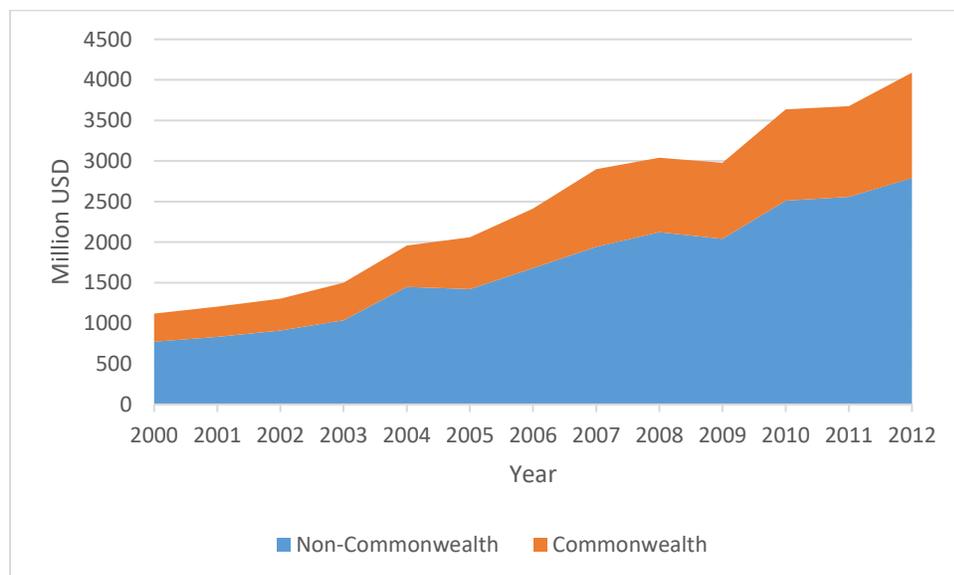
Figure 9: Kenya's services imports, 2000-2012, M USD.



Source: WTO-OECD BATIS dataset; and authors' calculations.

Kenya's services exports increased strongly through 2012 (Figure 10). Exports to other Commonwealth countries increased by 275%, while exports to the rest of the world increased by 261%.

Figure 10: Kenya's services exports, 2000-2012, M USD.



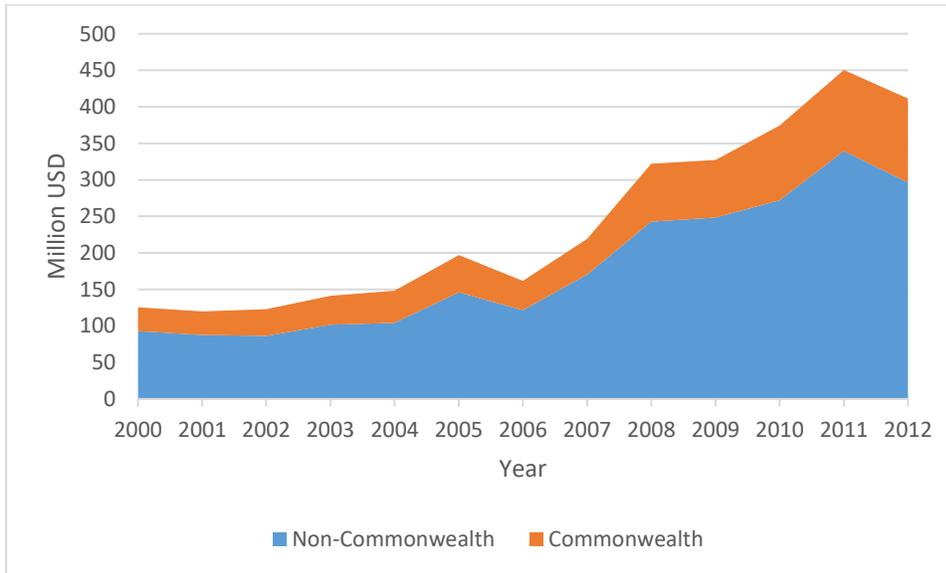
Source: WTO-OECD BATIS dataset; and authors' calculations.

As suggested by the observed differences in growth rates between trade with Commonwealth partners and trade with the rest of the world, the Commonwealth as a group represents an increasingly important share of Kenya's total services trade. In 2012, Commonwealth countries supplied 30.9% of Kenya's services imports, and accounted for 31.7% of its exports. Leading Commonwealth partners

include the UK and India on both the import and export sides, while the largest trading partners outside the Commonwealth include the USA and EU (Germany, France, and the Netherlands).

As in Kenya’s case, Rwanda’s services imports have been increasing in absolute terms (Figure 11). The breakdown into Commonwealth and other sources shows that imports from the former increased by 350% through 2012, while for the latter the comparable figure was 319%.

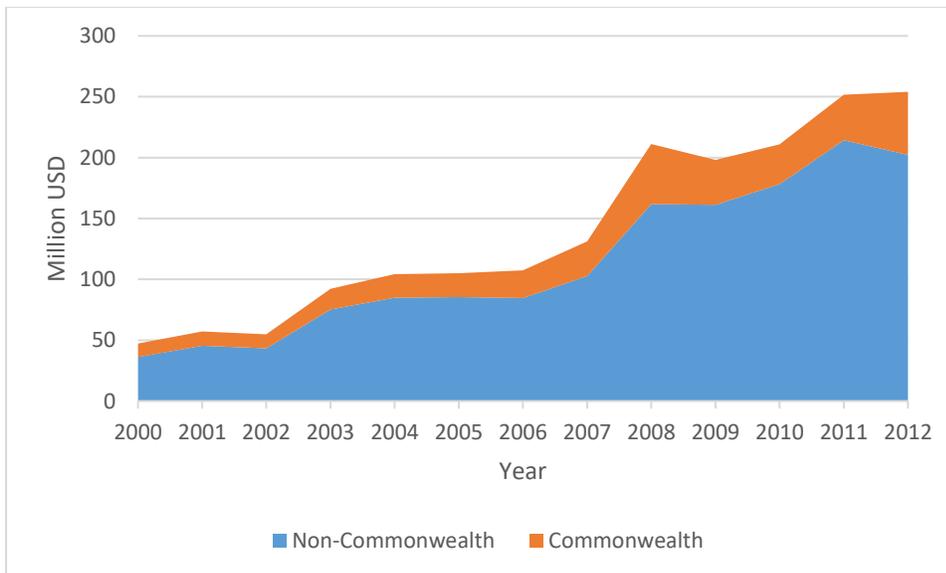
Figure 11: Rwanda’s services imports, 2000-2012, M USD.



Source: WTO-OECD BATIS dataset; and authors’ calculations.

Rwanda’s services exports also increased sharply through 2012 (Figure 12). Exports to other Commonwealth countries grew by 366%, while those to the rest of the world grew by 459%.

Figure 12: Rwanda’s services exports, 2000-2012, M USD.



Source: WTO-OECD BATIS dataset; and authors’ calculations.

In terms of shares of imports and exports, Commonwealth countries represent important sources of imports and destinations of exports for Rwanda, as was the case for Kenya. In 2012, intra-Commonwealth imports accounted for 27.9% of the total, while the corresponding figure for exports was 20.4%. Key Commonwealth trading partners include India, the UK, Kenya, and Uganda. Among non-Commonwealth countries, Rwanda has important services trade links with the USA, China, and the EU (Germany, the Netherlands, Sweden, and Belgium), as well as Switzerland.

This review of the data has shown that Kenya and Rwanda are both active in services trade, and are becoming increasingly so over time as their services sectors grow and become more competitive. The Commonwealth is an important part of an overall pattern of increasing trade integration: for all directions of trade except Rwanda's exports, we find that integration with Commonwealth countries has been growing more quickly than with the rest of the world. We re-emphasize that our analysis here is necessarily partial, and limited to the Balance of Payments statistics. We have relied extensively on synthetic data generated by econometric models, as well as data generated by trading partners. Although this exercise is informative, we stress that it is an urgent policy priority for Kenya and Rwanda, and indeed for most other Commonwealth countries, to develop the statistical capacity to track trade in services more comprehensively.

### **2.3 Services and Market Integration: The Regional Dimension**

Kenya and Rwanda are both members of the East African Community (EAC). In 2010, EAC instituted the first common market arrangement in Africa. It is based on the free movement of economic output and agents, including services. Instituting a full common market in services is a very ambitious agenda item, but it highlights the commitment of EAC countries to increasing regional integration, with the aim of promoting economies of scale and developing the competitiveness needed to succeed in world markets. However, it is important to keep in mind that facilitating trade in services is an ongoing commitment, not a one-off set of reforms like instituting a customs union for goods. Indeed, the EU has been working to promote continued reforms to its own single market for services, navigating a complex interplay of domestic political interests and regulatory complexity.

As a measure of transparency and to facilitate peer review and promote progress, EAC has published two Common Market Scorecards, in 2014 and 2016. They cover services, and identify member country commitments under Annex V of the EAC Common Market Protocol, as well as recent reforms. EAC and World Bank (2016) shows that EAC countries have been active in committing to integrate their services markets. The Common Market Protocol (CMP) identifies seven priority sectors: business, communication, distribution, education, financial, tourism and travel, and transport. Within these sectors, Rwanda has committed to open the most sub-sectors (103 out of a maximum of 136) of any EAC country, while Kenya has made commitments in 63 sub-sectors (Table 1). Kenya has committed to liberalize an additional 22 sub-sectors, taking the total committed under the CMP to 85. This is in line with the EAC Council of Ministers directive that each Partner State commits a minimum of 78 sub-sectors. In addition, Kenya and Rwanda are both expected to commence negotiations to liberalize 5 additional sub-sectors: construction services, environmental services, health related and social services, and recreational, cultural and sporting services.

**Table 1: Service sub-sectors committed under the EAC CAP, Kenya and Rwanda.**

Liberalized Service Sectors	Services sub-sectors	Kenya
1. Business Services	32	15
2. Communication Services	20	17
3. Distribution Services	4	3
4. Educational Services	5	4
5. Financial Services	16	12
6. Tourism and Travel Related Services	4	3
7. Transport Services	22	9
Total number of sub-sectors committed	103	63

Source: EAC and World Bank (2016).

A key contribution of the Scorecard exercise is to monitor the extent of compliance with the common market's requirements in different sectors, and across countries as provided for by Article 50 of the EAC Common Market Protocol. The publications track non-conforming measures (NCMs), which can then be targeted for removal over time. Both Scorecards have focused on four sectors: professional services (legal, accounting, architecture, and engineering), transportation services (air and road), telecommunication services, and distribution services (wholesale and retail trade). EAC and World Bank (2016) find that Rwanda had 10 NCMs in 2016, down from 11 in 2014. Kenya had 14, down from 16 in the previous report. Kenya's NCMs were concentrated in professional services and telecommunications, while Rwanda's were mainly in professional services and transport.

Monitoring regional integration of services markets is important for development of the services sector in EAC. However, it is a different exercise from the one we have been retained for here. Our objective is to catalogue and quantify the policies that Kenya and Rwanda maintain on an applied MFN basis, i.e. to those countries with which they do not have a preferential agreement covering services. This is in keeping with the STRI exercises that have been conducted previously by the Australian Productivity Commission, the World Bank, and the OECD. Of course, it would be possible to extend this work in the future to look at the different rates of restrictiveness of MFN and preferential policies, but first it is necessary to obtain a baseline that can be used for comparison. In terms of economic impact, it is important to note that imports from other EAC countries only accounted for 2.0% of Kenya's total services imports in 2012, while the corresponding figure for Rwanda was 8.2%. As a result, focusing on non-preferential policies ensures that we are capturing the trade policy measures that affect the overwhelming bulk of imports in both countries.

### **3 THE STRI METHODOLOGY: FROM REGULATIONS TO IMPACTS**

The previous section outlined the importance of the services sector in Rwanda and Kenya, including as part of their overall stance towards economic integration. In this section, we turn to the question of how to quantify policies that restrict trade in services. An extended discussion of methodology is necessary, because the question is in fact a challenging one given the large number of different regulations that affect services, and their complexity relative to the simple tariffs that are common in goods markets. The next subsection discusses in intuitive terms the STRI methodology, and specifically the version deployed by the OECD, which we adopt here. The following subsection then discusses our choice of sectors for this pilot project. The final subsection then presents our data collection methodology for those subsectors.

### 3.1 Measuring Policy Restrictiveness in Services

Measuring trade restrictiveness for services is different from measuring it for goods. Goods encounter trade barriers from border taxes (customs duties), as well as quantitative restrictions (quotas) and other non-tariff measures (NTMs). These measures are typically applied at the border, but some NTMs can also be applied behind the border, in the form of regulatory measures and standards that affect trade. In services trade, frictions come primarily from regulatory measures, which are more akin to NTMs in goods. In goods, comparing restrictiveness of tariffs across countries is relatively simple at the product-level: it is possible to simply compare tariff schedules, with a higher ad valorem tariff indicating a more restrictive policy stance. While difficult issues of aggregation arise in the construction of economy-wide measures of restrictiveness even in goods (e.g., Kee et al., 2009), the situation is much less complicated than in services due to the preponderance of tariffs.

Conceptually, three stages are involved in estimating the restrictiveness of trade policy settings in services. First, it is necessary to collect data on a wide range of regulations that affect the ability of service providers to contest markets (entry barriers), and the cost of doing business for providers in the market (ongoing conduct barriers). Individual regulatory measures need to be coded according to a pre-determined key so that the qualitative information contained in them can later be transformed into a quantitative scale, where a higher score indicates a more restrictive policy. To provide some intuition, Table 2 presents examples of common restrictions affecting particular modes of supply.

**Table 2: Examples of policy restrictions by mode of supply.**

Mode	Examples of restrictions
Mode 1: Cross-border supply	<ul style="list-style-type: none"> <li>• Requirement for foreign service providers to establish a commercial presence, i.e., requiring them to switch to another mode of supply;</li> <li>• Restrictions on business outsourcing;</li> <li>• Regulations on consumer protection that unduly restrict trade.</li> </ul>
Mode 2: Consumption abroad	<ul style="list-style-type: none"> <li>• Travel restrictions to the country where the service supplier is based and the service is offered;</li> <li>• Regulations on domestic recognition of documents proving the act of receiving certain services (e.g., domestic recognition of foreign degrees in educational services).</li> </ul>
Mode 3: Commercial presence	<p>Restrictions on establishment:</p> <ul style="list-style-type: none"> <li>• Licenses;</li> <li>• Quotas on establishment;</li> <li>• Restrictions on certain forms of legal entity;</li> <li>• Minimum capital requirements;</li> <li>• Limitations on the share of foreign capital;</li> <li>• Prohibition of FDI in certain sectors;</li> <li>• Location conditions.</li> </ul> <p>Restrictions on operation:</p> <ul style="list-style-type: none"> <li>• Local content requirements;</li> <li>• Operational permits and licenses.</li> </ul>
Mode 4: Movement of natural persons	<ul style="list-style-type: none"> <li>• Visa requirements;</li> <li>• Quotas on inflows of temporary workers;</li> <li>• Limitation of the maximum period of stay.</li> </ul>

Source: Authors.

Once this data collection exercise has been completed sector by sector—because heterogeneity is more of a factor in services trade than is the case for goods—it is necessary to move to the second step of the methodology, namely aggregating individual policy measures to produce what has come to be termed a Services Trade Restrictiveness Index (STRI). STRIs are sector-specific, and summarize the level of restrictiveness of the full set of regulations affecting that sector, both horizontal measures (i.e., those that affect all sectors), and sector-specific measures. A key issue that arises in this kind of aggregation is weighting: should all measures be given equal weights in the STRI, or are some types of policies more restrictive than others? Various approaches to this question are possible, ranging from purely statistical weighting schemes (e.g., Dihel and Shepherd, 2007) to the use of expert judgment.

Third, once the STRIs have been obtained, an econometric model can be used to relate them to economic outcomes of interest, such as prices, costs, or trade flows, to produce estimates of the economic impacts of restrictions on services trade. This methodology is originally due to the Australian Productivity Commission (see Dee, 2005, for a review).

Since first being deployed in selected sectors in the early 2000s, STRIs have been taken up by leading international organizations active in the trade domain. The World Bank's STRI project covers 103 countries and five sectors (Borchert et al., 2014). It records policy restrictions in place in around 2008-2010, based on a survey of law firms for developing countries, and publicly available sources for OECD countries. The range of policy restrictions captured is relatively narrow, focusing only on those that embody legal discrimination against service suppliers from other countries. The World Bank is currently updating the database in conjunction with the WTO, but as of writing, these data are not available.

The second major STRI project is conducted by the OECD. It covers 44 countries and 22 sectors. The database and indices are updated annually starting in 2014. As such, it represents a more detailed reading of policies in sectoral terms than the World Bank database, and has the advantage of representing a clear moment in time, with regular updates. In addition, it also captures some non-discriminatory policies that affect services trade. This is an important point: as Dee (2005) argues, it is likely that non-discriminatory services policies typically have bigger economic impacts than discriminatory measures, because they affect the real resource cost of doing business, not just the ability of incumbent firms to earn economic rents. Whereas the World Bank project primarily relies on law firms to supply information on policy restrictions, the OECD collects data directly, then validates it with government. Based on its greater level of sectoral specificity, its inclusion of some non-discriminatory policies, its data collection methodology, and the fact that it is updated regularly, we believe that the OECD STRI currently represents the efficient frontier in terms of quantifying barriers to trade in services. We apply it to Kenya and Rwanda here, and acknowledge with thanks the extensive and generous assistance supplied by the OECD Secretariat throughout the course of this project.

In terms of the three steps identified above, we can briefly summarize the OECD methodology, which is set out in full by Geloso-Grosso et al. (2015). The first step is undertaken by the team directly using Excel sheets to code information about possible policy restrictions, and to note sources for transparency and dialogue purposes. Most measures are coded as one (restriction) or zero (no restriction), or where there is a numerical answer, the methodology applies thresholds for binary scores. One complexity of services regulations is that apparently liberal policies in one area can be rendered de facto null and void by a single highly restrictive measure in another area. For instance, if the foreign equity limit for services firms in a particular sector is zero—i.e., FDI is not permitted—then a lack of other specific measures dealing with foreign providers does not mean that the sector is liberal: in fact,

it is completely closed for Mode 3. For that reason, the OECD methodology takes account of dependencies among measures by coding dependent measures as one if there is a related measure that has the effect of closing the market. On the flipside, complementary measures are grouped and scored as zero only if all measures in the bundle are not restrictive.

To aggregate these data into an STRI, the OECD methodology applies expert weights. Specifically, the organization convened expert meetings for each sector, to bring together experts proposed by member countries, as well as others from the World Bank, WTO, and the Secretariat itself, including specialized departments. Together, these experts concentrated on identifying relevant policy measures for inclusion in the STRI, and deciding on how each measure should be weighted relative to the others.

Finally, to translate the numerical STRI—which ranges between zero and one—into an economic impact, Benz (2017) uses the concept of an ad valorem equivalent. In essence, his methodology makes it possible to map STRI scores to tariff equivalents. Limitations on data availability mean it is not possible to do this for every sector. Nonetheless, results are striking: estimates of tariff equivalents range as high as 2000%, and range between 20% and 300% in most sectors. Consistent with the results of Miroudot et al. (2013), this approach suggests that trade costs are typically higher in services than in goods.

An additional way of translating numerical STRIs into concrete economic outcomes is through the concept of regulatory heterogeneity. Many services experts believe that differences in regulations between countries, not just their absolute level of restrictiveness, drive observed patterns of trade by influencing trade costs. The OECD Secretariat has developed an algorithm to compute measures of bilateral regulatory heterogeneity using the STRI data. Nordas (2016) shows that a reduction in regulatory heterogeneity of 0.05 points is associated with an increase in services exports of 2.5%, and that the impact is larger with a lower overall level of restrictiveness. Again using the concept of an ad valorem equivalent, she goes on to quantify the effect of the average regulatory heterogeneity score in the OECD STRI sample as between 20% and 70% at low levels of restrictiveness.

We follow the OECD's approach here, in the interests of rigor, comparability, and transparency. We emphasize that the STRIs constructed in this way measure *de jure* restrictions in place, not other *de facto* impediments that may exist to the operations of services firms. That is an important, but distinct, question. We use different data to address it in Section 5. The second point to note is that the STRIs we produced are based on MFN policies, i.e. measures that apply to trading partners with whom there is no preferential agreement. Although regional integration is an important dynamic in East Africa, focusing on MFN restrictions not only provides an important baseline with which to compare preferential liberalization, but also identifies policies that cover the overwhelming bulk of imports in both Kenya and Rwanda. Our work could be extended in future to look at the impacts of preferential agreements.

### 3.2 Selection of Services Sectors in this Report

With the aim of looking at links between goods and services trade, this report analyzes the trade restrictiveness of services sectors that are known to have an impact on the productivity and export performance of industry, particularly manufacturing, including through their involvement in GVCs. Hoekman and Shepherd (2015) use a combination of firm-level and country-level data to show that productivity in services sectors—which is negatively affected by overly restrictive policies—is associated with higher productivity and exports in manufacturing, due to the fact that the latter uses services inputs extensively. This rationale leads naturally to a focus on backbone services sectors that provide important inputs to other parts of the economy. The potential gains from reforms in these sectors are very high, because they have strong spillovers to the rest of the economy.

To make the point clear, we can use data from the OECD-WTO Trade in Value Added Database (TiVA). The only African country in the database is South Africa, so we take that as a point of reference. Using sophisticated techniques to reconcile national accounts data, input-output data, and trade data, TiVA makes it possible to analyze the origin of the value added content of exports. For instance, we can see that services value added accounted for 36.7% of the gross value of manufacturing exports in 2011, the latest year for which data are available. Looking deeper into the services sectors that contributed to manufacturing exports in South Africa, we see that transportation and storage accounted for 17.8% of the services total, finance accounted for 11.2%, and wholesale and retail trade (distribution) accounted for 32.4%. Together, these three sectors contributed 61.4% of total services value added in South Africa's gross exports of manufactured goods.

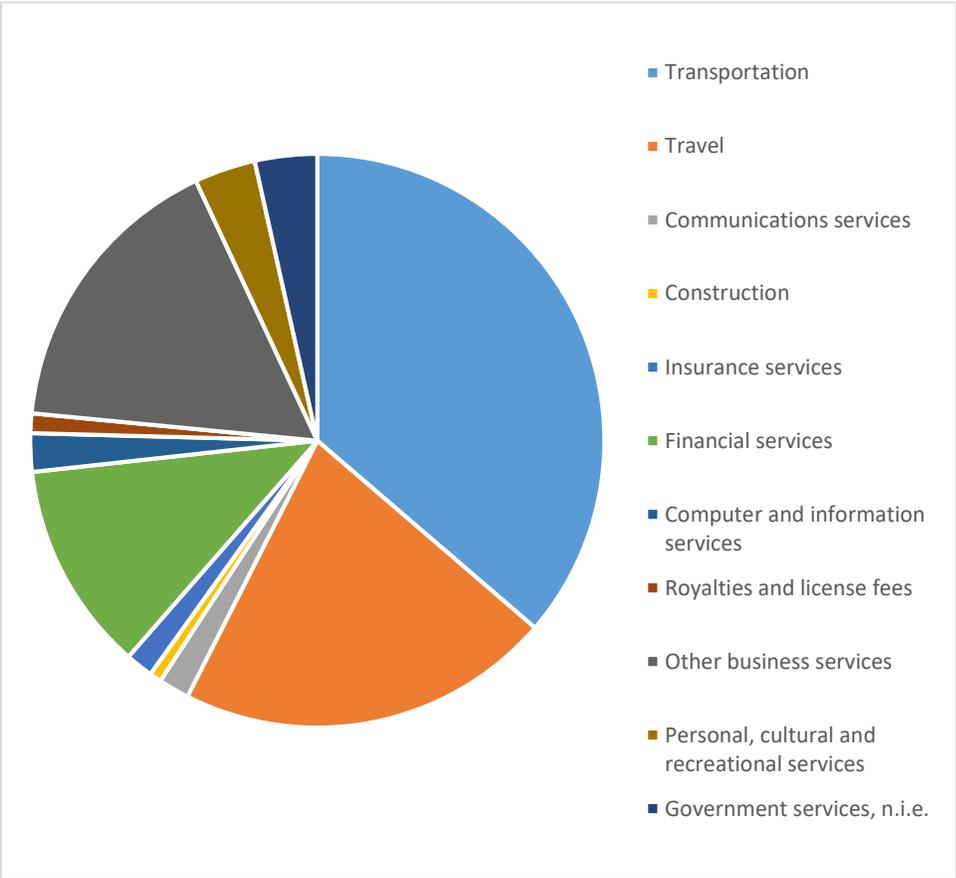
Although the TiVA dataset does not cover Rwanda and Kenya, similar information is available from the Eora Database. However, this information is presented with the major caveat that data quality are known to be inferior to TiVA, and much of the information for small, lower middle income countries is imputed or estimated rather than observed. With this in mind, however, the Eora data show another way in which the three sectors are integrated with regional and global economies: out of the value of Rwanda's and Kenya's gross exports in these three sectors, 16% and 21% respectively is accounted for by foreign value added. In other words, imports of goods and services are part of what facilitate the export success of these sectors

Given its nature as a pilot, this project can only focus on a limited number of sectors, not the full 22 considered by the OECD in its work. There is a strong rationale for focusing data collection efforts on sectors that are believed to have strong links to the rest of the economy, and where the gains from continued reforms could therefore be particularly high, as well as those sectors which have the strongest regional and global trade links. Based on the above analysis, we believe that transport, finance, and distribution are the leading priorities for Kenya and Rwanda from the point of view both of likely economic benefits, as well as their potential to promote structural change by helping develop the manufacturing sector.

We can use BATIS data to look more directly at the importance of these sectors to Rwanda's services trade. The sectoral disaggregation used by BATIS identifies financial services, and transportation and storage as individual sectors. There is no individual entry for distribution, but part of its activities, such as storage and warehousing, are caught under transportation and storage.

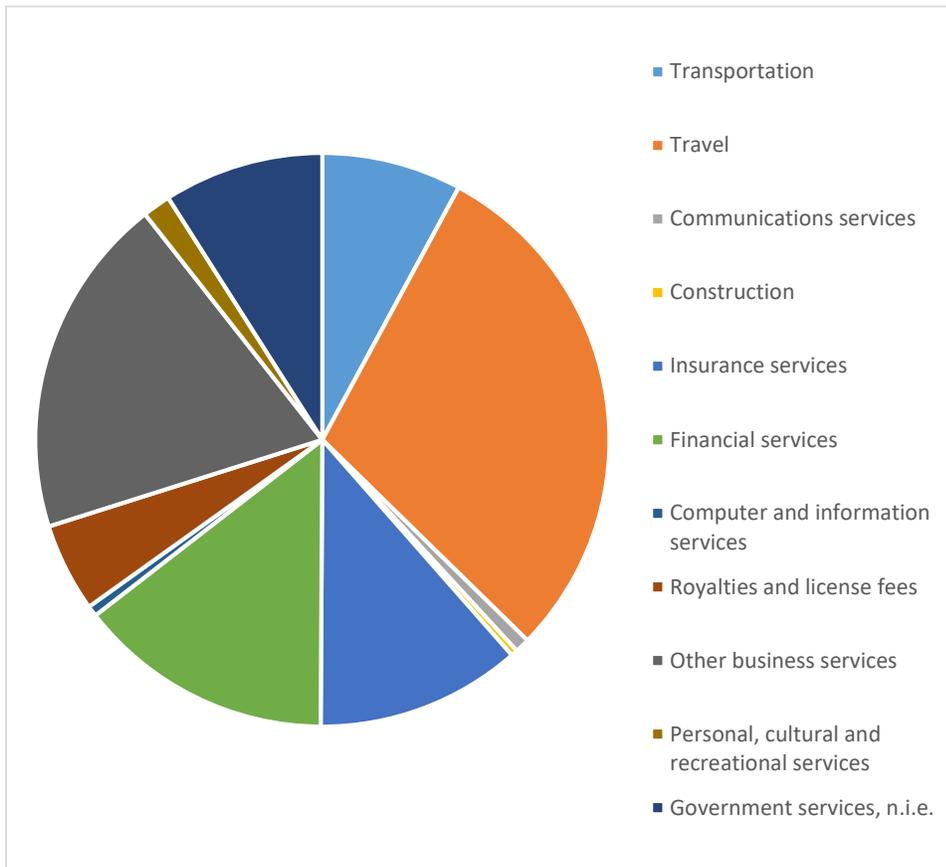
Figures 13 and 14 show that transportation and financial services accounted for significant shares of Rwanda's services trade in 2012. Specifically, they made up 48.1% of imports and 22.3% of exports. They made up the largest traded sectors other than other business services, which groups together a wide range of activities. The importance of these sectors is quite consistent over time, with the import share in 2000 equal to 53.4%, and the export share equal to 24.2%.

Figure 13: Breakdown of Rwanda's services imports by sector, 2012.



Source: OECD-WTO BATIS dataset; and authors' calculations.

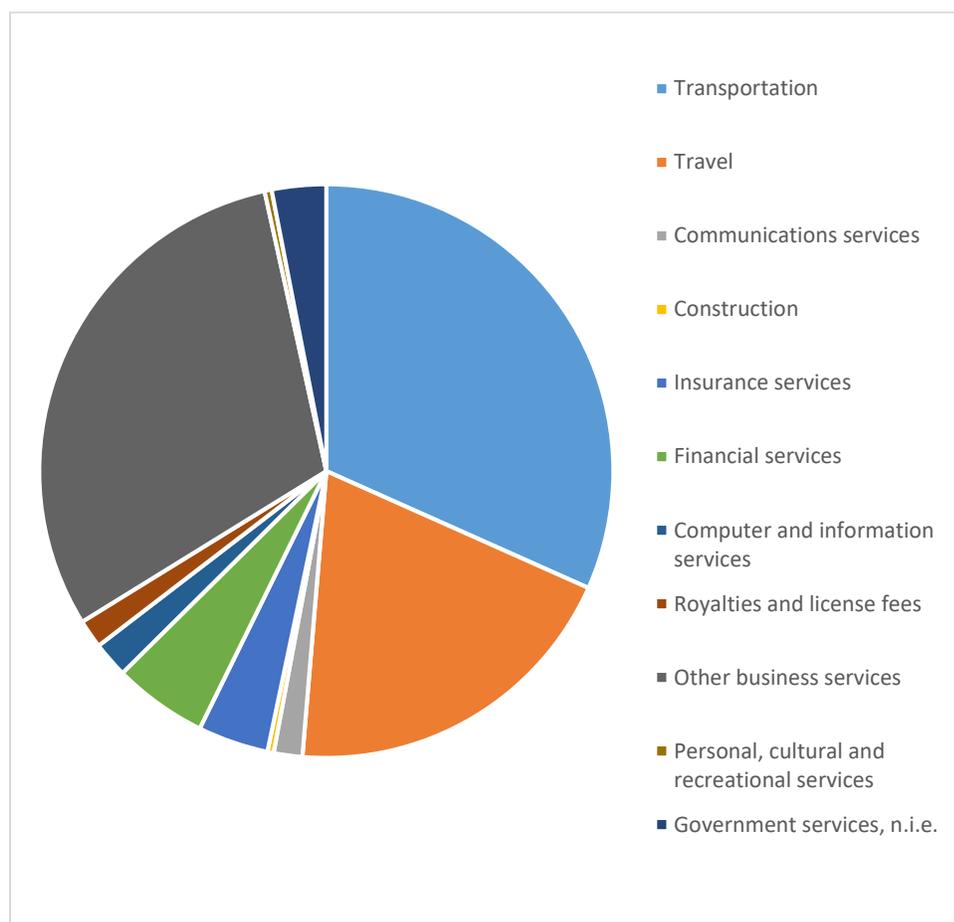
Figure 14: Breakdown of Rwanda's services exports by sector, 2012.



Source: OECD-WTO BATIS dataset; and authors' calculations.

A similar analysis for Kenya shows that transportation and financial services together accounted for 37.0% of imports and 38.7% of exports in 2012 (Figures 15 and 16). As was the case for Rwanda, these sectors in Kenya play a very significant role in trade. Indeed, transportation is the largest import sector in Kenya, and it comes a close second to travel services in terms of exports. Again, these sectoral shares remain relatively stable even over the medium term. In 2000, transportation and financial services together accounted for 43.6% of Kenya's imports, and 37.9% of exports.

Figure 15: Breakdown of Kenya's services imports by sector, 2012.

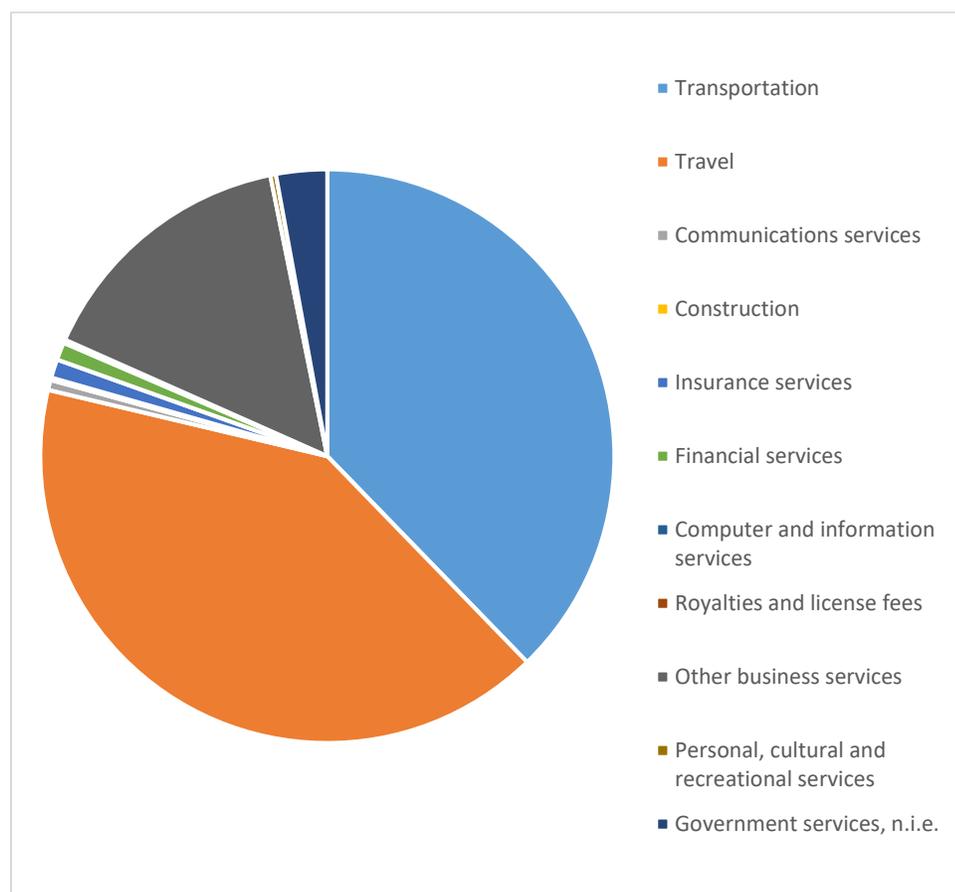


Source: OECD-WTO BATIS dataset; and authors' calculations.

This analysis confirms the view that it is appropriate to focus this pilot study on transportation, distribution, and finance in Rwanda and Kenya. In addition, Government of Rwanda (2013) identifies financial services, transport, and logistics as among its priorities, while Government of Kenya (2010) similarly highlights the importance of a productive financial sector, and of reducing costs in transport and distribution.

For STRI purposes, we need to map these large aggregates to individual sectors in the OECD scheme. For financial services, the OECD STRI scheme identifies commercial banking, which accounts for the lion's share of activity in this aggregate in developing countries, keeping in mind that insurance is treated as a distinct sector. Distribution is identified as such in the OECD STRI sectoral scheme. For transportation, we believe the best fit is road freight transportation. The other components of transportation in the OECD classification are rail, air, and maritime. The last one is clearly not appropriate, as Rwanda is a landlocked country. Air freight is limited to high value to weight commodities, and although it is developing in Africa, it is not yet as important as other modes. Road transport is responsible for the overwhelming bulk of trade within Africa, in particular between Kenya and Rwanda on the one hand, and their regional Commonwealth partners on the other. We also stress that road transport, commercial banking, and distribution are all included within the priority sectors of the EAC CMP (EAC and World Bank, 2016).

Figure 16: Breakdown of Kenya’s services exports by sector, 2012.



Source: OECD-WTO BATIS dataset; and authors’ calculations.

### 3.3 Data Collection Methodology

This project is much more limited in scope than OECD’s own data collection effort, which covers 44 countries and 22 sectors. Our data collection effort was limited by time and scope to three sectors—commercial banking, road freight transport, and distribution—in the two countries being studied, namely Kenya and Rwanda. Following a project kickoff meeting on January 22<sup>nd</sup> 2018, our team collected and coded data through March 9<sup>th</sup>, 2018. Results are based on data available as of April 2018, when validation took place. The coding team worked in tandem with local experts on the ground in Kenya and Rwanda to identify relevant laws, analyze their provisions, and resolve points of uncertainty or apparent inconsistency. In all, the team coded responses to 269 possible policy restrictions in each country, for a total of 538 measures in all. Our work took account of around 30 relevant pieces of legislation and regulation in Rwanda, and nearly half as many again in Kenya. Access to these legal documents in digital form was facilitated by our local experts, who were able to point the coders to the appropriate documents, and also confirm the empirically important case in which there was no relevant law or regulation dealing with a particular question.

The coding team worked with Excel sheets graciously provided by the OECD Secretariat. These sheets are the same ones used by the OECD in its work, thereby ensuring that our results are fully comparable with theirs—a point to which we return when we analyze results in the next section. The sheets catalogued the full range of policy restrictions to be assessed for each sector, and enabled the team to record responses that could feed into the quantitative analysis, as well as sources (legal texts)

and hyperlinks whenever possible. While Rwanda and Kenya both have a substantial amount of legislation available online, local experts were also able to provide texts that were not generally available, so hyperlinks are not provided in all cases. The exercise is therefore as transparent and replicable as possible.

To give an idea of how the coding process was undertaken, we can consider the first measure in the commercial banking sector. That measure asks whether or not there is a maximum foreign equity limit imposed. The result is recorded as a percentage, namely the maximum allowable percentage of a commercial bank that can be held by a foreigner. In Kenya, we consulted the Banking Act 1989. That Act does not impose any limitation on the percentage of a commercial bank that can be held by a foreigner, subject only to the general prudential requirement that no individual should hold an interest of greater than 25%. Consistently with OECD practice, which does not treat this kind of prudential limitation as a trade restrictive measure, we therefore coded the result as 100. Indeed, the Act specifically allows foreign commercial banks to have full ownership of commercial banks in Kenya, so there is indeed no effective limit on foreign participation. For this measure, Kenya is therefore scored as having the least restrictive environment possible.

For transparency, Appendices 2 and 3 reproduce the list of laws consulted in each country. Full results of this coding process, which proceeded in a similar way to the above example for the other 537 measures captured in each country, are available on request. For each sector, we have recorded relevant policy restrictions, the coding we have applied, and the legislation on which the coding is based. As is apparent from a review of these two Appendices, it is not possible to briefly summarize the process of coding individual pieces of legislation. That is why we have focused in this section on outlining the general approach and the safeguards put in place to ensure accuracy and consistency.

To ensure maximum consistency, during the coding process we paid particular attention to the most comparable countries in the OECD's dataset, namely South Africa, India, and Indonesia. We hypothesized that there may be some commonalities in terms of the restrictions applied by low and middle income countries, and so we ensured that similar policies in Rwanda and Kenya were coded in line with what is observed elsewhere in the OECD sample.

After coding was completed, we supplied the Excel sheets to the OECD Secretariat. The Secretariat kindly agreed to run its own aggregation and weighting algorithms on our data. Again, this ensures complete consistency and comparability with existing work. Finally, government officials in Kenya and Rwanda were asked to validate our coding and results. No errors were found in the Kenyan coding, while consultations in Rwanda necessitated some small changes in the data. Results presented in the following section take full account of this validation exercise, and are based on the small number of corrections introduced during that process.

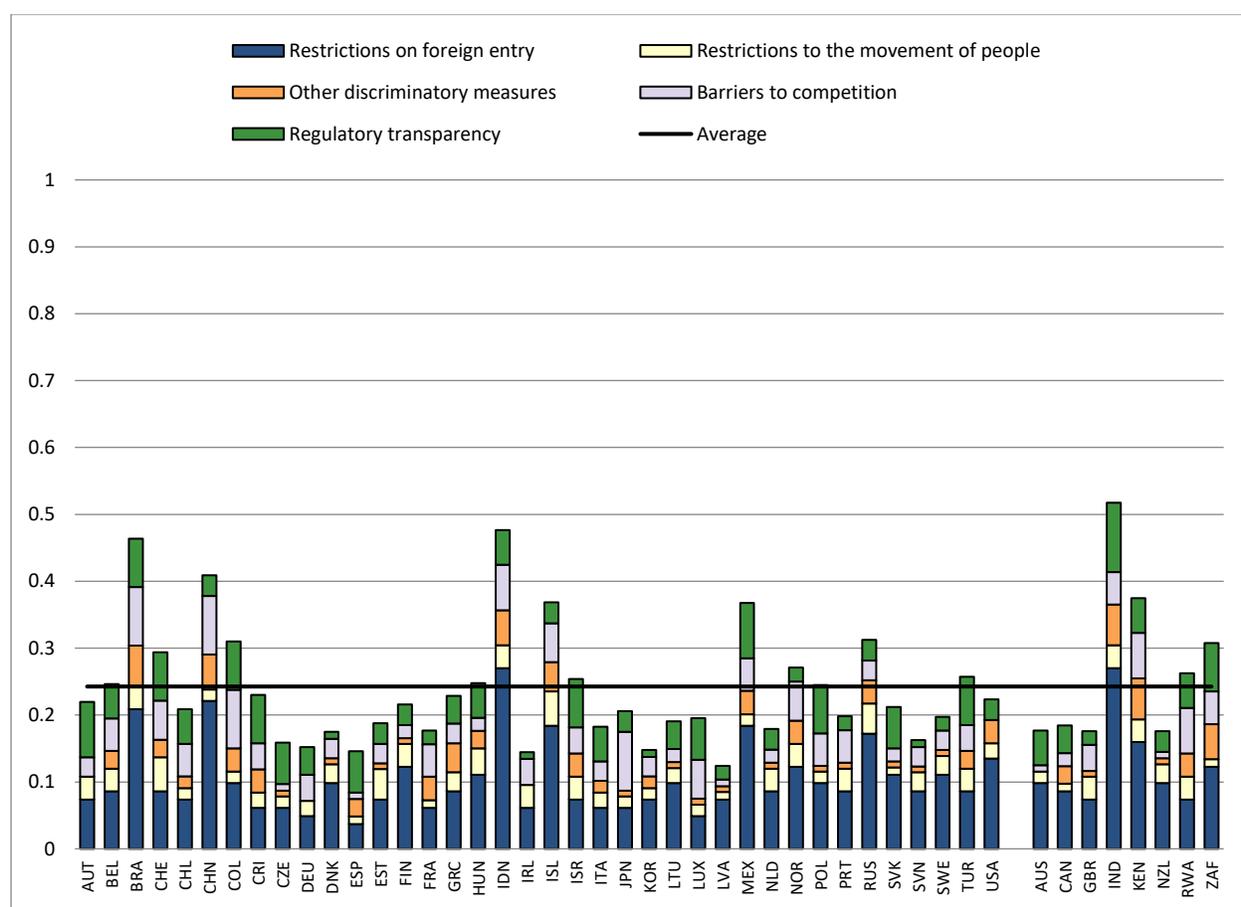
## 4 KENYA AND RWANDA STRIS: OVERVIEW OF RESULTS

Having discussed the services economies in Kenya and Rwanda, and introduced the STRI methodology, this section summarizes results of the data collection exercise. Raw data (coded regulations) are available on request. STRI scores with a breakdown by component are provided in Appendix 1. Here, we summarize the STRIs graciously produced by the OECD Secretariat using the raw data collected for this project. The indices are fully comparable with those calculated for the main OECD STRI project. We focus on comparisons with other Commonwealth countries, but also record overall averages and compare performance with other developing countries for context. In all cases, STRIs range between zero (no recorded restrictions) and one (closed market).

## 4.1 Commercial Banking

Figure 17 shows STRIs for the commercial banking sector. Kenya, with a score of 0.37, and Rwanda (0.26) are both more restrictive than the average across all countries for which data are available (0.24), but the difference is only slight in the case of Rwanda. Moreover, the average across all countries is dominated by OECD members. Comparing Kenya and Rwanda with middle income countries like Brazil (0.46), China (0.41), Indonesia (0.48), India (0.52), and South Africa (0.31) shows that they are generally more liberal or at least comparable in restrictiveness in this sector despite their lower level of per capita income. Indeed, neither Kenya nor Rwanda has restrictions that have historically been common in developing countries, such as restrictions on repatriating profits. The general picture that emerges for this sector is that Kenya and Rwanda are relatively liberal, in particular in comparison with other developing countries for which data are available.

Figure 17: STRIs in commercial banking, all countries, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Figure 18 zooms in on the Commonwealth countries in the sample, which are mostly developed. In comparison with their Commonwealth peers, Kenya and Rwanda, with scores of 0.37 and 0.26 respectively, are more restrictive than the developed Commonwealth countries: Australia has a score of 0.17, Canada 0.18, the UK 0.18, and New Zealand 0.18. However, both countries are less restrictive than India (0.52), and Rwanda is also less restrictive than South Africa (0.31).

To see where these results come from, we can take individual groups of measures separately. In terms of restrictions on foreign entry, Rwanda has the equal lowest score among Commonwealth countries

(0.07), while Kenya has the second highest (0.16) after India (0.27). The difference between Rwanda and Kenya is largely due to the fact that foreign investments in Kenya—regardless of sector—have to be shown to benefit the country, and are subject to administrative discretion;<sup>2</sup> in Rwanda, by contrast, there is no such requirement. However, both countries restrict land ownership by foreigners, and require commercial presence for the provision of commercial banking services.

Both countries have high scores relative to comparators in the area of restrictions on people movements, being equal to India (0.03) and above all other Commonwealth countries in this case. These high scores stem from the use of labor market tests in both countries: for example, Kenya requires firms to show that they were unable to fill a vacancy locally before using a foreign transferee or service supplier, and that programs are in place to provide training to locals.

In terms of other discriminatory measures, Kenya's score is equal highest in the Commonwealth sample (with India; 0.06), while Rwanda's (0.03) is below those of India and South Africa (0.05), but above those of the other countries. The countries' scores essentially stem from restrictions on public procurement designed to favor local firms in both countries, and differential tax treatment in Kenya.

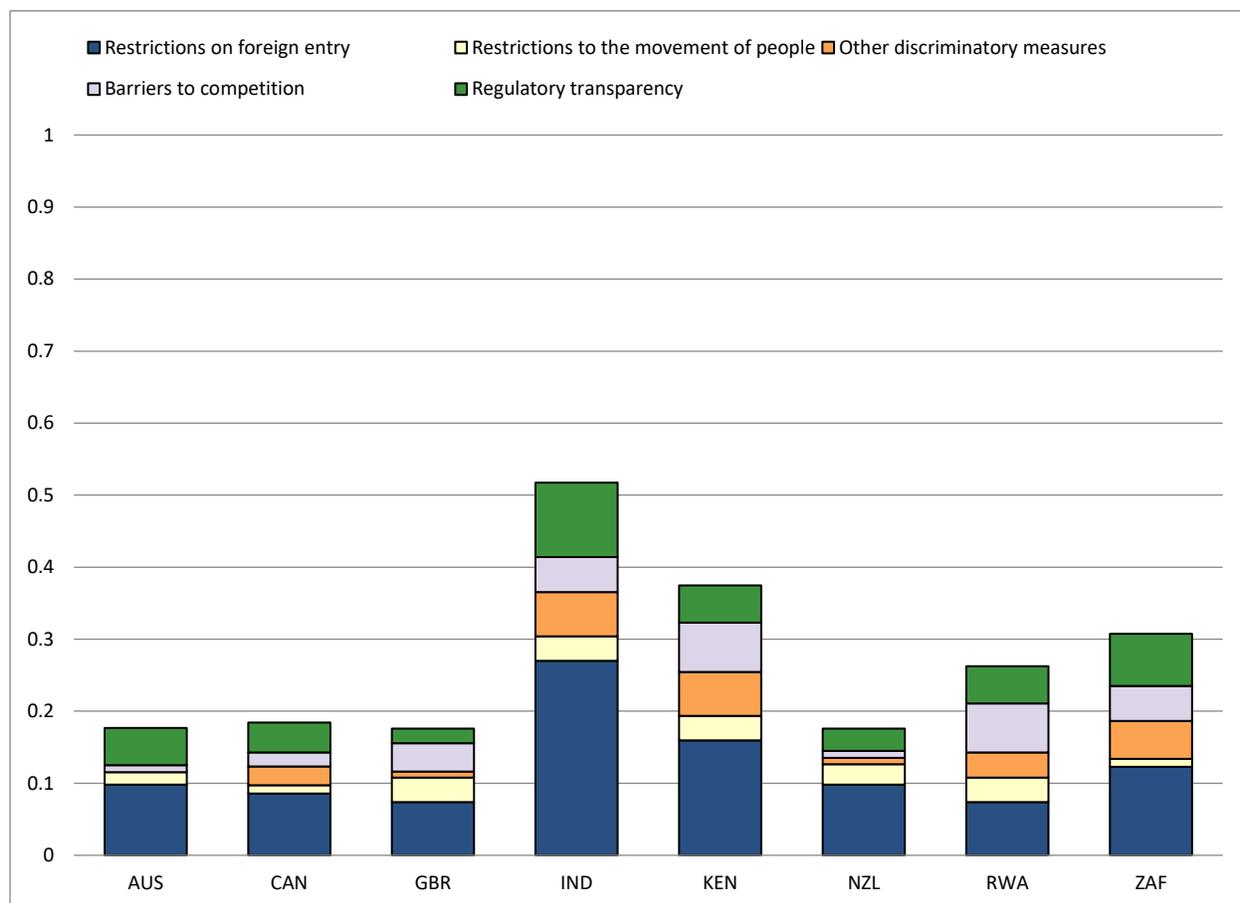
Kenya and Rwanda have the equal highest (0.07) scores in terms of barriers to competition in the commercial banking sector. In Kenya, banks are subject to regulated interest rates on loans and deposits, and there is public sector involvement in some commercial banks. Rwanda does not regulate rates, but has public sector involvement, and requires approval before banks can issue new products. By contrast, Australia and New Zealand both have very few restrictions on competition, with both countries scoring 0.01.

Finally, in terms of regulatory transparency, restrictive measures are relatively limited, on a par with what is observed in Australia (0.05); both countries have lower scores than India (0.10) and South Africa (0.07), which is consistent with a lower level of restrictiveness than those two countries.

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<sup>2</sup> It appears that Kenyan authorities rarely apply this test in practice to screen investment, but it remains on the statute book. Consistency therefore requires that we code it as a restriction, so that results are comparable with other countries, like Australia and Canada, which have a screening regime in law even though it is rarely used to stop investments in practice.

Figure 18: STRIs in commercial banking, Kenya and Rwanda plus Commonwealth comparators, 2018 for Rwanda and Kenya, 2017 for others.



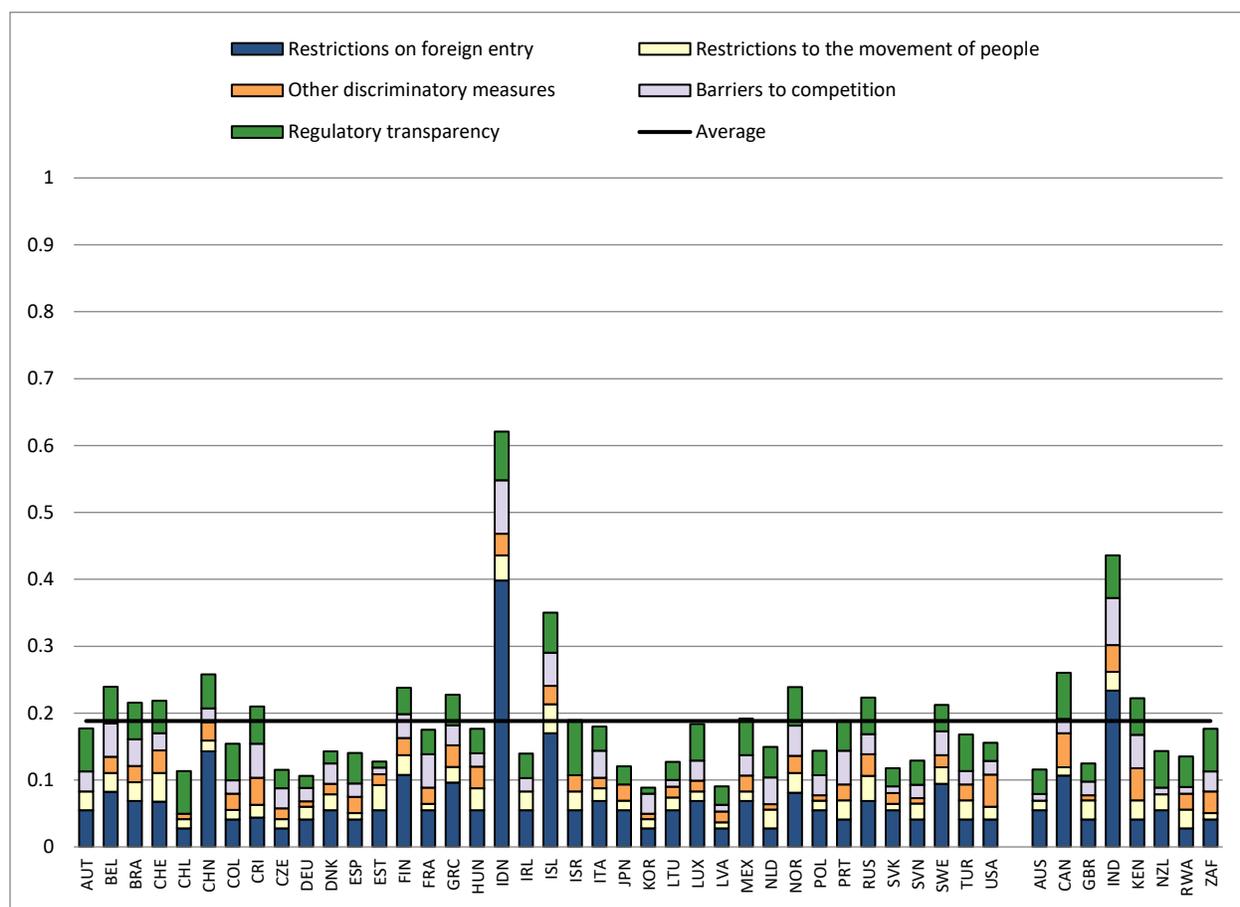
Source: OECD, based in part on data supplied by the authors.

Taking these results together, there is evidence that banking sector liberalization has taken place in both countries, but there is scope for further reform over time. Rwanda and Kenya are both more liberal in this sector than India, and Rwanda is also more liberal than South Africa, the only other Commonwealth developing country in the sample. In both cases, there is scope to look at a range of policy measures affecting the services trade environment, ranging from restrictions on foreign equity (particularly in Kenya’s case) to barriers to competition in both countries.

#### 4.2 Distribution

Figure 19 shows STRIs for the distribution sector for all countries. Kenya and Rwanda both show a low to moderate level of restrictiveness. Rwanda (0.14) is less restrictive than the sample average for this sector (0.19), while Kenya (0.22) is only slightly above. Again, it is important to note that the sample average is largely composed of OECD member countries. Comparing Kenya and Rwanda with other developing countries shows that they are more liberal in this sector than Brazil (0.22), China (0.26), Indonesia (0.62), and India (0.45).

Figure 19: STRIs in distribution services, all countries, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Figure 20 zooms in on Commonwealth countries for comparative purposes. Rwanda's STRI score of 0.14 for distribution is lower than those of Canada (0.26), India (0.44), and South Africa (0.18) among Commonwealth comparators.

Taking each group of measures separately, we find that Rwanda's level of restrictions on foreign entry (0.03) is the lowest among the Commonwealth countries for which data are available, and Kenya's is equal second lowest (0.04).

Restrictions on movement of people are the same in both countries (0.03), and equal to what is observed in the UK and India, but higher than in other Commonwealth countries. As in the case of commercial banking, the reason is essentially related to the existence of labor market tests in both countries.

For other discriminatory measures, Kenya has the second highest score (0.05) among Commonwealth comparators, lower only than Canada (0.05; difference not apparent due to rounding). Rwanda has a mid-range score (0.02), lower than South Africa (0.03), India (0.04), and Canada (0.05), but higher than the other Commonwealth countries in the sample. Both countries maintain public procurement

regimes that favor local firms, which is recorded as part of the other discriminatory measures heading,<sup>3</sup> and Kenya also has differential tax treatment for foreign companies.

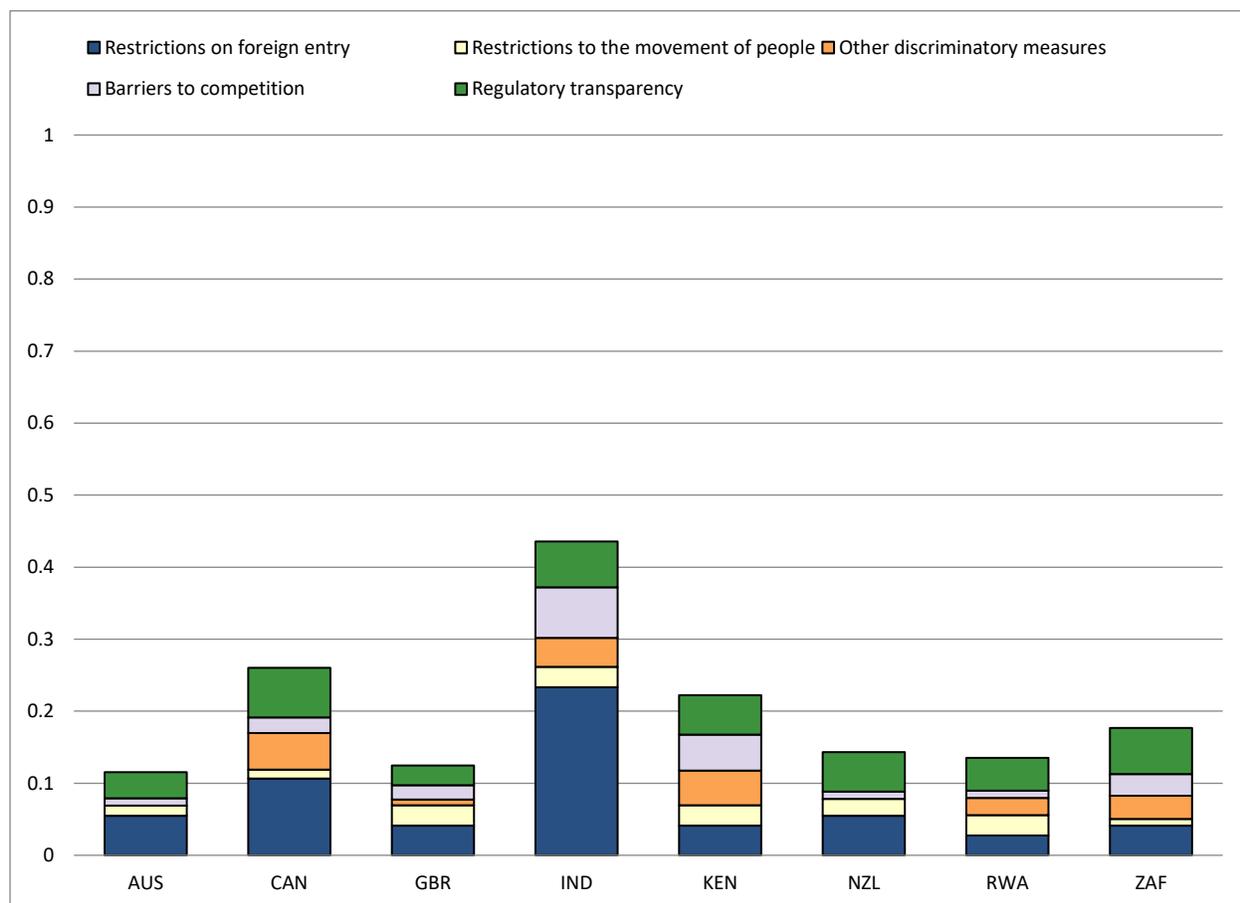
Restrictions in barriers to competition are equal second lowest among Commonwealth countries in Rwanda (0.02), while in Kenya(0.05) they are higher than other Commonwealth countries except India (0.07). The score in Kenya (0.05) is partly due to public sector involvement in distribution services (Uchumi Supermarkets), as well as the selective use of price controls, which restrict competition in the sector. All of these measures are restrictive, and so result in a higher score.

Finally, on regulatory transparency, Rwanda's score (0.05) is less restrictive than other Commonwealth countries except Australia (0.04) and the UK (0.03), but Kenya's score is mid-range within the Commonwealth, identical to that of New Zealand (0.05). The primary reason for the difference in the two countries' scores is that it takes much longer to obtain a construction permit in Kenya than Rwanda, according to the World Bank Doing Business database: 159 days versus just four. The length of time required to obtain a construction permit in Kenya is higher than the Sub-Saharan African average of 147.5 days. A similar issue for the distribution sector relates to customs procedure: imports take 3.6 days to clear the border in Rwanda, and there is no de minimis rule to exempt low value shipments; in Kenya, incoming shipments take 7.5 days to clear, and there is similarly no de minimis rule. The average clearance time for Sub-Saharan Africa is 5.7 days, so Rwanda's performance is stronger than regional peers, but Kenya's is somewhat weaker. On the other hand, Kenya and Rwanda both have the obligation under their own laws to communicate regulations to the public within a reasonable time before entry into force, and have adequate public comment procedures open to interested parties. In addition, licenses in relevant sub-sectors are awarded based on publicly available criteria. Positive measures such as these push regulatory transparency scores lower, i.e. in the direction of indicating fewer restrictions.

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<sup>3</sup> Local firms appear not to believe that they are favored in procurement decisions in practice. However, the restriction is recorded in the laws of both countries, so we code it accordingly.

Figure 20: STRIs in distribution services, Kenya and Rwanda plus Commonwealth comparators, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

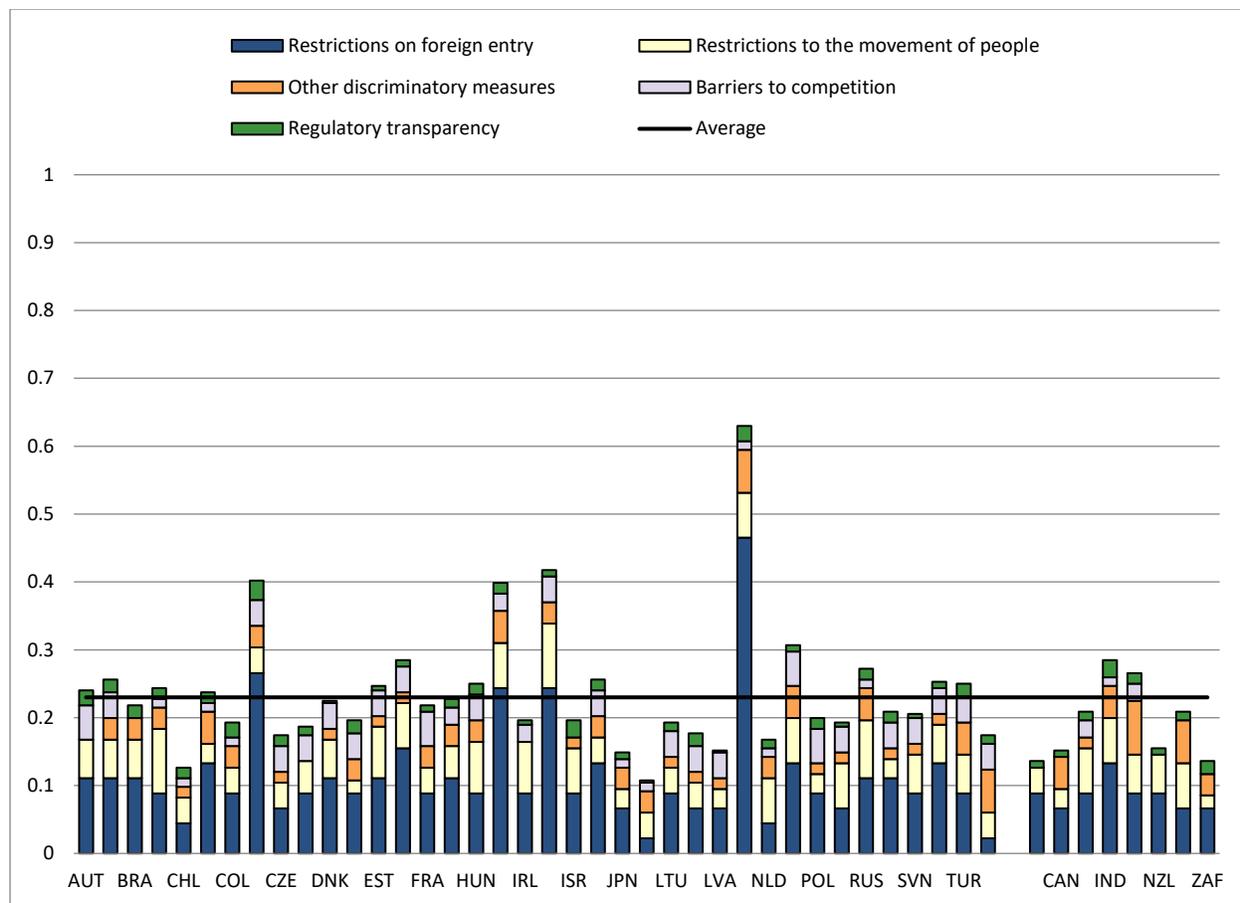
Rwanda and Kenya both perform well in terms of policy restrictions affecting trade in distribution services. Rwanda in particular stands out for its low level of restrictiveness, but both countries are far less restrictive than the most closed Commonwealth market, that of India. The comparison across countries and groups of measures shows that there is no strict relationship between services trade restrictiveness in this sector, and per capita income. Indeed, Rwanda has the lowest income level of the Commonwealth countries considered, but overall a level of trade restrictiveness that is lower than average, and comparable to a liberally-oriented developed Commonwealth country like New Zealand. Policy priorities relate to regulatory transparency, particularly the time required to obtain permits, in Kenya, as well as public sector involvement in distribution and the use of price controls. In Rwanda, the environment is already quite liberal relative to other countries in the sample.

### 4.3 Road Freight Transport

Finally, Figure 21 presents results for the road freight transport sector for all countries. Kenya (0.27) is above average (0.23) in terms of its policy restrictiveness, while Rwanda (0.21) is below average. Given that the average is largely composed of OECD countries, it is appropriate to compare Kenya and Rwanda with other developing countries. Rwanda has a less restrictive policy environment than Brazil (0.22), China (0.24), India (0.28), and Indonesia (0.40), but is more restrictive than South Africa (0.14). Kenya's policies are more restrictive than developing country comparators other than India

and Indonesia. In relation to both countries, middle-income Mexico (0.63)—which is an OECD member—stands out as having a much higher level of restrictiveness, the highest in the sample.

Figure 21: STRIs in road freight transport services, all countries, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Figure 22 extracts data for Kenya and Rwanda, along with their Commonwealth peers. Both countries are generally more restrictive than Commonwealth comparators, with the exception of India; Rwanda’s STRI score in this sector is identical to that of the UK.

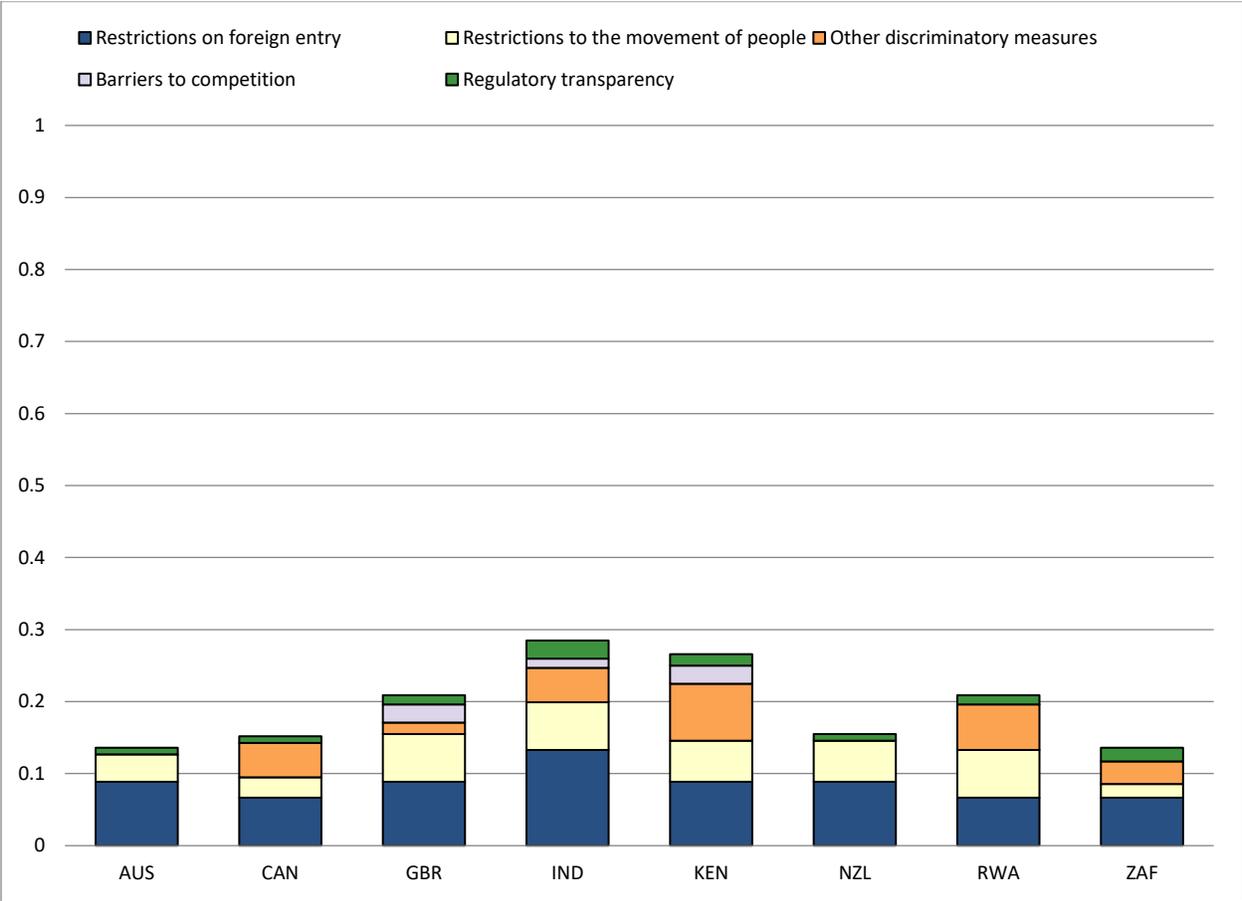
Taking each group of measures individually, we see that restrictions on foreign entry in Rwanda (0.07) and Kenya (0.09) are generally in line with what is observed in Commonwealth comparators, and are lower than in India (0.13). The key measures in this area are again investment screening in Kenya, and restrictions on land ownership in both countries.

Restrictions on movement of people—0.06 in Kenya and 0.07 in Rwanda—are in line with the more restrictive Commonwealth countries in that category for this sector, such as the UK (0.07) and New Zealand (0.06). Scores again relate to requirements mentioned earlier, such as labor market tests.

Other discriminatory barriers are an area that deserves additional attention, as Rwanda (0.06) and Kenya (0.08) both have scores that are higher than those of all other Commonwealth countries. The reason is to be found in differential treatment of foreign businesses under public procurement policies in both countries, and differential tax treatment in Kenya.

In relation to barriers to competition, Rwanda has a score of zero, indicating no restrictions, which is the same as Australia, Canada, New Zealand, and South Africa among Commonwealth comparators. Kenya’s score of 0.03 is identical to that of the UK. The reason for Kenya’s score is price regulation as well as an exemption from transit tolls for locally registered vehicles only in Kenya; i.e., road tolls are applied in a way that discriminates against foreign service providers.

Figure 22: STRIs in road freight transport services, Kenya and Rwanda plus Commonwealth comparators, 2018 for Rwanda and Kenya, 2017 for others.



Source: OECD, based in part on data supplied by the authors.

Rwanda and Kenya both again show a low to moderate level of policy restrictions in the road freight transport sector, with the environment being more conducive to trade in Rwanda than in Kenya. Although both countries have a relatively liberal stance, they are noticeably more restrictive than, for example, South Africa. While restrictions on foreign entry there are similar, policies in all other areas are less restrictive. Given the importance of road freight transport as a services sector that promotes connectivity, particularly for a landlocked country like Rwanda, it will be important for policymakers to critically examine the current regulatory stance, as well as practice elsewhere in the region, to see if there is scope for further progress.

4.4 Regulatory Heterogeneity with Commonwealth Partners

Nordas (2017) shows that the data from the STRI project can be used not only to measure restrictiveness, but also to calculate summary measures of regulatory heterogeneity between countries within sectors. Whereas the STRIs are one number per country per sector, measures of heterogeneity

are bilateral, i.e. they take account of regulations in each country of a pair. OECD calculates two measures of regulatory heterogeneity, one based on differences in scores between countries, and the other based on differences in answers to the regulatory questionnaire between countries. We use this latter approach, but indices using differences in scores are also available on request.

The essence of the methodology, as set out in Nordas (2017), is to look at answers to individual questions in the regulatory questionnaires used to build the STRIs. Concretely, the methodology proceeds by creating a matrix where each cell corresponds to a specific answer in the database for a pair of countries. If a country pair has the same answer to a question, the cell is recorded as zero. If they have different answers, it is recorded as one. The heterogeneity index is then calculated as a weighted average of the scores in each cell, using the same weights as in the STRIs themselves. To be clear, the index captures regulatory differences in a non-evaluative way: a low score does not indicate that one country's regulations are "better" than another's in any meaningful way. Rather, the index is an attempt to capture in a rigorous quantitative way the data underlying the widespread belief that regulatory differences contribute to trade costs in services sectors. Indeed, Nordas (2017) finds that reducing regulatory heterogeneity by 0.05 points is associated with 2.5% higher services exports, while an average heterogeneity scores of 0.26 is associated with ad valorem equivalent trade costs of between 20% and 75% at low levels of the STRI.

For Kenya and Rwanda, OECD has calculated regulatory heterogeneity measures for each sector with respect to every other country in the full sample. For each country there are therefore three sectors multiplied by 45 partner countries, giving 135 index scores with partners for each of the two countries. Appendix 3 reproduces the matrix of scores in full. It is not practical to reproduce the full matrix of heterogeneity at the level of individual measures, as that would entail 538 measures multiplied by 45 partner countries, giving a total of 24,210 scores per country.

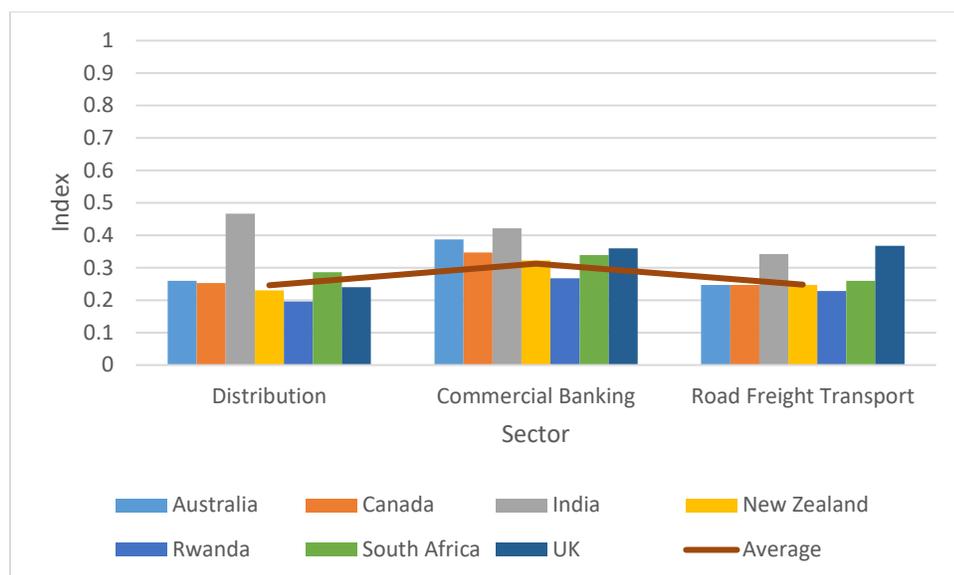
To summarize the results of this computationally intensive exercise, we use graphical methods, as for the STRIs themselves. A taller bar indicates a higher heterogeneity score with the country concerned. For comparative purposes, we focus on the two countries in relation to their Commonwealth peers, and also reproduce the sample average score by sector.

Results for Kenya are in Figure 23. Each bar represents regulatory heterogeneity with a particular Commonwealth trading partner, while the line is the average heterogeneity score across all countries in a particular sector. Unsurprisingly, Kenya's regulatory heterogeneity score in all sectors is lowest with Rwanda. This finding suggests that substantial harmonization has taken place between the two countries within the context of the EAC CMP. To put these results in perspective, however, we can compare heterogeneity between Rwanda and Kenya in one sector, such as distribution, with scores for EU member states in the same sector. Kenya's heterogeneity score with Rwanda in distribution is 0.196, whereas the lowest intra-EU score, between the Czech Republic and the Slovak Republic, is 0.084. Of course, regulatory heterogeneity varies substantially within the EU, so countries like Germany and Luxembourg, or the Slovak Republic and Sweden, have scores that are comparable to what is observed in Kenya and Rwanda. These findings suggest that there is likely substantial space within the EAC to increase regulatory harmonization among member countries as one way of reducing trade costs, but that the process is very complex from a political economy perspective, as substantial regulatory differences remain even in a setting like the EU which has been harmonizing regulations over a substantially longer period.

In distribution, Kenya's scores are lower than average with respect to New Zealand, Rwanda, and the UK, and close to average with the remaining Commonwealth countries except India. In commercial banking, only the score with Rwanda is below the sample average, while scores with other

Commonwealth countries except India are only slightly higher than average. Finally in road freight transport, regulatory heterogeneity is lower than average with Australia, Canada, New Zealand, and Rwanda, only slightly above average in South Africa, and higher than average in the remaining countries.

Figure 23: Regulatory heterogeneity indices by sector, Kenya and Commonwealth partners, based on 2018 data for Rwanda and Kenya, 2017 for others.

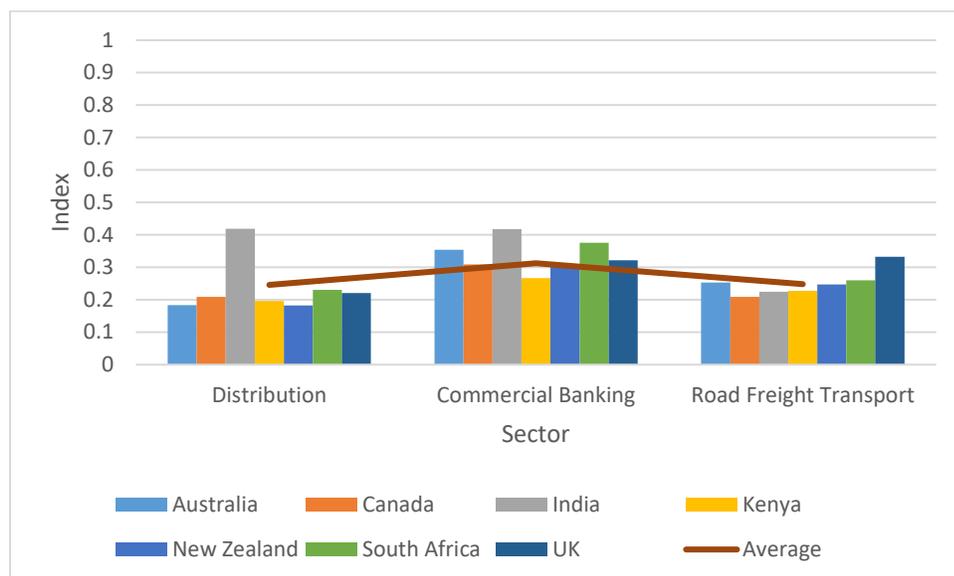


Source: OECD, based in part on data supplied by the authors.

Figure 24 shows comparable results for Rwanda. Whereas Rwanda was always the partner with the lowest heterogeneity index for Kenya, the same is not always true for Rwanda itself. In distribution, its regulations are more aligned with those in Australia and New Zealand than those in Kenya, while the same is true for Canada and India in the case of road transport. This finding supports the judgment above that there is still considerable room to move forward on regulatory harmonization within the framework of the EAC CMP.

In distribution services, Rwanda’s scores with all Commonwealth countries except India are lower than the average. In commercial banking, Rwanda’s index score with Kenya, Canada, and New Zealand are lower than average, while its score with the UK is just above the average; but scores with other countries are higher than average. In road transport, scores with Canada, India, Kenya, and New Zealand are lower than average, while those with South Africa and Australia are just a little higher than the average; only the score with the UK stands out as substantially higher than average. Overall, Rwanda’s average regulatory heterogeneity index scores with Commonwealth partners are lower than Kenya’s, which suggests that the component of its services sector trade costs linked to differences in regulatory stance across countries is lower, and correspondingly that it is more able to access foreign markets.

Figure 24: Regulatory heterogeneity indices by sector, Rwanda and Commonwealth partners, based on 2018 data for Rwanda and Kenya, 2017 for others.



Source: OECD, based on data supplied by the authors.

Results from the regulatory heterogeneity exercise suggest that there has indeed been some regulatory convergence within East Africa, as would be expected by the nature and structure of the EAC CMP. However, the process is ongoing and not complete. Interestingly, there is also some degree of regulatory convergence with other Commonwealth countries. This process has clearly taken place outside the strict framework of trade agreements, and likely represents deeper factors like institutional and legal similarities among member countries. However, that process has been stronger in Rwanda than in Kenya, and in particular in the distribution sector, and to a lesser extent road transport.

## 5 COMPLEMENTING THE STRI: DATA ON DE FACTO CONSTRAINTS AFFECTING SERVICES FIRMS IN KENYA AND RWANDA

By its nature, the STRI methodology focuses on de jure barriers to services trade, in the sense of well-defined legal restrictions that make it more difficult for service providers to enter markets, or to do business there once they do. This focus is entirely appropriate, and reflects the fact that the trade policy community—government, researchers, and civil society—is primarily concerned with working collaboratively to improve the policy framework within which business takes place. Trade agreements, whether multilateral like the WTO or regional like the EAC, typically focus on de jure restrictions.

However, the business community sometimes emphasizes that the laws on the books are not the full extent of the barriers they face in building and growing their activities. Particularly in countries with serious capacity constraints, there can be a large gap between laws and regulations on the one hand, and wide-spread practices on the other. This project is not primarily about quantifying this second group of issues, but in the interests of promoting a wide-ranging dialogue, we can present some data from an alternative source that goes some way towards showing the kinds of difficulties services firms in Kenya and Rwanda encounter beyond purely legal ones. Our objective in presenting these additional data is to complement what is in the STRIs, not to take away from those findings in any way.

The World Bank Enterprise Surveys project has surveyed 131,000 firms in 139 mostly developing and transition countries. It covers services as well as manufacturing. We focus here on surveys of formal-

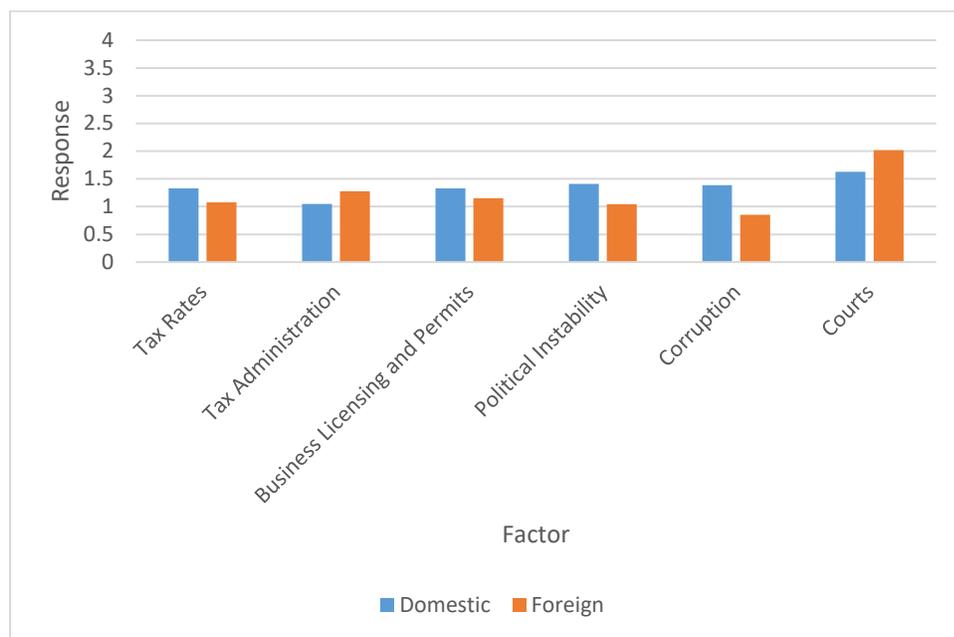
sector firms, as this scenario is of most interest to foreign service providers. However, we note that additional data are available on informal sector firms.

In addition to collecting standard data on firm activities and performance, the survey also has a series of questions that ask senior managers to rate the seriousness of various constraints they face in the general business environment. The constraints are shown to them in a random order. These questions go directly to the heart of the kinds of de facto barriers sometimes stressed by the business community. We therefore review the available data for Rwanda and Kenya, based on surveys conducted in 2011 and 2013 respectively. We distinguish between business constraints identified by domestic firms, and those identified by foreign invested firms (defined as those with at least 50% foreign ownership). The reason for this distinction is to shed light not only on the general constraints that services businesses face in the two countries, but also on any differential effects between local firms and foreign entrants (the sales of which are, subject to small differences in statistical treatment, effectively Mode 3 imports).

The Kenyan Enterprise Survey covers 367 services firms. Figure 25 presents results. The most striking feature is that of the six listed constraints, all are considered minor to moderate obstacles. Interestingly, domestic and foreign-owned firms alike consider the court system to be the most serious constraint on their current operations. This suggests that there may indeed be some de facto problems in terms of the business environment, in the sense that although legal obligations may be clear either through regulation or private contract, enforcing them may be more complicated and uncertain.

Comparing results for locally owned and foreign-owned firms is also instructive. Only in the areas of tax administration and the court system do foreign owned firms report that the relevant factors are more of a business constraint than is the case for local firms; in the other cases, the level of constraint faced by foreign-owned firms is noticeably less. In part, this is likely a factor of size, as firms with a significant share of foreign ownership are typically larger than their locally owned counterparts, and thus more able to absorb the costs associated with navigating the business environment. Nonetheless, there is some evidence that foreign-owned service providers have more difficulties with the court system and with tax administration than do local firms, in the former case rising to the level of a moderate obstacle to ongoing operations. Again, these findings highlight the complementary importance of de facto restrictions on doing business that sit beside the STRI when conducting a full analysis of the environment for foreign service providers within a country. This information is highly complementary, as it suggests that although Kenyan laws are not overly restrictive by international standards, the position on the ground may be more challenging in some areas for foreign firms.

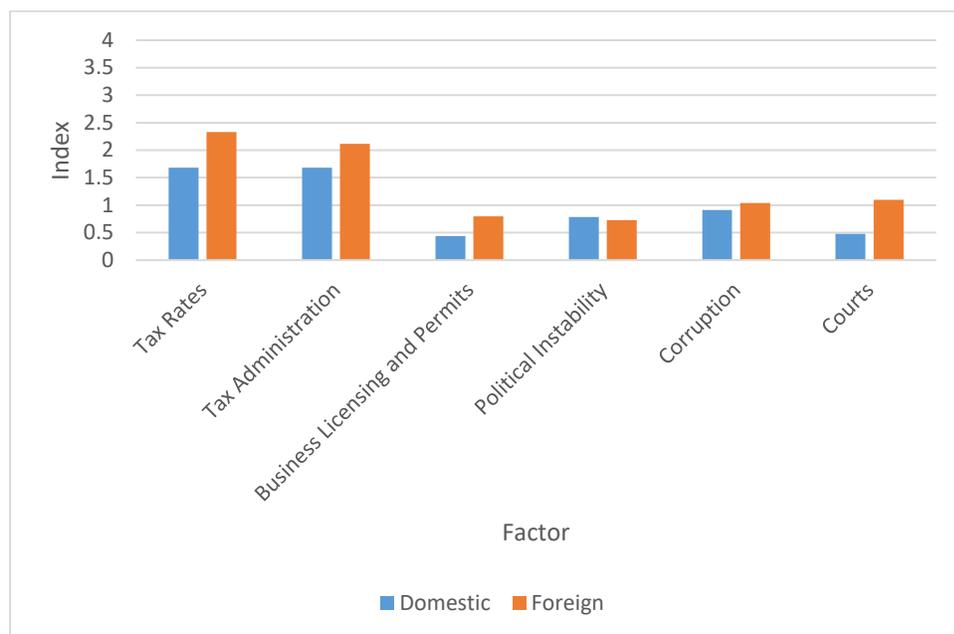
Figure 25: Average responses of Kenyan firms on the seriousness of particular business constraints as an obstacle to current operations, index (0-4), 2013.



Source: World Bank Enterprise Surveys; and authors' calculations. Note: Averages apply sampling weights included in the dataset. Foreign firms are those with at least 50% foreign ownership. Based on the scale in the questionnaire: 0 indicates no obstacle, 1 indicates a minor obstacle, 2 indicates a moderate obstacle, 3 indicates a major obstacle, and 4 indicates a very severe obstacle.

The Rwandan survey uses a smaller sample than the Kenyan one, by virtue of the country's smaller size. It covers 160 services firms. Figure 26 presents results. The first point that stands out is that tax is more of an issue for Rwandan firms than Kenyan firms, both in terms of rates and the way in which it is administered. In both cases, the obstacle rises in seriousness to the moderate level for foreign firms. The second point to emerge from Figure 18 is that foreign firms in nearly all areas report a higher level of business obstacles than their locally owned counterparts. Although business licensing and the court system are not major obstacles to business, the difference in perception between locally owned and foreign-owned firms is striking. Having said that, the absolute levels at which obstacles are assessed in all areas other than tax suggest that the business climate in Rwanda is in fact very accommodating, including to foreign-owned service providers. In all cases except the two tax questions, business obstacles are rates as lower in Rwanda than in Kenya. This is in keeping with results from the S'TRI, which suggest a generally supportive policy environment in the services sectors studied, and one that is more liberal than nearby Kenya.

Figure 26: Average responses of Rwandan firms on the seriousness of particular business constraints as an obstacle to current operations, index (0-4), 2011.



Source: World Bank Enterprise Surveys; and authors' calculations. Note: Averages apply sampling weights included in the dataset. Foreign firms are those with at least 50% foreign ownership. Based on the scale in the questionnaire: 0 indicates no obstacle, 1 indicates a minor obstacle, 2 indicates a moderate obstacle, 3 indicates a major obstacle, and 4 indicates a very severe obstacle.

Taking results for the two countries together, we find indications that although the business environment, particularly in Rwanda, is generally supportive of services firms, it is in most cases more difficult for foreign service providers to navigate rules and procedures than it is for locally-owned firms. In part, this may reflect information costs, but if so, there is a role for increased transparency in promoting a shared understanding of rules and procedures among all firms, irrespective of origin. While trade agreements will continue to focus on the types of de jure restrictions highlighted in the STRIs, it is important to look at the ways in which these policies and regulations interact with the environment on the ground to produce observed outcomes in terms of trade and investment. Policymakers can leverage both sets of results in a complementary way to support a dialogue with local firms and foreign providers in the interests of creating a level playing field that supports competitiveness, productivity upgrading, structural transformation, and increased regional and global integration of services markets.

## 6 CONCLUSION AND POLICY IMPLICATIONS

Services are becoming more important to trade and production all over the world. Rwanda and Kenya, particularly the former, are by no means exceptions to this general pattern. In addition to their presence in direct exports, services are also increasingly embodied in manufactured goods that are in turn exported. Key backbone services like transport, communications, logistics and distribution, and finance are therefore vital for countries looking to compete in world markets.

This pilot project has collected new data on services trade policy restrictions in Rwanda and Kenya covering commercial banking, distribution, and road freight transport. These sectors were chosen because of their economic importance to the two countries, which is reflected in the prominence given

to them in policy and strategy documents from the region. We believe the results are a clear testament to the feasibility and policy interest of collecting data on services trade restrictions in developing countries and least developed countries. Data on policies affecting services trade are out of date or not available at all for many Commonwealth countries. As a result, research and policy analysis of services is greatly hampered, and it is more difficult for businesses to assess the regulatory environment overseas as it affects their ability to sell into foreign markets. The purpose of this project was in part to show that well-established methodologies exist that can help close these gaps, even in low and lower-middle income countries.

Developing a competitive services sector is an important part of structural transformation in developing countries, including Rwanda and Kenya. Sectors like the three examined here can be produced and exported directly, but are also used intensively by other sectors, particularly manufacturing. Without competitive services offerings in these key areas, it will be difficult for downstream firms to themselves be productive and win export market share.

To systematically record and quantify policy restrictions affecting the selected services markets, we have adopted the approach used by the OECD in creation of their STRI. The advantage of using an established methodology is that results are directly comparable with what has already been collected for other countries. In addition, there is an existing, rigorously-tested body of knowledge in relation to weighting and aggregation of individual policies into summary STRIs. By leveraging this knowledge and experience in the present project, we have been able to focus on the most relevant policies, and thus collect and analyze the necessary data rapidly and at reasonable cost.

Results from the exercise are highly informative. In all three sectors, Kenya and Rwanda have low to moderate levels of policy restrictiveness compared with the other countries for which data are available, and are typically less restrictive in their policy settings than major developing countries. Rwanda stands out as having a relatively liberal policy stance, as it is less restrictive than observed on average across all countries for which data are available in distribution and road freight transport, and only a little more restrictive than average in commercial banking. In commercial banking and distribution, policy settings in both countries are reasonably comparable to what is seen in higher-income South Africa.

Looking more closely at particular types of policies that affect services trade, we see that a number of the most important factors that push Rwanda's and Kenya's STRI scores above what is seen in high-income Commonwealth comparators are in fact cross-cutting issue, rather than sector-specific ones. On the positive side, entry by foreign firms is not highly restricted in either country and common restrictions applied by some other developing countries, such as restrictions on repatriation of profits, are absent. Nonetheless, Kenya applies a discretionary test based on economic need, which could have the effect of discriminating against foreign firms; although investments are rarely rejected in practice, the legal capacity to do so reduces business certainty and could still impact negatively on services sector investment. For movement of people, both countries apply labor market tests that require, for example, that a company is unable to fill a vacancy locally before it can resort to a foreign service supplier or intra-corporate transferee. Other cross-cutting discriminatory measures include public procurement in both countries, which is designed to favor local firms, and a difference in tax treatment of foreign and local businesses in Kenya. Regulatory transparency is an interesting point of contrast between the two countries: whereas licenses for activities like construction are delivered quickly in Rwanda, much longer delays tend to be the norm in Kenya. The latter country could benefit from reducing these delays.

Whereas economists typically suggest that countries flatten and gradually reduce their tariff schedules in goods markets, advice for services markets is much more complex. The reason is that it is regulatory

measures, not simple discriminatory taxes, that are in issue. This report has shown that both countries have some restrictive measures. But before reforms can be undertaken, it is important to arrive at a clear assessment of the costs and benefits of existing regulations relative to feasible alternatives. We do not conduct such an exercise here, but as a result of the data collection and coding process at the core of the STRI, both countries are now better placed to conduct it themselves. As a general proposition, cases of direct discrimination against foreign service providers may be seen by some as justified because they support local industrial development, or SMEs in particular—that is a traditional argument for protection. It is likely, however, that alternative policies with lower economic costs are available, such as SME-specific improvements in the business and investment environment, or even certain targeted subsidies. We are not suggesting a wholesale repeal of the measures coded in the STRI as restrictive, simply that they be assessed rigorously for the economic costs and benefits, including their effects on international trade.

A key point of comparison for this pilot will be results from the World Bank / WTO STRI update. We are not currently aware of the likely launch date for results from that project, but it will be important to engage with the project team to ensure that their data (gathered from law firms via surveys) are comparable with ours (collected directly). Also, we understand that that project intends to aggregate results using the OECD and World Bank methodologies, which will provide two different cuts of the data. Broadly speaking, the OECD STRI includes a wider range of policy measures than the World Bank STRI, which focuses more closely on measures that explicitly discriminate against foreign providers. We believe it is important for measurements of services trade restrictiveness to also take account of selected non-discriminatory measures that increase the real resource cost of doing business. But ultimately, there is an empirical question to be answered as to which approach yields the best results in terms of explaining trade flows and other economic impacts. Comparing our results together with OECD's with the broader dataset assembled by the World Bank / WTO project will therefore be an important analytical priority in the future.

Moving forward, the intention of this project is to provide a point of departure for engagement with policymakers and stakeholders in Kenya and Rwanda. A key final step in production of the STRIs is validation by the two governments, which we hope will take place during 2018. In addition, we look forward to recording views expressed by government and firms (local and foreign) in terms of the de jure and de facto restrictions on services trade in the three sectors under consideration here. Although this project has taken some first steps towards loosening the data constraint in relation to laws and regulations affecting services trade, a matter of vital importance for both countries will be development of capacity to record disaggregated trade in services data. Empirical researchers, as well as policymakers and stakeholders, in both countries would benefit greatly from this development.

As members of the EAC, Kenya and Rwanda are both moving forward not only to liberalize trade on an MFN basis, but also specifically within the region. The Scorecard process, which tracks progress, is a very positive step for transparency. Although our analysis is based on MFN, not regional, policies, we believe both countries could greatly benefit from redoubling their efforts to reduce or eliminate the barriers to intra-regional services trade identified in the EAC Scorecard.

In terms of recommendations, we can formulate the following based on our review of the evidence in the three sectors under consideration:

1. **Trade statistics:** Develop the capacity to track services trade by partner country and sector. This information is a vital input into any serious analytical work on services trade, and is a necessary precursor to statistical analysis that could support policy change to facilitate trade, and enable analysis of trade effects induced through services trade policy changes.

2. **Expand STRI coverage:** The pilot has clearly established the feasibility and interest of calculating STRIs for developing Commonwealth countries. Expanding that initiative to cover additional sectors and countries would help improve the quality of economic policymaking, and facilitate trade both within the Commonwealth and more generally.
3. **Use the STRIs as a basis for regulatory audits:** This project has collected a large amount of data on regulatory measures affecting services trade in three sectors. Considerably more could be collected over time if the project is expanded. An important use of the data is to examine current regulatory measures, and undertake a rigorous cost-benefit assessment of them. The aim should be to develop a regulatory structure that is effective, in the sense that it achieves important social goals, and efficient, in the sense that it does so at minimum economic cost including disruptions to international trade. Looking at alternative regulatory measures that could achieve the same goals but with lower economic costs is an important part of the process. The OECD's STRI database provides a rich source of practice in other countries that can be drawn upon to inspire local reforms.
4. **Leverage regional initiatives:** The EAC has a well-established set of priorities in services, which in some cases can also support relaxation of MFN policy measures. The EAC Scorecard is a very positive initiative to promote transparency, so both countries should press forward with reforms aimed at eliminating the barriers identified in the Scorecard. The EAC CMP is also a positive platform for promoting regulatory harmonization. The data suggest that Kenya and Rwanda could both benefit more from reducing differences in key regulations with their trading partners, including intra-regionally.
5. **Address cross-cutting policies:** Some of the key policy restrictions we have identified are cross-cutting in nature, which is not unusual in the developing country context; indeed, compared with other developing countries for which data are available, Kenya and Rwanda do not typically have overly restrictive cross-cutting measures, as a general rule. Engaging with stakeholders and partners to envisage ways of reducing discrimination against foreign service providers could yield significant economic benefits by facilitating additional investment, people movements, and cross-border trade. Policy areas like government procurement and tax could benefit from
6. **Engage with stakeholders to address sector-specific policies:** Our analysis has also highlighted some sector-specific policies that contribute to restrictiveness in the two countries. Reform requires detailed analysis and consultation. But we believe that issues like discriminatory tolls for road freight transporters, and public sector involvement in commercial banks and distribution companies could benefit from further consideration with the aim of ensuring effective and efficient sectoral regulations.
7. **Further incorporate the services dimension into development strategies:** Both countries already recognize the importance of services as an agent of structural change. But in the absence of trade in value added data, the contribution of services to exports in other sectors, particularly manufacturing, is not well understood. It is difficult to compete in world markets without competitive backbone services sectors. Developing this understanding and highlighting the ability of services to support structural change, income growth, and development will be key to moving forward on a broad based agenda to leverage services as one part of the two countries' overall economic strategies. Moving forward on this agenda item would also support future trade policy reforms, and would position the countries more actively in services negotiations in regional and multilateral forums.

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## APPENDIX 1: STRI SCORES AND COMPONENTS

Country	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	STRI
AUS	Commercial banking	0.098	0.017	0.000	0.010	0.052	0.177
AUT	Commercial banking	0.074	0.034	0.000	0.029	0.083	0.220
BEL	Commercial banking	0.086	0.034	0.026	0.049	0.052	0.247
BRA	Commercial banking	0.209	0.034	0.061	0.088	0.072	0.464
CAN	Commercial banking	0.086	0.011	0.026	0.019	0.041	0.184
CHE	Commercial banking	0.086	0.051	0.026	0.058	0.072	0.294
CHL	Commercial banking	0.074	0.017	0.017	0.049	0.052	0.208
CHN	Commercial banking	0.221	0.017	0.052	0.088	0.031	0.409
COL	Commercial banking	0.098	0.017	0.035	0.088	0.072	0.310
CRI	Commercial banking	0.061	0.023	0.035	0.039	0.072	0.230
CZE	Commercial banking	0.061	0.017	0.009	0.010	0.062	0.159
DEU	Commercial banking	0.049	0.023	0.000	0.039	0.041	0.152
DNK	Commercial banking	0.098	0.028	0.009	0.029	0.010	0.175
ESP	Commercial banking	0.037	0.011	0.026	0.010	0.062	0.146
EST	Commercial banking	0.074	0.045	0.009	0.029	0.031	0.188
FIN	Commercial banking	0.123	0.034	0.009	0.019	0.031	0.216
FRA	Commercial banking	0.061	0.011	0.035	0.049	0.021	0.177
GBR	Commercial banking	0.074	0.034	0.009	0.039	0.021	0.176
GRC	Commercial banking	0.086	0.028	0.044	0.029	0.041	0.228
HUN	Commercial banking	0.111	0.040	0.026	0.019	0.052	0.248
IDN	Commercial banking	0.270	0.034	0.052	0.068	0.052	0.476
IND	Commercial banking	0.270	0.034	0.061	0.049	0.103	0.517
IRL	Commercial banking	0.061	0.034	0.000	0.039	0.010	0.145
ISL	Commercial banking	0.184	0.051	0.044	0.058	0.031	0.368
ISR	Commercial banking	0.074	0.034	0.035	0.039	0.072	0.254
ITA	Commercial banking	0.061	0.023	0.017	0.029	0.052	0.182
JPN	Commercial banking	0.061	0.017	0.009	0.088	0.031	0.206
KEN	Commercial banking	0.160	0.034	0.061	0.068	0.052	0.375

Country	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	STRI
KOR	Commercial banking	0.074	0.017	0.017	0.029	0.010	0.148
LTU	Commercial banking	0.098	0.023	0.009	0.019	0.041	0.190
LUX	Commercial banking	0.049	0.017	0.009	0.058	0.062	0.195
LVA	Commercial banking	0.074	0.011	0.009	0.010	0.021	0.124
MEX	Commercial banking	0.184	0.017	0.035	0.049	0.083	0.367
NLD	Commercial banking	0.086	0.034	0.009	0.019	0.031	0.179
NOR	Commercial banking	0.123	0.034	0.035	0.058	0.021	0.271
NZL	Commercial banking	0.098	0.028	0.009	0.010	0.031	0.176
POL	Commercial banking	0.098	0.017	0.009	0.049	0.072	0.245
PRT	Commercial banking	0.086	0.034	0.009	0.049	0.021	0.198
RUS	Commercial banking	0.172	0.045	0.035	0.029	0.031	0.312
RWA	Commercial banking	0.074	0.034	0.035	0.097	0.052	0.292
SVK	Commercial banking	0.111	0.011	0.009	0.019	0.062	0.212
SVN	Commercial banking	0.086	0.028	0.009	0.029	0.010	0.163
SWE	Commercial banking	0.111	0.028	0.009	0.029	0.021	0.197
TUR	Commercial banking	0.086	0.034	0.026	0.039	0.072	0.257
USA	Commercial banking	0.135	0.023	0.035	0.000	0.031	0.224
ZAF	Commercial banking	0.123	0.011	0.052	0.049	0.072	0.308
AUS	Distribution services	0.055	0.014	0.000	0.010	0.036	0.115
AUT	Distribution services	0.055	0.028	0.000	0.030	0.064	0.177
BEL	Distribution services	0.082	0.028	0.024	0.050	0.055	0.239
BRA	Distribution services	0.069	0.028	0.024	0.040	0.055	0.216
CAN	Distribution services	0.107	0.012	0.051	0.022	0.069	0.260
CHE	Distribution services	0.068	0.043	0.034	0.026	0.049	0.219
CHL	Distribution services	0.027	0.014	0.008	0.000	0.064	0.113
CHN	Distribution services	0.143	0.016	0.027	0.020	0.051	0.258
COL	Distribution services	0.041	0.014	0.024	0.020	0.055	0.154
CRI	Distribution services	0.044	0.019	0.041	0.051	0.055	0.210
CZE	Distribution services	0.027	0.014	0.016	0.030	0.027	0.115
DEU	Distribution services	0.041	0.019	0.008	0.020	0.018	0.106

Country	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	STRI
DNK	Distribution services	0.055	0.023	0.016	0.030	0.018	0.143
ESP	Distribution services	0.041	0.009	0.024	0.020	0.046	0.140
EST	Distribution services	0.055	0.037	0.016	0.010	0.009	0.128
FIN	Distribution services	0.108	0.029	0.026	0.035	0.040	0.238
FRA	Distribution services	0.055	0.009	0.024	0.050	0.036	0.175
GBR	Distribution services	0.041	0.028	0.008	0.020	0.027	0.125
GRC	Distribution services	0.096	0.023	0.032	0.030	0.046	0.227
HUN	Distribution services	0.055	0.033	0.032	0.020	0.036	0.176
IDN	Distribution services	0.398	0.037	0.032	0.080	0.073	0.621
IND	Distribution services	0.233	0.028	0.040	0.070	0.064	0.436
IRL	Distribution services	0.055	0.028	0.000	0.020	0.036	0.140
ISL	Distribution services	0.170	0.043	0.028	0.049	0.060	0.350
ISR	Distribution services	0.055	0.028	0.024	0.000	0.082	0.189
ITA	Distribution services	0.069	0.019	0.016	0.040	0.036	0.180
JPN	Distribution services	0.055	0.014	0.024	0.000	0.027	0.121
KEN	Distribution services	0.041	0.028	0.048	0.050	0.055	0.222
KOR	Distribution services	0.027	0.014	0.008	0.030	0.009	0.089
LTU	Distribution services	0.055	0.019	0.016	0.010	0.027	0.127
LUX	Distribution services	0.069	0.014	0.016	0.030	0.055	0.184
LVA	Distribution services	0.027	0.009	0.016	0.010	0.027	0.090
MEX	Distribution services	0.069	0.014	0.024	0.030	0.055	0.192
NLD	Distribution services	0.027	0.028	0.008	0.040	0.046	0.149
NOR	Distribution services	0.081	0.029	0.026	0.045	0.057	0.239
NZL	Distribution services	0.055	0.023	0.000	0.010	0.055	0.143
POL	Distribution services	0.055	0.014	0.008	0.030	0.036	0.144
PRT	Distribution services	0.041	0.028	0.024	0.050	0.046	0.189
RUS	Distribution services	0.069	0.037	0.032	0.030	0.055	0.223
RWA	Distribution services	0.027	0.028	0.024	0.020	0.046	0.145
SVK	Distribution services	0.055	0.009	0.016	0.010	0.027	0.118
SVN	Distribution services	0.041	0.023	0.008	0.020	0.036	0.129

Country	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	STRI
SWE	Distribution services	0.095	0.025	0.018	0.035	0.040	0.212
TUR	Distribution services	0.041	0.028	0.024	0.020	0.055	0.168
USA	Distribution services	0.041	0.019	0.048	0.020	0.027	0.156
ZAF	Distribution services	0.041	0.009	0.032	0.030	0.064	0.177
AUS	Road freight transport	0.089	0.038	0.000	0.000	0.009	0.136
AUT	Road freight transport	0.111	0.057	0.000	0.051	0.022	0.241
BEL	Road freight transport	0.111	0.057	0.032	0.038	0.019	0.256
BRA	Road freight transport	0.111	0.057	0.032	0.000	0.019	0.218
CAN	Road freight transport	0.066	0.028	0.047	0.000	0.009	0.152
CHE	Road freight transport	0.089	0.095	0.032	0.013	0.016	0.244
CHL	Road freight transport	0.044	0.038	0.016	0.013	0.016	0.127
CHN	Road freight transport	0.133	0.028	0.047	0.013	0.016	0.237
COL	Road freight transport	0.089	0.038	0.032	0.013	0.022	0.193
CRI	Road freight transport	0.266	0.038	0.032	0.038	0.028	0.402
CZE	Road freight transport	0.066	0.038	0.016	0.038	0.016	0.174
DEU	Road freight transport	0.089	0.047	0.000	0.038	0.013	0.187
DNK	Road freight transport	0.111	0.057	0.016	0.038	0.003	0.225
ESP	Road freight transport	0.089	0.019	0.032	0.038	0.019	0.196
EST	Road freight transport	0.111	0.076	0.016	0.038	0.006	0.247
FIN	Road freight transport	0.155	0.066	0.016	0.038	0.009	0.285
FRA	Road freight transport	0.089	0.038	0.032	0.051	0.009	0.218
GBR	Road freight transport	0.089	0.066	0.016	0.025	0.013	0.209
GRC	Road freight transport	0.111	0.047	0.032	0.025	0.013	0.228
HUN	Road freight transport	0.089	0.076	0.032	0.038	0.016	0.250
IDN	Road freight transport	0.244	0.066	0.047	0.025	0.016	0.399
IND	Road freight transport	0.133	0.066	0.047	0.013	0.025	0.285
IRL	Road freight transport	0.089	0.076	0.000	0.025	0.006	0.196
ISL	Road freight transport	0.244	0.095	0.032	0.038	0.009	0.418
ISR	Road freight transport	0.089	0.066	0.016	0.000	0.025	0.196
ITA	Road freight transport	0.133	0.038	0.032	0.038	0.016	0.256

Country	Sector	Restriction on foreign entry	Restrictions movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency	STRI
JPN	Road freight transport	0.066	0.028	0.032	0.013	0.009	0.149
KEN	Road freight transport	0.089	0.057	0.079	0.025	0.016	0.266
KOR	Road freight transport	0.022	0.038	0.032	0.013	0.003	0.108
LTU	Road freight transport	0.089	0.038	0.016	0.038	0.013	0.193
LUX	Road freight transport	0.066	0.038	0.016	0.038	0.019	0.177
LVA	Road freight transport	0.066	0.028	0.016	0.038	0.003	0.152
MEX	Road freight transport	0.465	0.066	0.063	0.013	0.022	0.630
NLD	Road freight transport	0.044	0.066	0.032	0.013	0.013	0.168
NOR	Road freight transport	0.133	0.066	0.047	0.051	0.009	0.307
NZL	Road freight transport	0.089	0.057	0.000	0.000	0.009	0.155
POL	Road freight transport	0.089	0.028	0.016	0.051	0.016	0.199
PRT	Road freight transport	0.066	0.066	0.016	0.038	0.006	0.193
RUS	Road freight transport	0.111	0.085	0.047	0.013	0.016	0.272
RWA	Road freight transport	0.066	0.066	0.063	0.013	0.013	0.222
SVK	Road freight transport	0.111	0.028	0.016	0.038	0.016	0.209
SVN	Road freight transport	0.089	0.057	0.016	0.038	0.006	0.206
SWE	Road freight transport	0.133	0.057	0.016	0.038	0.009	0.253
TUR	Road freight transport	0.089	0.057	0.047	0.038	0.019	0.250
USA	Road freight transport	0.022	0.038	0.063	0.038	0.013	0.174
ZAF	Road freight transport	0.066	0.019	0.032	0.000	0.019	0.136

Source: OECD based in part on data provided by the authors.

## APPENDIX 2: LAWS CONSULTED IN KENYA

Alcoholic Drinks Control (Licensing) Regulation, 2010.

Alcoholic Drinks Control Act, 2010.

Banking Act, 1989.

Capital Markets (Foreign Investors) Regulations, 2012.

Capital Markets Act, 1989.

Central Bank of Kenya Act, 1966.

Central Bank of Kenya, Credit Reference Bureau Data Standards Manual.

Central Bank of Kenya, Guidelines on Compliance with the AML-CFT Law, 2015.

Central Bank Of Kenya, Guidelines on the Discount Window, 2011.

Central Bank of Kenya, Risk Management Guidelines, 2013.

Central Bank Regulation of Interest Rates and Terms of Credit of Specified Banks and Specified Financial Institutions, 1990.

Companies Act, 2015.

Competition Act, 2010.

Competition Authority of Kenya, Guidelines.

Constitution of Kenya, 2010.

Consumer Protection Act, 2012.

Convention On The Law Applicable To Contracts For The International Sale Of Goods.

Co-operative Societies Act, 1997.

Copyright Act, 2001.

Credit Reference Bureau Regulations, 2013.

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## APPENDIX 4: REGULATORY HETEROGENEITY SCORES BY PARTNER AND BY SECTOR, FOR KENYA AND RWANDA

Reporter	Partner	Sector	Regulatory Heterogeneity
KEN	AUS	Distribution	0.260
KEN	AUT	Distribution	0.253
KEN	BEL	Distribution	0.336
KEN	BRA	Distribution	0.294
KEN	CAN	Distribution	0.252
KEN	CHE	Distribution	0.239
KEN	CHL	Distribution	0.244
KEN	CHN	Distribution	0.292
KEN	COL	Distribution	0.252
KEN	CRI	Distribution	0.235
KEN	CZE	Distribution	0.269
KEN	DEU	Distribution	0.238
KEN	DNK	Distribution	0.255
KEN	ESP	Distribution	0.243
KEN	EST	Distribution	0.285
KEN	FIN	Distribution	0.312
KEN	FRA	Distribution	0.299
KEN	GBR	Distribution	0.240
KEN	GRC	Distribution	0.288
KEN	HUN	Distribution	0.274
KEN	IDN	Distribution	0.370
KEN	IND	Distribution	0.466
KEN	IRL	Distribution	0.285
KEN	ISL	Distribution	0.351
KEN	ISR	Distribution	0.250
KEN	ITA	Distribution	0.309
KEN	JPN	Distribution	0.288
KEN	KOR	Distribution	0.284
KEN	LTU	Distribution	0.283
KEN	LUX	Distribution	0.338
KEN	LVA	Distribution	0.260
KEN	MEX	Distribution	0.165
KEN	NLD	Distribution	0.226
KEN	NOR	Distribution	0.294
KEN	NZL	Distribution	0.230
KEN	POL	Distribution	0.284
KEN	PRT	Distribution	0.323
KEN	RUS	Distribution	0.296
KEN	RWA	Distribution	0.186
KEN	SVK	Distribution	0.288

Reporter	Partner	Sector	Regulatory Heterogeneity
KEN	SVN	Distribution	0.243
KEN	SWE	Distribution	0.367
KEN	TUR	Distribution	0.210
KEN	USA	Distribution	0.280
KEN	ZAF	Distribution	0.287
RWA	AUS	Distribution	0.174
RWA	AUT	Distribution	0.216
RWA	BEL	Distribution	0.243
RWA	BRA	Distribution	0.274
RWA	CAN	Distribution	0.199
RWA	CHE	Distribution	0.181
RWA	CHL	Distribution	0.177
RWA	CHN	Distribution	0.254
RWA	COL	Distribution	0.177
RWA	CRI	Distribution	0.227
RWA	CZE	Distribution	0.202
RWA	DEU	Distribution	0.219
RWA	DNK	Distribution	0.198
RWA	ESP	Distribution	0.148
RWA	EST	Distribution	0.197
RWA	FIN	Distribution	0.271
RWA	FRA	Distribution	0.261
RWA	GBR	Distribution	0.211
RWA	GRC	Distribution	0.222
RWA	HUN	Distribution	0.208
RWA	IDN	Distribution	0.368
RWA	IND	Distribution	0.409
RWA	IRL	Distribution	0.172
RWA	ISL	Distribution	0.293
RWA	ISR	Distribution	0.174
RWA	ITA	Distribution	0.240
RWA	JPN	Distribution	0.227
RWA	KEN	Distribution	0.186
RWA	KOR	Distribution	0.180
RWA	LTU	Distribution	0.206
RWA	LUX	Distribution	0.272
RWA	LVA	Distribution	0.183
RWA	MEX	Distribution	0.208
RWA	NLD	Distribution	0.209
RWA	NOR	Distribution	0.209
RWA	NZL	Distribution	0.173
RWA	POL	Distribution	0.218

Reporter	Partner	Sector	Regulatory Heterogeneity
RWA	PRT	Distribution	0.248
RWA	RUS	Distribution	0.235
RWA	SVK	Distribution	0.192
RWA	SVN	Distribution	0.194
RWA	SWE	Distribution	0.225
RWA	TUR	Distribution	0.172
RWA	USA	Distribution	0.220
RWA	ZAF	Distribution	0.221
KEN	AUS	Commercial Banking	0.387
KEN	AUT	Commercial Banking	0.396
KEN	BEL	Commercial Banking	0.356
KEN	BRA	Commercial Banking	0.354
KEN	CAN	Commercial Banking	0.347
KEN	CHE	Commercial Banking	0.385
KEN	CHL	Commercial Banking	0.398
KEN	CHN	Commercial Banking	0.372
KEN	COL	Commercial Banking	0.390
KEN	CRI	Commercial Banking	0.369
KEN	CZE	Commercial Banking	0.354
KEN	DEU	Commercial Banking	0.444
KEN	DNK	Commercial Banking	0.359
KEN	ESP	Commercial Banking	0.397
KEN	EST	Commercial Banking	0.449
KEN	FIN	Commercial Banking	0.338
KEN	FRA	Commercial Banking	0.389
KEN	GBR	Commercial Banking	0.359
KEN	GRC	Commercial Banking	0.379
KEN	HUN	Commercial Banking	0.337
KEN	IDN	Commercial Banking	0.452
KEN	IND	Commercial Banking	0.422
KEN	IRL	Commercial Banking	0.393
KEN	ISL	Commercial Banking	0.357
KEN	ISR	Commercial Banking	0.331
KEN	ITA	Commercial Banking	0.431
KEN	JPN	Commercial Banking	0.385
KEN	KOR	Commercial Banking	0.355
KEN	LTU	Commercial Banking	0.352
KEN	LUX	Commercial Banking	0.471
KEN	LVA	Commercial Banking	0.382
KEN	MEX	Commercial Banking	0.323
KEN	NLD	Commercial Banking	0.371
KEN	NOR	Commercial Banking	0.375

Reporter	Partner	Sector	Regulatory Heterogeneity
KEN	NZL	Commercial Banking	0.322
KEN	POL	Commercial Banking	0.397
KEN	PRT	Commercial Banking	0.416
KEN	RUS	Commercial Banking	0.395
KEN	RWA	Commercial Banking	0.296
KEN	SVK	Commercial Banking	0.380
KEN	SVN	Commercial Banking	0.327
KEN	SWE	Commercial Banking	0.445
KEN	TUR	Commercial Banking	0.303
KEN	USA	Commercial Banking	0.339
KEN	ZAF	Commercial Banking	0.339
RWA	AUS	Commercial Banking	0.325
RWA	AUT	Commercial Banking	0.326
RWA	BEL	Commercial Banking	0.284
RWA	BRA	Commercial Banking	0.432
RWA	CAN	Commercial Banking	0.299
RWA	CHE	Commercial Banking	0.361
RWA	CHL	Commercial Banking	0.317
RWA	CHN	Commercial Banking	0.397
RWA	COL	Commercial Banking	0.312
RWA	CRI	Commercial Banking	0.301
RWA	CZE	Commercial Banking	0.272
RWA	DEU	Commercial Banking	0.388
RWA	DNK	Commercial Banking	0.289
RWA	ESP	Commercial Banking	0.273
RWA	EST	Commercial Banking	0.344
RWA	FIN	Commercial Banking	0.349
RWA	FRA	Commercial Banking	0.358
RWA	GBR	Commercial Banking	0.312
RWA	GRC	Commercial Banking	0.319
RWA	HUN	Commercial Banking	0.281
RWA	IDN	Commercial Banking	0.423
RWA	IND	Commercial Banking	0.409
RWA	IRL	Commercial Banking	0.268
RWA	ISL	Commercial Banking	0.346
RWA	ISR	Commercial Banking	0.323
RWA	ITA	Commercial Banking	0.336
RWA	JPN	Commercial Banking	0.304
RWA	KEN	Commercial Banking	0.296
RWA	KOR	Commercial Banking	0.215
RWA	LTU	Commercial Banking	0.272
RWA	LUX	Commercial Banking	0.328

Reporter	Partner	Sector	Regulatory Heterogeneity
RWA	LVA	Commercial Banking	0.302
RWA	MEX	Commercial Banking	0.348
RWA	NLD	Commercial Banking	0.283
RWA	NOR	Commercial Banking	0.305
RWA	NZL	Commercial Banking	0.278
RWA	POL	Commercial Banking	0.354
RWA	PRT	Commercial Banking	0.323
RWA	RUS	Commercial Banking	0.347
RWA	SVK	Commercial Banking	0.327
RWA	SVN	Commercial Banking	0.299
RWA	SWE	Commercial Banking	0.279
RWA	TUR	Commercial Banking	0.283
RWA	USA	Commercial Banking	0.353
RWA	ZAF	Commercial Banking	0.385
KEN	AUS	Road Freight Transport	0.247
KEN	AUT	Road Freight Transport	0.320
KEN	BEL	Road Freight Transport	0.354
KEN	BRA	Road Freight Transport	0.272
KEN	CAN	Road Freight Transport	0.247
KEN	CHE	Road Freight Transport	0.278
KEN	CHL	Road Freight Transport	0.278
KEN	CHN	Road Freight Transport	0.288
KEN	COL	Road Freight Transport	0.320
KEN	CRI	Road Freight Transport	0.244
KEN	CZE	Road Freight Transport	0.367
KEN	DEU	Road Freight Transport	0.354
KEN	DNK	Road Freight Transport	0.345
KEN	ESP	Road Freight Transport	0.351
KEN	EST	Road Freight Transport	0.351
KEN	FIN	Road Freight Transport	0.367
KEN	FRA	Road Freight Transport	0.348
KEN	GBR	Road Freight Transport	0.367
KEN	GRC	Road Freight Transport	0.297
KEN	HUN	Road Freight Transport	0.342
KEN	IDN	Road Freight Transport	0.288
KEN	IND	Road Freight Transport	0.342
KEN	IRL	Road Freight Transport	0.408
KEN	ISL	Road Freight Transport	0.348
KEN	ISR	Road Freight Transport	0.215
KEN	ITA	Road Freight Transport	0.351
KEN	JPN	Road Freight Transport	0.297
KEN	KOR	Road Freight Transport	0.272

Reporter	Partner	Sector	Regulatory Heterogeneity
KEN	LTU	Road Freight Transport	0.335
KEN	LUX	Road Freight Transport	0.373
KEN	LVA	Road Freight Transport	0.335
KEN	MEX	Road Freight Transport	0.174
KEN	NLD	Road Freight Transport	0.275
KEN	NOR	Road Freight Transport	0.415
KEN	NZL	Road Freight Transport	0.247
KEN	POL	Road Freight Transport	0.351
KEN	PRT	Road Freight Transport	0.405
KEN	RUS	Road Freight Transport	0.247
KEN	RWA	Road Freight Transport	0.215
KEN	SVK	Road Freight Transport	0.345
KEN	SVN	Road Freight Transport	0.313
KEN	SWE	Road Freight Transport	0.453
KEN	TUR	Road Freight Transport	0.184
KEN	USA	Road Freight Transport	0.256
KEN	ZAF	Road Freight Transport	0.259
RWA	AUS	Road Freight Transport	0.241
RWA	AUT	Road Freight Transport	0.329
RWA	BEL	Road Freight Transport	0.297
RWA	BRA	Road Freight Transport	0.247
RWA	CAN	Road Freight Transport	0.196
RWA	CHE	Road Freight Transport	0.244
RWA	CHL	Road Freight Transport	0.206
RWA	CHN	Road Freight Transport	0.256
RWA	COL	Road Freight Transport	0.228
RWA	CRI	Road Freight Transport	0.250
RWA	CZE	Road Freight Transport	0.275
RWA	DEU	Road Freight Transport	0.326
RWA	DNK	Road Freight Transport	0.272
RWA	ESP	Road Freight Transport	0.237
RWA	EST	Road Freight Transport	0.282
RWA	FIN	Road Freight Transport	0.373
RWA	FRA	Road Freight Transport	0.332
RWA	GBR	Road Freight Transport	0.320
RWA	GRC	Road Freight Transport	0.209
RWA	HUN	Road Freight Transport	0.269
RWA	IDN	Road Freight Transport	0.180
RWA	IND	Road Freight Transport	0.212
RWA	IRL	Road Freight Transport	0.259
RWA	ISL	Road Freight Transport	0.383
RWA	ISR	Road Freight Transport	0.228

Reporter	Partner	Sector	Regulatory Heterogeneity
RWA	ITA	Road Freight Transport	0.288
RWA	JPN	Road Freight Transport	0.269
RWA	KEN	Road Freight Transport	0.215
RWA	KOR	Road Freight Transport	0.165
RWA	LTU	Road Freight Transport	0.297
RWA	LUX	Road Freight Transport	0.278
RWA	LVA	Road Freight Transport	0.259
RWA	MEX	Road Freight Transport	0.136
RWA	NLD	Road Freight Transport	0.222
RWA	NOR	Road Freight Transport	0.266
RWA	NZL	Road Freight Transport	0.234
RWA	POL	Road Freight Transport	0.278
RWA	PRT	Road Freight Transport	0.304
RWA	RUS	Road Freight Transport	0.218
RWA	SVK	Road Freight Transport	0.278
RWA	SVN	Road Freight Transport	0.282
RWA	SWE	Road Freight Transport	0.301
RWA	TUR	Road Freight Transport	0.237
RWA	USA	Road Freight Transport	0.253
RWA	ZAF	Road Freight Transport	0.247

Source: OECD based in part on data supplied by the authors.