

Using trade to propel high growth: lessons from Rwanda's export performance in the past decade

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Executive Summary

Rwanda's ambitious growth plan to achieve middle-income status by 2035 will depend centrally on its ability to tap into regional and global export markets. Over the past decade, the government has outlined and worked towards explicit export growth targets and in the process has successfully fostered robust exporting operations in coffee, tea, minerals, and non-traditional exports. Between 2010 and 2019, Rwanda's exports grew by 14 percent annually and Rwandan exporters have outperformed comparator economies to become stronger global competitors with more diversified product and market portfolios. Rwanda's successes are widely acknowledged and impressive given the lingering effects of the 2008 financial crises, persistent regional challenges in the East African Community, and teething problems around coordinating a coherent trade and industrial policy. The driver of success has been Rwanda's forward-looking export strategy with critical public and private investments to not only boost traditional goods export but also to position Rwanda as a strong services exporter with impressive growth in business and leisure tourism and continuous ambitions to become an international hub for world-class education and healthcare services.

Unfortunately, the unexpected global pandemic recession that hit in 2020 threw a wrench into Rwanda's export growth trajectory. Exports plummeted across almost all major export categories- coffee, tea, minerals, other exports, and re-exports- with an overall decline in export value and volume of 15.2 percent and 6.2 percent, respectively. The good news is that swift policy responses, together with some support from the international community, facilitated a strong rebound in 2021 with a projected real GDP growth of 10.2 percent and encouraging recovery in goods and services exports.

Looking forward, Rwanda's main challenge will be to support export recovery in light of the COVID-19 pandemic and leverage gains in export competitiveness to generate double-digit year-on-year growth in goods and services exports- an export growth target set by the Government of Rwanda in the Future Drivers of Growth (FDG) report (World Bank 2019). Now more than ever, Rwanda must implement an export growth strategy that responds to domestic and international challenges while also taking advantage of emerging opportunities, regionally-under the African Continental Free Trade Area- and globally- as supply chains shift in response to disruptions stemming from the global pandemic. This study analyses Rwanda's export performance over the past decade to glean insights into areas requiring more policy attention. It looks at successes and gaps with the goal of proposing a set of actionable recommendations for the Ministry of Trade and Industry and the other Ministries and agencies within government.

Key messages

Overview of Rwanda's export structure and performance

- Rwanda's goods and services export growth has outperformed export growth globally and for the Sub-Saharan Africa region. Between 2010 and 2019, Rwanda's exports almost doubled from around 11 percent of GDP in 2010 to 19 percent in 2019. Export values stood at over US\$ 2.2 Billion. Furthermore, Rwanda's exports, for both goods and services, and its participation in global value chains grew at a higher rate than most of its comparator economies.
- Beyond increases in the absolute value of exports, Rwanda's export competitiveness improved, with exporters capturing a greater share of the global export market. Here too, Rwanda outperformed and showed relatively stronger gains in export competitiveness against comparators. Notably, Rwanda has increased its export market penetration- meaning exporters have reached a higher number of international markets over the years. For example, in 2010, Rwanda exported coffee to 13 percent of global coffee importers; in 2019, this share jumped to 22 percent.

- Rwanda's primary source of merchandise export growth over the decade came from increases in re-exports and exports of vegetable and export crops like coffee and tea, foodstuffs, cement, gold and minerals (tantalum, tin and tungsten). For services exports, tourism, transport and government services also saw significant growth. In 2019, re-exports- mainly petroleum, food and vehicle exports to the DRC- made up 17 percent of total formal exports compared to 5 percent in 2010.
- Rwanda has also developed new export markets. Exports to all major export regions have increased with the Democratic Republic of Congo (DRC) and the United Arab Emirates (UAE) emerging as major export markets; Europe and North America, while also increasing in absolute amounts, have declined in relative importance.
- The number of Rwanda's export products and markets has increased by between two and fourfold over the 2010-2019 period for exports greater than 10,000 USD as well as for exports greater than a million dollars. Product and market numbers have increased across most of the major export product categories further highlighting improvements in export diversification.
- Most of Rwanda's export growth has occurred through more robust performance in resource-based products and products with lower product complexity. Analysis of product complexity at the firm level shows an encouraging shift towards more complex exports: new and growing exporters exported more complex products over the decade than firms that ceased exporting or exhibited shrinking exports.

Identified challenges

- Of concern is Rwanda's price-driven export growth, which leaves future export performance at the mercy of price shocks and will prove unsustainable for maintaining a double-digit export growth path. Against the backdrop of increasing exports and export competitiveness is the significant contribution of prices to overall export growth. Over the past decade, there has been an increasing but unsteady pattern of export growth reflecting variations in international prices- primarily international commodities prices.
- On top of this, export growth was weaker in the second half of the decade pointing to a slowdown across all sectors except minerals, coffee and tea. Rwanda has also largely failed to hit its export targets under the Economic Development and Poverty Reduction Strategy (EDPRS2) and the National Strategy for Transformation (NST1).
- A decomposition of Rwanda's export growth over the decade reveals that around 18.2 percent of Rwanda's potential export growth has been lost due to a decrease in exports of existing products to established markets (6.7 percent) as well as the complete cessation of exports to established markets (11.5 percent). Furthermore, research from the World Bank (2018) shows that around 30 percent of exporters, on average, continue to export after the first year, pointing to relatively low exporter survival for Rwanda.
- Although Rwanda has increased its number of export products and markets over the period, a look at export shares shows that Rwanda's product and market diversification has decreased primarily due to high export values of gold to one central market- the UAE.
- Rwanda's goods exports are also limited to a small set of partners, the European Union (EU) and Asia. Even though both regions made up over half of exports in 2019, the UK, Switzerland, Belgium, Pakistan

and Singapore make up the majority of Rwandan exports. Services exports are also concentrated within the United States and the United Kingdom together with other markets in Europe and Asia.

- Despite overall gains in the share of complex export goods, exports of more complex products declined across the two halves of the decade. A detailed product-level analysis points to opportunities for Rwanda to diversify into higher complexity products.
- Finally, the growth of Informal Cross Border Trade (ICBT) slowed because of regional tensions. In 2012, the earliest period for which data is available, informal exports made up around 18.7 percent of total exports. In 2019, informal exports declined by close to 20 percent year-on-year due to disruptions along the borders with Uganda and made up around 9.5 percent of total goods exports.

Developments around salient policy factors: trade facilitation, innovation, FDI, and regional trade agreements

- Rwanda has improved its logistics performance over the past decade. In fact, improvements in trade facilitation in recent years have led to a decline in transport costs and time for Rwanda exports. Policy changes and improvements in coordination have been at the helm of enabling Rwanda's improvements in trade facilitation and will continue to be salient. However, trade costs, particularly costs associated with intra-African trade, remain high and require further government intervention.
- Rwanda scores low on innovation measures (ranking 94 out of 129 economies in 2019), and, for the most part, it is classified as a limited commodity exporter. Without improvements in firm-level innovation, firms will be limited in how many markets they can access, directly impacting global value chain participation. Innovation is essential for exporting because it allows firms to develop complex products and meet quality requirements in more established markets. Government investments to transform Rwandan into an innovation-driven economy will be critical.
- Over the past decade, FDI has been export-enhancing with resulting increases in the participation of Rwandan firms in global value chains. Because of investment promotion efforts and improvements to the business environment, the stock of FDI has increased with ICT, financial and insurance activities, manufacturing and energy having the largest share. Looking forward, Rwanda would require an FDI strategy that responds to an evolving FDI landscape focused on sustainable and climate-friendly projects.
- Despite mostly positive developments around trade agreements, the growth rate of export volumes to partners under Regional Trade Agreements (RTAs) and Preferential Trade Agreements (PTAs) has been sporadic, raising questions about the reasons behind the low utilisation of preferred market access among Rwanda firms. Between 2010 and 2019, Rwanda increased its number of PTAs but with mixed impact on the growth rate of exports to new PTA partners. Additionally, between 2010 and 2019, there were four significant developments around regional integration involving Economic Community for Central African States (ECCAS), the African Continental Free Trade Area (AfCFTA), Economic Partnership Agreement (EPA) and the African Growth and Opportunity Act (AGOA).

Policy ideas and recommendations for the next decade for export growth

Overall, Rwanda has made laudable gains in export performance between 2010 and 2019. Exports will continue to be a critical driver of growth for Rwanda in the face of declining foreign development assistance

and a small, albeit growing, domestic market. Indeed, boosting trade will increase much-needed foreign exchange. Firms participating in global trade will have opportunities to increase their productivity while facilitating the movement of labour from low productivity sectors to high productivity and high wage sectors.

In this study, we build on our key findings to present a set of policy recommendations and discussions around potential policy emphasis and adjustments to Rwanda's export strategy.

- **Review existing export product and market priorities across government strategies for policy coherence and prioritise feasible export diversification against the backdrop of changing global trade dynamics.** Over the years, there have been several reviews of priority export sectors under the government's export strategy, industrial policy, Made in Rwanda strategy and other related policy documents. The result is a long list of sectors and products with export potential. A comprehensive review in consultation with stakeholders across the government and private sector is essential.
- **Commission a study looking at nascent services export sectors with high- potential for growth like transport, government, education, and healthcare services.** An effective export diversification strategy should not neglect services exports. However, information on services exports in Rwanda is lacking. Studies to quantify exports in sub-sectors like education and healthcare would provide critical information to inform export strategies.
- **Re-energise national export market access programs and coordinate existing government, private sector and donor programs around helping exporters identify, enter and expand their export markets.** The strategy should include increased funding to support the cost of overseas marketing and promotional activities that help build commercial export markets for Rwandan agricultural products and commodities. It should also include more funding for informational services for exporters. The Ministry of Trade and Industry and the Rwanda Development Board should work together with sector-specific exporter associations to design sectoral strategies that addresses exporter challenges around market access. The government might also want to consider using its embassies more intensely to better market Rwandan products to underserved markets.
- **Pay particular attention to regional barriers under the African Continental Free Trade Area (AfCFTA).** A separate national trade facilitation strategy for the AfCFTA should be considered with accompanying studies to understand the scope and nature of existing and emerging barriers to trade with the continent. High costs of imported inputs, costly transport, and difficulty accessing credit are three significant and persistent barriers that might prove salient. The government might also want to explore the prospects of unifying the World Trade Organization's Trade Facilitation Agreement (TFA) efforts with African Union trade facilitation discussions - at present, each EAC country has an inconsistent TFA commitment proposal; the AfCFTA is an opportunity to bring those together.
- **Dedicate more policy attention to increasing export volumes across all major goods sectors; the National Industrial Research and Development Agency (NIRDA) program on firm upgrading should be scaled up.** Established in 2013, NIRDA has successfully managed upgrading programs for six major value chains- wood, textiles, leather, banana wine, fruits and vegetables and livestock. NIRDA's strategy document is set to end in 2022, opening an opportunity for the agency to expand its scope and advocate for a larger budget.
- **Provide support to sporadic exporters.** Commission a study on the low survival rates of exports to understand why firms cannot maintain export relationships after entering export markets. The

findings of this study should be used to inform a support program for exporters that are struggling to keep their export markets.

- **Provide more support for supplier development programs (SDPs).** Access to reliable cheap inputs is essential for boosting Rwanda's export competitiveness. In export sectors that have the potential for local substitution of inputs, the government should design and implement programs to develop the capacity of local suppliers in line with the needs of Rwandan exporters. Two short-term actions include the expansion of the Supplier Development Unit at the RDB and the creation of a fund, perhaps through the Development Bank of Rwanda (BRD), to finance SDP programs and initiatives. More analytical work like firm surveys and value chain mapping to inform the design of supplier development interventions would also be critical.
- **Strengthen capacity around trade negotiations and regularly monitor trade and investment agreements to ensure that Rwandan exporters continuously benefit.** Within the EAC, Rwanda should take the lead in promoting deeper regional integration by working with other member states to discuss and address persistent trade and political tensions.
- **Commission a study to understand the trade financing landscape and measure the existing trade finance gap.** Although there has not been a direct study on trade finance, close to half of the exporters surveyed under the World Bank Enterprise survey indicated that access to credit was an obstacle (World Bank 2019). In addition, a study of firms looking at business perceptions around the AfCFTA revealed that trade finance is a significant business concern (Vanguard 2020). The findings of a survey of trade finance would be invaluable in designing policy to ensure that Rwandan exporters have access to the finance they need to export sustainably.
- **Invest in educating the private sector on opportunities under the AfCFTA and underserved markets while also providing credit and technical support to exporters looking to export under the agreement.** The Government needs to dedicate resources to sensitising exporters on the AfCFTA and regularly monitor NTB reports from Rwandan traders.

Rwandan exporters will continue to grapple with persistent challenges from the past decade, in addition to the economic ramifications of the pandemic. Although Rwanda has successfully managed the pandemic preserving existing export markets while revamping firm production would be crucial. Government support to actively promote Rwandan exports to new markets will pay dividends as global markets adjust to a post-COVID-19 reality and new opportunities emerge for firms to enter new markets. It will also be crucial for the Rwandan Government to support viable exporting firms as they adjust to new economic realities while allowing less productive firms to exit.

This study is organised as follows. Section 1 provides an overview of Rwanda's export structure and performance between 2010 and 2019. It presents measures of export growth, competitiveness, diversification and sophistication. Where possible, we benchmark Rwanda's performance against comparator economies. Section 2 delves into key trends in Rwanda's export trajectory. It discusses performance in global value chain participation, the growing importance of re-exports, services exports and informal trade. It also touches briefly on the impact of the COVID-19 pandemic. Section 4 addresses salient policy factors for Rwanda: trade facilitation, innovation, foreign direct investment, regional trade agreements and tariff policy. Finally, Section 5 highlights relevant policy discussions and presents a set of actionable recommendations to position the Rwandan economy for more robust export growth in the short and medium-term.

1. Overview of Rwanda’s export structure and performance

This section presents an overview of Rwanda’s export structure and performance for both goods and services trade over the past decade. In addition to looking at changes in export values and volumes, the analyses centre on understanding Rwanda’s export competitiveness regionally and locally. Where informative, the export performance of comparator economies like Uganda, Kenya, Ghana, Vietnam, and Ethiopia, among others, is highlighted to provide context for Rwanda’s export trajectory.

1.1 Export growth and competitiveness

Overall, Rwanda’s export growth (for both goods and services) has exceeded both global and Sub-Saharan African (SSA) export growth. Over the decade, Rwanda has significantly increased its trade openness. Exports grew at around 14 percent per year compared to 3 percent for overall global exports and 2 percent for SSA (Figure 1). This is notable given the 2008 Global Financial Crises, the impacts of which were still lingering in 2010 at the start of the decade. Looking at goods exports alone, the pattern remains similar with Rwanda’s annual export growth rate exceeding global and SSA rates. Since 2010, exports of goods and services have just about doubled from 11 percent to 20 percent of GDP and the trade balance has remained relatively stable at around 16 percent on average over the past decade (Figure 3).

Figure 1. Goods and services export annual growth

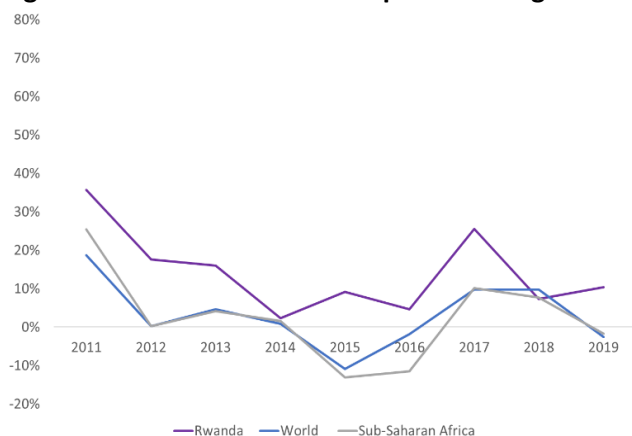
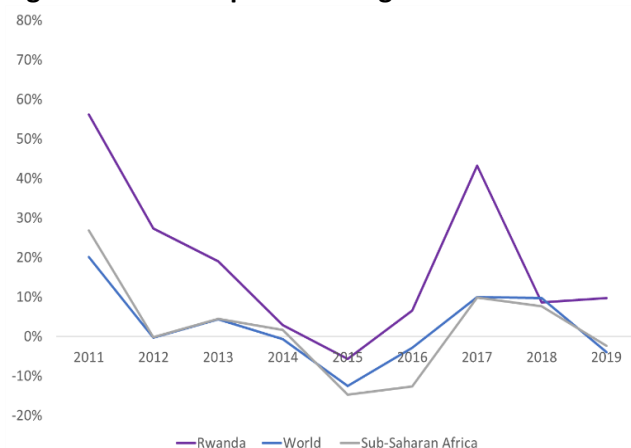
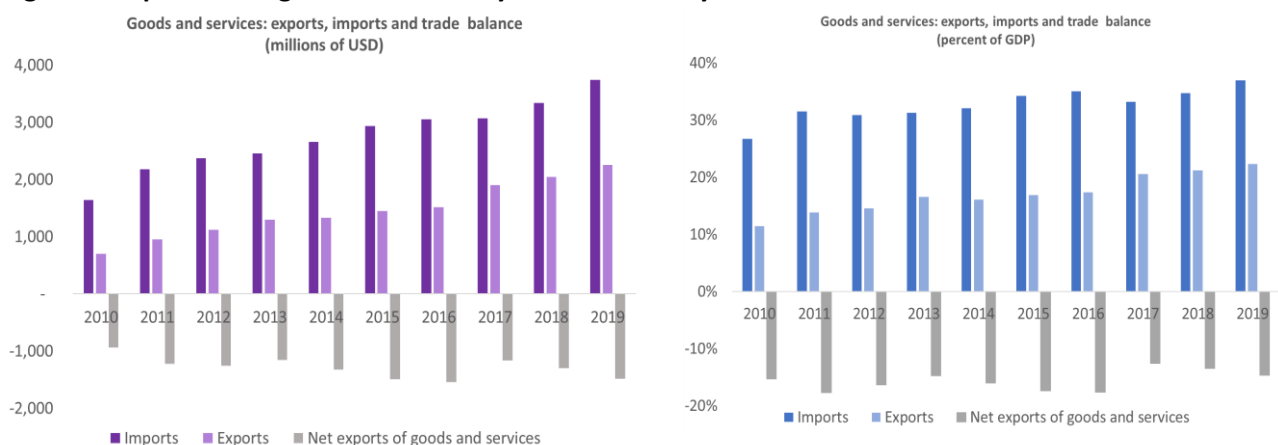


Figure 2. Goods export annual growth



Source: Government of Rwanda and UN Comtrade for various years.

Figure 3: Exports have grown consistently with a relatively stable trade deficit



Source: Author’s calculations using data from the Government of Rwanda.

Rwanda’s exports, for both goods and services grew at a higher rate than most of its comparator economies (Figure 6 and 7). Analysis of broad level export performance only provides a partial picture of Rwandan trade. To benchmark performance, we compare Rwanda’s export growth to five economies: Ethiopia, Ghana, Kenya, Tanzania and Uganda. The East African comparators- Kenya, Tanzania and Uganda- share similar export structures. Like Rwanda, all three are economies produce and export coffee, tea and tourism services. Additionally, these economies are regionally integrated under the East African Community. Understanding Ethiopia’s trade dynamics is also useful because it has a developing textile export sector- one of the priority sectors for Rwanda. On traditional exports, Ethiopia also exports coffee and tea, and through its national airline, generates significant foreign exchange (Rwanda has also invested a national airline and aims to become a growing travel hub for the African continent). Figure 4 and Figure 5 track export growth using 2010 as a base. Both figures above show that Rwanda’s export growth in goods and services has outpaced growth in all comparators except Ghana for services exports.

Figure 6: Rwanda’s goods export performance relative to comparators (2010=100)

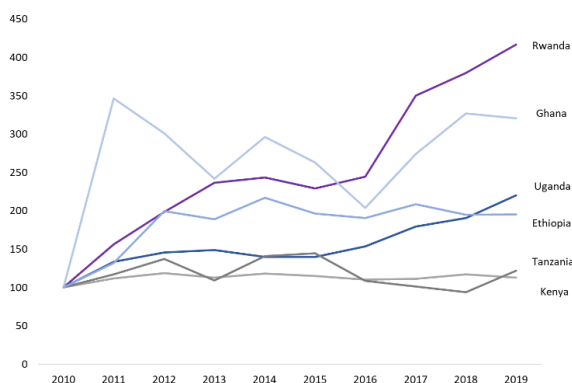
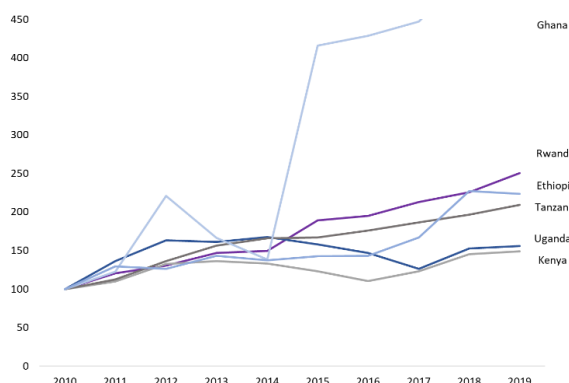


Figure 7: Rwanda’s services export performance relative to comparators (2010=100)



Source: Author’s calculations using data from the Government of Rwanda.

Box 1: Government should focus on export growth not reducing trade deficits

Rather than set a target of achieving a trade surplus, the government should focus on increasing export growth and ensuring sustainable financing of the current account. MINICOM should be held accountable for the growth rate of exports, increasing the productivity of firms, and efficient import substitution. The trade balance is not a sufficient way to gauge the health of the Rwandan economy. A trade deficit that is associated with large volumes of both imports and exports could be more beneficial than a trade surplus in which trade volumes are low.

In fact, some countries have achieved trade deficits during economic booms. South Korea and Thailand-two countries that currently have trade surpluses- had trade deficits during some of their strongest periods of economic growth. In fact, Rwanda has also experienced divergent trends in economic growth and its trade balance (Figure 4). Moreover, capital goods imports go directly into investment and make firms (and workers) more productive and intermediate goods provide much needed inputs into exports. In Rwanda, exporting firms buy the bulk of their imports – far more than non-exporters (Figure 5).

Trade deficits are likely to lead to trouble when: (a) they are financed by large and eventually unsustainable debt inflow (e.g., Mexico in the early 1970s; Argentina in the late 1970s); and/or (b) when foreign flows involve short-term money inflows (e.g., Chile in the 1970s; Thailand in the mid-1990s); and/or (c) when the government sells its foreign reserves over some period to maintain an overvalued exchange rate (e.g., almost all the cases above).

Trade deficits can help improve long-term growth when: (a) foreign direct investment comprises a large share of the inflows (e.g., Korea in the 1960s; Chile in the late 1990s); (b) development partners provide grant financing or access to concessional finance; (c) the investment that these foreign savings finances increase the productivity of the economy.

Figure 4: Economic growth in Rwanda has not always moved in parallel with the trade balance

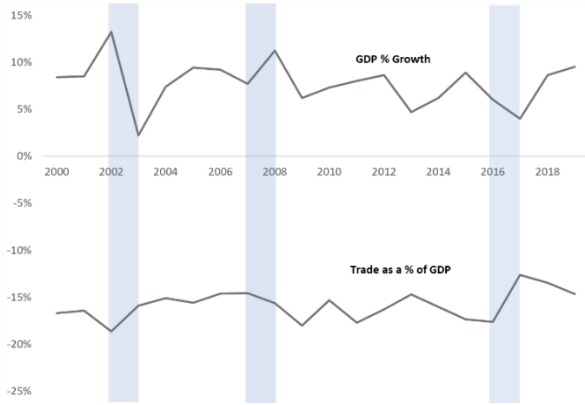
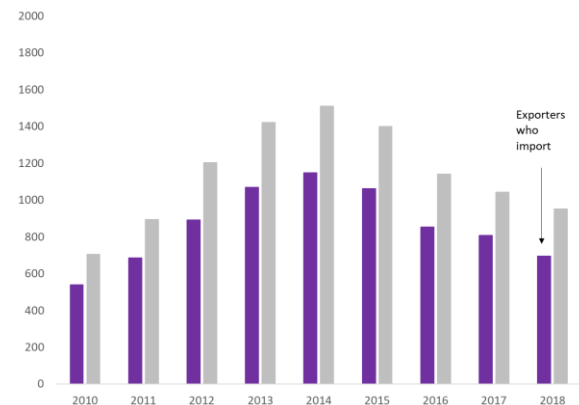


Figure 5: Rwandan exporters are major consumers of imports



Source: Adapted from IGC note “Trade Deficits: When do they hamper growth-and when do they help growth? (2019). Figure 5 is constructed using transaction level customs data.

Additionally, Rwanda became a more competitive exporter over the period. For both goods and services exports, Rwanda has gained global market share with stronger performance for services exporters (Figure 8). A sector breakdown of performance shows that Rwanda has increased its exports in relation to global exports for all six major export categories- coffee, tea, minerals, travel and transport (Figure 9). The export growth of tea, manufactured goods, and minerals was around four times the growth of global exports, while travel exports grew at around 8.5 percent per year-about two times the global rate. Performance in the coffee sector was less impressive and only slightly higher than global export growth- 2.5 percent as compared to 2.2 percent between 2010 and 2019. Finally, the transport sector grew by over 20 percent annually compared to 2.3 percent per year globally. In 2019, transport, travel and minerals were the largest of the six sectors by export value.

Figure 8: Rwanda has become more competitive in exports

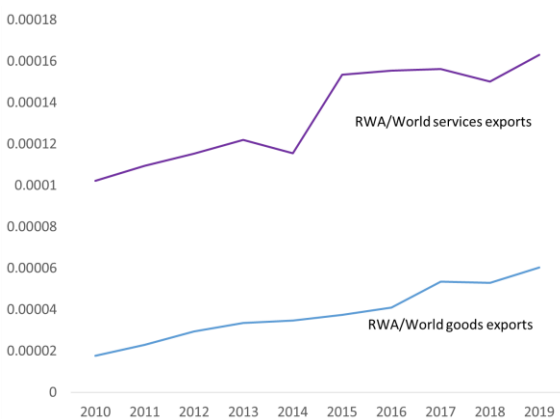
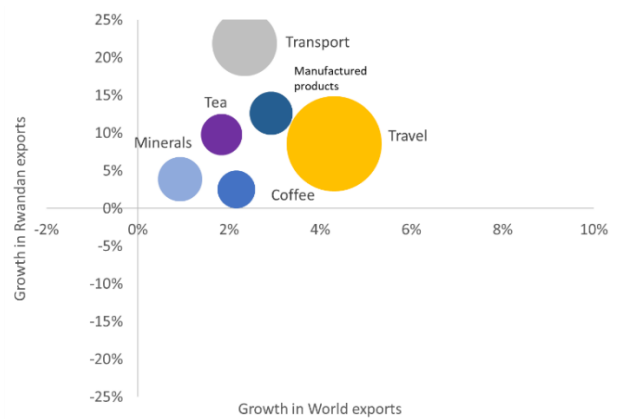


Figure 9: Exports of Rwanda’s major export sectors grew faster than global exports



Source: Calculations using data from the Government of Rwanda and UN COMTRADE data for various years.

Improvements in export competitiveness overall and in major export sectors is encouraging given that government and private investments have supported expansion and upgrading in all six sectors. Notable investments include improvements to coffee washing stations; public investments in RwandAir- Rwanda’s national airline; and the introduction of policies to improve value addition in the mining sector. Rwanda also gained market share in agro-processing driven by increased exports of cereal, oil and soap products.

Looking at comparator economies, Rwanda outperformed and showed relatively stronger gains export competitiveness. Figure 10 and Figure 11 show a simple and intuitive measure of export competitiveness- the share of country exports to global exports between 2010 and 2019. It also shows the overall annual percentage growth of this measure in parentheses next to country names. For both goods and services exports, Rwanda is the least competitive exporter with the lowest share of country exports to global exports. However, between 2010 and 2019, Rwanda has shown impressive improvement, with an annual growth rate in export competitiveness of around 15 percent for goods and 5 percent for services exceeding growth for all comparators except Ghana.

Figure 10: Rwanda’s competitiveness in goods exports against comparators

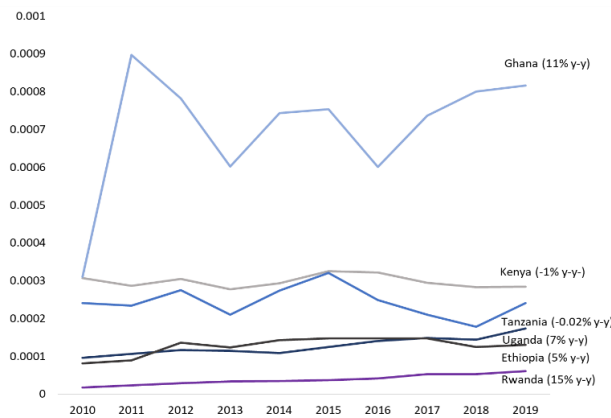
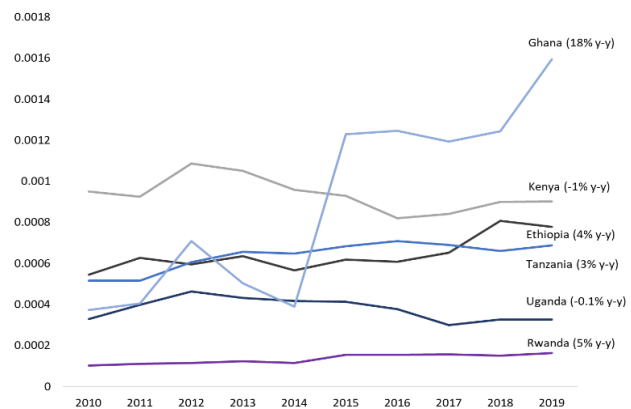


Figure 11: Rwanda’s competitiveness in services exports against comparators



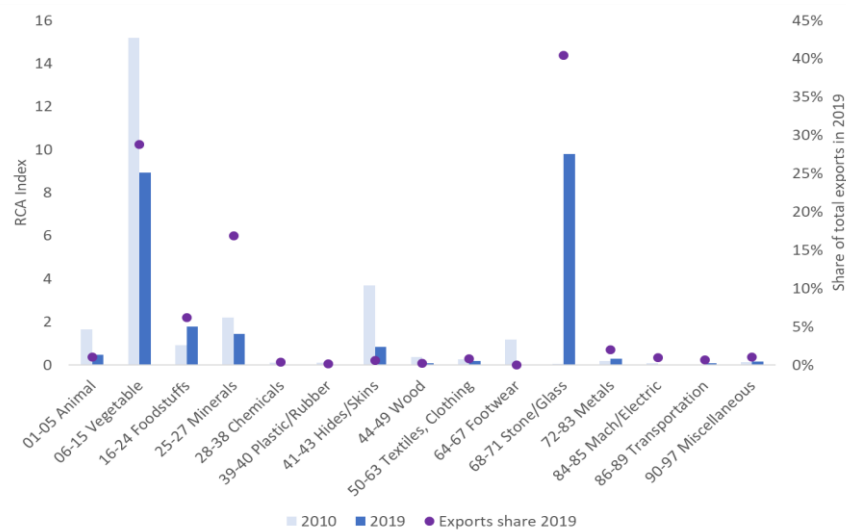
Source: Calculations using data from the Government of Rwanda and UN COMTRADE data for various years.

Rwanda has a strong revealed comparative advantage (RCA) in agricultural products (vegetables and export crops like coffee and tea), stone products, foodstuffs and minerals (Figure 12). The RCA index uses actual trade flows to provide information on product level export competitiveness in relation to other countries. The RCA index has its limitations.¹² However, it can be useful in understanding which sectors have driven export growth over the decade. Figure 12 shows a subset of sectors with high RCAs. The stone and glass sector is notable for the sharp increase in its RCA index between 2010 and 2017. This is a good example how a low RCA index in previous years does not necessarily preclude the emergence of a strong export sector. The strong export growth of the stone and glass sector has been mostly driven by gold and cement exports. Both sectors have seen important investments that have increased production capacity and opened new markets regionally for cement and for gold, the UAE. Section 2.2 (Table 7) has RCA indices for more detailed products.

¹ Measures of revealed comparative advantage (RCA) have been used to help assess a country’s export potential. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. The RCA index of country I for product j is often measured by the product’s share in the country’s exports in relation to its share in world trade.” https://wits.worldbank.org/WITS/WITS/WITSHELP/Content/Utilities/e1.trade_indicators.htm

² RCA measures are based on actual trade flows and therefore are reflective not only of a country’s comparative advantage but also other policy factors that might influence size of an exporting industry beyond natural advantage. Policies to target specific FDI (like tax incentives), subsidies and government investments can lead to the emergence of export sectors. Therefore, having a high RCA in a sector does not preclude the export potential of other sectors neither does it point to a sector with export growth that is necessarily sustainable.

Figure 12: Rwanda’s sectoral RCA (left axis) and share of total exports in 2019 (right axis)



Source: Author’s calculations using data from the Government of Rwanda.

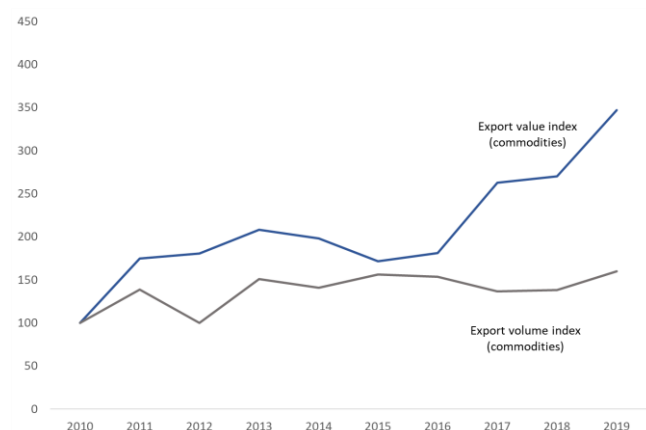
Against the backdrop of increasing exports and export competitiveness is the significant contribution of prices to overall export growth. Over the past decade, there has been an increasing but unsteady pattern of export growth reflecting variations in international prices- primarily international commodities prices. Measures of export value and volume indices³ show that Rwanda’s export value index, the ratio of exports in a given year to average exports in the base year, has been higher on average than the export volume index (Figure 13). The gap is greater for commodities exports where the export value index has been around 1.5 to 2 times the export volume index pointing to a strong price effect (Figure 14). A disproportionate role of prices can leave Rwanda’s export growth at risk of global price fluctuations, and without strong growth in volumes, export vulnerability might increase over the next years.

Figure 13: Total goods exports: export value and volume index (2000=100)



Source: Author’s calculations using data from the Government of Rwanda.

Figure 14: Commodities exports: export value and volume index (2000=100)



A deeper look at Rwanda’s exports confirms a pattern of increasing export competitiveness primarily driven by prices and shifts in geographical specialization. To further understand the drivers of export performance over the period, this analysis uses indicators of export competitiveness constructed using a database of

³ Value indices are the current value of imports or exports (c.i.f.) converted to USD and expressed as a percentage of the average of the base period (2000). Volume indices are the ratio of the import or export value index to the corresponding unit value index.

quarterly export frequency with year-on-year quarterly changes (Gaulier et. al 2013). The database allows for the decomposition of Rwanda’s export market growth and quantifies export growth contributions from market specialization, sectoral specialization, as well as price and volume determinants of export growth.⁴

Table 1 shows for Rwanda and other comparators, indices of export growth, export market share change, changes in geographical and sectoral specialization (composition effects), and changes in export market share growth once sectoral and geographical composition effects have been removed. It also shows estimates of price and volume contributions to export market share growth.

The results in Table 1 confirm Rwanda’s strong export growth and increasing competitiveness. It also shows that export growth has mainly come from geographical and price factors. Over the past decade, Rwanda’s quarterly year-on-year export growth has exceeded global, SSA and EAC quarterly export growth. Rwanda has had an export growth of around 6.5 percent per quarter compared to 4.2 percent for global growth. Rwanda’s quarterly export growth was 3.5 times the export growth of SSA, and exceeded quarterly export growth for Kenya, Uganda and Tanzania over the same period.

Table 1: Decomposition of Rwanda’s export performance

Country	Average quarterly export growth	Export market share change (push effect)	Specialization composition		Market share growth without composition effects		
			Geographical	Sectoral	Overall (value)	Price	Volumes
Rwanda	6.54	2.22	1.04	-0.32	1.50	0.92	0.58
World	4.21	-0.11	0.02	-0.33	0.20	-0.06	0.25
SSA	1.75	-2.58	0.54	-0.20	-2.93	0.03	-2.95
<i>EAC member states</i>							
Kenya	2.86	-1.47	-0.12	-1.77	0.42	-0.60	1.02
Uganda	5.79	1.46	-0.20	-1.31	2.96	-0.86	3.82
Tanzania	6.41	2.09	1.06	-1.31	2.33	0.18	2.16
<i>Other comparator economies</i>							
Ethiopia	7.08	2.75	0.11	-1.09	3.73	0.45	3.28
Mauritius	0.88	-3.45	-0.77	-2.62	-0.05	-0.81	0.76
Vietnam	16.69	12.36	0.25	-0.40	12.52	2.32	10.19

Source: Calculations using World Bank Measuring Export Competitiveness (MEC) database.

Note: Export market share= sum of geographical, sectoral and overall market share growth without compositional effects. For example, export market share for Rwanda (2.2%) = 1.04% - 0.32% + 1.50%.

Rwanda’s export growth was accompanied by gains in export market share (2.2 percent) exceeding market share gains across all comparators- market share declined globally, in the SSA region as well as for Kenya. Further decomposing Rwanda’s growth in export market share shows that the main drivers of growth have been favourable geographical specialisations along with positive contributions from price and, to a smaller extent, volume effects. Specifically, around 46.8 percent of Rwanda’s gain in export market share is from its geographical specialisation, 41.4 percent from price effects and 26.1 percent from increases in export volumes. There was also a decline in market share of around 14.5 percent of total export market share coming

⁴ The authors use “regression analysis to decompose export growth of bilateral export data at the HS-6-digit product level of disaggregation and using high frequency data. Specifically, the method envisages a decomposition of export growth based on a weighted variance analysis (ANOVA) of bilateral export data, disaggregated by product and using high frequency data. The model identifies the export growth of each exporting country as if all exporters had the same geographical and sectoral specialization. This is important for export data, as export growth rates are affected by structural effects: exporters with strong positions in the most dynamic destination markets or specialized in high growth sectors benefit ceteris paribus from stronger growth”. <http://documents1.worldbank.org/curated/en/924401468181488696/pdf/WPS6733.pdf>

from the dampening effect of Rwanda’s sectoral specialisation, meaning Rwanda’s product specialisation has had relatively lower export market share growth.

Rwanda’s export market growth has come from export expansions with SSA, China, USA and East Asia together with export expansions in minerals and agriculture. Finally, stripped of geographical and sectoral effects, price and volume effects, primarily from export expansion to SSA, China, USA and the East Asia and Pacific region, have driven export market growth (Figure 15). Agricultural products, primarily coffee and tea together with mineral products have contributed positively to price effects while food products, chemicals and the transportation sectors have contributed to volume effects (Figure 13). Negative pulls on price effects have come from Europe, South Asia and Central Asia, with these same three regions also contributing negatively to overall volume effects (Figure 16).

Figure 15: Geographic impacts on price and volume effects on export market share growth

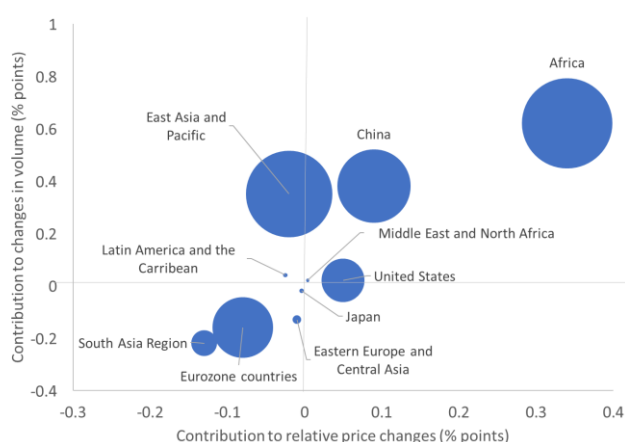
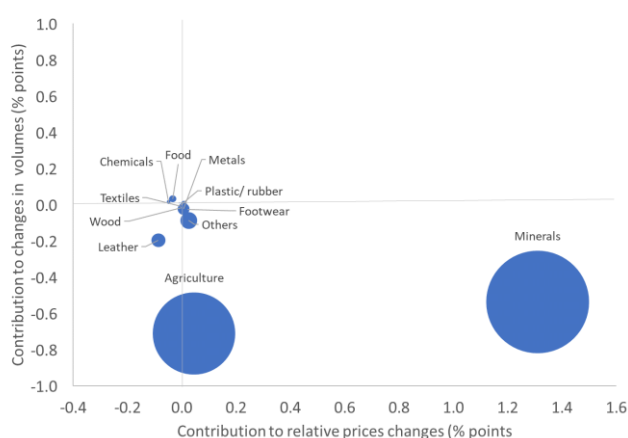


Figure 16: Product impacts on price and volume effects on export market share growth

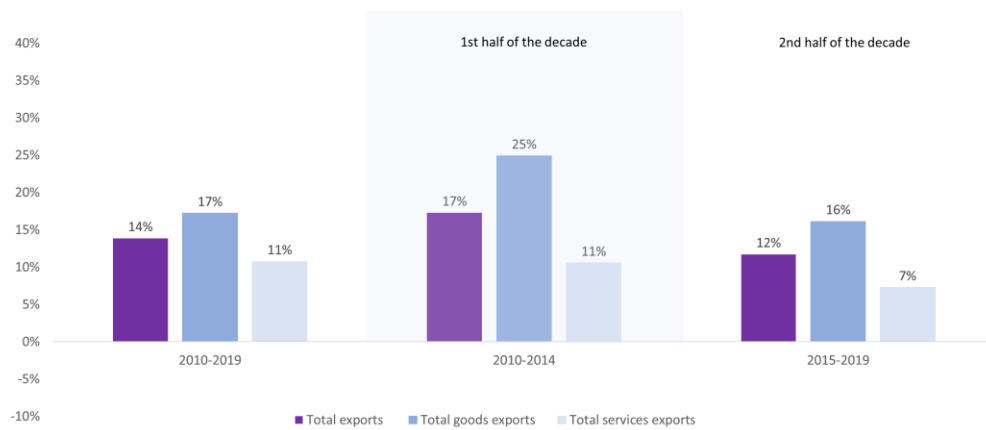


Source: Calculations using World Bank Measuring Export Competitiveness (MEC) database.

Despite increasing exports and export competitiveness, Rwanda’s export performance was weaker in the second half of the decade. Between 2010 and 2019, exports of goods and services grew by around 14 percent per year with good exports growing at around 17 percent per year- three percentage points higher than goods growth the previous decade (between 2000 and 2010). Growth in services exports was also impressive at around 1 percent per year.

A closer look at export performance for the period reveals two stories of export growth over the past decade. The first is a story of strong export growth, around 17 percent growth per year, in the first half of the decade, underpinned by an impressive export performance in minerals, coffee, tea and tourism. The second is a more muted story of a slowdown in export growth in the second half of the decade to less than half of the export growth in the previous period- around 12 percent per year. Goods exports grew at 16 percent per year compared to 25 percent per year in the first half of the decade, and services exports grew at 7 percent per year compared to 11 percent per year (Figure 17).

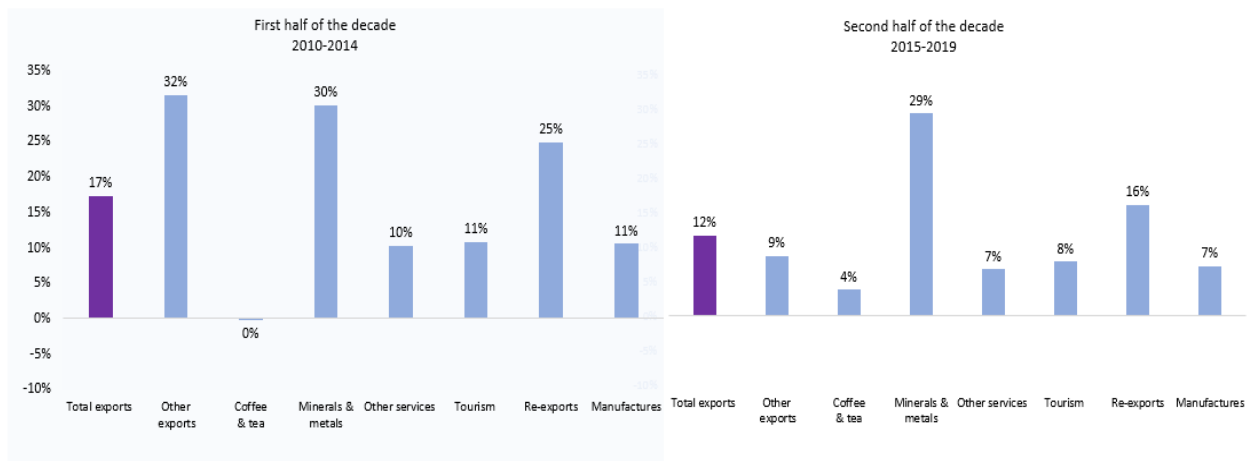
Figure 17: Export growth slowed down in the second half of the decade



Source: Author’s calculations using data from the Government of Rwanda.

Furthermore, in the second half of the decade, export growth was slower across all major export sectors except coffee and tea. Overall, minerals, services (including tourism) and re-exports have been major contributors to export growth. In the first half of the decade, minerals and metals, services, re-exports and manufacturing exports grew at double digits with coffee and tea growing at less than 1 percent annually over the period (2010-2014). Between 2015 and 2019, minerals and metals maintained a similar growth rate to the previous period. Re-exports was the second fastest growing sector, but only at around two thirds of the growth rate in the previous half of the decade (Figure 18). In addition, export growth in tourism and in other export sectors (mainly other agriculture products and horticulture) declined in the second period. In contrast, the coffee and tea sector showed stronger growth between 2015-2019 in part due to an increase in international prices, but also because of improvements in value addition through the upgrading of coffee washing stations.

Figure 18: Export growth slowdown in second half of the decade cuts across major sectors



Source: Author’s calculations using data from the Government of Rwanda.

Finally, Rwanda has, for the most part, failed to hit export targets set under EDPRS2 and NST1. Comparing actual export performance to export targets set by the government shows that Rwanda has not been able to meet its targets for most of the decade (Table 2). Given the strong export growth under EDPRS1, the Government of Rwanda adjusted export targets upwards under EDPRS2 from 15 percent annual export growth to almost double at 28 percent annual growth. However, over the period, exports grew by single digits prompting another revision under NST1 to 17 percent annual growth. The revision was in line with targets under the World Bank and Government of Rwanda Future Drivers of Growth report, which stated that Rwanda

would need double digit export growth in order to reach middle-income status by 2035. Unfortunately, between 2017 and 2019, export growth fell short of targets yet again (Table 2).

Table 2: Review of export targets and performance under EDPRS1, EDPRS2 and NST1

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Overall exports targets	15% annual			28% annual			17% annual			
Development strategy with stated export targets	EDPRS 1			EDPRS2			NST1			
Actual Annual growth of exports	26.3%			5.3%			8.8%			

Source: Government of Rwanda.

Admittedly, Rwanda’s unsteady export growth over the period has made it hard to project export performance, which relies partly on past growth rates. Moving forward, the government must achieve double-digit export growth per year at the least. Setting and achieving targets above 10 percent annual growth per year would be critical to achieving Rwanda’s medium term growth targets.

1.2 Export orientation and growth

Rwanda has increased its export market penetration by tapping into a larger share of the international market. However, on average, it still lags Uganda, Tanzania and Kenya. Using the index of export market penetration allows for the estimation of Rwanda’s share of the global market for its export. The index of export market penetration will be higher in years where Rwanda reaches a larger share of the international markets that import the basket of products that Rwanda exports.⁵ Over the past decade, Rwanda has increased its export market penetration but at a slower pace than Kenya and has not caught up with Uganda and Tanzania even with declining export penetration in both of those countries (Figure 19 and Figure 20). The increasing trend is encouraging but more can be done push Rwanda exports into new markets.

Figure 19: Rwanda’s index of export market penetration, 2010-2019

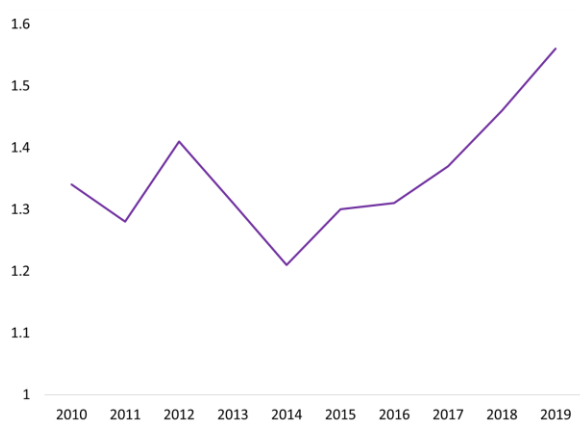
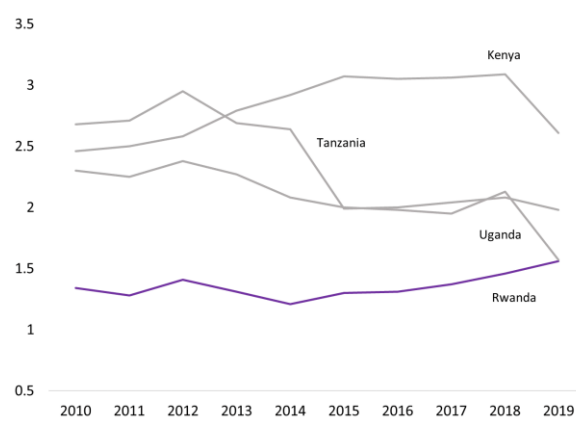


Figure 20: Rwanda’s index of export market penetration vs. comparators, 2010-2019



Source: Calculations using UNCOMTRADE.

Over the past decade, exports to all major export regions have increased, albeit with significant changes to the composition of exports by export partner; the DRC and the UAE have emerged as major export markets while Europe and North America have declined in importance. In 2010, exports to the DRC accounted for a

⁵ Export Market Penetration Index measures the extent to which a country’s exports reaches already proven markets. It is calculated as the number of countries to which the reporter exports a particular product divided by the number of countries that report importing the product that year.

little over 8 percent of total exports, and in the span of a decade, exports to the DRC have increased exponentially, and now make up close to 32 percent of total exports, mostly consisting of re-exports, and processed food and beverages. In 2019, the Middle East made up around 30 percent of total exports primarily due to gold exports to the UAE; in 2010, exports to the Middle East made up less than 1 percent of total exports (Figure 21 and Figure 22).

Figure 21: Exports by major export partner, 2010 and 2019 (million USD)

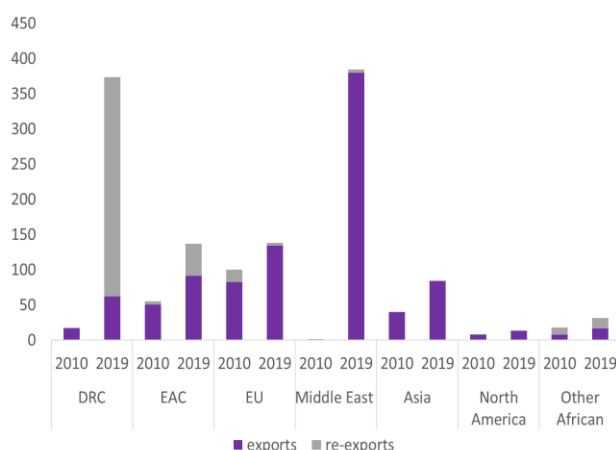
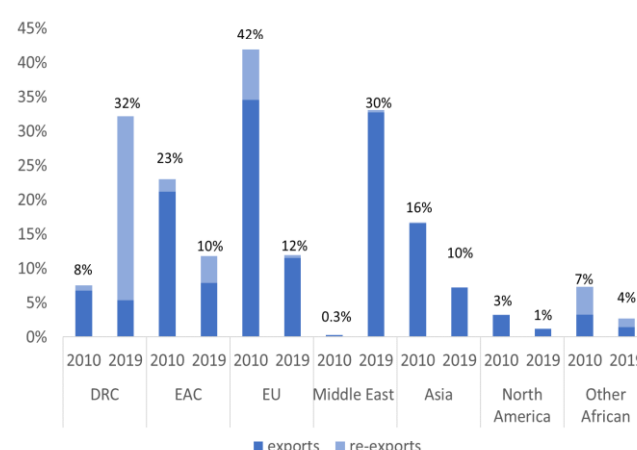


Figure 22: Export composition by export partner, share of total exports, 2010-2019



Source: Authors calculations using data from the Government of Rwanda.

Although the EU, Middle East and Asia made up a little over half of exports in 2019, these markets are highly concentrated which might point to limited market diversification. For the EU, majority of exports (coffee, tea and minerals) go to Switzerland, the United Kingdom and Belgium. In the Middle East, the UAE is the main importer of gold accounting for a staggering 43 percent of total exports in 2019. In Asia, Pakistan, Singapore imports the most from Rwanda (Table 3) with exports consisting mostly of tea exports. The EAC market is dominated by exports to Uganda and Burundi with the importance of the Kenyan market declining between 2010 and 2019.

Table 3: Top 20 destinations of goods exports for 2010 and 2019

Rank	Country	2010		Country	2019	
		Export Value (millions of USD)	% of total exports		Export Value (millions of USD)	% of total exports
1	Kenya	38.8	19%	United Arab Emirates	339.3	43%
2	Switzerland	36.8	18%	Congo, The Democratic Republic Of	62.1	8%
3	Belgium	26.5	13%	Switzerland	54.2	7%
4	Hong Kong	19.0	9%	Pakistan	39.3	5%
5	China	17.5	9%	United Kingdom	37.6	5%
6	Congo, The Democratic Republic Of	16.2	8%	Singapore	29.8	4%
7	United Kingdom	10.7	5%	Uganda	28.6	4%
8	United States	7.3	4%	Burundi	27.3	3%
9	Uganda	5.8	3%	South Sudan	20.0	3%
10	Swaziland	4.3	2%	Belgium	14.5	2%
11	Burundi	3.9	2%	United States	12.4	2%
12	Germany	3.3	2%	Kenya	11.8	2%
13	Italy	2.4	1%	Myanmar	8.1	1%
14	Japan	2.2	1%	Hong Kong	7.9	1%
15	South Africa	2.2	1%	Kazakhstan	7.4	1%
16	Tanzania, United Republic Of	2.1	1%	India	6.7	1%
17	Luxembourg	1.6	1%	China	6.6	1%
18	United Arab Emirates	0.4	0%	Egypt	6.5	1%
19	Netherlands	0.3	0%	Netherlands	5.4	1%
20	Zambia	0.3	0%	Ireland	4.8	1%
Total		201.7	99%		730.3	94%

Source: Author's calculations using data from the Government of Rwanda.

Table 4 below shows the product breakdown by different markets. For the DRC, manufactured products make up a large share of total exports in contrast to other major markets. This highlights the importance of

DRC as a market for to exports of manufactured products. Minerals, coffee, tea and gold are major exports across all partners with 70 percent of exports to the Middle East consisting of Gold. North America and Europe share the same top three exports products- coffee, Niobium, tantalum and vanadium and tin.

Table 4: Major exports (excluding re-exports) by country and regional export markets by share of total exports to partner, 2010-2019

Top 10 export products							
DRC		EAC		Europe		Middle East	
Wheat or meslin flour	26%	Tea	45%	Coffee	31%	Gold	70%
Maize cereal flour	10%	Bran	6%	Niobium, tantalum & vanadium	21%	Precious stones	9%
Live bovine animals	9%	Raw hides and skins	4%	Tin	21%	Niobium, tantalum & vanadium	6%
Cement	8%	Coffee	3%	Precious stones	6%	Tungsten	6%
Malt Beer	4%	Legumes	3%	Tungsten	6%	Tea	2%
Iron bars and rods	3%	Oil-coake and other solid residues	2%	Tea	5%	Lead	2%
Mattress supports	3%	Containers for gas	2%	Gold	3%	Bran	1%
Iron or non-alloy steel:flatrolled	3%	Food preparations	2%	Chromium ore	1%	Vegetable Sap and extracts	1%
Mattresses	2%	Gold	2%	Food preparations	1%	Cereal groat	0%
Tuber flour, meal and powder	1%	Mineral substances	1%	Cut flowers	1%	Mineral substances	0%

Asia		North America		Other African countries	
Niobium, tantalum & vanadium	24%	Coffee	42%	Tea	19%
Tea	15%	Niobium, tantalum & vanadium	16%	Bran	10%
Gold	14%	Tin	10%	Coffee	9%
Tin	15%	Plants and parts	6%	Live Bovine animals	6%
Mineral substances	10%	Tungsten	3%	Tin	3%
Tungsten	6%	Vegetable saps and extracts	3%	Food preparations	2%
Coffee	5%	Gold	2%	Dairy produce	1%
Precious stones	3%	Jerseys, pullovers, cardigans	2%	Food preparations of flour	1%
Lead	1%	Sculptures and statuary	1%	Legumes	1%
Food preparations	1%	Nuts, edible; macadamia	1%	Plants and parts	1%

Source: Author's calculations using data from the Government of Rwanda.

Rwanda has had shifts in export market competitiveness and regional markets that have proved to be increasingly important. Table 5 shows the top 15 markets with increasing and decreasing export market competitiveness. The Trade Intensity Index⁶ points to existing and new markets with increasing export potential as well as markets that might have bottlenecks and barriers to exporting. DRC, Central African Republic and Uganda emerge as the top three markets with the biggest gains in export competitiveness over the past decade. The top three markets with declining export competitiveness are Kenya, Eswatini and Burundi possibly signalling bottlenecks in exporting or a global shift in world exports for products that Rwanda does not export to those three markets.

Table 5: Markets with increasing and decreasing export market competitiveness

Increasing market competitiveness	Trade Intensity Index			Declining market competitiveness	Trade Intensity Index		
	2010-2012 (average)	2017-2019 (average)	Change		2010-2012 (average)	2017-2019 (average)	Change
Democratic Republic of Congo	25656	86431	60775	Kenya	23749	1640	-22109
Central African Republic	6	24905	24899	Eswatini	11594	156	-11438
Uganda	12311	20101	7791	Burundi	99479	97264	-2216
Lithuania	7	1536	1528	Haiti	2059	1	-2058
Pakistan	6	1384	1377	Burkina Faso	687	207	-480
United Arab Emirates	56	1148	1093	Switzerland	476	69	-407
Niger	50	879	829	Belgium	394	176	-218
Sudan	1082	1903	820	Jamaica	205	23	-182
Republic of Congo	330	709	379	France	173	5	-168
Kazakhstan	0	335	335	Slovenia	150	2	-148
Thailand	1	266	265	Zambia	92	6	-86
Ethiopia	687	949	261	Chad	79	0	-79
Tanzania	1939	2135	196	Sierra Leone	123	58	-65
Singapore	9	190	181	Guinea	80	36	-44
Qatar	56	215	159	Jordan	87	1	-87

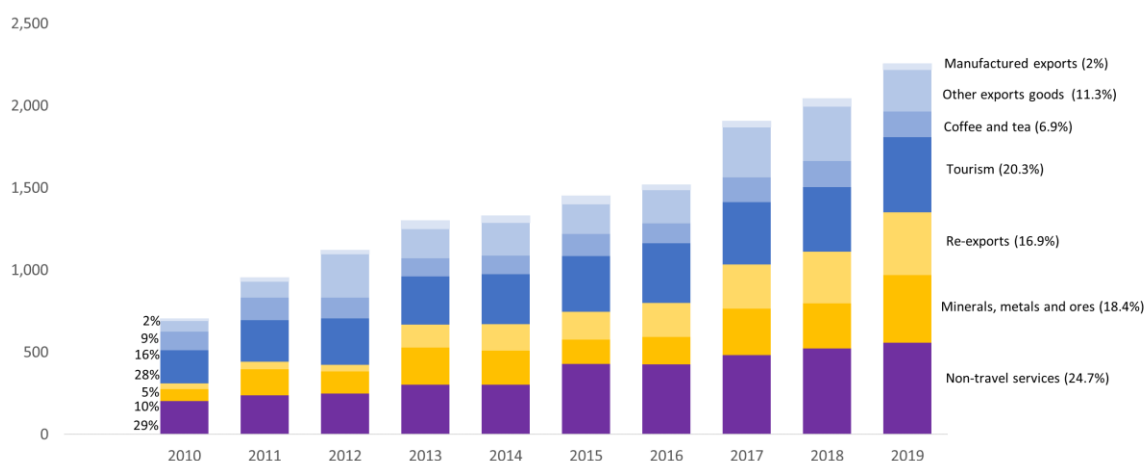
Source: Author's calculation using UNComtrade data on Trade Intensity Index.

In addition to shifts in export markets, Rwanda has also seen a shift towards a larger share of re-exports and non-traditional exports. Figure 23 shows the composition of Rwanda's exports between 2010 and 2019.

⁶ The trade intensity index- a measure used to estimate whether the value of trade between two countries is greater or smaller than would be expected based on their importance in world trade.

The share of services to total exports has declined from over 55 percent in 2010 to just around 45 percent in 2019. Additionally, there has been remarkable growth in the share of re-exports- a little over three-fold increase from 5 percent in 2010 to 16.9 percent in 2019. The majority of re-exports consist of petroleum and vehicle products to the DRC. There has also been a shift in Rwanda’s primary export commodities in favour of non-traditional exports. The two primary export products- coffee and tea made up 6.9 percent of exports in 2019, over a 50 percent decline from its share of exports in 2010. Over the decade, mining and mineral processing has increasingly played a bigger role in export boosted by an increase in the exports of gold.

Figure 23. Export product composition has evolved over the past decade



Source: Author’s calculations using data from the Government of Rwanda.

To provide more detail on these product shifts, we decompose Rwanda’s export at the product level to highlight the top 15 export products in 2010 and 2019 (excluding re-exports). Most stark is the rise of gold as a major export product surpassing the export shares of coffee, tea, tin and tantalum combined. Additionally, in 2019, processed precious stones were one of the top 15 export products reflecting the success of the government’s strategy to attract investments for the processing and trading of gold and precious stones.⁷ Food processing and cement production have also contributed to export growth over the period; both export products make up close to 5% of total exports, which is around the same share as exports of tin, one of Rwanda’s major mineral exports (Table 6). The regional market has proven to important destination for processed food and cement particularly the DRC (see Table 5 above).

Table 6: Rwanda’s export composition has evolved to include gold and agro-processing product

Top 15 export products by share of total exports			
	2010		2019
Coffee	28%	Gold	39%
Tin	20%	Tea	11%
Tea	17%	Coffee	9%
Niobium, tantalum, vanadium or zirconium	10%	Niobium, tantalum, vanadium or zirconium	6%
Tungsten	3%	Tin	5%
Live bovine animals	2%	Bran, sharps and other residues	3%
Chromium	1%	Wheat or meslin flour	3%
Bran, sharps and other residues	1%	Tungsten	2%
Raw hides and skins	1%	Petroleum based products	2%
Beer made from malt	1%	Food preparations	1%
Paper packaging	1%	Precious stones and semi-precious stones	1%
Non-alcoholic beverages	1%	Dried leguminous vegetables	1%
Footwear	1%	Cement	1%
Fish	1%	Cane or beet sugar and sucrose	1%
Flat-rolled products of iron or non-alloy steel	1%	Bars and rods, of iron or non-alloy steel	1%

Source: Author’s calculations using data from the Government of Rwanda.

⁷ Aldango Gold Refinery was set up in 2017 to process melt gold into grains and bars as well as refine gold into higher grades.

The past decade has also revealed products of increasing and decreasing export competitiveness. The agro-processing sector has had significant increases in export competitiveness while a decline in competitiveness is evident in commodities and more traditional export sectors. Using measures of Revealed Comparative Advantage, we examine export competitiveness at the product level. Products with increasing competitiveness point to products with potential for high export growth. Tungsten, worked precious stones along with flour and cereal processing, and the processing of edibles and other food preparations emerge as products with the highest increase in export competitiveness. Table 7 below also shows increasing export competitiveness in export products of the horticulture sector: cut flowers, legumes and dried and crushed peppers have shown some of the highest gains in export competitiveness. For all products with increasing export competitiveness, government policy would be imperative to leveraging increased competitiveness into even higher export growth.

Table 7: Products with increasing and decreasing export competitiveness

Increasing export competitiveness	RCA Index			Decreasing export competitiveness	RCA Index		
	Average 2010-2013	Average 2017-2019	Difference		Average 2010-2013	Average 2017-2019	Difference
Tungsten ores and concentrates	2743.5	3134.9	391.4	Tin ores and concentrates	10653.3	4775.8	-5877.5
Mineral substances	0.6	381.8	381.1	Niobium, tantalum, vanadium or zirconium	1565.6	1287.0	-278.6
Bran, sharps and other residues	45.9	342.5	296.6	Tea	580.4	348.3	-232.0
Worked precious and semi-precious stone	0.0	223.4	223.4	Coffee	113.2	61.2	-52.0
Cereal flours other than of wheat or meslin	45.8	185.0	139.3	Raw hides and skins of bovine	43.2	13.0	-30.3
Wheat or meslin flour	19.9	112.0	92.1	Vegetable saps and extracts	28.2	9.4	-18.8
Flour, meal and powder of the dried leguminous vegetables	5.4	81.0	75.6	Beer made from malt	9.0	0.3	-8.7
Fresh leguminous vegetables	38.3	76.5	38.1	Cereal groats, meal and pellets	42.8	35.3	-7.5
Cement	4.6	22.4	17.8	Fish, dried, salted or in brine; smoked fish	7.0	1.0	-6.0
Unwrought lead	0.0	17.1	17.1	Waters, including mineral waters	4.7	0.1	-4.7
Raw skins of sheep or lambs	9.1	21.9	12.8	Quicklime, slaked lime and hydraulic lime	3.7	0.1	-3.7
Gold	0.0	12.6	12.6	Basketwork	5.9	2.8	-3.1
Dried leguminous vegetables	5.9	15.9	10.0	Live bovine animals	20.9	19.1	-1.8
Cut flowers	0.0	9.1	9.1				
Iron or non-alloys steel: bars and rods	1.9	9.5	7.6				
Food preparations	0.0	6.6	6.6				
Potatoes	3.8	9.4	5.6				
Milk and cream	0.1	5.6	5.5				
Titanium ores and concentrates	0.0	4.1	4.1				
Dried or crushed pepper	0.2	3.9	3.8				

Source: Calculations using UNCOMTRADE.

Table 7 also lists products with decreasing export competitiveness, meaning the share of these products in Rwanda's total exports has declined when compared to products shares in world exports. Coffee, tea, tin and tantalum show decreasing export competitiveness despite increases in export volume over the period. These findings might point to barriers to export for those products that are limiting even higher exports or the emergence of stronger exporting competitors on the global market. More research is needed to diagnose potential barriers within those sectors, and in cases where newer exporters have emerged, a market analysis and strategy to improve promotion of Made in Rwanda Products might be needed.

1.3 Export diversification

This section analyses Rwanda's export portfolio diversification. Indeed, product and market diversification in exports and thus in domestic production has been shown to be conducive to stronger economic growth particularly in lower income countries.⁸ When countries diversify their export base, they are more likely to face a lower risk of output disruptions and price fluctuations. As discussed in Section 2.1, Rwanda's export growth has been significantly price-driven which indicates that Rwanda's favourable export position is very much dependent on rising prices and therefore tenuous in the face of unstable prices. There is both an export and economic growth payoff (stemming from price and production stability) to diversification, underscoring the need for the Rwandan Government to implement policies and initiatives that facilitate diversification.

⁸ Cadot et al., (2011), Papageorgiou and Spatafora (2012), Imbs, and Wacziarg (2003).

The number of Rwanda’s export products and markets has increased by between two and fourfold over the 2010-2019 period for exports greater than 10,000 USD as well as for exports greater than a million dollars.

The number of products and markets is a straightforward and informative measure of progress around export product and market diversification. In 2010, for exports greater than 10,000 USD per year, Rwanda exported 88 products and reached 40 markets globally. Looking at big value products and markets- “the million-dollar products and markets”- Rwanda exported around 10 export products and reached 15 markets with total export values of more than a million US dollars. All four measures increased between 2010 and 2019. In 2019, for exports above 10,000 USD, Rwanda traded over 350 products and exported to slightly over 70 markets: a marked increase from 2010. Larger value export products and markets also saw an increase with Rwanda exporting 30 products with export values over a million dollars and reaching 27 “million-dollar” markets in 2019 (Figure 24 and Figure 25).

Figure 24: Products and markets with exports greater than 10,000 USD

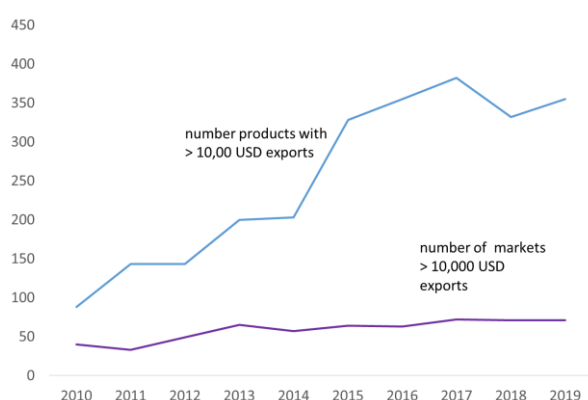
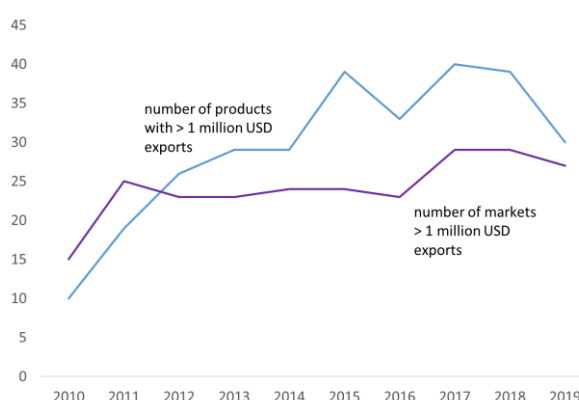


Figure 25: Products and markets with exports greater than a million dollars



Source: Author’s calculations using data from the Government of Rwanda.

Note: A market is counted if the exporter ships at least one product to that destination in the given year with a trade value of at least 10,000 USD (or 1 million USD for Figure 25). A product is counted if it is exported to at least one destination in the selected year with a value of at least 10,000 USD (or 1 million USD for Figure 25).

Product and market numbers have increased across most of the major export product categories further highlighting improvements in export diversification. The agriculture sector (including export crops) saw the highest increase in products and markets over the past decade. Exports of raw hides and skins saw a decline in the number of exported products and markets potentially pointing to challenges in the sector. The chemical sector also saw a decline in products but maintained the same number of markets.

Figure 26: Number of major products per sector

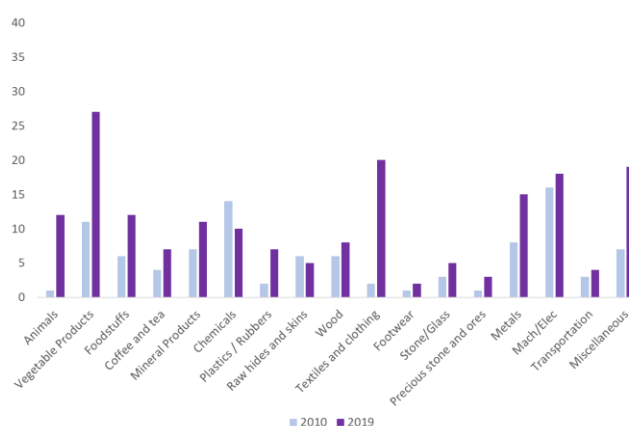
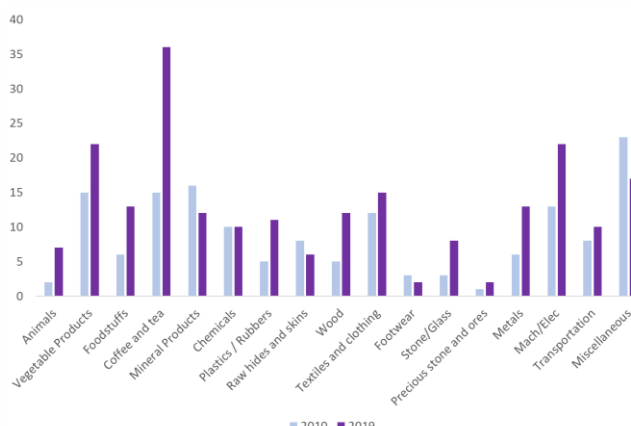


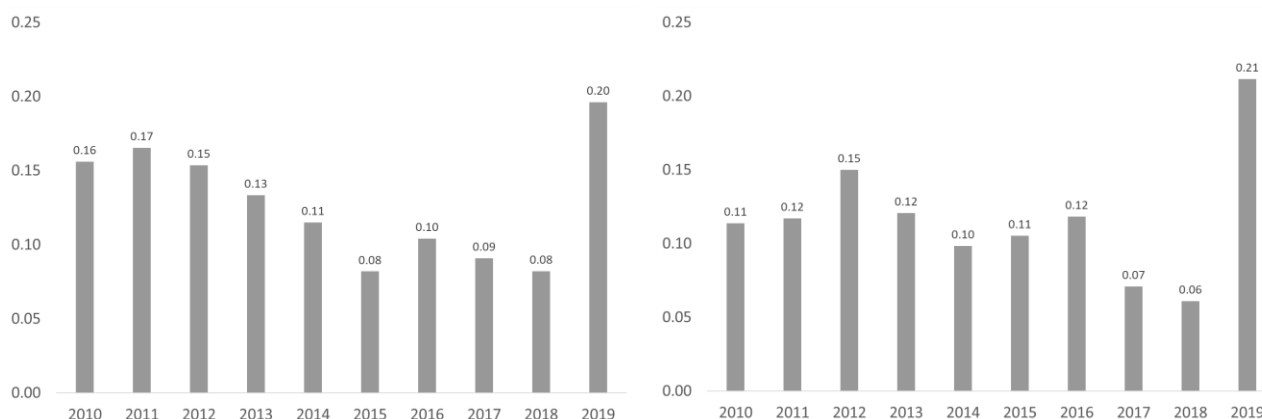
Figure 27: Number of major markets per sector



Source: Author’s calculations using data from the Government of Rwanda.

Although Rwanda has increased its number of export products and markets over the period, a look at export shares shows that Rwanda’s product and market diversification has decreased primarily due to high export values of gold to one major market- the UAE. Between 2010 and 2019, there has been a gradual concentration in Rwanda’s export products and markets when you look at two measures of export concentration- Market Concentration Index and Product Concentration Index.⁹ Both graphs in Figure 18 show that between 2010 and 2019, an increasingly smaller number of products and export markets are responsible for a larger share of total exports.

Figure 28: Market and Product concentration indices Herfindahl-Hirschman



Source: Author’s calculations using data from the Government of Rwanda.

1.4 Export sophistication

Most of Rwanda’s export growth has occurred through stronger performance in resource-based products and products with lower product complexity. Exports of more complex products declined across the two halves of the decade. Rwanda’s export growth, starting at a relatively low base, has stagnated for technology intensive and complex products. The low sophistication of Rwanda’s exports indicates its position at lower levels of global value chains with a significant share of its export feeding raw material and inputs into further production of products in other markets (Figure 29).

Measures of product complexity reveal that during the first half of the decade, 72 percent of Rwanda’s merchandise exports, comprising primarily of coffee, tea and mineral exports, were in the two lowest complexity categories. These two lowest complexity segments saw a significant increase in exports between 2010-14 and 2015-19 (Figure 30). For the two higher complexity segments, we observe a decline in exports over the period.

⁹ Market Concentration Index is a measure of the dispersion of trade value across an exporter’s partners. A county with a preponderance of trade value concentrated in a very few markets will have an index value close to 1. Thus, it is an indicator of the exporter’s dependency on its trading partners and the danger it could face should its partners increase trade barriers. Measured over time, a fall in the index may be an indication of diversification in the exporter’s trading partners. The same definition applies to Product Concentration Index, which considers products instead of markets.

Figure 29: Exports increased for resourced based products (technological classification of exports by share of total export)

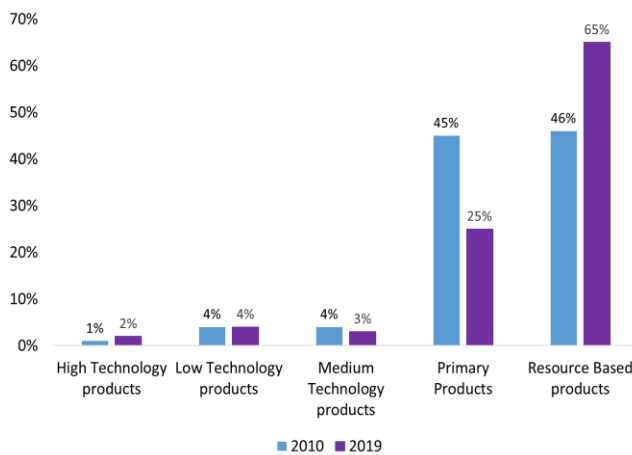
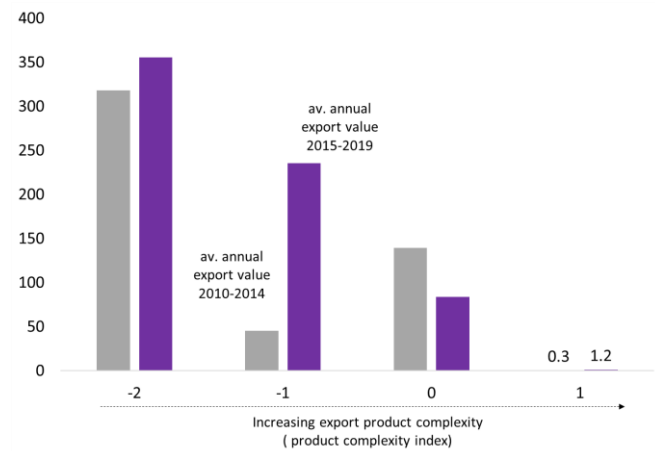


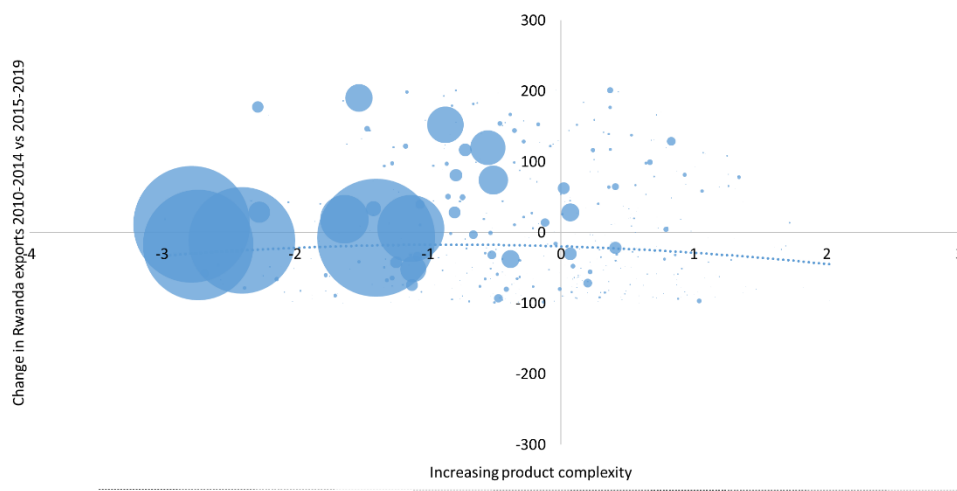
Figure 30: Exports in high complexity products increased with a persistent low base for higher complexity products (millions of USD)



Source: Figure 19 using data from UNCOMTRADE. Figure 20 using data from the Government of Rwanda.
 Notes: Products are classified as high tech, medium tech, low tech, primary products, and resource-based products (Lall, 2000). Measures are estimated for two periods to account for fluctuations in exports and thus average complexity.

A detailed product level analysis further demonstrates the export gap for high complexity product and points to opportunities for Rwanda to diversify into higher complexity products. The pattern of exports between 2010 and 2019 shows that Rwanda has experienced higher export growth in product categories with lower export complexity and that these products make up a sizeable share of total exports in 2019 (Figure 31).

Figure 31: Low complexity products performed better than high complexity products and are the major drivers of export growth (size of bubble= product exports in 2015-2019)



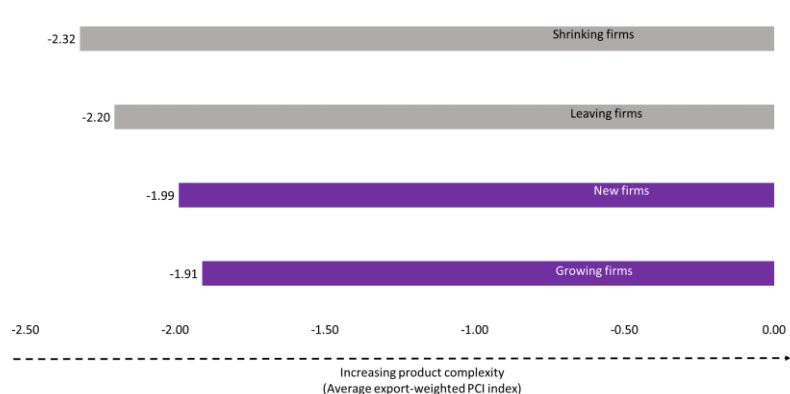
Source: Author’s calculations using data from the Government of Rwanda. Product analysis at the HS6 digit level.

Low and stagnating complexity is indicative of similarly stagnant industry with firms that do not progressively export more complex products. At the industry level, firms in the chemicals and plastics embody the highest complexity levels and a few firms have set up operation in these sectors over the past decade. Firms in food

and beverage production and apparel manufacturing are classified as firms producing medium complexity products, and on average the complexity of their export products has been increasing, albeit slowly.

Analysis of product complexity at the firm level shows an encouraging shift towards more complex exports. Over the decade, new and growing exporters export more complex products than firms that cease exporting or exhibit shrinking exports. Looking at product complexity by firm exit and entry we find that growing firms, on average, exhibited slightly higher complexity than shrinking firms: -1.91 vs -2.32. Similarly, new firms entrants were more complex than old leaving firms with complexity measures of -1.99 vs. -2.20. New firms accounted for just 28 percent of total exports over the period, while firms that exited in 2015-19 accounted for around 5 percent of total exports (Figure 32).

Figure 32: New and growing exporters export more complex products than firms that cease exporting or exhibit shrinking exports



Source: Author’s calculations using data from the Government of Rwanda.

Note: Firms are categorised based on two periods. 2010-2014 (period A) and 2015-2019 (period B). “New firms” are firms with exports in period B but no exports in period A. “Leaving firms” are firms that export in period A, but stop exporting in period B. For “growing” and “shrinking” firms we compare exports in period A to exports in period B; firms are “growing” if their exports are higher in period B, and if a firm’s exports are lower in period B there are classified as “shrinking” firms.

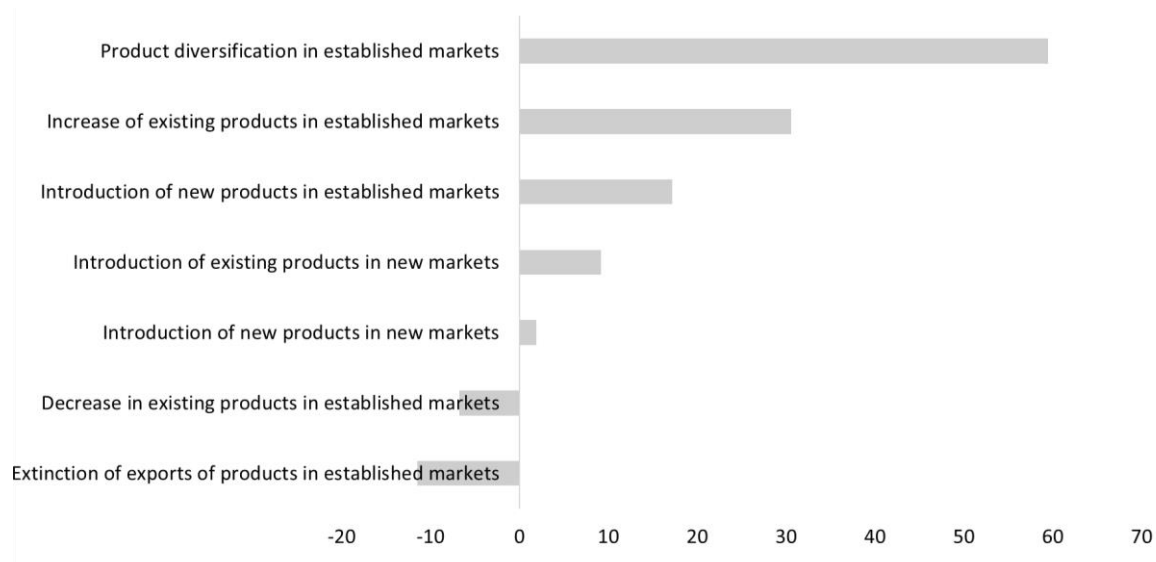
1.5 Export survival

Between 2010 and 2019, around 18.2 percent of Rwanda’s potential export growth has been lost due to a decrease in exports of existing products to established markets (6.7 percent) as well as the complete cessation of exports to established markets (11.5 percent). Altogether, improvements in export market and product diversification along with increasing export market penetration are important for Rwanda’s sustained export growth. However, another key element to achieving higher aggregate export growth is export survival. Through decomposing Rwanda’s export growth, we are able to understand the underlying contributing channels to export growth- the expansion of existing trade flows (the intensive margin), the addition of new products and markets (the extensive margin) and export death.

Between 2010 and 2019, the main drivers of Rwanda’s export growth (Figure 33) have been product diversification in established markets (59 percent); positive export growth contributions from Rwanda increasing existing exports in established markets (30 percent); the introduction of new products to established markets (17 percent); and the introduction of existing products into new markets (9 percent). The introduction of new products to new markets has had a positive but low contribution to overall export growth of just around 1.9 percent.

On the other side of the scale, decreases in the export of existing products to established markets (6.7 percent) as well as the complete cessation of exports to established markets (11.5 percent) have contributed to a loss of around 18.2 percent of Rwanda’s potential export growth (Figure 33).

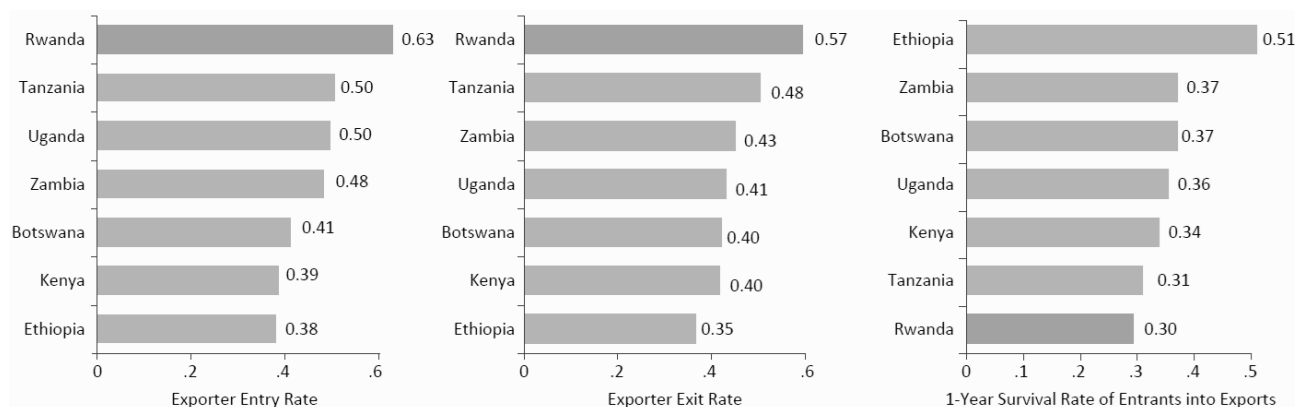
Figure 33: Decomposition of Rwanda’s export growth, 2010-2019 (share of total export growth)



Source: Authors calculations using UNComtrade data.

The World Bank (2017) estimates that on average only 30 percent of new exporters in a year survive in the export market into the next year and concludes that the entry and exit rate of exporters is highest in Rwanda compared to regional peers. It is imperative for the Government to further explore causes of export death within the Rwandan economy and design a forward-looking policy agenda to support higher export survival rates.

Figure 34: Entry, exit and survival rates for exports (2009-2016)



Source: World Bank (2017).

2. A review of global value chain participation, re-exports, services exports, informal trade and the impact of COVID-19 on exports

2.1 Global value chain participation

Rwanda's GVC participation has improved since 2010 and has exceeded participation rates of its similar economies including the other four EAC member states. Panel A shows a selection of figures capturing the evolution of Rwanda's GVC participation. Due to data limitations, global datasets on GVC's extend only up to 2015. Even with data on only the first half of the decade, it is possible to get an idea of Rwanda's GVC performance. GVC participation rate measures the share of a country's exports that are connected to global value chains, meaning, exports serve as inputs into another country's exports or the country's exports consist of imported inputs. Figure 35 shows that in 2015, Rwanda's GVC participation rate of around 45 percent exceeded that of peer economies and EAC member countries.

Panel A: Overview of Rwanda's GVC participation

Figure 35: GVC participation Rwanda compared to similar economies

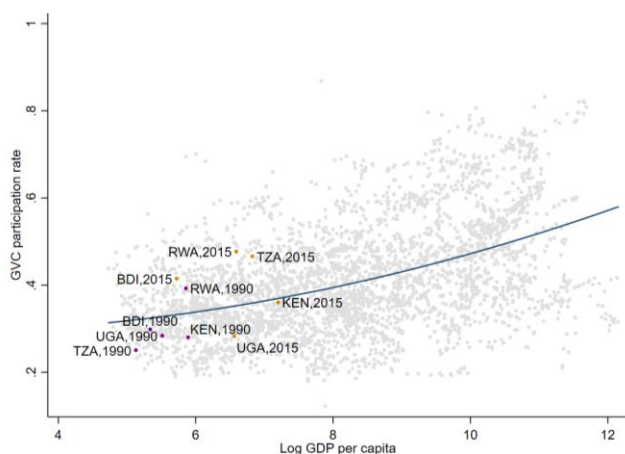


Figure 36: Overall GVC participation for Rwanda and EAC peers

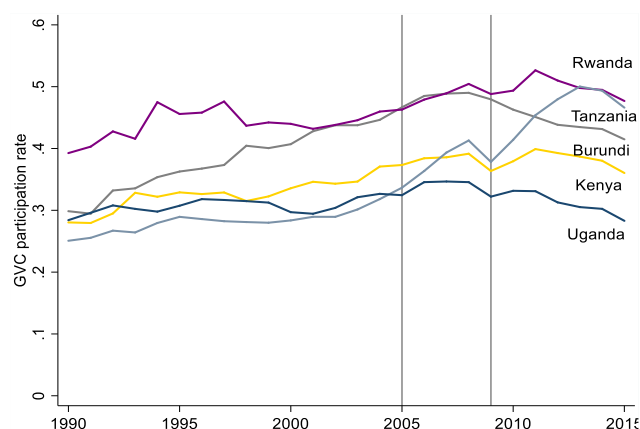


Figure 37: Forward GVC participation for Rwanda and EAC peers

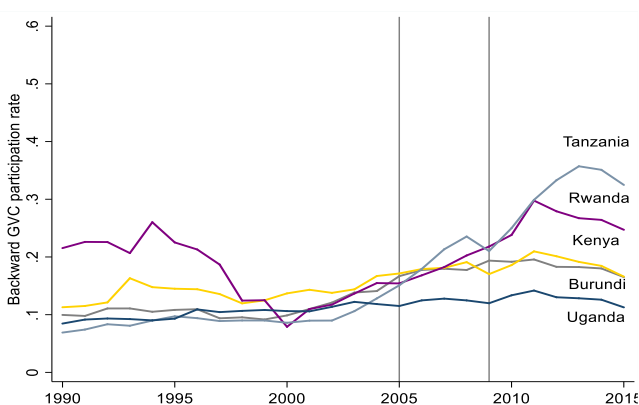
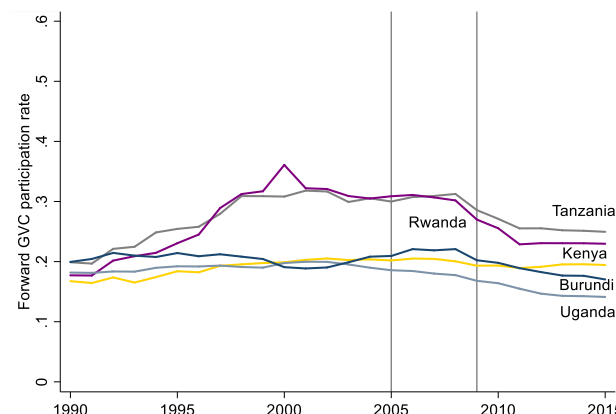


Figure 38: Backward GVC participation for Rwanda and EAC peers



Source: de Melo and Twum (2020).

On forward and backward GVC participation, Rwanda tends to have a higher forward GVC participation rate relative to other EAC member states.^{10/11} Between 2010 and 2015, Rwanda’s forward participation rate is around 25 percent on average and close to 20 percent for its backward participation meaning Rwanda plays more of a supplier role within GVCs where its exports serve as inputs into the production of a final product. In fact, backwards GVC participation rates were higher in 2010. Looking forward, it would be critical for Rwanda to increase its backward GVC participation, which generates more value added for firms and is reliant on higher level of technology and productivity. The Government needs to keep in mind three obstacles that have been shown to hamper greater inclusion in global value chains: (i) high tariffs on imports of intermediates; (ii) restrictive rules of origin, an obstacle to intra-regional trade; (iii) high ad-valorem equivalents of barriers to connectivity and more generally to trade in services (de Melo and Twum, 2020).

2.2 Re-exports

Re-exports have significantly increased in value and share between 2010 and 2019 and consists mainly of petroleum and food and beverage products. In 2010, re-exports accounted for 14 percent of total exports. By 2019, this share more than doubled to 33 percent with a total export value of around 377 million USD (Figure 40), more than twice the contribution of coffee and tea combined (Figure 23). Petroleum products constituted close to 35 percent of total re-exports in 2019. Other re-exported products include vehicles, machines and engines (Table7).

Figure 40: Re-exports, value and share of total goods exports

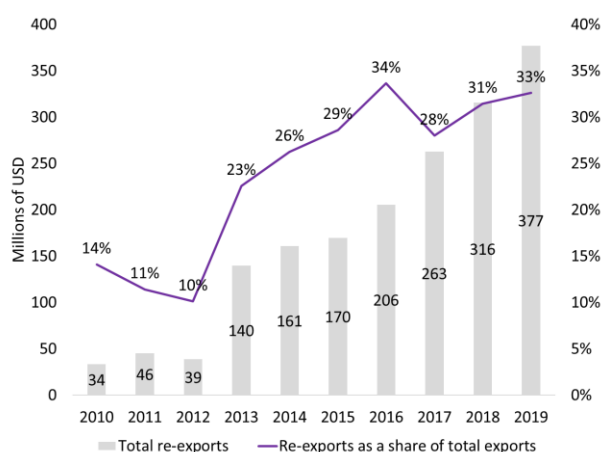
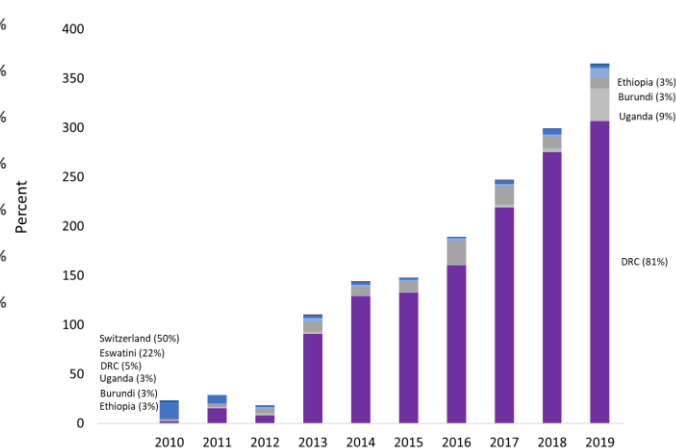


Figure 41: Re-export value by major destination (millions USD)



Source: Author’s calculations using data from the Government of Rwanda.

While re-exports are typically associated with little value addition, Rwanda’s emergence as an important re-export route highlights the country’s potential in regional trade of goods and services. Due to its central location between East and Central Africa, Rwanda serves as a transport hub to eastern DRC and Burundi around which re-exports develop. For example, oil marketers use Rwanda as a storage base before exporting to Eastern DRC and Burundi. These storage services earn valuable foreign exchange for Rwanda. Ultimately, further growth of re-exports will be driven by improvements in the transport, logistics and distribution services in Rwanda.

¹⁰ Forward GVC participation measures the share of a country’s exports that are used by an importing country to produce for export. In the example of fortified foods exports, Uganda is engaging in forward GVC participation because its exports are used as intermediates by Rwanda for the production of its fortified food exports.

¹¹ Backward GVC participation measures the share of a country’s exports that include value added previously imported from abroad. For example, if Rwanda imports maize from Uganda for the production of fortified foods for export, then Rwanda is said to be participating in backward GVC participation.

Table 7: Top 20 re-export products, 2010 and 2019

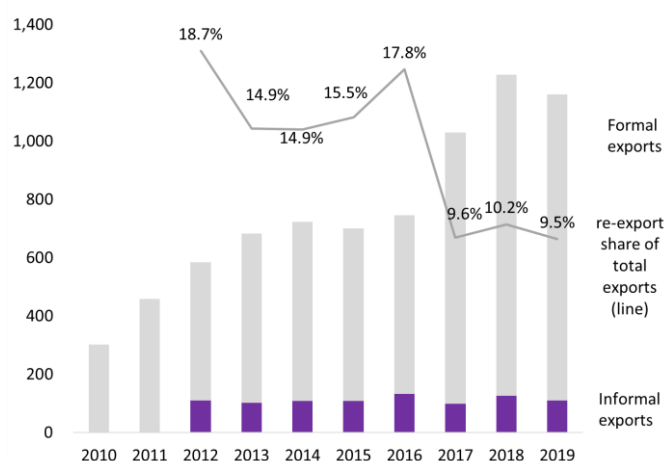
	2010		2019
Ores, slag and ash (tin and tungsten)	73%	Petroleum products	35%
Motor vehicles	11%	Miscellaneous edible preparations	9%
Petroleum products	5%	Animal or vegetable fats and oils	8%
Nuclear reactors, machinery and parts	4%	Cereals	7%
Aircraft, spacecraft, and parts thereof	2%	Worn clothing and worn textile articles	5%
Articles of iron or steel	1%	Electrical machinery, equipment and parts	3%
Electrical machinery, equipment and parts	1%	Sugars and sugar confectionery	2%
Worn clothing and worn textile articles	1%	Motor vehicles	2%
Medical equipment	0.5%	Soap and organic surface-active agents	2%
Furniture	0.4%	Fish	2%
Musical instruments, parts and accessories	0.3%	Preparations of cereals, flour, starch or milk	1%
Ceramic products	0.2%	Beverages, spirits and vinegar	1%
Wood and articles of wood; wood charcoal	0.2%	Products of the milling industry	1%
Oil seeds and oleaginous fruits	0.2%	Paper and paperboard	1%
Tools of base metal	0.2%	Footwear	1%
Sugars and sugar confectionery	0.2%	Plastics and plastics articles	1%
Pharmaceutical products	0.1%	Iron and steel	1%
Cereals	0.1%	Dairy produce	1%
Tobacco and manufactured tobacco substitutes	0.1%	Iron or steel articles	1%
Fertilisers	0.1%	Ceramic products	1%

Source: Author’s calculations using data from the Government of Rwanda.

2.3 Informal Cross Border Trade

Informal Cross Border Trade (ICBT) is an important part of Rwanda’s exports. In 2012, the earliest period for which data is available, informal exports made up around 18.7 percent of total exports. In 2019, informal exports were only slightly over half of the share in 2012 at around 9.5 percent in part due to a decrease in export volumes from disruptions along the Uganda Rwanda borders as well as a significant increase in volumes of formal exports (Figure 42). The balance of informal trade has been positive over the period with Rwanda exporting more than in imports. Majority of the products flowing across land boards informally are foods products, which makes informal trade central to Rwanda’s food security. It is also a major source of livelihood for women and young people.¹²

Figure 42: Informal exports as a share of total good exports



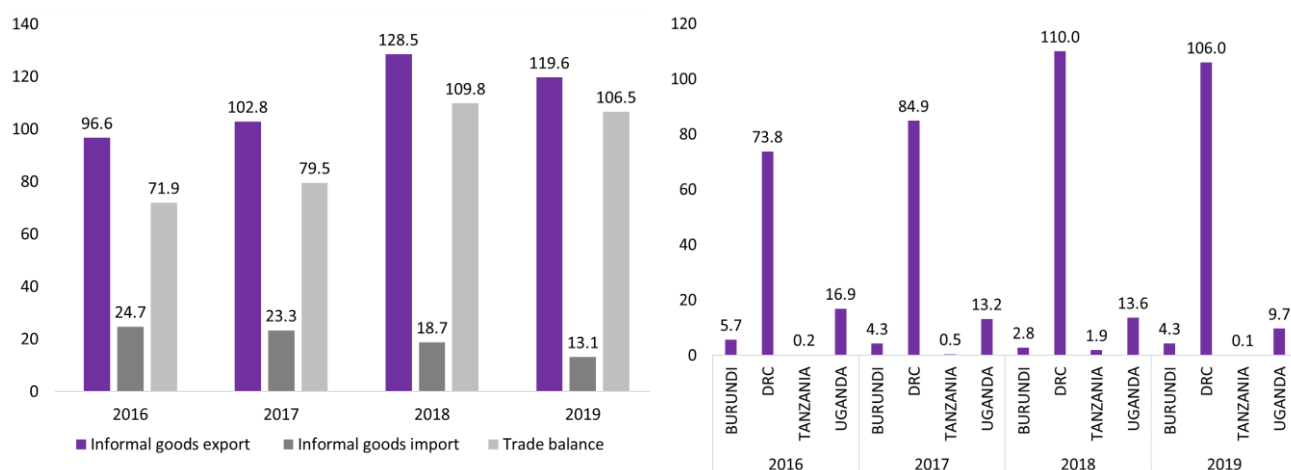
Source: Author’s calculations using data from the Government of Rwanda.

¹² This section includes an in-depth analysis of the extent of informal trade in Rwanda, over the period between 2012 and 2016. It includes detailed data on informal trade, at the product and country level, from January 2012 to March 2020. Data are provided by the Central Bank of Rwanda, and it covers all informal trade transactions occurring between Rwanda and its neighbouring countries: Burundi, DRC, Tanzania and Uganda, at all borders for which trade data is collected.

The ICBT balance has been consistently positive, and the DRC has continued to serve as a major export market for Rwanda. Since 2016, Rwanda has maintained a positive balance of informal trade. ICBT occurs between Rwanda and its neighbouring countries: Burundi, DRC, Tanzania and Uganda. Among them, DRC is by far the largest commercial partner, followed by Uganda, Burundi and then Tanzania (Figure 43). On average around 83 percent of Rwanda’s informal exports flows into the DRC and consists mainly of food products: vegetables, dairy and meat products. Uganda is the major exporting destinations among EAC member states; however, exports flows have been declining over the past four years due to border closures and political tensions.¹³

Figure 43: Informal exports by year and by destination

Millions of USD



Source: Author’s calculations using data from the Government of Rwanda.

Out of 186 products, 15 products make up over 50 percent of total ICBT trade. These are maize flour, Irish potatoes, fresh sweet bananas, dried Beans, tomato, cassava flour, beef meat, raw milk, fresh fish tilapia, husked rice, maize, poultry live, cement, modern soft drinks, and cabbage. Beside cement, these are all products from the agriculture sectors or from livestock, consistent with the evidence from other SSA countries.

Box 2: Rwanda’s investment into One Stop Border Posts has streamlined ICBT

The past decade has seen impressive investments from the Rwandan Government to improve the flow of informal cross border trade. Major investments have been through One Stop Boarder Posts (OSBPs) which have been designed, financed and implemented with support from development partners. An OSBP is a border facility that combines two stops for national border control processing into one and consolidates border control functions in a shared space for exiting one country and entering another.

Since 2010, Rwanda has operationalised 6 OSBPs. The Kagitumba (Rwanda) / Mirama Hills (Uganda) was completed in 2017 and is one of the major border crossings linking Rwanda and Uganda along with the Gatuna OSBP. The Ruhwa one-stop border post is the second border post and is shared between Rwanda and Burundi following the establishment of the Gasenyi-Nemba one-stop border post in Bugesera District in 2011. There are also OSBPs with Tanzania- the Rusumo OSBP and the La Corniche OSBP in Rubavu with DR Congo. Many of these border posts operate 24 hours a day and 7 days a week.¹⁴

OSBPs have been linked to significant decline in the time and cost of moving cargo and people across Rwanda’s borders with Burundi, Tanzania, Uganda and the DRC. A report from TradeMark East Africa

¹³ The Katuna/Gatuna boarder was closed in 2019 and has remained closed over the past two years. Rwanda and Uganda are still in talks around opening the border. The border closure directly affected the flow of goods and people travelling for business, tourism or for family visits.

¹⁴ <https://www.trademarka.com/onestopborderposts/wp-content/uploads/2018/03/TMEA-OSBP-Coffee-Table-Book-1.pdf>

showed that Kagitumba (Rwanda) / Mirama Hills (Uganda) OSBP reduced traffic time from 5 hours based on 2012 data to 1 hour 25 minutes in 2017, a 72% decline in traffic time as a result of the OSBP.

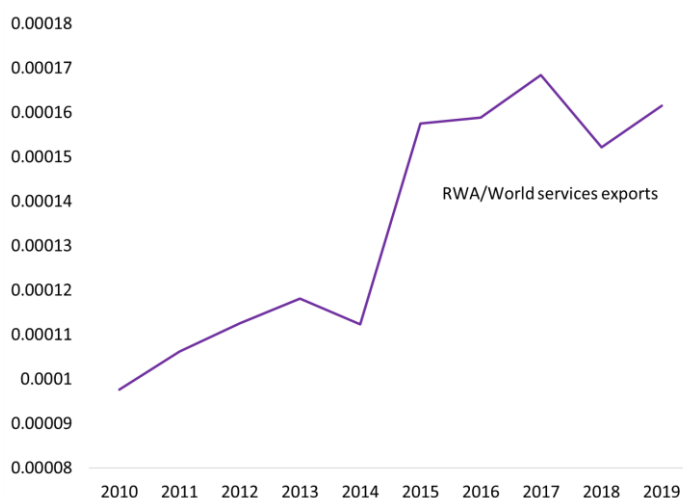
Over the next five years, the government, under the National Trade Facilitation plans to construct and operationalize five additional OSBPs in Cyanika, Rusizi I&II, Bugarama and Akanyaru Haut. The Rusizi II OSBPs was launched in 2019 and is scheduled for completion in 2023.

2.4 Services Trade

The services sector- tourism, telecommunications, financial, government and business services- is a crucial part of Rwanda’s export strategy. Trade in services allows Rwanda to diversify its exporting activities into higher value-added sectors and in the process serves as an important part of Rwanda’s export competitiveness on the global market. Over the last decade, Rwanda’s export of services has more than doubled in value from 386.9 million USD (56.2 percent of total exports) in 2010 to 822.5 million USD in 2019 (42 percent of total exports). The decline in the share of total exports is due to the massive increase in gold exports and a slowdown in the growth rate of services. Despite this, Rwanda has become increasingly competitive in services exports (Figure 44). However, gains in competitiveness slowed down in the second half of the decade. As technological advances and adoption rates increase, more opportunities in services will emerge making trade in services and ever more important for Rwandan export growth.

Figure: 44: Rwanda has become increasing competitive in service exports. However, progress has stagnated in the second half of the decade

Rwanda services export as a share of world services exports

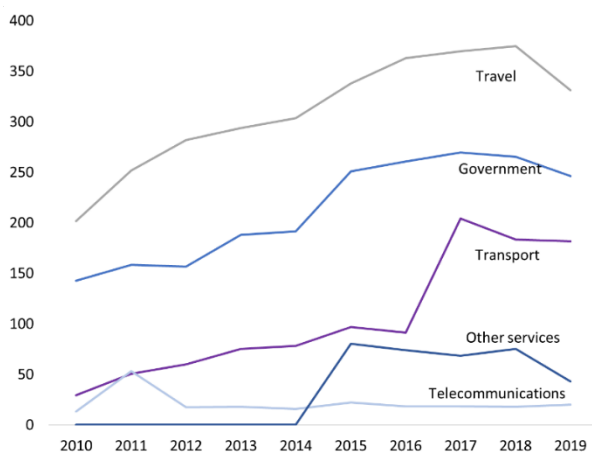


Source: Calculations using data on services exports from UnctadStat.

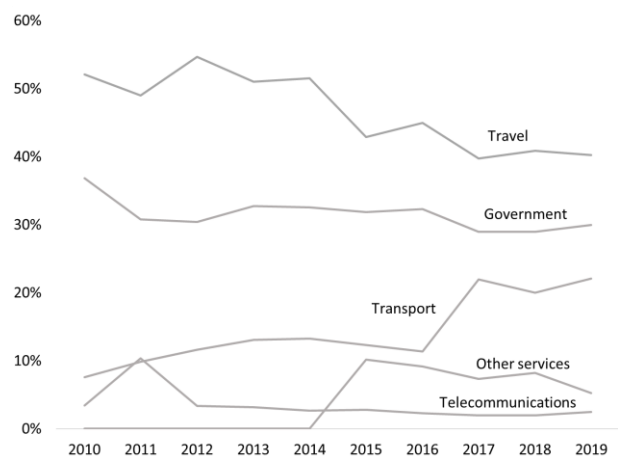
Services data from the Central Bank of Rwanda shows that total services exports have increased with exports of transport services showing significant growth. All the other services sectors have also seen growth, but over the past five years export growth rates have slowed, and the export shares of travel, government and other services has declined. Reasons behind slowing growth are not immediately clear. However, they do warrant further research. One possibility is a decline in services related FDI or slower export growth to target export markets.

Figure 45: Services exports have grown over the decade with transport services becoming more important

Millions of USD



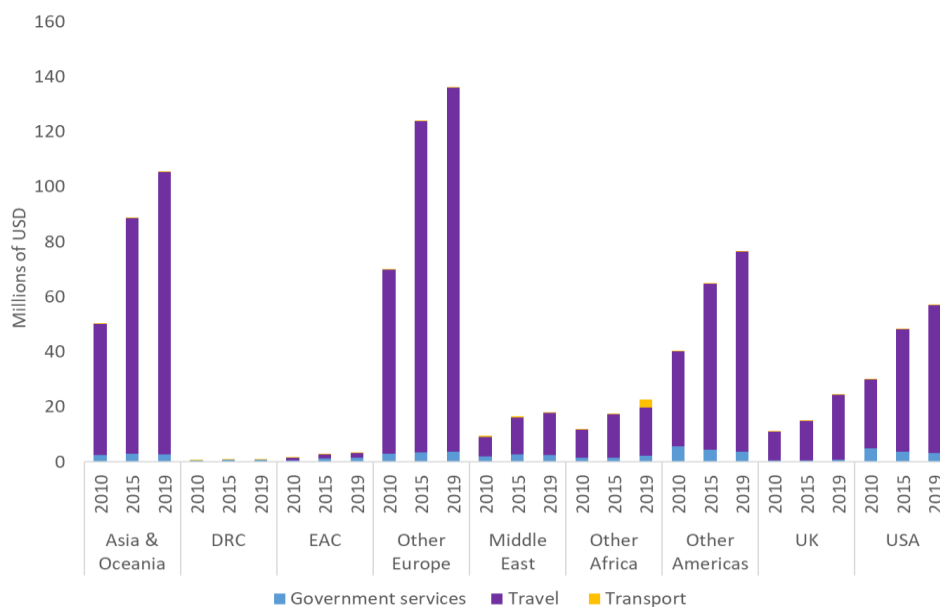
Share of total services export



Source: External trade statistics from the National Bank of Rwanda (BNR).

Rwanda's top services export destinations are the United States and the United Kingdom together with other destinations in Europe and in Asia. In contrast to goods trade, services exports to the EAC and the DRC make up around 1 percent of total services export- this share has not changed between 2010 and 2019. In 2019, services exports to the USA and the UK were around 80 million USD. The main components of services export are travel and transport across all partner countries and groups in Figure 46. Outside of the USA and UK, the rest of Europe (led by Belgium, Netherlands and Germany) and Asia (led by China, Singapore and Indian) are the main regional markets for Rwanda's services export. The Americas (led by Brazil and Mexico) has also seen an increase in services exports between 2010 and 2019. Kenya and the United States are the two largest individual importers of government services consisting mainly of peacekeeping, security and transport services.

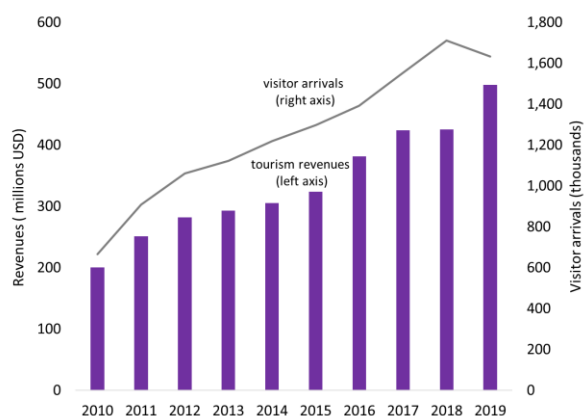
Figure 46: Rwanda's main destinations for services exports (2010-2019)



Source: Author's calculations using OECD-WTO BaTIS.

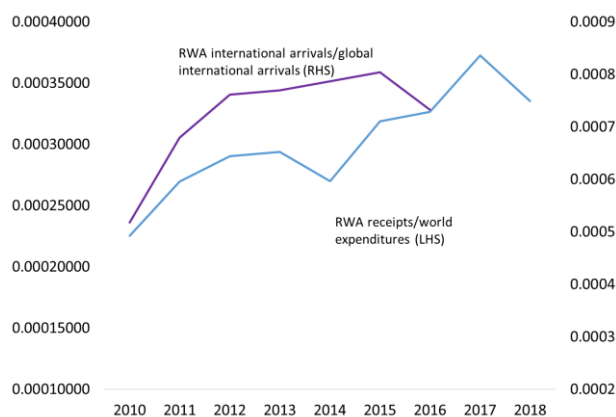
The tourism sector, which includes travel services, is a major export category for Rwanda and has grown at around 10.6 percent per year. In 2010, the tourism sector, which includes activities from land and air travel, accommodation and food services and recreational activities, earned an estimated US\$200 million in revenue, the majority of this coming from international tourists, which were estimated at around 669,000. By 2019 revenues and the number of international tourists had more than doubled to around US\$498 million and 1.6 million visitors respectively (Figure 47). Rwanda’s competitiveness in tourism has gradually improved over the decade with Rwanda capturing an increasing share of international travellers and world expenditure on tourism (Figure 48).

Figure 47: Tourism revenues and visitor arrivals



Source: Data from the Rwanda Development Board.

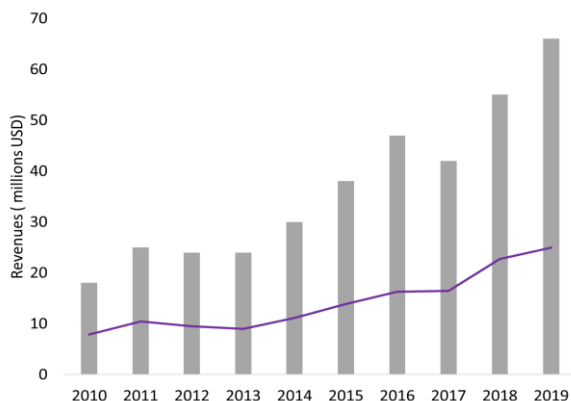
Figure 48: Analysis of Tourism export competitiveness



Source: Data from the World Tourism Organization.

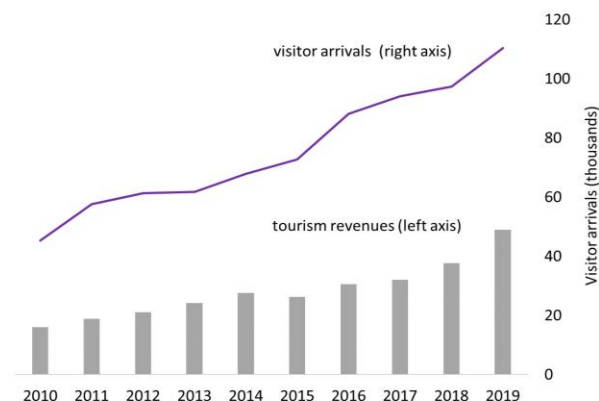
Tourism revenues from MICE and park visits have increased due to strategic investments in both sectors. Since 2010, Rwanda has managed to create a growing tourism sector around conference/global events as well as its natural parks. In 2016, the Kigali Convention Center, a multi-million-dollar modern conference facility, opened its doors launching Rwanda into the top ten African countries for conference events. In 2019, 13.2 percent of total tourism revenue came from conference visitors, up from 9 percent in 2010 (Figure 49). Parks are also growing source tourism revenue. In 2010, revenues from park tourists were around 4.5% of total tourism revenues. In 2019, the share of revenue from parks was around 5.8 percent of total tourism revenues (Figure 50).

Figure 49: Tourism revenues from MICE



Source: Data from the Rwanda Development Board.

Figure 50: Tourism revenues from Park



Revenues from all major tourism revenue flows and markets have increased between 2010 and 2019. The number of visitors transiting through Rwanda has increased and Europe, Kenya and North America are major tourism markets. Growth in tourism has been positive across the board. Visitor numbers for transit, business, and leisure have gone up with the transit travel having the highest annual percentage growth rate (Figure 51). With transit travel there is an opportunity for Rwanda to convert a share of transit travellers into short-term tourists through, for example, attractive packages bundle together with ticket prices. Growth in transit travels follows increased investments into RwandAir and the subsequent expansion of flight routes connecting Africa, Europe, the Middle East and Asia. Travel from all major tourism markets has increased over the period with all markets growing at an average of 9 percent per year (Figure 52).

Figure 51: Visitors by type of visit

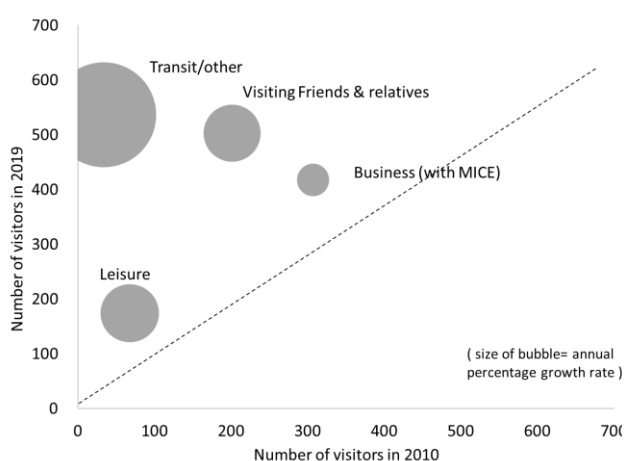
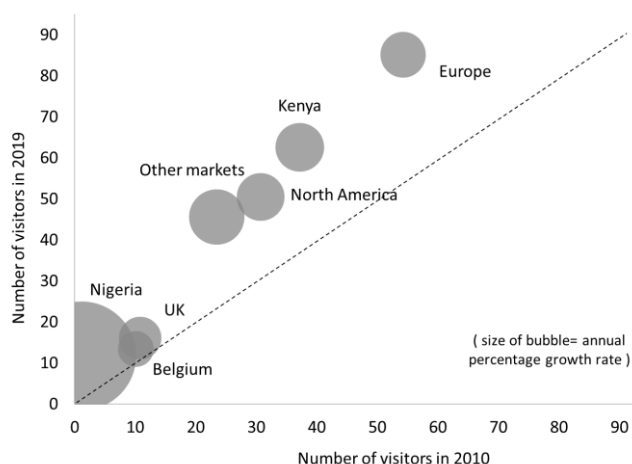


Figure 52: Visitors by key tourism markets



Source: Data from the Rwanda Development Board.

2.5 Impact of COVID-19 on exports

In 2020, the COVID-19 pandemic disrupted local, regional and global trade flow. Rwanda was not spared. Since the start of the global outbreak, Rwanda has seen a significant drop in tourism, one of its major export sectors. Merchandise trade has also suffered if you exclude the impressive growth of gold exports. As Rwanda moves towards recovery, it will have work towards rebuilding exporting relationships lost during the pandemic while also preparing to take advantage of new opportunities for hybrid conference tourism, production of medical and protective equipment and business process outsourcing as more business go online and remote work becomes increasingly viable.

Panel B below gives a snapshot of the impacts of the COVID-19 pandemic on good and services exports. In contrast to many African countries, Rwanda saw an increase in overall exports of goods in 2020. Primarily driven by gold, export value was higher than the average for the three previous years. A look at export values once gold is excluded shows the opposite picture; exports in 2020 were lower than the average for the three previous years.

Comparing 2019 to 2020, almost all major export categories- coffee, tea, minerals, other exports and re-exports- showed a decline in exports (Figure 55) with an overall decline in export value and volume of 15.2 percent and 6.2 percent respectively. Exports of gold grew by over 134 percent between 2019 and 2020 with most of that gold going to the Middle East. Tourism revenues declined by 76 percent and recovery is expected to be slow over the next two years.

Panel B: Covid-19 led to lower export values and volumes for goods (excluding gold) and services

Figure 53: Export value including gold exports
Millions of USD

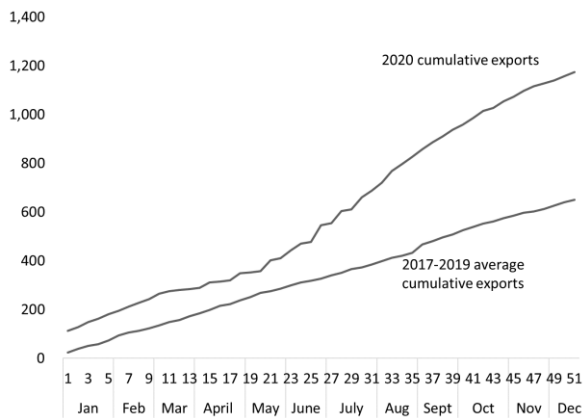


Figure 54: Export value excluding gold exports
Millions of USD

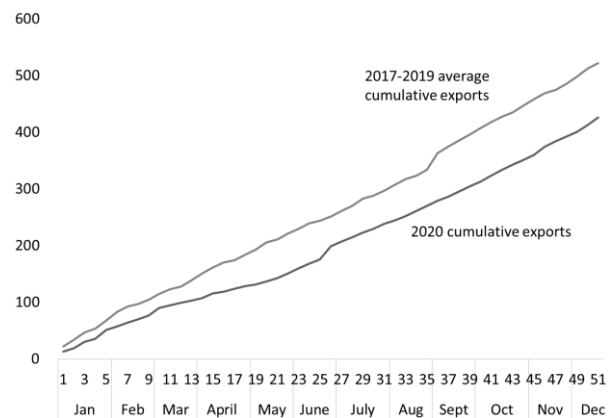


Figure 55: Exports by major export goods, 2019 vs 2020
Millions of USD

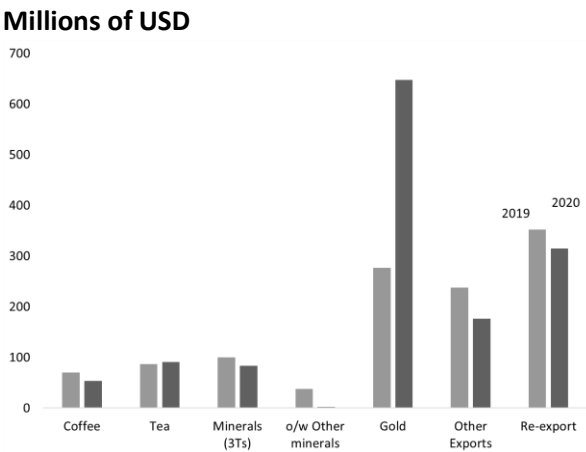


Figure 56: Informal goods export value
Millions of USD

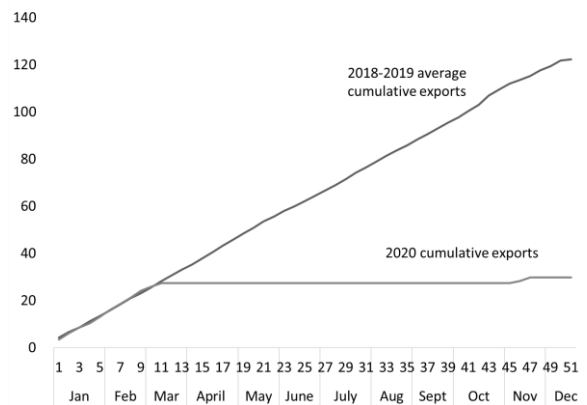


Figure 57: Tourism revenues, 2010-2021 (projected)
Millions of USD

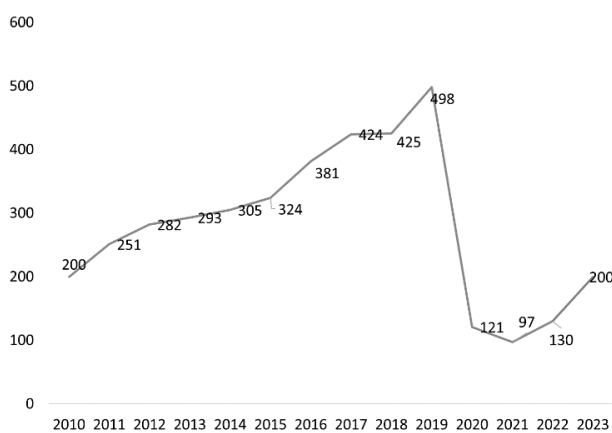
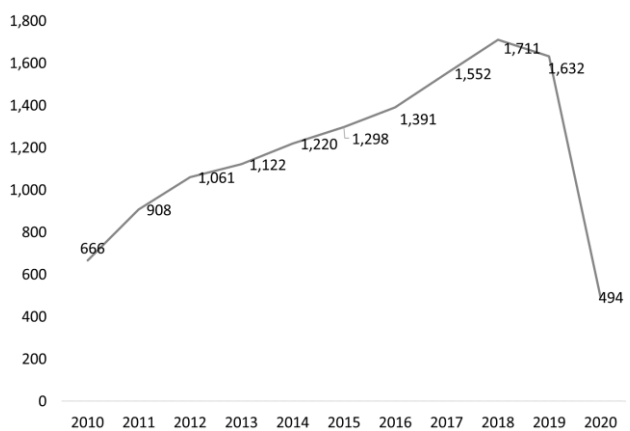


Figure 58: International arrivals 2010-2020
Thousands of USD



Source: Data on goods trade comes from the ASYCUDA system. Tourism data comes from the Tourism unit at the Rwanda Development Board.

3. Prospects for strong export growth: salient policy factors

3.1 Trade facilitation

Rwanda has improved its logistics performance over the past decade. Rwanda’s rank on the World Bank’s Logistics Performance Indicator (LPI) has improved greatly between 2010 and 2018 (the latest year for which data is available). At the start of the decade, Rwanda ranked 151 out of 155 economies on logistics performance and after eight years ranked 57 out of 160 economies, higher than all its comparator economies except Vietnam (Figure 57). A look at the indicators behind the composite LPI shows that Rwanda has improved across all six measurements of logistics performance: timeliness (61), logistics services (60), tracking (86), ease of shipment (29), infrastructure (65) and customs (64). For the most recent ranking, Rwanda scores the lowest on tracking which measure the capacity to save, track and trace shipping data.

Figure 57: LPI ranking for Rwanda and comparators

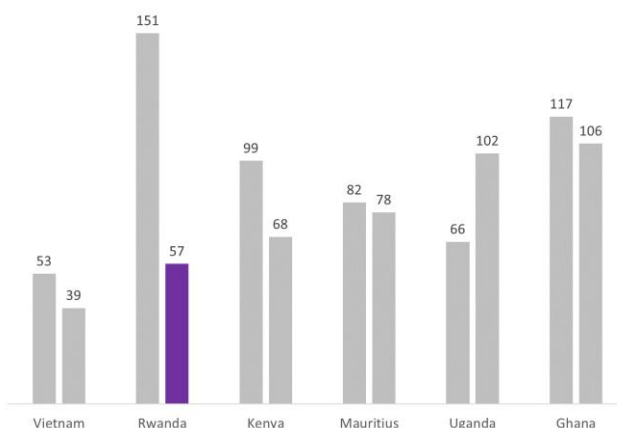
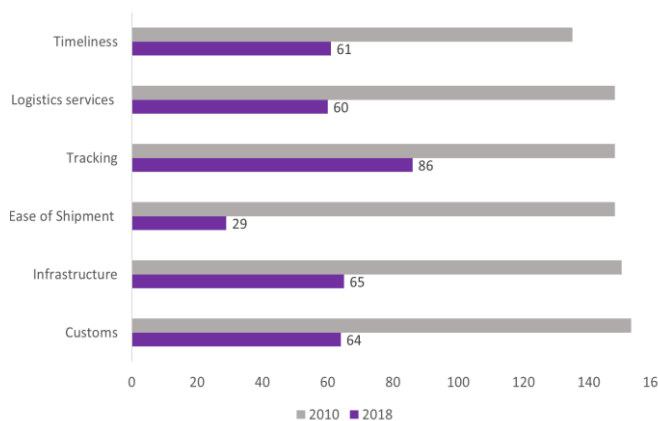


Figure 58: LPI ranking for Rwanda by category



Source: Author’s presentation using World Bank Logistics Performance Index.

Improvements in trade facilitation in recent years have led to a decline in transport costs and time for Rwanda exports. Rwanda utilises both the Northern and Central transport corridors to move products to the Mombasa and Dar es Salaam ports. As a landlocked country, exports carry a natural tariff from associated transport costs and time. Therefore, keeping these costs as low as possible would be crucial the competitiveness of Rwandan exports. Data from both transport corridors show significant reductions in container rates and transport time (Figure 59).

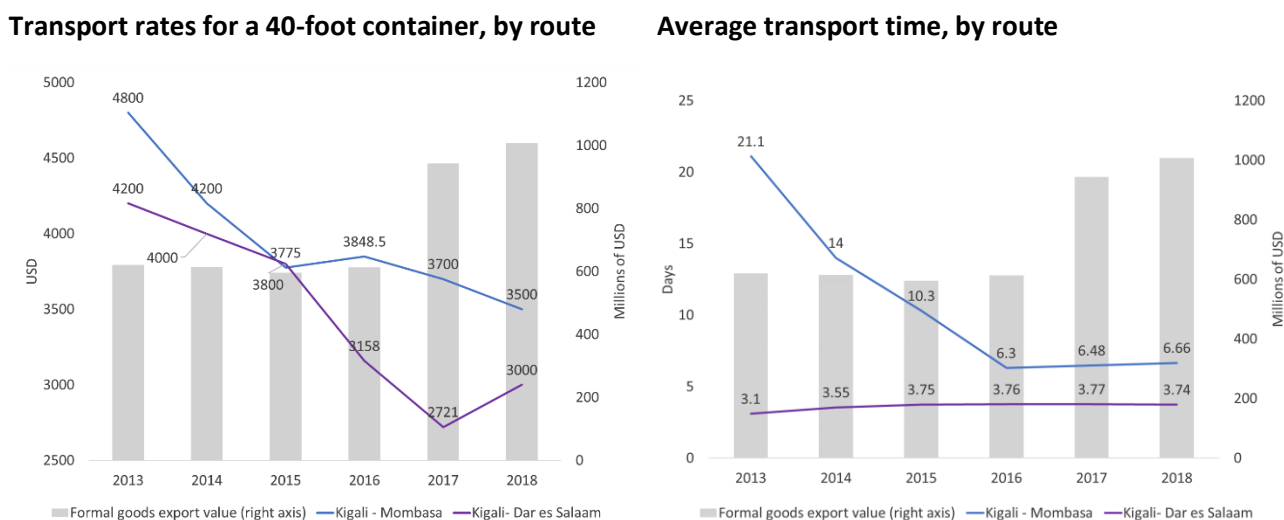
Policy changes and improvements in coordination have enable Rwanda’s improvements in trade facilitation. Since 2010, Rwanda has monitored NTBs effectively by developing a strategic plan and M&E system for the implementation of the National Strategy for the Elimination of NTBs (2014). The Government also re-structured the NTB National Monitoring Committee and strengthened its legal mandate in identifying, removing and monitoring NTBs. In 2017, Rwanda ratified the WTO Trade Facilitation Agreement, and in 2018 launched a National Trade Information portal, which serves as an accessible resource for exporters.

One notable area of success has been around road tolls. In 2014, the Ministry of Trade and Industry commissioned a diagnostic study on road transport and freights. The study “Rwanda Road Freight Industry Competitiveness Study 2014” found that high tolls along road networks to and from Rwanda were affecting the competitiveness of Rwandan Trucking companies and independent truck drivers. For example, a Rwandan

truck entering Tanzania was charged US\$500 while a Tanzanian truck entering Rwanda was charged only US\$152. These findings were used by policy makers and resulted in Rwanda and Tanzania reducing and harmonizing road tolls at US\$125 saving an estimated US\$800,000 for Rwandan transporters.¹⁵

Other interventions around trade facilitation include investments in modern inland container depots, one-stop border posts and cross border markets, and exporter facilitation through the Rwanda development Board and through Special Economic Zones. Rwanda has also set up an online NTB reporting system with options to file complaints in English, French and Kinyarwanda.¹⁶ In 2019, the government released the National Trade Facilitation roadmap, 2019-2020 to continue efforts under the previous trade facilitation strategy.¹⁷

Figure 59: Transport rates and time for Rwandan exports by major routes



Source: The Northern Corridor Transit and Transport Coordination Authority and the Central Corridor Transit and Transport Coordination Authority.

3.2 Innovation to grow exports

Rwanda scores low on innovation measures and for the most part, Rwanda, classified as a limited commodity exporter, trades goods at low levels of complexity.¹⁸ Without productivity enhancing, innovative investment, Rwanda can expect to continue exporting on the lower level of the complexity scale. Current inertia around exporting of complex products could be a result of challenges within the existing innovation landscape for example, weak management skills and low levels of technology adoption. In 2013, the first publication year of the Global Innovation Index, Rwanda ranked 112 out of 142 economies¹⁹. In 2019, Rwanda ranked 94 out of 129 economies but saw its GII score drop although it was the highest ranked country in the set of low-income economies (Figure 60). The 2019 GII ranking reveals that *creative outputs, human capital and research, and knowledge and technology outputs* are low ranking areas. Performance on “input” rank (65)

¹⁵ Review of Rwanda’s National Strategy for Elimination of NTBs, ACE International 2014.

¹⁶ Rwanda NTB Complaint System <https://tradefacilitation.rw/ntbs/Welcome/nc>

¹⁷ Rwanda National Trade Facilitation Roadmap, 2019-2024, https://tradefacilitation.rw/IMG/pdf/rwanda_national_trade_facilitation_roadmap_report.pdf

¹⁸ Classification from the 2020 World Development Report “Trading for Development in the Age of Global Value Chains”.

¹⁹ The overall GII score is the average of the input and output sub-indices, on which the GII economy rankings are then produced. Innovation Input Sub-Index consists of five input pillars that capture elements of the economy that enable and facilitate innovative activities. The innovation output sub-index innovation outputs are the result of innovative activities within the economy.

was far higher than for “outputs” rank (123), which might suggest a problem in resource allocation and/or efficiency.

Figure 60: GII scores and GDP per capita in PPP US\$

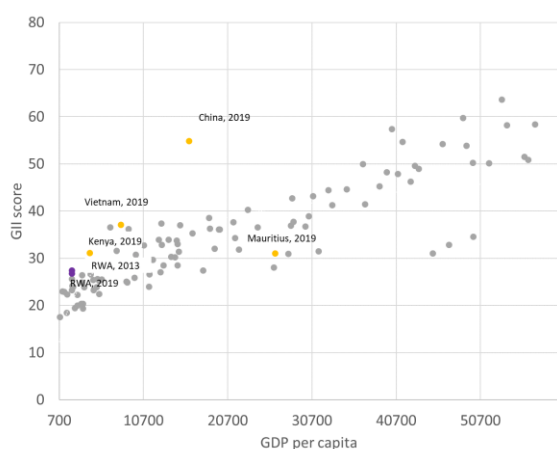
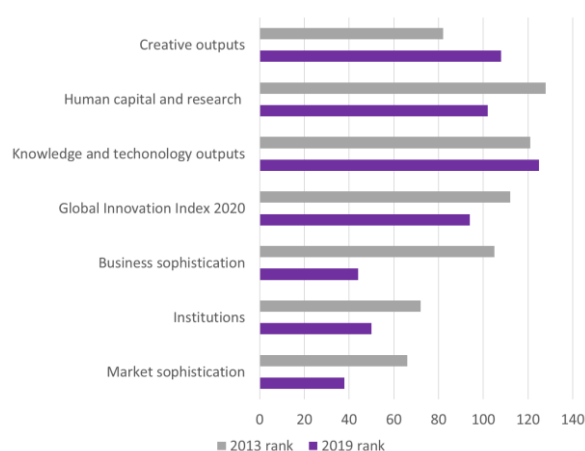


Figure 61: GII rank across measures of innovation



Source: Author’s calculation using data from the Global Innovation Index (GII Index).

Notes: The higher the GII score the more innovative the economy. Rank is in ascending order with the first ranked economy having the highest GII score.

Innovation is important for exporting because it allows firms to develop complex products and meet quality requirements in more established markets. Limited levels of innovation can undermine firms’ ability to access export markets or link to global value chains. For example, if a Rwandan firm wants to participate in a new supply chain, they will need to satisfy standards requirements, which would require higher levels of R&D, and adaptations in the form of learning new production and management processes. Here, programs that support business R&D and knowledge sharing become crucial. Indeed, firms with “incipient” levels of innovations tend to have difficulty expanding market access, which in turn serves as a deterrent for firms interested investing in research or new technology.²⁰

3.3 The critical role of Foreign Direct Investment in driving exports

Over the past decade, the Government of Rwanda has implemented investment promotion policies and initiatives to create an enabling business and investment environment for FDI. One critical part of the policy was to establish the Rwanda Development Board in 2008, a dedicated agency to promote and facilitate investment into high-priority sectors. The headline achievement of this policy has been an impressive improvement in Rwanda's position on the World Bank’s Doing Business rankings, where Rwanda moved from 158 in the world in 2007 to 38 in 2020, making it the second-best economy in Africa, after Mauritius, to do business. Rwanda scored higher than its average score in measures that look at how easy it is for an investor to start a business, access credit, pay taxes, and register property. Other more targeted initiatives are the Rwanda investment code with stipulations to encourage FDI; a strong investor facilitation and aftercare program through the Rwanda development Board; and a special economic zone policy to boost FDI and export-oriented manufacturing.

As a result of investment promotion efforts and improvements to the business environment, the stock of FDI has increased with ICT, financial and insurance activities, manufacturing and energy having the largest

²⁰ World Bank 2020 report “A Practitioner’s Guide to Innovation Policy”.

share. Rwanda has shown an impressive increase in FDI moving from around 7 percent of GDP in 2010 to around 25 percent of GDP in 2019. Rwanda’s FDI growth has been at a rate similar to larger comparator economies- Ghana, Uganda and Ethiopia. (Figure 62). There has also been a shift in structure of FDI with more the tourism and energy sectors emerging as a major area for investment (Table 8). Although FDI cannot be directly mapped to specific export product codes, FDI stock by major economic sector is a useful indication of areas of potential export growth. FDI trends for Rwanda show a larger share of FDI stock in ICT and financial sector, which might translate into increased exports. Manufacturing is another sector with a large stock of FDI.

Figure 62: FDI stock as a share of GDP for Rwanda and comparators

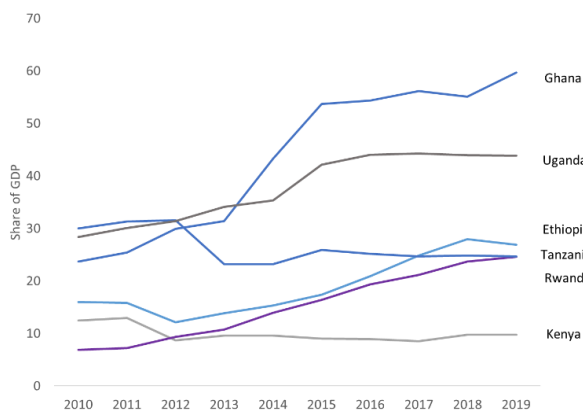
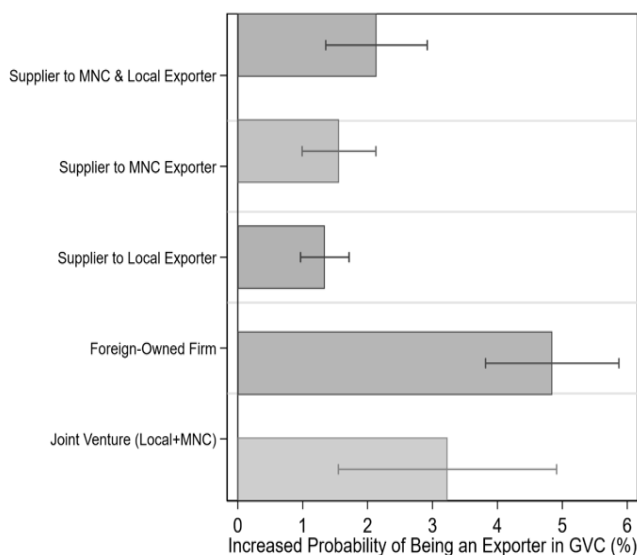


Table 8: Stock of FDI in Rwanda by sector, 2012 vs 2018

Sector	Millions of USD		% of total FDI stock	
	2012	2018	2012	2018
ICT	444.0	778.3	40%	24%
Financial and insurance activities	226.4	777.7	20%	24%
Manufacturing	161.0	466.4	15%	15%
Electricity, gas, steam	0.2	391.9	0%	12%
Tourism	82.3	229.4	7%	7%
Wholesale and retail trade	59.1	190.4	5%	6%
Agriculture	72.4	118.2	7%	4%
Mining	26.3	92.1	2%	3%
Transportation and storage	27.2	55.9	2%	2%
Real estate activities	1.0	34.7	0%	1%
Construction	4.3	25.7	0%	1%
Other	4.3	40.3	0%	1%

Source: FDI stock as a share of GDP calculated using UNCTADstat. Stock by sector comes from the National Bank of Rwanda.

Figure 63: Supplying MNCs increases the probability of exporting



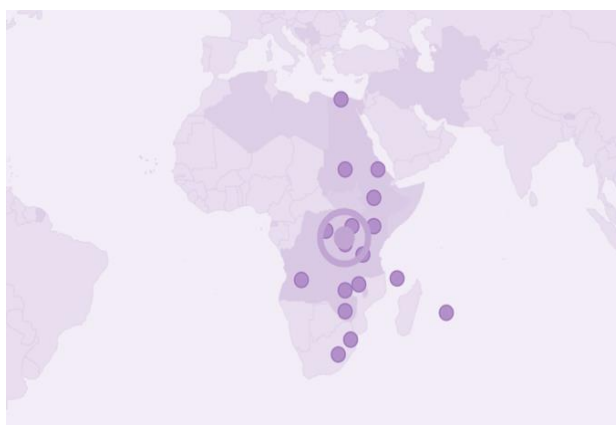
FDI in Rwanda has been shown to be export enhancing and increases the participation of Rwandan firms in global value chains. A joint study with the World Bank and the International Growth Centre found that, when controlling for a firm’s sector and time, *being a foreign-owned firm* is the biggest predictor that a firm will start to export into a GVC (+5.4%), followed by *being in a Joint Venture (local plus MNC)* (+3.8%). Then, even when controlling for general firm characteristics, there is also a strong, statistically significant link between firms who supply to GVC firms and becoming a GVC exporter yourself. This relationship is strongest for those who supply both MNCs and local exporters (+2.2%), followed by supplying MNCs (+1.6%) and supplying domestic GVCs (+1.4%).

Source: From a joint World Bank and International Growth Centre study “The Role of Foreign and Domestic Investors in Rwanda’s Participation in Global Value Chains” part of the World Bank report “GVCs: an Investment Perspective”.

3.4 Regional trade agreements

Rwandan exports benefit from access under regional and preferential trade agreements (RTAs and PTAs). Between 2010 and 2019, Rwanda increased its number of PTAs but with mixed impact on the growth rate of exports to new PTA partners. Rwanda is a member of two major RTAs (Figure 64): the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA).^{21/22} Rwanda also has PTAs with 24 countries under which it benefits from varying degrees of duty-free access for exports. Between 2010 and 2019, Rwanda signed 8 PTAs representing 30 percent of the total number of PTAs in force as of 2019 (Table 9). Preferential Trade Agreements (PTAs) have become a prominent tool used by countries to secure market access and to deepen regional and global integration. They often go beyond lowering trade tariffs and include, for example, harmonization of customs and border procedures, quality standards, and investment integration provisions.

Figure 64: Rwanda’s participation in regional trade agreements: EAC and COMESA



Source: Data from the World Trade Organization.

Rwanda’s new PTAs are with economies in Asia and Eastern Europe signalling potential new markets in these regions. Data on export volumes show that there has been some increase in exports from Rwanda most notable for Kazakhstan and Russia. Exports to China and Thailand saw a boost after the start of the PTA but declined in the latter part of the decade (Panel B) possibly pointing to challenges around market access and sustainability.

Between 2010 and 2019, there were four significant developments around regional integration involving Economic Community for Central African States (ECCAS), the African Continental Free Trade Area (AfCFTA), Economic Partnership Agreement (EPA) and the African Growth and Opportunity Act (AGOA). The first came in 2015 when Rwanda made the decision to re-join ECCAS after it pulled out in 2007. ECCAS has 11 members spanning Central and Southern Africa.²³ Although the bloc has ambitions around trade integration, to date, there have been no arrangements to liberalize intra-ECCAS. The second major development around regional integration was in 2018 when Rwanda ratified AfCFTA. However, the trade under the agreement only came into force in 2021. Third, Rwanda signed on to the EPA between the EAC and the European Union. However, the agreement has not yet been ratified. Finally, in July 2018, the duty-free status of apparel exports under

Table 9: Providers of Preferential Trade Agreements (PTAs)

PTAs in force before 2010		
Generalized System of Preferences		LDC Specific
Australia	Norway	Chinese Taipei
Canada	Russian Federation*	India
European Union	Switzerland	Korea, Republic of
Iceland	Turkey	Kyrgyz Republic
Japan	United Kingdom	Morocco
New Zealand	United States of America	Tajikistan
Additional PTAs in force after 2010		
Generalized System of Preferences		LDC Specific
Armenia		Chile
Kazakhstan		China
Kyrgyz Republic		Montenegro
Russian Federation		Thailand

²¹ EAC member include Rwanda, Kenya, Uganda, Burundi and Tanzania.

²² COMESA members include Burundi, Comoros, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe.

²³ ECCAS members include Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe.

AGOA originating from Rwanda was suspended, following Rwanda's decision to maintain higher tariffs on imports of second-hand clothes.

Panel B: New Preferential Trade Agreements (PTAs) and Rwanda export volumes to provider (2010-2019)

Figure 65: China PTA and Rwanda export volume



Figure 66: Kazakhstan PTA and Rwanda export volumes

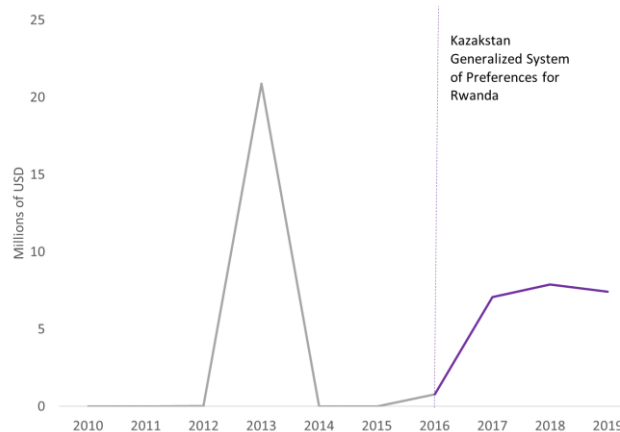


Figure 67: Thailand PTA and Rwanda export volume

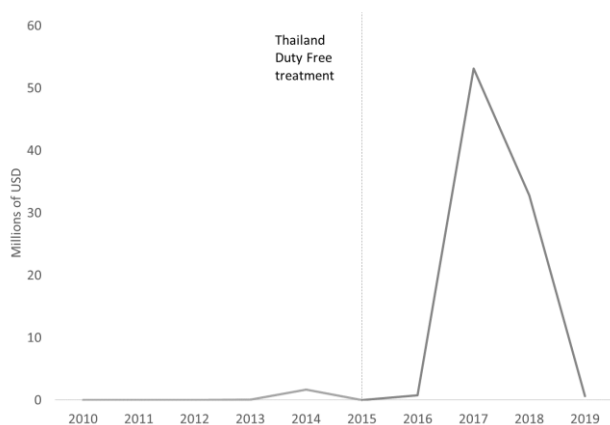
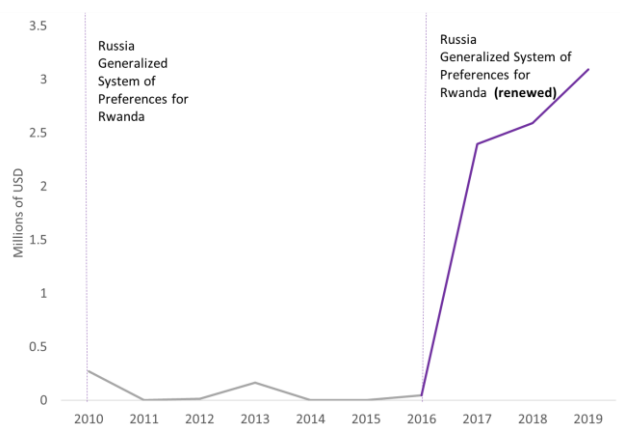


Figure 68: Russia PTA and Rwanda export volume



Source: High frequency trade data from the Government of Rwanda.

Despite mostly positive developments around trade agreements over the past decade, the growth rate of export volumes to partners under RTAs and PTAs has been sporadic, and it raises questions around the reasons behind low utilisation of preferred market access among Rwanda firms. Since 2010, Rwanda has exported under the EAC, COMESA regional trade agreements as well as GSP access for EU and USA markets where Rwanda also benefits from AGOA. Export to the COMESA region (excluding EAC member countries) has seen the strongest growth driven by export performance in the Egypt and DRC markets. Export growth to the US, albeit starting from a low base, was robust between 2010 and 2014, but slowed down in the second half of the decade and dropped further after Rwanda lost AGOA access for textile exports. Performance for the EAC region has fluctuated with recent declines in export in part due to ongoing trade tensions regionally.

Figure 69: Export volumes for major RTAs and PTA partners



Source: Author’s calculations using data from the Government of Rwanda.

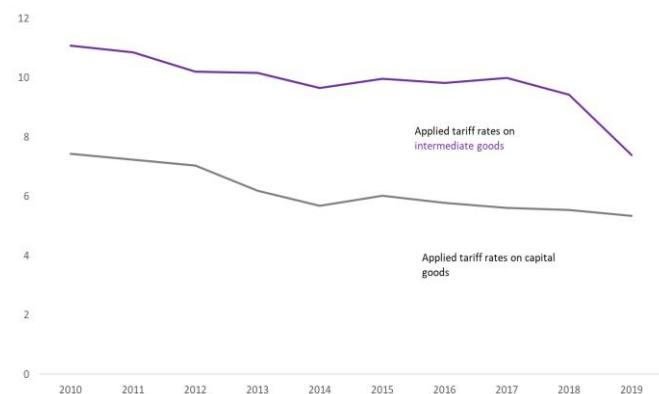
3.5 Tariff policy

Although Rwanda’s applied trade weighted import tariffs has declined over the period it remains higher than average tariff rates globally and for SSA, East Asia (China, Vietnam) and other comparators. A breakdown of tariffs by product type shows that applied tariffs rates on intermediates and capital goods, important inputs for Rwandan exports, have been going down over the past decade. Figure 70 shows estimates of trade weighted applied tariff rates for Rwanda and comparator economies. Since 2010, Rwanda’s average applied tariff has been close to double that of China but is the lowest in the EAC region. Using transaction level customs data for Rwanda and product classification under the BEC system of classification, analyses show that applied tariff rates on intermediate goods were around 11 percent at the start of the decade and decreased to around 8 percent in 2019 (Figure 71). Applied tariff rates have also been declining for capital goods. Increases in tariff exemptions and reductions for manufactures is one of the main factors behind declining applied tariff rates. These exemptions have been through unilateral tariff exemptions under *Stays of Applications (SOAs)* and firm-level tariff reductions under the *Duty Remission Scheme (DRS)* - both provisions for tariff deviations under the EAC Common External Tariff (CET).

Figure 70: Rwanda’s trade weighted average applied tariff rate (2010-2019)

Economy	Trade weighted average applied tariff rate (2010-2019)
Ghana	10.3
Kenya	10.2
Tanzania	8.3
Uganda	8.3
Rwanda	8.1
China	4.1
Vietnam	3.4
United States	2.9
<i>Regional comparators</i>	
World	3.0
SSA	7.0

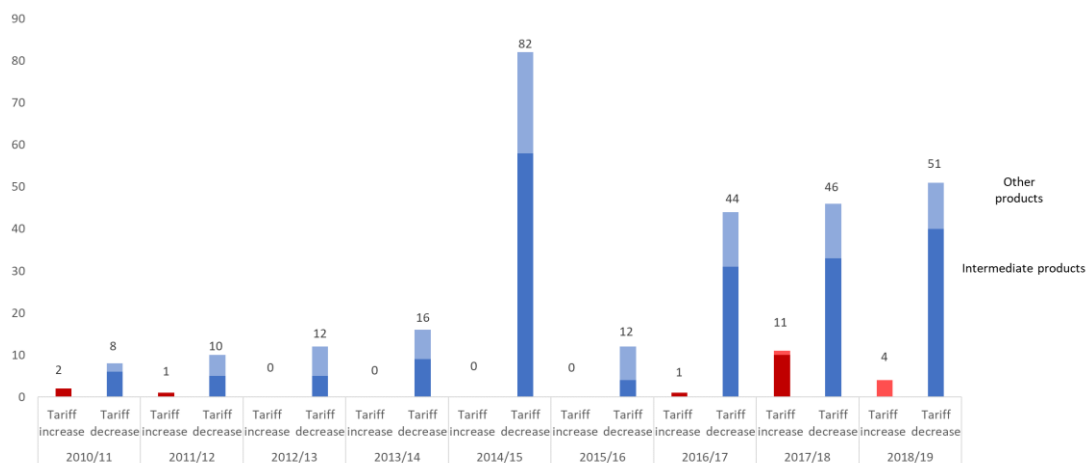
Figure 71: Rwanda applied tariff rates for intermediate and capital goods imports (percent)



Source: Figure 70 calculated using data from the WTO. Figure 71 is based on calculations using transaction level import data from the Government of Rwanda.

Since 2010, Rwanda has progressively deviated from the CET by applying SOAs, which reduce or increase the tariff rate of imports from outside of the EAC for all importers. Figure 72 shows that these SOAs have for the most part decreased tariff rates on imports with intermediate products receiving the largest share of tariff reductions.

Figure 72: Tariff exemption by year and product type (number of products receiving tariff exemptions)



Source: Author’s calculations using data on the EAC Stays of Applications from Rauschendorfer and Twum (2020).

Looking at the two halves of the decade, it is clear that SOAs have been a more prominent feature between 2015 and 2019 with tariff reductions mainly targeted at iron, steel, leather and inputs into the beverage industry. These trends reflect increased manufacturing and investment activity that would benefit from lower tariffs on intermediate products. Rwanda has used SOAs to increase tariffs on only a few products with the most targeted increases recorded in 2011 for mostly iron and steel products that are locally produced.

Tariff reductions have also come through the DRS scheme, which approves firms for tariff reductions on their imports. This provision is under the investment code and is available for imports that are needed as inputs into industrial production. Approvals are given one to two times a year and are in force for one year. Similar to SOAs, there has been an increasing number of approved firms and products under the DRS scheme. Figure 73 and 74 shows that since 2010, the number of firms and products approved for DRS have increased by around six-fold.

Figure 73: Number of firms approved for tariff reductions on imports

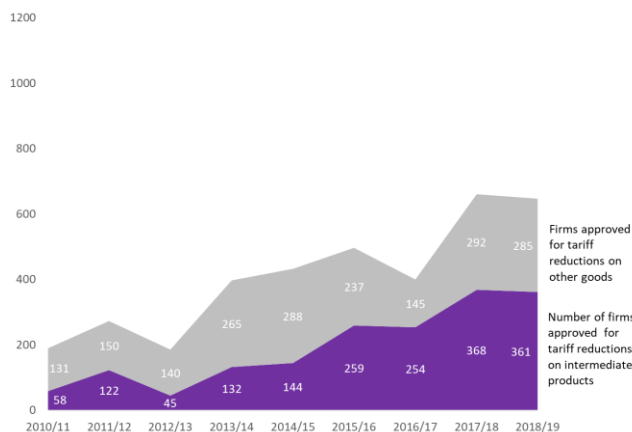
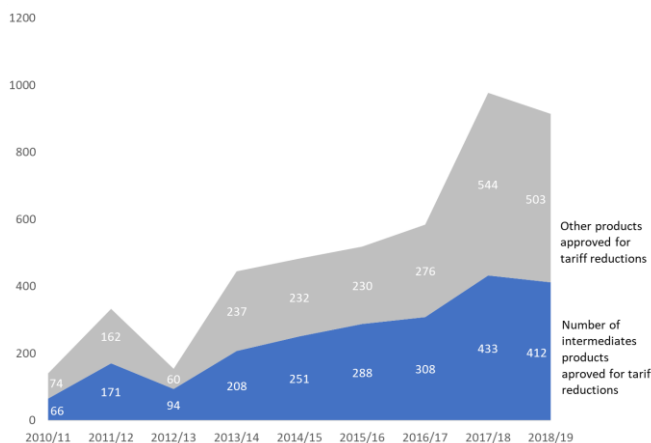


Figure 74: Number of import products with approved tariff reductions



Source: Author’s calculations using data on the EAC Duty Remissions Scheme from Rauschendorfer and Twum (2020).

Even with schemes to provide tariff relief for importers of critical industrial inputs, Rwanda's tariff system still creates a significant cost disadvantage for Rwandan exporters who themselves rely on imports; smaller firms are disproportionately affected. Research commissioned by the IGC found potential misclassification issues under the EAC CET. Specifically, about 600 primary and intermediate product lines, around 12 percent of total product lines, are misclassified and charged higher rates. (Frazer 2017). The same paper also found that the DRS scheme favours large firms at the expense of smaller firms who pay higher effective tariff rates despite having access to the program. As a landlocked economy, Rwanda must grapple with additional transport costs to and from the two major ports- Dar es Salaam and Mombasa. This extra tariff already means Rwandan exports face higher prices for imported inputs and face challenges staying price competitive on the global market. Inefficiencies in the tariff system would only further undermine export competitiveness for Rwandan firms. EAC member states are currently renegotiating the CET and for the most part Rwanda's position has been focused on protecting Rwanda's export competitiveness. However, recent domestic market recapturing strategies, most notably the Made in Rwanda policy have a risk of increasing protectionism in the name of growing local industry, which invariably creates a tension between export promotion and import substitution policies.

4. Policy discussion and recommendations: A look at the next decade

This section presents policy ideas to promote stronger and more resilient export growth for the next decade. There have been many policy wins over the years, and the Government has succeeded at creating a sound business environment for export-oriented investment. It has adopted a strategy that recognises the importance of regional and international exporting opportunities while also working towards promoting value addition for traditional and non-traditional exports.

The following policy discussion builds on prior and continuing policy initiatives. It not only recognises the challenges the government faces in a post COVID-19 global economy struggling with disrupted markets and supply chains, but also the opportunities arising out of the pandemic as well as the recently launched AfCFTA.

Along with maintaining existing export markets, export diversification is critical to increasing export growth and reducing export volatility; high value-added agriculture, upgrading of manufacturing exports and non-tourism services are important. An effective export diversification strategy should include policy around improving the quality and scope of high value-added agriculture together with policies focused on increasing and upgrading exports from the manufacturing sector. Diversification of services exports should not be neglected. Too often, countries ignore opportunities in non-tourism service sectors like offshoring and education. Concrete steps to enhance export diversification include improving infrastructure and trade networks in non-traditional export sectors and reducing barriers to entry for new products, particularly information barriers that stifle innovation and market penetration for new products. Information sessions for the private sector on exporting activities with high potential could serve to encourage a shift to new exports. Improvements in governance, financial deepening, increases in human capital, and agricultural reforms all facilitate diversification as well as quality upgrading.

Review existing export product and market priorities across government strategies for policy coherence and prioritize feasible export diversification against the backdrop of changing global trade dynamics. Over the years, there have been several reviews of priority export sectors under the government's export strategy, industrial policy, Made in Rwanda strategy and other related policy documents. The result is a long list of sectors and products with export potential. A comprehensive review of the list in consultation with stakeholders across the government and private sector is essential.

Commission a study looking at nascent services export sectors with high- potential for growth like transport, government, education and healthcare services. An effective export diversification strategy should not neglect services exports. However, information on services exports in Rwanda is lacking. Studies to quantify exports in sub-sectors like education and healthcare would provide critical information to inform export strategies.

Provide support to sporadic exporters. Commission a study on the low survival rates of exports to understand why firms are not able to maintain export relationships after entering export markets. The findings of this study should be used to inform a support program for exporters that are struggling to maintain their export markets.

Tariff and non-tariff barriers will continue to hamper export growth. Major barriers faced by Rwanda exporters include three major and persistent barriers; high costs of imported inputs, costly transport, and difficulty accessing credit. For the next decade, the Government must prioritise policy around reducing costly barriers to exports. Indeed, there have been impressive gains over the years. Transport costs have declined along the Northern and Central Corridor trade routes (Figure 59). The NTB National Monitoring Committee has been effective in monitoring and implementing interventions around NTBs. The Government has also proactively worked to reduce production costs of exports through reforms around the business environment, which has led to Rwanda ranking as the second-best place to do business behind Mauritius. However, challenges remain. For firms (particularly small and medium firms) that are unable to access tariff reductions under the Duty Remissions Scheme (DRS), imported inputs are still cost-prohibitive. A recent survey of exporters done by the World Bank showed that close to 43 percent of respondent exporter firms struggle with higher tariffs on inputs and difficulty accessing financing. 62 percent of them cited shipping costs and delays as their main logistics challenge. The lack of facilitation at the border, fragmentation of the supply chain, and limited access to affordable air cargo opportunities are equally important factors that contribute to the high cost of trading.

Pay particular attention to regional barriers under the African Continental Free Trade Area (AfCFTA). A separate national trade facilitation strategy for the AfCFTA should be considered with accompanying studies to understand the scope and nature of existing and emerging barriers to trade with the continent. High costs of imported inputs, costly transport and difficulty accessing credit are three major and persistent barriers that might prove salient.

Marketing to international markets is exceptionally important for boosting exports. A decomposition of Rwanda's export performance over the past decade showed that most of Rwanda's export growth came from existing export relationship with a significant loss of potential exports coming from the decrease or cessation of exports to established market (Section 2.5). Additionally, Rwanda's export market penetration has lagged behind other EAC member states meaning there is more room for Rwandan exporters to proactively target and enter new markets for their products. The Government needs to invest more in the marketing of Rwandan exports using more traditional strategies like trade shows and marketing campaigns combined with more innovative digital marketing. Research should be done on export market penetration at a detailed product level to provide a list of new markets for existing products.

- **Re-energise national export market access programs and coordinate existing government, private sector and donor programs around helping exporters identify, enter and expand their export markets.** The strategy should include increased funding to support the cost of overseas marketing and promotional activities that help build commercial export markets for Rwandan agricultural products

and commodities. It should also include more funding for informational services for exporters. The Ministry of Trade and Industry and the Rwanda Development Board should work together with sector-specific exporter associations to design sectoral strategies that addresses exporter challenges around market access. The government might also want to consider using its embassies more intensely to better market Rwandan products to underserved markets.

Targeted supplier development programs have the potential to promote sustainable local supply chains for exporters. Access to reliable cheap inputs is essential for boosting Rwanda's export competitiveness. In export sectors, that have the potential for local substitution of inputs, the government should design and implement programs to develop the capacity of local suppliers in line with the needs of Rwandan exporters. Africa Improved Foods (AIF) supplier program has been particularly successful at increasing local sourcing of maize, a key ingredient used in the manufacturing of fortified food exports. Prior to the program, local maize farmers struggled with post-harvest loss limiting the amount of local maize procured by AIF. The Supplier Development Unit at the RDB should work with the Private Sector Federation to identify promising value chains with high potential for local sourcing for the production of exports.

Provide more support for supplier development programs (SDPs). Two short-term actions include the expansion of the Supplier Development Unit at the RDB and the creation of a fund, perhaps through the Development Bank of Rwanda (BRD), to finance SDP programs and initiatives. More analytical work like firm surveys and value chain mapping to inform the design of supplier development interventions would also be critical.

Effective negotiating and regular monitoring of trade and investments agreements will ensure that Rwandan exporters continuously benefit. Within the EAC, Rwanda should take the lead in promoting stronger regional integration by working with other member states to discuss and address persistent trade and political tensions. The EAC is critical for Rwandan exports: it serves a major market and is a conduit for Rwandan exports destined for international markets. Access to the central and northern trade corridors as well as the Mombasa and Dar es Salaam ports are vital to the future growth of Rwandan exports. However, the region has been plagued with trade and political squabbles that have directly affected Rwandan exporters. As the AfCFTA progresses, strong regional unity would be even more important to take advantage of emerging opportunities.

Strengthen trade negotiations capacity and regularly monitor trade and investment agreements to ensure that Rwandan exporters continuously benefit. Within the EAC, Rwanda should take the lead in promoting stronger regional integration by working with other member states to discuss and address persistent trade and political tensions.

Understanding the trade financing landscape and existing trade finance gap is critical to ensuring that Rwandan exporters have access to the finance they need to sustainably export. Trade finance is critical. It reduces payment risks between exporters and importers and helps businesses maintain a steady cash flow. However, globally, SMEs account for only 37 percent of global trade finance demand and face a 45 percent rejection rate (6 percentage points higher than mid-sized business and more than double the rejection rate of large sized firms). Women-owned businesses are even more credit-constrained, with a 44 percent rejection rate compared to a 38 percent rejection rate for male-owned businesses (ADB 2020). A review of existing evidence in Rwanda points to similar trade financing challenges. Although, there has not been a direct study on trade finance, close to half of exporters surveyed under the World Bank 2019 Enterprise survey indicated that access to credit was an obstacle (World Bank 2019). In addition, a survey of firms looking at business

perceptions around the AfCFTA revealed that trade finance is a major business concern (Vanguard 2020). Government needs to fill in the important research gap on the demand and supply of trade finance in Rwanda in order to inform targeted policies to improve access to trade finance.

Commission a study to understanding the trade financing landscape and measure the existing trade finance gap. Although, there has not been a direct study on trade finance, close to half of exporters surveyed under the World Bank 2019 Enterprise survey indicated that access to credit was an obstacle (World Bank 2019). In addition, a survey of firms looking at business perceptions around the AfCFTA revealed that trade finance is a major business concern (Vanguard 2020). The findings of a study on trade finance would be invaluable in designing policy to ensure that Rwandan exporters have access to the finance they need to sustainably export.

Rwanda's experience with upgrading the coffee sector demonstrates the role that value addition can play in mitigating the risks associated with fluctuating international commodity prices. Rwanda's export growth since 2010 has been more price than volume-driven- a pattern of export growth that has left Rwanda vulnerable to price shocks and will prove unsustainable for maintaining a double-digit growth path. Persistent diversification of exports from commodities towards manufacturing and services exports, and improvements to value addition will also be important.

Dedicate more policy attention to increasing export volumes across all major goods sectors; the National Industrial Research and Development Agency (NIRDA) program on firm upgrading should be scaled up. Established in 2013, NIRDA has successfully managed upgrading programs for six major value chains- wood, textiles, leather, banana wine, fruits and vegetables and livestock. NIRDA's strategy document is set to end in 2022, opening up an opportunity for the agency to expand its scope and with a larger budget for its upgrading program. Government and donor financing would provide the necessary support.

The AfCFTA presents an important opportunity for Rwandan exporters. The AfCFTA can serve as a launch pad for Rwandan exporters looking to access the African market, but success lies in traders taking advantage of preferential trade under this agreement. Research on other free trade areas highlights the risk of firms finding the costs- direct and indirect- associated with trading under the AfCFTA prohibitive. Costs to procure certificate of origins along with costs to set up supplier relationships can deter many firms.

Invest in educating the private sector on opportunities under the AfCFTA while also providing credit and technical support to exporters looking to export under the agreement. The Government needs to dedicate resources to sensitizing exporters on the AfCFTA and regularly monitor NTB reports from Rwandan traders.

Other policy considerations

Special Economic Zones have been another tool to boost high value-added local production and FDI for domestic consumption and export. Rwanda's investment code, investment promotion strategy as well as its domestic market development policy, Made in Rwanda, highlight the importance of SEZ's for investment promotion. Indeed, Rwanda has had some success in this area. Between 2013 and 2016, the Kigali Special Economic zone, which was the first SEZ established and mainly occupied by foreign firms, accounted for between 4.5 and 10 percent of all national goods exports and fomented new manufacturing and agro-

processing exports (Steenbergen and Javorcik 2017). Through the SEZ, investors can access cheap inputs through customs exemptions (as outlined in table 1) and also benefit from more responsive trade facilitation, more accessible and reliable infrastructure and utilities as well as critical investor aftercare services to help navigate government legislation and mediate disputes.

A competitive real exchange rate is important for exports and investments in tradable sectors. For Rwanda, facilitating the price competitiveness of exports would rely on the effective management and monitoring of exchange rate policy. As Rwanda diversifies its exports towards non-traditional exports and services, the appropriate policies toward the real exchange rate become even more important. Over the past decade, Rwanda's real exchange rate has appreciated especially during the second half of the decade (Annex A7). Greater flexibility and close monitoring of exchange rates are necessary to avoid inadvertent episodes of overvaluation, especially in regional markets. As Rwanda looks to increase trade under the AFCFTA, continental markets and currency movements would require close monitoring as well.

ANNEX

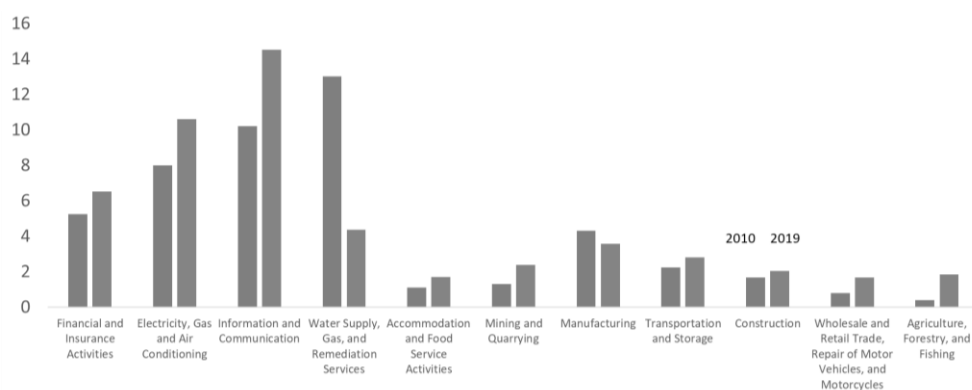
A1: Rwanda's currency has been steadily appreciating. Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) Index (January 2010 =100)



Source: Calculations using data from BNR.

A2: Labour Productivity across differ economic sectors

Labour Productivity (millions of RWF per worker)

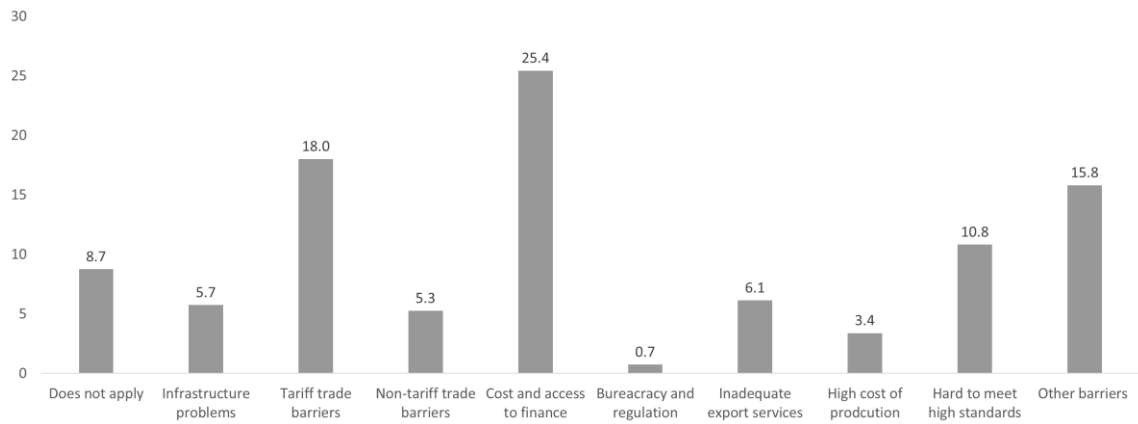


Source: Calculations using data from MINECOFIN.

A3: Trade related questions from the World Bank's Enterprise Survey, 2019

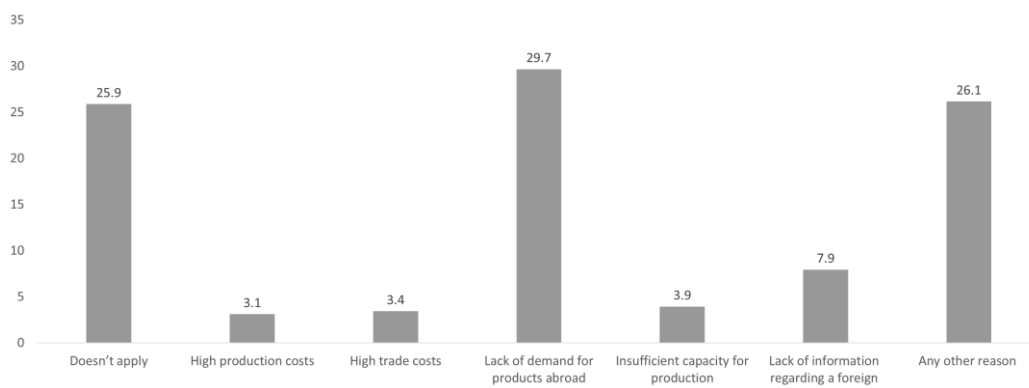
What is the most important barrier to expanding your firm's activity?

(share of respondents)



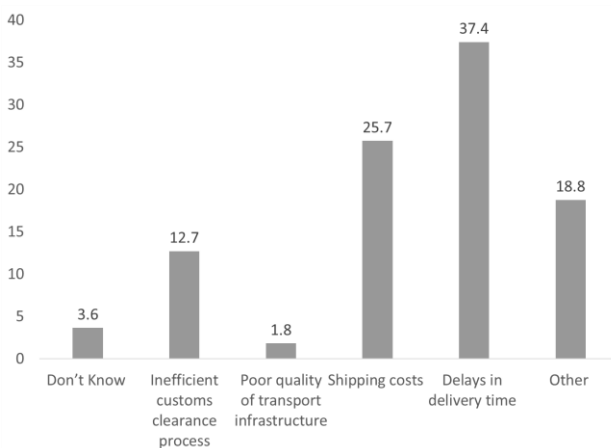
What is the main reason why the firm did not export directly or indirectly?

(share of respondents)

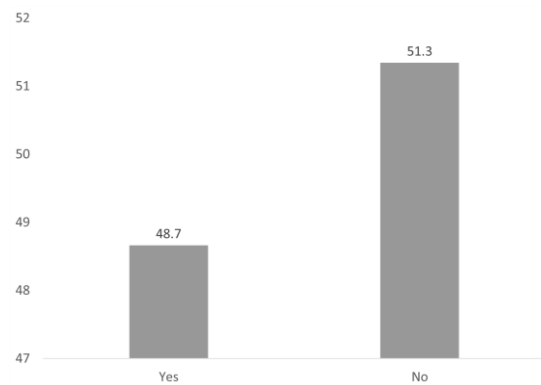


What is the main logistic related obstacle faced by the firm in its direct import or export operations?

(share of respondents)

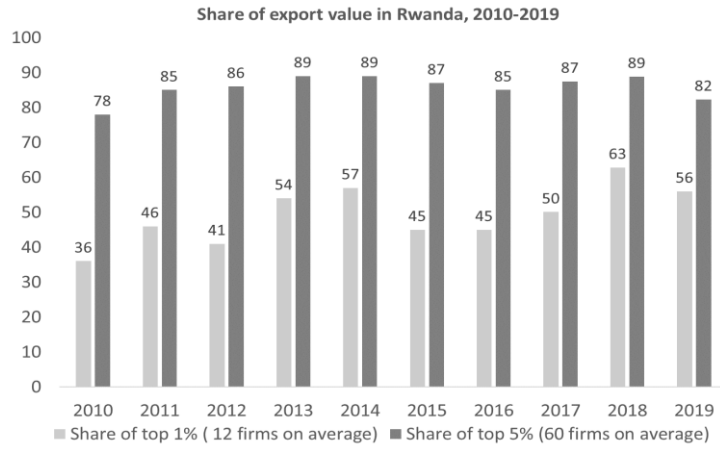


Does this establishment use internet for business purposes?



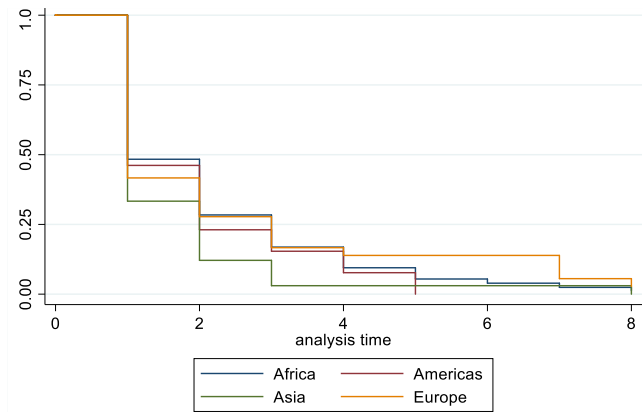
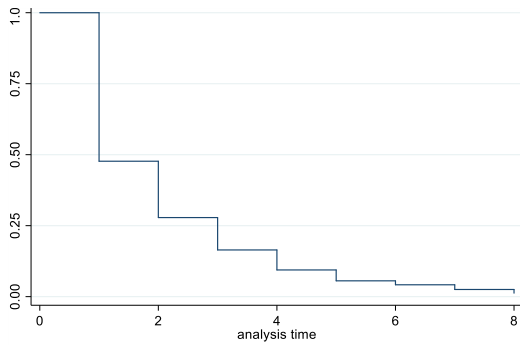
Source: World Bank Enterprise Survey.

A4: Share of export volume in Rwanda, 2010-2019



Source: Author’s calculations using data from the Government of Rwanda.

A5: Survival analysis of firm exports using ASYCUDA data



Source: Author’s calculations using data from the Government of Rwanda.

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