



ENHANCING COHERENCE BETWEEN TRADE AND INDUSTRIAL STRATEGIES IN AFRICA

The Experience of Rwanda





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Abstract

Recent research indicates that Rwanda needs to foster the development of productive capacities to enhance prospects for achieving its development vision and build resilience to current and emerging shocks. The government recognizes the importance of developing productive capacities and diversifying the economy and has incorporated these as priorities in its development strategies. However, progress has been modest as reflected in the very limited role of manufacturing activities in the economy and in exports. It is also reflected in the low share of Rwanda in global trade and industrial output relative to its share of global population. Several factors have been adduced for the low levels of diversification and productive capacities in Rwanda ranging from the small size of domestic markets and high trade costs associated with being landlocked to infrastructure bottlenecks, shortage of raw materials, skills gap, finance constraints and challenges in domestic policy design and implementation.

This paper focuses on the role of trade and industrial policies in fostering productive transformation in Rwanda. It identifies areas where there is the need for policy action to make trade and industrial policies more consistent with the goal of diversification and development of productive capacities. It also offers recommendations on how to make trade and industrial policies more supportive of the goal of productive transformation and enhance prospects for achieving Rwanda's vision of being an upper middle-income country by 2035 and a high-income country by 2050.

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I. Introduction

Rwanda has made significant progress in social and economic development over the past few decades. Real output growth increased from 3.23 percent in the period 1991–2000 to 8.23 percent in 2001–2010 and 7.32 percent in 2011–2018 (table 1). Its growth performance is impressive given the fact that it has been consistently above the African average in the past few decades. Rwanda has also made some progress with regard to social aspects of development, with its human development index increasing from 0.245 in 1990 to 0.536 in 2018. Despite the progress that has been made in both economic and social indicators, recent research indicates that the country would have to grow at a much higher rate in order to eradicate poverty, enhance living standards, and achieve the governments vision of becoming an upper middle income country by 2035 and a high income country by 2050. For example, World Bank (2019) suggests that in order to achieve its long-term vision, real output per capita must grow at more than 10 percent per annum. Over the period 2011–2018 the average annual growth of real output per capita in Rwanda was about 4.6 percent, which is about 5.4 percentage points below what would be needed to achieve upper middle-income status by 2035. In this context, going forward a major challenge facing the government is how to foster more rapid and higher economic growth than in the recent past. This challenge has been compounded by the ongoing Coronavirus (COVID-19) pandemic, which is expected to have negative impact on growth and development in African countries both in the short and medium term. The turmoil began as a health crisis in Wuhan, China, and quickly spread to other parts of the world forcing the World Health Organization (WHO) to declare it as a global pandemic on 11 March 2020. So far, relatively very few cases have been observed in Rwanda but the fact that the health crisis has forced leading economies and trade partners into recession suggests that it would have significant consequences for growth and development in Rwanda.¹

The health and economic crises associated with COVID-19 are still ongoing so it is too early to know precisely what the ultimate impact on growth and development in Rwanda would be. Nevertheless, growth forecasts by key international organizations before and during the crises can give us an indication of the likely consequences of the crises for Rwanda. For example, in the regional economic outlook for sub-Saharan Africa published by the International Monetary Fund (IMF)

¹ Information on the website of the Johns Hopkins University Coronavirus Resource Center indicates that, as of 26 August 2020, the total number of confirmed COVID-19 cases at the global level was 23,933,343 and the number of deaths was 820,286. Rwanda had 3,537 confirmed cases and 15 deaths.

Table 1: Economic growth performance

	Rwanda		Africa	
	Real GDP growth	Real GDP per capita growth	Real GDP growth	Real GDP per capita growth
1971–1980	5.64	2.35	4.35	1.56
1981–1990	1.89	-1.58	1.92	-0.90
1991–2000	3.23	2.00	2.42	-0.12
2001–2010	8.23	5.71	5.47	2.88
2011–2018	7.32	4.62	2.75	0.14

in April 2020, it is estimated that real output growth in Rwanda in 2020 will be 3.5 percent, which is about 4.6 percentage points below the estimate provided in the October 2019 projection made before the onset of the crises (IMF 2020). Clearly, this is an estimate and the actual and ultimate impact will depend on the efficacy of measures taken by the government and the international community in response to the crises. It will also depend on domestic efforts to cushion the effects of shocks through diversification of the production and export structures of the economy. Research by UNCTAD and other international institutions indicate that Rwanda needs to foster the development of productive capacities to enhance prospects for achieving its development vision and build resilience to current and emerging shocks. The government also recognizes the importance of developing productive capacities and diversifying the economy and has incorporated these as priorities in its development strategies. However, progress has been modest as reflected in the very limited role of manufacturing activities in the economy and in exports. It is also reflected in the low share of Rwanda in global trade and industrial output relative to its share of global population. Several factors have been adduced for the low levels of diversification and productive capacities in Rwanda ranging from the small size of domestic markets and high trade costs associated with being landlocked to infrastructure bottlenecks, shortage of raw materials, skills gap, finance constraints and challenges in domestic policy design and implementation.

This paper focuses on the role of trade and industrial policies in fostering productive transformation in Rwanda. It identifies areas where there is the need for policy action to make trade and industrial policies more consistent with the goal of diversification and development of productive capacities. It also offers

recommendations on how to make trade and industrial policies more supportive of the goal of productive transformation and enhance prospects for achieving Rwanda's vision of being an upper middle-income country by 2035 and a high-income country by 2050.

The rest of the paper is organized as follows. Section II of the paper presents an overview of industrial and trade performance of Rwanda while section III examines the linkages between trade and industrial policies and the challenge of productive transformation in Rwanda. Section IV identifies and discusses coherent policies for productive transformation in Rwanda and the final section contains conclusions.

II. Overview of industrial and trade performance

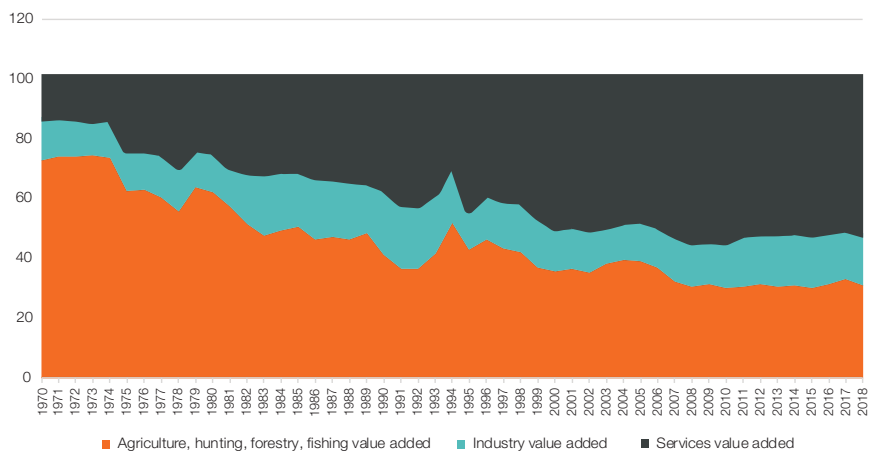
Over the past few decades, there has been significant changes in the structure of the Rwandan economy, with the contribution of agriculture to GDP decreasing and that of services increasing at a rapid rate. In the period 1970–80 the annual average share of agriculture in GDP was about 67 percent, while industry and services contributed about 14 percent and 19 percent respectively (table 2). Since the turn of the Millennium the service sector has emerged as the leading sector of the economy accounting for about 51 percent of output in the period 2011–18. Despite the increasing role of services in the economy, the agriculture sector still accounts for more than 60 percent of employment in the economy and so is crucial for poverty alleviation. Relative to the service sector, the industrial sector's share of output has not changed significantly over the past few decades (figure 1). In the period 2001–10, its contribution was about 15 percent and in 2011–18 it was about 18 percent. Within the industrial sector, manufacturing activities also account for a very low share of output. In 1970–80 manufacturing activities accounted for about 7.5 percent of output. Its contribution reached a peak of 9.9 percent in 1991–2000 and then fell to 6.3 percent in 2011–18. It should be noted that although manufacturing plays a limited role in output, it accounts for a significant share of new jobs created in the economy. For example, based on the labour force survey for 2017–18 manufacturing accounted for about 21 percent of new jobs created in the economy, making it the second most important source of new jobs after construction which accounted for 25 percent.

Table 2: Average annual contribution of sectors to output

	Agriculture, hunting, forestry, fishing	Industry		Services
		All industries	Manufacturing	
1970–80	66.9	13.8	7.5	19.2
1981–90	48.7	19.4	8.1	32.0
1991–20	41.4	18.2	9.9	40.4
2001–10	35.0	14.7	6.6	50.3
2011–18	31.2	17.8	6.3	51.0

Source: UNCTADstat.

Figure 1: Trends in sectoral shares of GDP (%)



Source: UNCTADstat.

The limited roles of manufacturing and industry in Rwanda is a consequence of the low levels of productive capacities in the economy. UNCTAD has computed an index of productive capacities for 193 countries based on eight components: transport, energy, information and communications technologies (ICTs), human capital, natural capital, institutions, private sector and structural change. The productive capacities index (PCI) ranges from 0 to 100, with higher values

indicating higher levels of productive capacities. Based on the index for 2018, Rwanda had a score of 25.42, which is slightly above the average for least developed countries (LDCs) but below the average for landlocked developed countries (LLDCs). While the 2018 score is low, it reflects a significant increase from the score of 19.09 in 2000 driven largely by improvements in human capital, institutions and the private sector. The components of the index where Rwanda had the least performance were energy and structural change.

As in most small economies, trade plays a vital role in the economic development of Rwanda. It provides access to technology, satisfies consumers love for varieties of consumption goods, and is a crucial source of foreign exchange needed for imports of capital and intermediate goods used by domestic industry. Available data indicates that the role of trade in the economy has increased over the past few decades from 32 percent of GDP in the period 1970–1980 to 33 percent in 1991–2000 and 48 percent in 2011–2018 (table 3 and table 4). This increase in the role of trade is also reflected in the fact that the value of merchandise exports increased from a mere \$121 million in 1980 to about \$1.17 billion in 2019 while the value of merchandise imports rose from \$262 million to \$2.7 billion over the same period (figure 2). Interestingly, this increase in the role of trade in the economy has gone hand in hand with an increase in trade deficits as is evident in the fact that imports account for a much larger share of GDP than exports. Closing this trade gap through boosting exports, particularly in dynamic products with high income elasticities of demand is one of the priorities of the government. There is also an attempt to reduce the deficits through increasing domestic production of imported consumer goods as enumerated in the Made in Rwanda (MIR) policy prepared by the government in December 2017. Other aims of the MIR policy are to enhance competitiveness of Rwandan products and services and to encourage Rwandans to buy locally made products by changing the perception that locally made goods are of lower quality than imported products.

History has shown that it is not only the value of trade that matters for development but also its composition. While Rwanda has experienced a rapid increase in exports and imports over the past few decades, the economy is still heavily dependent on exports of commodities. In 2018, about 25 percent of exports was made up of food items, Ores and metals accounted for 20 percent, Fuels accounted for 8 percent and manufactured goods accounted for 8 percent (table 5). Relative to 1995, there has been a decline in the importance of food items in export and an increase in the importance of Ores and metal and fuels. Regarding imports, its composition is quite different from that of exports. For example, in 2018 manufactured goods accounted for about 78 percent of imports while food items accounted for about 16 percent, Ores and metals for 1.5 percent and

	1970–80	1981–90	1991–20	2001–10	2011–18
Exports of goods and services (% of GDP)	12.9	9.5	6.1	11.0	15.0
Imports of goods and services (% of GDP)	19.2	19.4	27.2	25.9	33.0
Trade (% of GDP)	32.1	28.9	33.3	36.9	48.0
External balance on goods and services (% of GDP)	-6.3	-10.0	-21.0	-15.0	-18.1

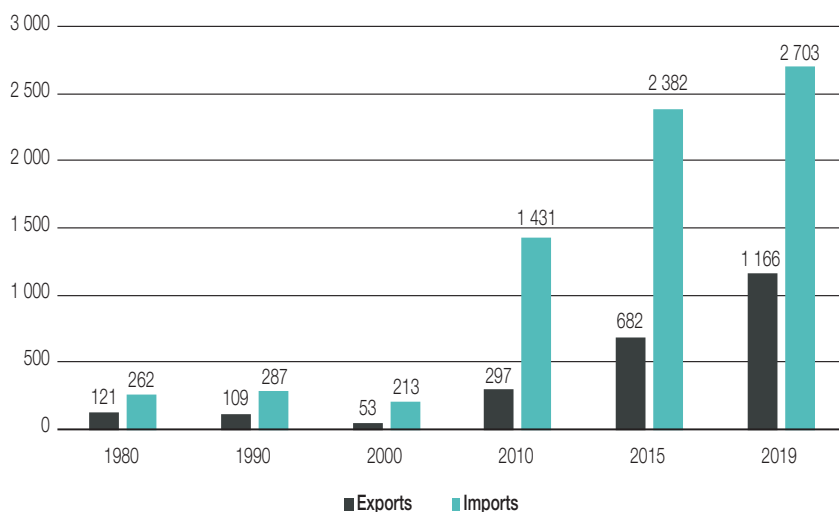
Source: UNCTADstat. and World Bank.

	Exports	Imports
1992–1995	-14.26	-14.51
1995–2000	-0.74	-1.79
2000–2005	14.18	10.78
2005–2010	19.25	29.47
2010–2015	17.54	9.33
2016–2019	15.32	3.45
2016	7.23	-5.36
2017	42.46	-0.68
2018	7.59	9.23
2019	3.98	10.56

Source: UNCTADstat.

Fuels for 2 percent. In other words, Rwanda's trade structure is similar to those of many African countries, with exports predominantly primary commodities and imports mostly composed of manufactured goods. In this context, there is the urgent need to diversify the economy to enhance the prospect of achieving upper middle-income status in 2035 and high-income status in 2050. Given Rwanda's vision of being an upper middle-income country by 2035, it would be interesting to compare its current structure to those of middle-income countries. Table 6

Figure 2: Values of merchandise exports and imports (million \$)



Source: UNCTADstat.

presents the export structures of Rwanda, Mauritius, South Africa, and Vietnam. Two of these countries, Mauritius and South Africa, are currently classified as upper middle-income countries while the third, Vietnam, is a lower middle-income country. In Mauritius, manufactured goods dominate exports, accounting for 47 percent of exports in 2018 followed by food items with a share of 30 percent. In South Africa, manufactured goods account for 42 percent of exports in 2018, Ores and metals for 25 percent, food items for 10 percent, and fuels for 10 percent. In Vietnam, manufactured goods account for 81 percent of exports in 2018, food items for 12 percent, fuels for 3 percent and Ores and metals for 1 percent. The key take-away from these figures is that manufactured goods play a crucial role in the exports of middle-income economies and so if Rwanda wants to achieve middle income status there is the need to diversify exports and build productive capacities, particularly towards manufactured goods.

Investment is a driver of development of productive capacities and diversification and ensuring that it is allocated to production activities in priority sectors has been a challenge for African policymakers. In Rwanda, promotion of productive investment for economic transformation and diversification is an important goal of development policies. In 2018, about 29 percent of the FDI stock in Rwanda was in ICT, 19 percent in the financial sector, 13 percent in manufacturing, 11 percent in electricity, 9 percent in tourism, 8 percent in wholesale, and 4 percent in mining.

Table 5: Rwanda's Merchandise Exports and Imports by Product Category

		1995		2018	
	Product	Value (thousand \$)	Share	Value (thousand \$)	Share
Exports	Total all products	51 979	100.00	1 125 800	100.00
	All food items (SITC 0 + 1 + 22 + 4)	37 449 479	72.05	27 795 967	24.69
	Ores and metals (SITC 27 + 28 + 68)	3 702 693	7.12	230 404 042	20.47
	Fuels (SITC 3)	86 496	0.17	92 328 751	8.20
	Manufactured goods (SITC 5 to 8 less 667 and 68)	4 233 341	8.14	98 031 757	8.71
	Others		12.52		37.93
Imports	Total all products	241 007	100.00	2 518 100	100.00
	All food items (SITC 0 + 1 + 22 + 4)	68 226 709	28.31	40 767 444	16.19
	Ores and metals (SITC 27 + 28 + 68)	4 761 549	1.98	37 065 332	1.47
	Fuels (SITC 3)	23 708 003	9.84	55 010 332	2.18
	Manufactured goods (SITC 5 to 8 less 667 and 68)	134 424 678	55.78	1 973 404 524	78.37
	Others		4.09		1.79

Source: UNCTADstat.

Regarding FDI inflows, about 40 percent was in electricity, 21 percent in ICT, 19 percent in financial sector, 7 percent in manufacturing, 4 percent in wholesale, 4 percent in agriculture, and 2 percent in transportation. In terms of origin of FDI, in 2018, about 51 percent of the inflows came from Mauritius, 17 percent from the Netherlands, 7 percent from Kenya, and 6 percent from the United States (NBR 2019).

Technology also plays an important role in diversification and building of productive capacities of economies and its level of development is generally reflected in the type of products exported. Economies with high levels of technology and

Table 6: Structure of Merchandise Exports across Selected Countries

	Status	Product	1995 (Share)	2018 (Share)
Mauritius	Upper middle income	Total all products	100.00	100.00
		All food items (SITC 0 + 1 + 22 + 4)	28.94	30.30
		Ores and metals (SITC 27 + 28 + 68)	0.19	0.56
		Fuels (SITC 3)	0.01	0.92
		Manufactured goods (SITC 5 to 8 less 667 and 68)	68.38	47.13
Rwanda	Low income	Total all products	100.00	100.00
		All food items (SITC 0 + 1 + 22 + 4)	72.05	24.69
		Ores and metals (SITC 27 + 28 + 68)	7.12	20.47
		Fuels (SITC 3)	0.17	8.20
		Manufactured goods (SITC 5 to 8 less 667 and 68)	8.14	8.71
South Africa	Upper middle income	Total all products	100.00	100.00
		All food items (SITC 0 + 1 + 22 + 4)	9.98	10.92
		Ores and metals (SITC 27 + 28 + 68)	19.02	25.04
		Fuels (SITC 3)	10.93	10.60
		Manufactured goods (SITC 5 to 8 less 667 and 68)	43.55	42.24
Vietnam	Lower middle income	Total all products	100.00	100.00
		All food items (SITC 0 + 1 + 22 + 4)	30.22	11.94
		Ores and metals (SITC 27 + 28 + 68)	0.47	1.24
		Fuels (SITC 3)	17.96	3.40
		Manufactured goods (SITC 5 to 8 less 667 and 68)	43.68	80.83

Table 6: Structure of Merchandise Exports across Selected Countries (cont.)

	Status	Product	1995 (Share)	2018 (Share)
Africa		Total all products	100.00	100.00
		All food items (SITC 0 + 1 + 22 + 4)	15.01	11.84
		Ores and metals (SITC 27 + 28 + 68)	8.71	11.23
		Fuels (SITC 3)	37.93	43.26
		Manufactured goods (SITC 5 to 8 less 667 and 68)	25.55	23.01

Source: UNCTADstat.

innovation tend to export sophisticated products, mostly in the manufacturing sector. A classification of Rwanda's exports by technological category suggests it has made some progress over the years by reducing dependence on primary products. The share of primary commodities in total exports fell from 83 percent in 1995 to 46 percent in 2010 and 22 percent in 2018, while the share of resource-based manufactures in exports increased from about 8 percent in 1995 to 39 percent in 2010 and about 29 percent in 2018 (table 7). The contributions of low, medium and high technology products to exports are still very low and need to be enhanced.

III. Trade and industrial policies and the challenge of productive transformation

Trade performance is linked to industrial performance

A key fact of modern economic development is that manufacturing plays a vital role in the economic development process. It permits firms to exploit economies of scale in production, provides access to new technologies, creates decent jobs, and has strong backward and forward linkages which enhance its development impact in an economy. This pivotal role of manufacturing in development is reflected in the fact that countries that have good industrial performance have good trade

Table 7: Rwanda's Merchandise Exports Structure by Technological Categories

Lall classification of products	1995	2010	2018
Primary products	82.6	46.0	22.4
Resource-based manufactures: agro-based	0.5	3.4	5.4
Resource-based manufactures: other	7.6	39.4	28.8
Low technology manufactures: textile, garment and footwear	0.4	1.3	1.0
Low technology manufactures: other products	0.9	5.1	1.5
Medium technology manufactures: automotive	2.0	0.8	0.7
Medium technology manufactures: process	2.5	1.1	0.7
Medium technology manufactures: engineering	1.5	1.4	1.3
High technology manufactures: electronic and electrical	0.3	0.7	1.6
High technology manufactures: other	0.0	0.5	0.6
Unclassified products	1.7	0.5	36.0
Total	100	100	100

Source: UNCTADstat.

performance and also higher income levels. Table 8 presents the contributions of various country groupings to total merchandise trade. It shows that industrialized economies, which are mostly high-income countries, account for the bulk of global merchandise trade. Within developing and transition economies, the main exporters of manufactured goods also account for a significant share of merchandise trade. For example, in 2019 this group of economies accounted for about 33 percent of global merchandise trade compared to 7 percent for exporters of petroleum, 0.91 percent for exporters of agricultural products, and 0.89 percent for exporters of minerals and mining products. These facts suggest an important link between industrial and trade performance of countries that African countries should fully exploit in order to enhance their role in the global trading system and derive significant benefits from global economic integration.

Another way to demonstrate the association between industrial and trade performance in modern economic development is to present graphs capturing cross-section relationships between industry value added and merchandise exports across countries. In figure 3 we present this information using data for developing countries for the period 1970–2018. The figure shows that there is a

Table 8: Contributions to global exports by country categories (%)

	1980	1990	2000	2010	2015	2016	2017	2018	2019
Low-income economies	0.60	0.43	0.29	0.38	0.30	0.29	0.31	0.31	0.29
High-income economies	78.13	82.93	79.17	68.31	66.41	67.36	66.74	66.19	65.74
Main exporters of petroleum in developing and transition economies	17.16	7.70	6.38	9.63	6.94	6.01	6.72	7.75	7.12
Main exporters of manufactured goods in developing and transition economies	7.61	13.61	21.69	28.16	33.14	32.72	32.71	32.36	32.85
Main exporters of agricultural products in developing and transition economies	1.50	1.09	0.93	1.08	0.93	0.93	0.89	0.85	0.91
Main exporters of minerals and mining products in developing and transition economies	0.80	0.60	0.56	0.93	0.83	0.87	0.93	0.93	0.89
Net food-exporting developing economies	7.37	7.20	10.26	12.15	12.71	12.97	13.29	13.23	13.55
Industrialized economies	75.09	84.25	79.82	68.48	66.33	66.94	66.45	65.89	65.43
Emerging Industrial Economies	17.22	11.89	16.11	26.19	28.69	28.15	28.32	28.62	28.86

Source: UNCTADstat.

positive relationship between the share of industry value added in GDP and the share of merchandise exports in GDP, with a correlation coefficient of about 0.30. In other words, countries with a high share of industry value added in GDP tend to have high shares of merchandise exports in GDP. When we consider manufacturing value-added and manufactured exports the correlation coefficient is 0.36, indicating a strong association between manufacturing value added and manufactured goods exports across developing countries. Therefore, as should be expected the relationship is much stronger when the data is restricted to manufacturing rather than industry value added. Interestingly the results are also stronger when the data is restricted to countries in sub-Saharan Africa, where the

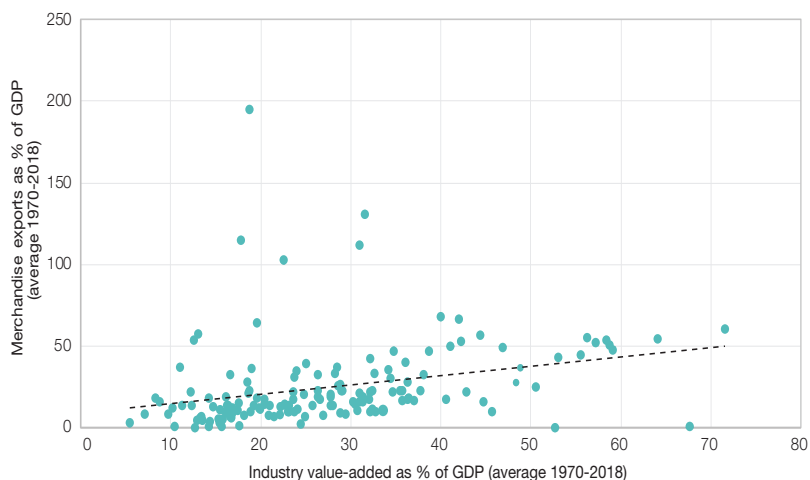
correlation between industry value added and merchandise exports is as high as 0.66 (figure 4). Although these facts do not establish causality, they do suggest an important link between industrial and trade performance of countries, which should be taken into account in the design and implementation of development policies for productive transformation.

Rwanda, like most African countries plays a very limited role in the global market for manufactured goods, as evidenced by the fact that it accounts for a very small share of global manufacturing value added both in absolute terms and also relative to its share of global population. While the small size of the country and the prevalence of trade barriers may have contributed to this phenomenon, it is fair to say that it is also a result of the very low levels of productive capacities and diversification of the economy. Over the past few decades, several efforts have been made by the government to reverse this trend through initiatives and programs to diversify the production and export structures of the economy. In 2000 the government adopted Vision 2020 as its long-term development framework aimed broadly at transforming the country from a low-income to a middle-income country by 2020. The three specific objectives were to foster macroeconomic stability and wealth creation to reduce aid dependency, induce structural economic transformation, and create a productive middle class and foster entrepreneurship. This long term vision is operationalized through the following medium term strategies: the Poverty Reduction Strategy Papers (2002–2006), the Economic Development and Poverty Reduction Strategy (EDPRS I) for the period (2007–2012), EDPRS II for the period (2013–2018) and the National Strategy for Transformation (NST) covering the period (2018–2024).

The NST, which is the current medium-term strategy, has three core priorities: economic transformation, social transformation, and transformational governance. It is operationalized through sector strategic plans in agriculture, education, energy, health, ICT, finance, water and sanitation, social protection, transport, among others. The NST is considered a bridge between Vision 2020 which ends in 2020 and Vision 2050, which is the new long-term plan for the country. As with Vision 2020, economic transformation is one of the key priorities in Vision 2050. More specifically, the five core priorities of Vision 2050 are: High Quality and Standards of Life; Developing Modern Infrastructure and Livelihoods; Transformation for Prosperity; Values for Vision 2050; and International Cooperation and Positioning.

As is to be expected, trade and industrial policies are important instruments in the implementation of Rwanda's development plans. Rwanda adopted its national trade policy in 2010 with the stated vision of "growing sustainable and diversified quality products and services for trading locally, regionally and internationally, with the aim of creating jobs, increasing incomes and improving the living standards of Rwandans."

Figure 3: Relationship between industry value added and merchandise exports

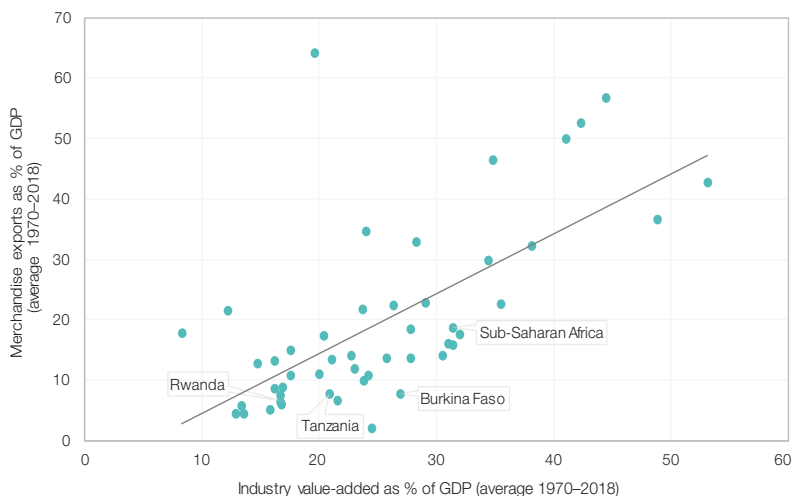


Source: compiled using data from UNCTADstats.

The national trade policy has been complemented with the Competition and Consumer Protection Policy (2012), the Cross Border Trade Strategy (2012), the Trade Logistics and Distribution Strategy (2012), the National Export strategy (2015) and the Intellectual Property Rights Policy (2018). Regarding industrial development, Rwanda’s industrial policy was formulated in 2011 with a focus on increasing domestic production for local consumption, enhancing export competitiveness and creating an enabling environment for industrialization. In addition to the industrial policy there are other complementary initiatives geared towards promoting industrial development such as the SME Development Policy (2011), Special Economic Zone Policy (2017), and the Made in Rwanda Policy (2018).

Regarding the institutional framework and process for policymaking, in Rwanda the Ministry of Trade and Industry (MINICOM) is responsible for the formulation of trade and industrial policies. It also coordinates the implementation of these policies in the country. The fact that in Rwanda trade and industrial development are under the same Ministry is a good recognition of the interface between trade on one hand and economic transformation and productive capacity development on the other. It is also good practice that has been observed in newly industrialized developing countries in Asia. For example, in South Korea, trade and industrial development issues are under the Ministry of Trade, Industry and Energy (MOTIE) and in Singapore they are under the Ministry of Trade and Industry (MTI).

Figure 4: Industry value added and merchandise exports in sub-Saharan Africa



Source: compiled using data from UNCTADstats.

In performing its lead role in design and implementation of trade and industrial policies MINICOM works in collaboration with the following ministries and establishments: the Ministry of Agriculture and Animal Resources (MINAGRI), the Ministry of Finance and Economic Planning (MINECOFIN), the Ministry of Foreign Affairs, Cooperation and East African Community (MINAFFET), the National Bank of Rwanda (NBR), the National Agricultural Export Development Board (NAEB), the Rwanda Standards Board (RSB), the Rwanda Development Board (RDB), and the Rwanda Revenue Authority (RRA). In addition to the roles played by relevant line ministries and establishments, there is also a process for consultation of the private sector and other local stakeholders in the formulation and implementation of trade and industrial policies. The National Trade Facilitation Committee, which replaced the National Development and Trade Policy Forum (NDTPF) in 2015 is the current official platform for involvement of the private sector and other stakeholders in the trade policymaking process (WTO 2019).

Strengthening coherence is needed in aspects of trade and industrial policies

Rwanda has a well-developed and functional framework for formulation and implementation of trade and industrial development policies. Its policies are

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guided by a Vision of where the country would like to be over a specified period. Key stakeholders are consulted in the design and implementation of policies. Policies are costed and reflected in budgets and there is a process for monitoring and evaluation of policies. Nevertheless, there are areas where there is room for improvement in policy design and implementation to ensure better development outcomes in terms of fostering productive transformation. In Rwanda, there are mechanisms in place to ensure that trade policies are developed considering their impact on other development policies and that industrial policies are developed taking into account the impact on trade policies. However, the fact that these two strongly related policies are developed separately and at different times does not permit a proper and full exploitation of the synergies and complementarities between these two crucial drivers of productive transformation. Trade and industrial policies are two sides of the same coin and the strong linkages and complementarities between them calls for an integrated approach to policy formulation and implementation for coherence and maximum impact.

In addition to the fact that Rwanda has separate trade and industrial policies frameworks or documents, there are multiplicities of policies and strategies geared towards promoting trade and industrial development in the country. For example, on trade policy there is the National Trade Policy (2010), the Cross-Border Trade Strategy (2012), and the National Export Strategy (2015). Similarly, on industrial development there is the SME Development Policy (2011), the Special Economic Zone Policy (2017), the Made in Rwanda Policy (2018) and the National Strategy for Transformation (NST). These are all very useful documents but having several strategies to address related trade and industrial development issues creates room for policy incoherence. These documents often have overlapping goals, which can result in duplication of efforts and make achieving policy coherence challenging. It would be desirable to integrate these policy documents into a comprehensive trade and industrial development strategy or framework to make implementation and monitoring and evaluation of policies much easier and enhance their development impact.

Another area in which the implementation of trade policy seems to be at odds with the objective of promoting industrial development is on plastics. The government has been concerned about the environmental damage caused by plastics: they litter streets, cause pollution, threaten animal health, propagate diseases, and clog drainage systems. To address this environmental challenge, in 2005 the import and use of plastics of less than 100 micron thick was banned. This was followed in 2008 by a ban on the importation and use of non-biodegradable packaging bags (Behuria 2019a). Furthermore, in 2019, the government imposed a ban on single-use plastics such as straws, plastic plates, cups, cutlery, and

plastic packaging materials among others. While this is a well-intentioned policy, it has consequences for the achievement of the industrial development and transformation objectives of the country. Because plastics are durable, lightweight, and cheap, they are widely used in production and transportation of manufactured products and so the imposition of a ban on plastics puts domestic manufacturers at a cost disadvantage relative to their foreign competitors who are less constrained. It should be noted that Rwanda's neighbors and competitors such as Kenya and Uganda have also instituted bans on plastics on several occasions. However, unlike in Rwanda, implementation of these policies has been sluggish which puts Rwandan firms at a competitive disadvantage². One of the lessons from the plastic ban policy in Rwanda is the need to provide domestic manufacturers adequate time to adjust to the policy before it is fully implemented to reduce the potentially negative impact on domestic firms. Another lesson is the need for targeted support to domestic firms operating in the plastics industry to enable them exploit new opportunities created by the ban. For example, the ban has created opportunities in recycling and in plastic substitutes such as paper bags and cloth bags. But domestic firms engaged in these substitute activities cannot compete with paper and cloth bags imported tariff-free from Kenya within the framework of the East Africa Community (EAC) Customs Union agreement. In this context, there is the need for Rwanda to consider designating these substitute bags as special products requiring protection under the EAC Customs Union (Behuria 2019a).

Rwanda has a strong commitment to free trade and open markets, which is not surprising given its small size and the fact that it is landlocked. In line with this commitment the economy has experienced very rapid trade liberalization over the past few decades. While the liberalization of trade has gone hand in hand with a significant increase in exports, especially traditional exports, it has also increased competition facing domestic manufacturing firms and made industrial development and productive transformation even more challenging. Experience has shown that rapid trade liberalization leads to surges in imports of consumer goods and the demise of domestic manufacturing in many countries in Africa. For example, it has been argued that a significant part of the decline in production of apparel in many African countries since the 1980s was due in part to an increase in imports of used clothing following trade reforms (Behuria 2019b; Ggombe and Newfarmer 2017; Fraser 2008). Furthermore, trade reforms are necessary and can boost growth and exports in poor developing countries, but they do not necessarily foster diversification and production transformation, particularly in economies with high trade costs and where there are imperfections in domestic

² In 2017 the East African Community passed the Polyethylene Materials Control Bill.

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input markets. In this context, the need for success in productive transformation in Rwanda calls for a more gradual approach to liberalization than in the past to give domestic firms more space to address or lift input market imperfections that constrain supply capacities and enhance their ability to compete in export markets (Osakwe, Santos-Paulino and Dogan, 2018).

Rwanda is involved in several bilateral trade agreements between African countries and their development partners which have provided it access to key export markets. For example, it participates in the European Union's Everything but arms treaty and until recently was one of the beneficiaries of the United States African Growth and Opportunities Act (AGOA). While these agreements provide opportunities for trade, they also constrain the use of domestic policy instruments needed to promote industrial development and productive transformation. Trade agreements between African countries and major donors come with conditionalities or requirements that they must satisfy for eligibility to participate in the programmes. Rwanda's experience with the United States regarding the banning of imports of secondhand clothing into Rwanda is a stark reminder of the constraints imposed on the exercise of domestic industrial policy by participation in bilateral trade agreements with donors. In 2016 the EAC decided to ban imports of used clothing and leather products into member States by 2019. Following this decision, there was pressure on EAC members not to implement this decision and most of the countries, except Rwanda, backed down. As a result, in July 2018, Rwanda was removed from the list of countries eligible to participate in the AGOA programme, which presented challenges for the domestic firms who depended on AGOA for access to export markets. The key lesson from this experience is that African countries that are keen to foster industrial development and productive transformation have to balance the trade benefits from participation in bilateral treaties against the loss of policy space associated with these initiatives before making a decision on whether or not to participate. Another lesson from the experience is that when policies of this nature are to be implemented the timing should reflect the supply response capacity of domestic firms. The ban on secondhand clothing in Rwanda was aimed at reducing imports and boosting local production which made good economic sense. But it was implemented at a time when the capacity of domestic firms to supply the import-substituted goods was weak. As a result, domestic firms face challenges filling the gap left by the import ban.

The application of the EAC common external tariff (CET) also presents challenges for industrial development and productive transformation given the fact that a significant portion of imports into Rwanda is made up of capital and intermediate inputs used by domestic industry. The CET was implemented by the EAC in 2005

but Rwanda adopted it in 2009 after it joined the EAC in 2007. The CET has three bands: raw materials and capital goods are supposed to have zero tariffs, intermediate goods 10 percent tariffs, and final and consumer goods 25 percent tariffs (WTO 2019). In addition to the three tariff-bands specified above, products designated as sensitive products could have applied tariffs above 25 percent. In principle, these bands were chosen to ensure that domestic manufacturers who import capital and intermediate inputs can procure them at rates that do not put them at a competitive disadvantage relative to their competitors. However, in practice tariffs applied to several capital and intermediate inputs are those meant for final and consumer goods. This has been ascribed to the misclassification of capital and intermediate goods as consumer or final goods, which results in their facing higher applied tariffs meant for final goods. In principle, the misclassification problem could be addressed by firms using the “Duty Remission Schemes” which permits companies to apply for an exemption from application of tariffs at CET-level for a product if the imported good is used for production. However, some firms may not be aware of these provisions and those that are aware may find the exemption process too costly to adhere to. These challenges have consequences for procurement of intermediate and capital goods used by domestic firms and hence implications for competitiveness and industrial development (Shepherd and Twum 2018; Newfarmer and Twum 2018).

IV. Fostering coherent policies for productive transformation in Rwanda

Rwanda has an established and functional framework for trade and industrial policies. However, it has separate national trade and industrial policy frameworks developed at different periods in addition to other strategies on issues related to trade and industrial development. Economic history has taught us that there is a strong linkage between trade and industrial performance, which calls for an integrated approach to trade and industrial strategies to ensure policy coherence. It would be desirable for Rwanda to integrate these policy documents into a comprehensive trade and industrial development strategy or framework to make implementation and monitoring and evaluation of policies much easier and enhance their development impact. In addition, there is the need to address specific aspects of design and implementation of trade policy that are not fully supportive of the goal of productive transformation. These include the policy on plastics, the nature and scope of bilateral agreements with key development

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partners, and the implementation of regional integration agreements, particularly the application of the EAC common external tariff. There is also the need to adopt a more gradual approach to trade liberalization to ensure that it does not put domestic firms at a disadvantage and enhance their survival rates.

The setting of realistic development targets enhances effectiveness of policies and the likelihood that they will result in expected development outcomes. One of the lessons from the implementation of Vision 2020 is that targets should be set considering the capabilities of domestic firms, the capacity of the government to implement policies, country endowments, and feasibility of policies geared towards achieving national development goals. These essential ingredients ensure that countries align their policies to their static and dynamic comparative advantage to ensure better development outcomes. In this context, going forward there is the need for future targets on industrial development in development plans to be set considering what is achievable within the period under consideration.

In addition to the need for coherent policies and realistic targets, enumerated and discussed above, there are five other areas where the government should consider strengthening policy action so that Rwanda could successfully transform its production and export structure and position itself to benefit from globalization and the changing nature of production. These include fostering productive investment; promoting technology and innovation; enhancing the quality of institutions; building human capital; and making regional integration work for productive transformation in Rwanda.

To induce structural change there is the need to attract more investment into priority production sectors of the economy, particularly in agro-processing and manufacturing. Increasing access to affordable finance for domestic firms in production sectors, strengthening infrastructure provision, particularly energy and transport, and reducing regulatory barriers that increase transaction costs are some measures that the government could take to boost production activities through catalyzing productive investment for transformative growth. There is also the need to enhance the quality of public investments through measures such as better project selection and delivery, better maintenance of infrastructure assets, and redirecting public investments to areas where it is challenging to attract private investment.

Technology and innovation are vital for productive transformation. Rwanda is one of the African countries that have made significant process in the area of information and communications technology over the past few decades due largely to conscious efforts by the government to foster technology and innovation. Despite the commitment of the government to fostering technology

and innovation, the impact on productive transformation has been minimal as evidenced by the fact that a large part of the exports of Rwanda is still either in primary commodities or resource-based manufactures. The contributions of low, medium and high technology products to exports are still very low and need to be enhanced. In this context, it would be desirable for the government to strengthen efforts to enhance the ability of domestic firms to absorb and adapt technologies in the production sector to enhance the role of low, medium and high technology products to exports.

Human capital development is one of the drivers of productive capacity development and industrialization. Entrepreneurs will have an incentive to invest if there is an abundant pool of both skilled and unskilled labour to support their investment and production activities. While Rwanda has made some progress in terms of developing human capital, there are indications that firms face significant challenges in obtaining skilled labour needed for production activities. In this regard, there is the need for the government to strengthen efforts to foster human capital development in the country. This will require stemming brain drain and also ensuring that the outputs of educational and vocational institutions meet the needs of domestic industry through, for example, fostering effective linkages between industry and universities and research institutes.

The quality of domestic institutions also contributes to productive capacity development and industrialization in a country. Good institutions foster the generation, use and diffusion of innovation, which is crucial for structural change. Institutions also establish the rules governing interactions between economic agents and also enforce contractual obligations thereby creating an environment conducive to investment. It is well known that Rwanda has relatively better institutions than most African countries and so efforts should be made to build on the progress that has been made in this area with a view to creating a robust foundation for investment and productive transformation of the economy.

Regional integration will play an important role in fostering productive capacity development and industrialization in Rwanda through, for example, enhancing market size and reducing trade costs. As a landlocked developing country, Rwanda has high trade costs which reduces its export competitiveness and impedes manufacturing development. The development of regional infrastructure could play a crucial role in reducing trade costs for Rwanda and unlocking its potential for manufacturing development. But there is the need for the government to ensure that the design and implementation of regional agreements are supportive of its overall goal of building productive capacity development and industrialisation.

V. Conclusion

The eradication of poverty and promotion of sustained and inclusive development is one of the development challenges facing Rwanda and other African countries. This challenge has been compounded by the Coronavirus pandemic which has triggered the worst decline in global economic activity since the great depression. It is evident that the crisis will have serious consequences for growth in Rwanda and that the development of productive capacities must be part of any package to effectively respond to the crisis. The government recognizes the need to build productive capacities not only in response to the crisis but also to address other development challenges such as reducing poverty and unemployment and enhancing integration into the global economy.

In both Vision 2020 and Vision 2050, trade and industrialization are regarded as important vehicles to trigger sustained growth and foster inclusive development. While over the past few decades some progress has been made on both fronts, performance has been limited relative to potential due to factors such as the small size of domestic markets, high trade costs associated with being landlocked, infrastructure bottlenecks, shortage of raw materials, skills gap, finance constraints, and challenges in domestic policy design and implementation. This paper focused on the role of trade and industrial strategies in explaining trade and industrial performance in Rwanda. It identified key areas where there is the need to strengthen coherence between trade and industrial strategies and offered suggestions on what needs to be done to accelerate progress in achieving the goal of productive transformation.

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