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Rwanda: an effective development model, rising to the challenge of its sustainability

Author Jules Porte

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Contents

Rwanda emerged from the 1994 genocide in a considerably weakened state. The country's strongman, Paul Kagame, came to power during this period of instability and gradual reconstruction. He became President of the Republic in 2000, and is still head of state today. The authorities, who derive their political legitimacy from the development imperative, play a central role in economic planning. Rwanda has thus developed effective governance mechanisms comparable to those of high-income countries. Some social progress has been made, including a substantial reduction in the poverty rate and improved health conditions. On the other hand, the model seems to be running out of steam and to be growing less and less inclusive, while inequalities are being reduced only moderately. The level of education is an obstacle to the country's development, while its small size poses a structural challenge, given that the population is expected to double by 2050.

The pace of economic growth has been particularly strong in Rwanda since 2000. Nevertheless, the process of convergence in terms of per-capita gross domestic product (GDP) seems to be slow, hampered as it has been by sustained population growth. Growth in GDP has been driven by state interventionism, which can be seen through large public investments and plans for the development of various sectors. In 2019, for instance, major public infrastructure projects such as the Kigali Arena, Bugesera International Airport in Kigali, and the construction of roads helped speed up growth considerably. Rwanda was expected to enter a recession in 2020 because of the global economic crisis brought on by the COVID-19 pandemic:

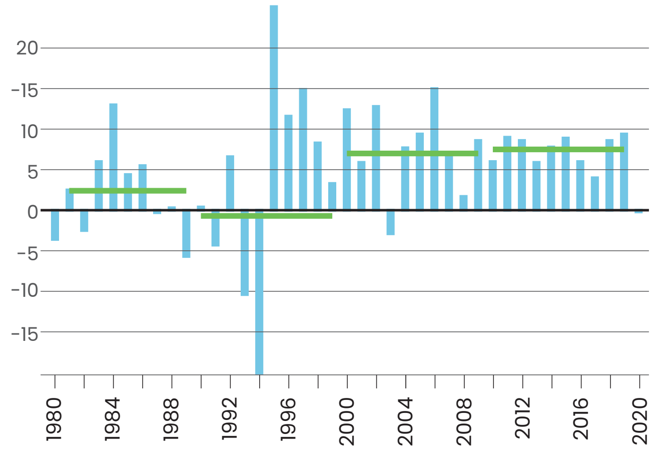
the International Monetary Fund (IMF) predicted a 0.2 percent drop in GDP.

The pace of growth in Rwanda is based in part on a running government deficit of about 5% of GDP. This imbalance is leading to a rapid deterioration in public finances, particularly as regards the ratio of public debt to GDP, which was expected to be higher than 65% at the end of 2020. This trend, coupled with the negative cyclical developments associated with COVID-19, led the IMF to revise Rwanda's risk of going into debt distress upwards, from low to moderate. This revision highlights the risks to the current growth model and makes clear that the trend for Rwanda’s indebtedness cannot continue if growth is to be sustained over the medium term. The country will have to find both alternative sources of financing, particularly by tapping into domestic resources and alternative sources of growth, by developing the private sector. Failing that, it will have to redefine its priorities.

1. The drivers of strong economic growth

Rwanda's recent history has been shaped by the 1994 genocide of the Tutsis. In the space of three months, nearly one million Tutsis and moderate Hutus were slaughtered. The civil war led about a million Rwandans to move to the west of the country and twice that number to take refuge in neighboring countries, particularly Zaire[1]. The economic consequences of the civil war and the genocide were disastrous. GDP per capita dropped by half, from USD 420 in 1993 to USD 221 in 1994. In terms of national wealth, the 1990s were a lost decade: the GDP that the country had in 1990 was not reached again until 2000 and its 1993 per capita GDP was not reached again until 2004. These figures aside, the country was left structurally weakened. Productive capacities were largely destroyed and the loss of seeds and livestock in particular hampered the resumption of activities. The loss of human lives and the displacement of the population disrupted the country, while the nation lost a generation of teachers, doctors and trained civil servants. Seen against this backdrop, Rwanda's performance in terms of economic growth in the period after the genocide has been particularly impressive.

Figure 1 - Real GDP growth over the long term



Growth rate (%)
Average annual growth rate (%)

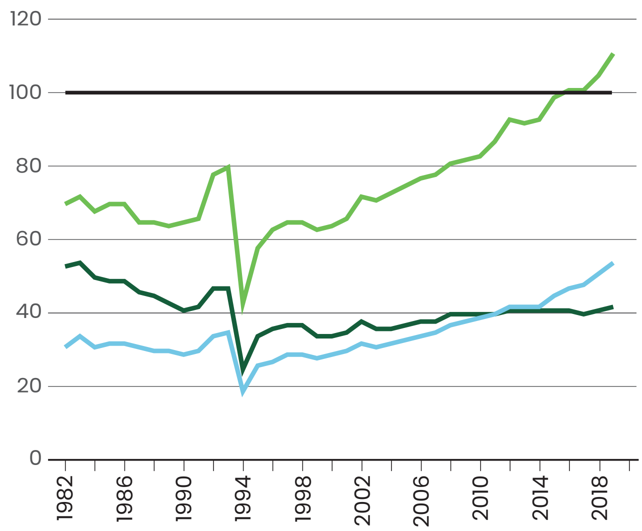
Source: IMF (WEO) and calculations by the author.

1.1 – The key role the state plays in fostering economic activity

The period from 1994 to the end of the decade was devoted to rebuilding the country. Starting in 2000, economic growth was particularly strong. Indeed, from 2000 to 2009, average annual growth was as high as 7.1%, and that figure rose to 7.6% from 2010 and 2019 (See Figure 1)[2].

Despite these positive trends, the process of convergence has been slow, hampered by strong demographic growth, which averaged 2.5% a year from 2000 to 2019. Thus, while Rwanda was aiming to become a middle-income country (MIC) in 2020, it missed its target, which it is now expected to reach only in 2030. Per capita GDP, which was 34% of the average for lower-middle-income countries (LMICs) in 2000, was still only 42% of the LMIC average in 2019 (Figure 2).

Figure 2 - Real GDP growth over the long term



Rwanda/average sub-Saharan Africa
Rwanda/LIC
Rwanda/LMIC

Source: World Bank (WDI) and calculations by the author.

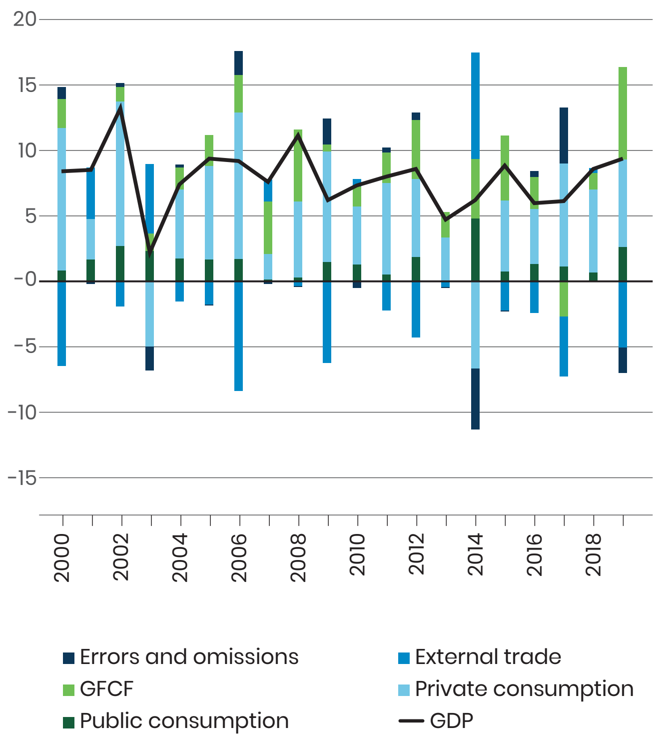
1 Renamed the Democratic Republic of the Congo (DRC) in 1997.

2 The present publication is based on data available in March 2021, date of the publication of the original version.

The sources of Rwandan growth, on both the demand and the supply side, depend in large part on state intervention in the economy. Household consumption was the main source of economic growth over this period, driven by sustained population growth and an improvement in people's living conditions. Overall, foreign trade played a negative role here, primarily because of a structural trade deficit. By contrast, it was the major public investments made by the state or public enterprises that contributed decisively to economic growth (Figure 3). Indeed, the share of public investment in GDP has gone up from 5% at the beginning of the period in question to an average of 15% in recent years. Overall, gross fixed capital formation (GFCF), which includes both public and private investment, rose from about 12% to 25% of GDP, thanks in no small measure to official development assistance (ODA), which has averaged about 17% of GDP each year since 2000. It is worth noting that this is 7 percentage points higher than the average level of aid received by low-income countries.

On the supply side over the same period, growth has been driven by a sectoral shift. Although it is steadily declining, the agriculture sector is still key to the Rwandan economy: it has accounted for an average of 1.8 percentage points in the growth in GDP each year since 2000. The share of GDP represented by agriculture has been gradually declining: it was about 50% in the 1970s, 35% in the 1990s and it now accounts for about a quarter of all economic activity (Figure 4). Agriculture is significant when it comes to employment: it accounted for 90% of jobs in the 1990s and for two-thirds even today (Figure 5). Like many African countries, Rwanda seems not to be undergoing a classic structural transformation: losses in the agricultural sector are being absorbed mainly by services, not by the industrial sector. The service sector now accounts for about 50% of economic activity (as against one-third in the 1970s) and nearly 30% of jobs (as against less than 10% in the early 1990s) and has accounted for an average of 4.4 percentage points in the growth of GDP each year since 2000 (Figure 6). The tertiary sector in particular has developed thanks to contributions from the sectors that are promoted in Rwandan development plans (see Box 1): tourism, including transport and aviation, and international conferences and events. In the meantime, the industrial sector is stagnating. The share of industry in GDP was higher in the 1980s (around 20 to 22% of GDP) than it is today (18% of GDP). There has been no notable change over the last two decades. While the share of employment represented by the industrial sector has risen by

Figure 3 - Contributions of demand factors to growth (%)

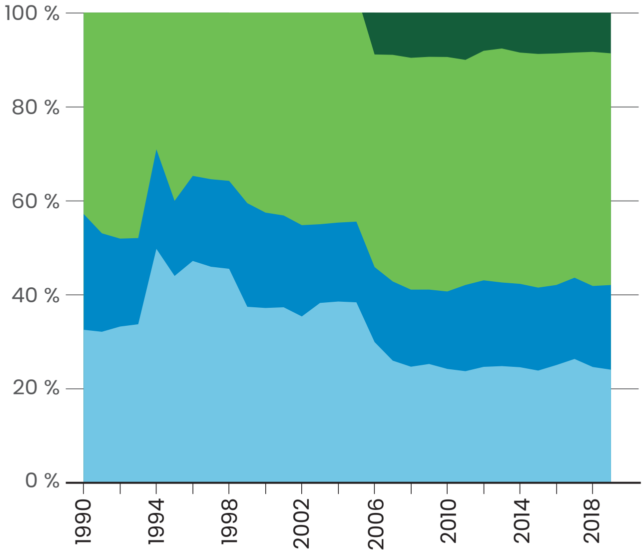


Source: IMF (WEO) and calculations by the author.

7 percentage points since the 1990s, it still accounts for only a small part of overall employment—less than 9%. It makes the lowest contribution to growth in GDP: 1.3 percentage points on average each year since 2000. Despite government initiatives such as "Made in Rwanda,"[3] manufacturing is struggling. Finally, it should be noted that labor transfers across sectors have become much less pronounced in recent years. Productivity gains in the primary sector are slowing down thanks to the parceling of land, while one-third of the workforce is still engaged in subsistence farming. In addition, the new sectors, mainly service-based, which attract the lion's share of investments—international meetings, conferences and events, RwandAir, and so on—generate fewer jobs.

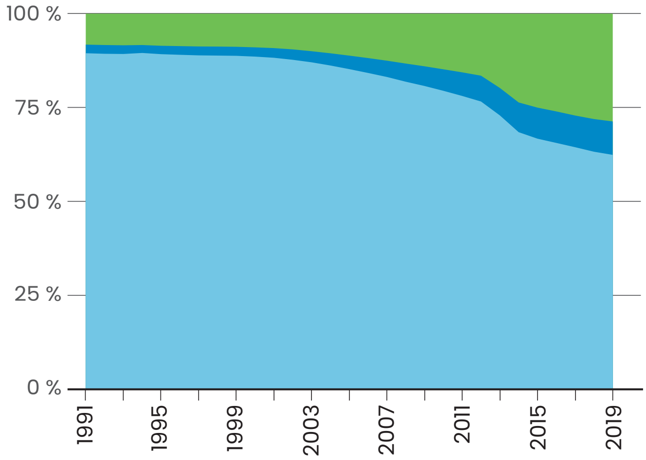
3 This strategy aims to bolster local industrial production and promote exports. To this end, targeted tariff-based protectionism is applied to imports of products, efforts are made to attract foreign direct investment (FDI) to facilitate the financing and development of local value chains, and training is offered to improve local skills and raise productivity. Nevertheless, at this stage, such projects are still at the embryonic stage and are more for show than anything else—a Volkswagen electric car assembly plant and an African smartphone are examples—and have no impact on economic activity.

Figure 4 - Breakdown of value added, by sector (% of GDP)



Source: World Bank (WDI).

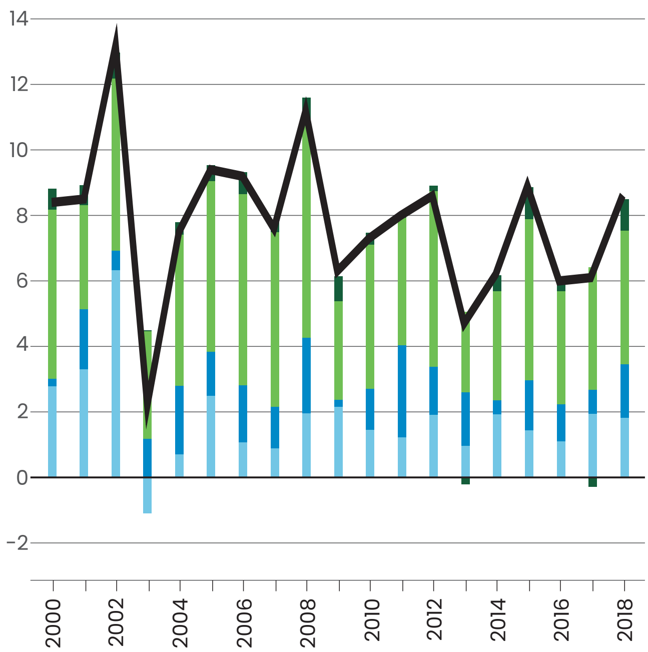
Figure 5 - Breakdown of employment by sector (% of total employment)



Source: World Bank (WDI).

At 8.6%, growth in 2018 was higher than the average for the 2010s as a whole. This strong pace picked up further in 2019, when growth hit 9.4%. This growth was driven by the increase in public consumption (+17.4%) and investment (+30.5%) in the context of the national transformation strategy—the implementation over seven years of the "Vision 2020" program (see Box 1). This strong growth led to a spectacular 25% increase in the construction sector, which, in turn, resulted in growth of 16.5% in the industrial sector. For example, major public infrastructure projects such as the Kigali Arena, Bugesera International Airport[4], and road construction sped up overall growth in 2019, thus confirming the prominent role that state intervention plays in the economy. Other sectors also grew strongly, with services increasing by 8.7%, driven by growth in trade, financial services and tourism, while the agricultural sector grew at 5.9%, in line with the performance of the preceding years (World Bank 2020).

Figure 6 - Contributions to GDP growth by sector (%)



Source: NBR and calculations by the author.

4 Sixty percent of the financing for the construction of this airport, an amount estimated to be USD 1.3 billion, would be provided by Qatar, which is keen to make Kigali a regional hub for its national airline, Qatar Airways (Augé 2019).

Box 1 – Development plans in Rwanda

The Rwandan economy is characterized by strong state involvement, as can be seen from the importance of state enterprises and public investments, but also from the development plans launched by the government, particularly "Vision 2020" and "Vision 2050." These plans offer a roadmap for achieving ambitious medium- and long-term development goals in line with the UN's Sustainable Development Goals (SDGs), while also spelling out the reforms that will be needed in order to do this. Launched in 2000, "Vision 2020" (Ministry of Finance and Economic Planning 2011) set a target for the country to become an MIC. While Rwanda will not become an MIC by the target date, it has come close, going from 30% to 79% of the threshold it has to reach to join this group between 2000 and 2019.

"Vision 2050" sets Rwanda the goal of joining the upper-middle-income countries (UMICs) by 2035 and the high-income countries (HICs) by 2050. To do this, the country would have to grow at an average annual rate of about 10% throughout the period in question, which is higher than the rates achieved by the economies of Asia when they emerged in the 1970s and 1980s. The financing for this development plan is not guaranteed at this stage, given the country's limitations in mobilizing internal resources and the leveling off or even the relative decline in state development aid. It is against this backdrop that the authorities are seeking to attract foreign investment.

While full details of the plan are still being finalized, certain aspects seem to be emerging: (i) good governance and a well-functioning state; (ii) a knowledge-based economy and the development of human resources; (iii) an economy led by the private sector; (iv) the development of infrastructure; (v) productive, market-oriented agriculture; and (vi) regional and international economic integration. More specifically, the aims will be to improve people's living conditions in such areas as food security, access to water and energy, health, and high-quality education and to modernize the country and its cities comprehensively through broadband internet, public transport, renewable energy, waste management and financial services. Gender equality, environmental sustainability and a long-term commitment to science and technology are intersecting themes that will support these six aspects.

These long-term plans, which have been developed by the Rwandan authorities, are broken down into several shorter-term programs. In 2017, in fact, the government launched the National Strategy for Transformation (NST1) for the period from 2017 to 2024. It is based on three components: (i) economic transformation, by speeding up private-sector-led economic growth; (ii) social transformation, to improve the quality of people's lives; and (iii) the transformation of governance for the sake of equitable and sustainable development. Government measures focus in particular on improving productivity and local production in order, in turn, to boost exports and create jobs through the "Made in Rwanda" program, most notably in agriculture and industry. To rein in high transport costs and boost regional trade, the country is developing a dry port in Kigali and RwandAir is increasing its cargo operations. The use of technology is being promoted in order to improve basic public services and help farmers gain access to financing.

1.2 – A thoroughgoing improvement in governance to satisfy the development imperative

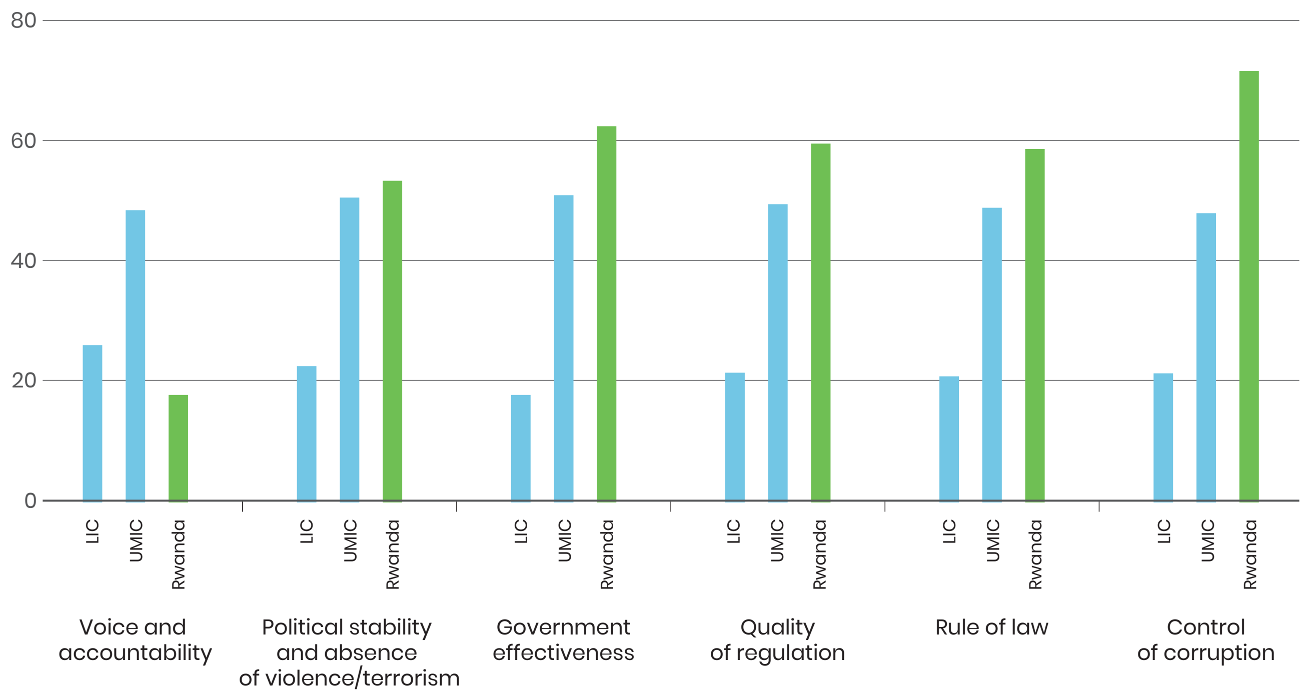
Politically, the reconstruction of the country has been led by the Rwandan Patriotic Front (RPF). This party, historically composed of Tutsis in exile, won the fight against the Hutu government through armed struggle in the mid-1990s. At a time of great instability in the late 1990s, Paul Kagame, the co-founder of the RPF and a real strongman, was elected President of the Republic by the Transitional National Assembly in 2000. Eventually, in 2003, a new Constitution was adopted, thus establishing a presidential system of government. Executive power is held by the government, which is headed by the President of the Republic, while legislative power rests with the two houses of Parliament. Paul Kagame was re-elected President of the Republic in 2003, with 95% of the votes cast, and his party won a majority in the National Assembly. Politically, then, Rwanda enjoys strong stability: after being re-elected in 2010, Paul Kagame had a constitutional amendment passed in 2015 that allowed him to remain in office for more than two terms. In 2017, he was re-elected head of state, with 98.7% of the vote.

In 2018, the parliamentary elections once again gave the RPF an absolute majority. Paul Kagame has thus been the de facto leader of the country for nearly 25 years and could conceivably stay in power until 2034.[5]

Rwanda's economic performance, which is often held up as an example, is partly the result of the economic and social policies the RPF has put in place since coming to power. The decision to highlight the country's development as a political leitmotiv must be seen in the light of history and the special place the RPF and its members have in it, namely that of a beleaguered elite. The party is in fact made up of Tutsis, at the head of a majority-Hutu country. For decades, the Hutu imagination has been imbued with racist ideology toward the Tutsis and some Hutus directly participated in the genocide. As a minority, and in such a historical context, the RPF cannot base its political legitimacy on ethnicity or on a level political playing field. Development is thus perceived by RPF members as a powerful means of political legitimization (Chemouni 2020).

5 A seven-year term until 2024, followed by two successive terms of five years each until 2034. The 2015 constitutional reform also reduced the length of a presidential term from seven to five years.

Figure 7 - Governance indicators around the world
(Score is from 0 to 100—the better the result, the higher the score)



Source: World Bank (WGI).

This has led to the creation of a strong and effective state, through a vertical and rapid decision-making process that requires a high degree of political and administrative discipline. Rwanda's governance indicators have improved rapidly and are now impressive, much better than those of others in its income group or other UMICs, and sometimes even HICs (other than those in the OECD). According to the World Bank's worldwide governance indicators (Figure 7), Rwanda outperforms UMICs when it comes to political stability and the absence of violence or terrorism, government effectiveness, the quality of regulations, the rule of law and control of corruption. That said, the country falls short when it comes to government accountability and the ability of citizens to make their voices heard.

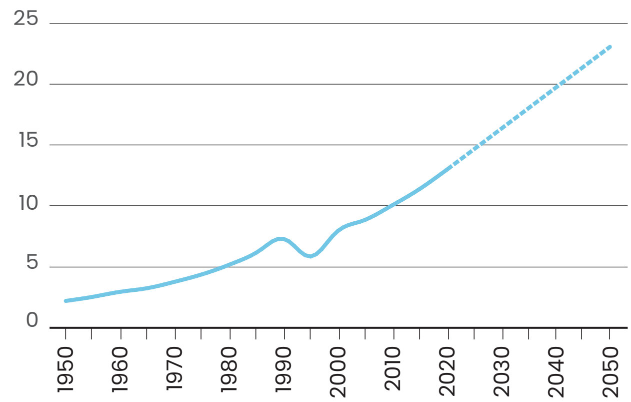
Despite a relatively closed political system, improved governance has made it possible to better structure ODA and enhance the impact it has. Indeed, even though the amounts paid to Rwanda, which were related to the considerable requirements of the period after the genocide, were higher than average, the country is not a special case or an anomaly. The contrast with many countries that are fragile or that have been hit by conflict has lain primarily in how effectively aid has been managed. In line with the Paris Declaration on Aid Effectiveness (2005), Rwanda has made a considerable effort in terms of the appropriation of aid, structuring and allocating the aid it receives from different donors according to its development priorities (IMF 2020a). Thus, the Rwandan authorities do not hesitate to refuse aid that is not in line with their priorities or, conversely, to carry out projects that donors see as irrelevant (AFD 2019). This approach has allowed Rwanda to limit silo effects—a recurrent pitfall of development aid—by focusing each donor's involvement on no more than three sectors. This in turn has allowed it to maximize the effectiveness of the aid it receives and to make sure it does not get scattered—thus creating a "confetti" effect whereby each donor tries to get involved in all sectors of the economy—while integrating interventions into an overall vision for development. The increased use of technical assistance has also brought about a significant improvement in the governance and monitoring of aid. And ex-post impact evaluations have also been carried out to improve the calibration of new projects.

1.3 – A significant improvement in the population's living conditions

Today, Rwanda has a population of nearly 12 million—twice what it was just 20 years ago. Population growth is particularly high, at around 2.5% per year. While the mortality rate has fallen gradually since independence—except during the genocide —the birth rate continued to rise until the end of the 1980s. There was a modest slowdown in the birth rate starting in the 1990s, as the country entered the second phase of its demographic transition. Nevertheless, the birth rate is still quite high today, with an average of 4.1 children for each woman (a ratio that is half of what it was in 1960). In its projections (according to the medium scenario), the United Nations (UN 2019) assumes a population of 16 million in 2030 and 23 million in 2050 (Figure 8).

Despite the rapid population growth, which mitigates the effects of the high rate of economic growth the country has seen in recent years, poverty and inequality appear to be declining in Rwanda. While there are doubts about the reliability of these figures (see Box 2) that would tend to call into question the improvements, even so, in the absence of any alternative figures, data from the World Bank and the National Institute of Statistics of Rwanda (NISR) are used here. The poverty rate, measured by reference to the international poverty line (USD 1.90), fell markedly from 77.2% of the population in 2000 to 55.5% in 2016 (World Bank 2019b). Gauged against the national poverty line, the proportion of the population living in poverty fell from 58.9% to 38.2% over the same period (NISR 2018)

Figure 8 - Total population (in millions)



Source: UN, World Population Prospects 2019

Box 2 – A critical look at how poverty in Rwanda is measured

Statistics on poverty in Rwanda are calculated by the NISR, based on a survey of household consumption. This survey makes it possible to estimate household consumption and, in particular, the amount of money needed to acquire a basket of basic goods that would provide an average of 2,500 calories a day. Two aspects are thus particularly relevant: (i) the monetary estimate of household expenditures, and (ii) the price of the basket of goods involved. That price depends, of course, on what is in the basket, but also on pricing trends for the products that make it up. Researchers and many others have voiced concerns about the method the NISR uses. These recurring criticisms, which have been made since 2015, were relayed and exposed to the general public by a *Financial Times* (FT) investigation in 2019 (Wilson and Blood 2019).

The main concerns had to do with changes to the basket of goods. The objection was that, if such changes are to be seen as reasonable, particularly to reflect changes in consumption, then previous results will also have to be adjusted. Otherwise, it is no longer possible to compare two points in time. Nevertheless, since the NISR did not make these adjustments between 2011 and 2014 (thus making comparisons between the two measures of poverty irrelevant), the Rwandan authorities were able to claim there was a decline in poverty from 44.9% of the population in 2011 to 39.1% in 2014 (NISR 2016). Taking into account these criticisms, the NISR later presented a revision of the old data that took into account the changes made to the basket. According to these calculations the drop in poverty was greater, at 6.9 percentage points.

The second concern, which was published in the FT, came at this point: the authors worked out that this drop in poverty was possible only if the average price of products consumed by the poorest 40% went up by no more than 4.7% between 2011 and 2014. Such a level of inflation, especially in rural areas, seems to be the result of significant underestimation: researchers put it at about 30%. If this figure is correct, it implies an increase in poverty of 6.6 percentage points over the period in question, which is at odds with the data the NISR put out.

These challenges from the researchers and the FT did nothing to change the official figures, which both the Rwandan authorities and the World Bank stood by. That being said, these debates did cause something of a stir within the World Bank and a group of economists at the Bank blew the whistle, questioning the accuracy of the official statistics. All of this led the World Bank to publish a response[6], confirming the doubts about how inflation had been calculated, and in particular about the differences between the rate of inflation in Kigali and that in the rest of the country. All the same, the World Bank denies the possibility of any error or manipulation.

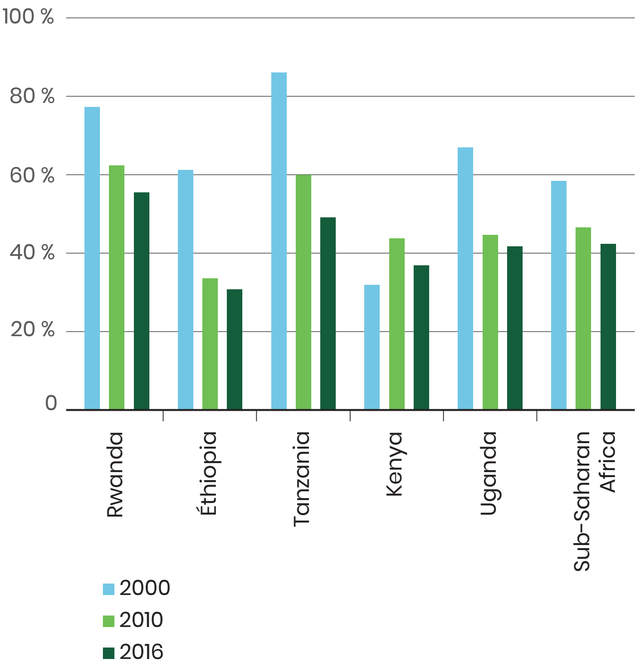
Some social progress has been made, supported by far-reaching reforms, particularly in the social security system, which covers nearly 90% of the population through public and private mechanisms and social protection programs from which nearly 60% of the population benefit[7]. As a result of these efforts, many social indicators have improved and some are stronger than those in East African countries or in other countries in the same income group. If we take health, for instance, life expectancy at birth—on which the genocide had a major effect—increased from 48.6 years in 2000 to 68.7 years in 2018. By way of comparison in Kenya, life expectancy at birth was 50 years in 2000 and 66 years in 2018, while the LIC average was 53 years in 2000 and 63.5 years in 2018. At the same time, the share of births attended by skilled health personnel increased by 60 percentage points to 91% in 2018.

However, it seems that the approach is running out of steam and becoming less and less inclusive. Much of the drop in poverty, 14 percentage points, was brought about between 2000 and 2010. Over the next decade, poverty fell by only 7 percentage points, and the decline has slowed to a crawl in recent years. Inequality, as measured by

6 https://www.worldbank.org/en/news/factsheet/2019/04/22/qa-on-rwanda-poverty-statistics.

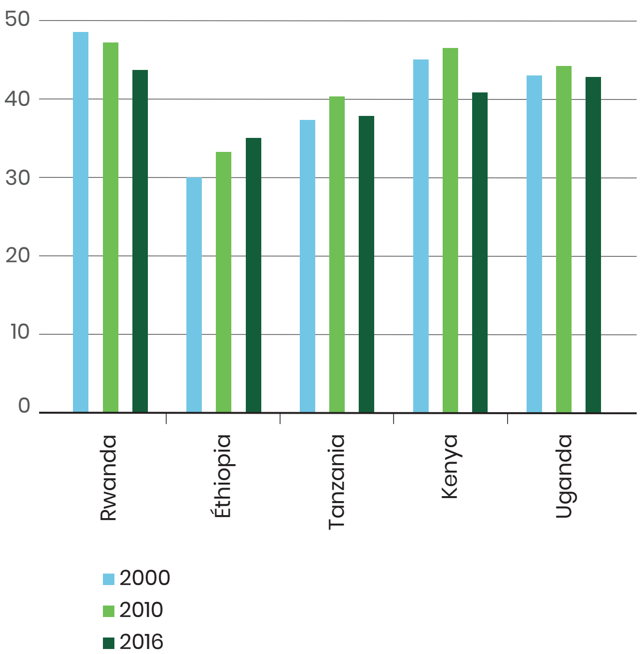
7 These programs include unconditional cash payouts, financial support to mothers to ensure their children are properly fed, participation in community public works projects, the provision of capital such as livestock, agricultural supplies or agricultural or industrial micro-equipment, skills-development training and micro-credit.

Figure 9 - Poverty rates, regional comparison



Source: World Bank (WDI).

Figure 10 - Gini Index, regional comparison



Source: World Bank (WDI).

the Gini index[8], rose between 2000 and 2005 (48.5 and 52, respectively) and then fell (it was 43.7 in 2016). In the end, the decline appears limited within the period in question. Rwanda is also more heavily affected by both poverty and inequality than its East African neighbors (Figures 9 and 10).

This recent slowdown in the improvement of the population's living conditions can be explained primarily by the occurrence of droughts and floods in rural areas. These exogenous climatic phenomena have had a cyclical impact on the agricultural sector, which is the main source of income or subsistence for a large proportion of Rwandan households. However, in the medium and long term, climate change in Rwanda is expected to make this type of phenomenon more intense, thus leading to structural vulnerabilities (see Box 3). The pace of structural transformation, which is linked to the process of urbanization, also seems to be slowing down. Now, since a large part of the country's population, as well as the poor, is concentrated in rural areas, urbanization and the shift among workers to activities outside agriculture are a partially underused tool in the fight against poverty. Finally, it would appear that the poverty has been less responsive to growth in recent years. Indeed, the most dynamic sector, services, is also the one with the fewest working poor.

Box 3 – Assessment of the physical climate risk to Rwanda

Located just below the equator in East Africa, Rwanda is a landlocked country with an equatorial but temperate climate. Indeed, thanks to its altitude[9] and its hilly topology, the average annual temperature of this "land of a thousand hills," as it is called, is only 19 °C. There are two rainy seasons each year, one from March to May, the other from September to December.

8 The Gini index (or coefficient) measures the level of inequality within a population on a scale from 0 to 100. The closer the score is to 100, the greater the inequality.

9 The lowest point of the country is 950 meters above sea level; the highest, 4,507.

At some point between 2030 and 2040, Rwanda will become particularly vulnerable to water stress, heat stress and extreme rainfall. In terms of its vulnerability to climate change, Rwanda is ranked 151st out of 181 countries according to the index developed by the Notre Dame Global Adaptation Initiative (ND-GAIN). On the other hand, and thanks to the level of awareness on the part of the Rwandan authorities and to the approach they are taking[10], the country is ranked relatively high—98th—when it comes to its capacity to adapt. It thus ranks 116th on the global index that combines the two measures: the levels of exposure to, and of preparedness for, climate change. Overall, Rwanda is ranked much higher on the index than other East African countries such as Tanzania (148th), Kenya (152nd), Ethiopia (157th), and Uganda (166th). It is worth noting that, of all the countries in the world, Rwanda is among those that emit the least carbon dioxide (CO2) per capita.

It is already feeling the effects of climate change. In 2018, for instance, heavy rains caused flooding. About 25,000 people were affected: their homes were either washed away or otherwise destroyed. The floods also led to an increase in the number of cholera cases and to an outbreak of the chikungunya virus. These events led Germanwatch[11], through its Global Climate Risk Index (CRI), which measures the direct impact of extreme weather events on socio-economic indicators, to rank Rwanda as the eighth most-heavily affected country in the world in 2018. More generally, the average temperature in the country has risen faster than the global average and rainfall is becoming more erratic and difficult to predict. The temperature is expected to rise by anywhere from 1.4 and 2.3°C by 2050 and both the duration and intensity of heatwaves are expected to be more pronounced. Variability in rainfall is high in Rwanda, but it is expected that by 2050 there will be about 20% more. Most significantly, it is also expected to be more intense, thus increasing the risk of flooding, which causes landslides, the loss of crops, health risks and damage to infrastructure.

The impact of climate change on the agricultural sector could be significant, given that it still employs about 70% of the Rwandan workforce. Only 10% of crops are irrigated in Rwanda, so crops are particularly dependent on how much and where rain falls and are thus susceptible to drought[12]. Crop yields could also be reduced by rising temperatures. These risks are further exacerbated by worsening soil erosion and by periodic flooding and landslides. Livestock could also be impacted by the spread of disease, which can in turn be caused by rising temperatures. Overall, agricultural yields could decline as a result of climate change and this could impact food security in a country where a quarter of the population is engaged in subsistence farming. That could in turn cut export earnings. Indeed, the two main export products, tea and coffee, are particularly susceptible to heat stress. The aforementioned social risk, which is linked to the increase in population density in agricultural areas, could be worsened by the fall-off in agricultural yields.

The risks to people's health could also rise as the climate changes. A warmer, wetter climate could expand the areas that are at high risk for malaria. Diseases such as diarrhea, typhoid, cholera, and hepatitis A, which are related to the consumption of polluted water, are likely to increase as floods keep happening. Droughts could lead to localized food shortages and increase rates of malnutrition. Finally, floods or landslides, which happen with particular regularity in Rwanda thanks to its topology, could displace populations and kill people.

Structurally, the level of education among the population would appear to be a major obstacle to reducing poverty. While the percentage of students who finish primary school is relatively high, at 86.5%, far fewer—just 37%—go on to finish secondary school (See Table 1). According to figures from 2018, a Rwandan student is thus in school for just 4.4 years, less than for other countries in the region: Tanzania (6 years), Uganda (6.1 years), and Kenya (6.6 years). Moreover, a Rwandan student is expected to complete only 6.6 years of schooling, as against an average of 8.1 years for sub-Saharan

10 The authorities launched a first plan for green growth in 2011, and followed this up in 2019 with the National Environment and Climate Change Policy. These plans spell out what policies are to be carried out to limit the country's contribution to global warming, but above all to develop its capacity to adapt. Notable examples include the development of Green Villages, the protection of forests and wildlife through national parks, the banning of plastic bags and non-biodegradable packaging and Umuganda, a day on which it is compulsory to do community work, cleaning streets or otherwise helping out.

12 Rwanda's needs, and the risks it is susceptible to, are not the same throughout the country. While the irregularity of rainfall in the south and the east leads to droughts that impact the feeding of livestock, the north and west are subject to floods that cause the loss of crops, the spread of disease, and the destruction of infrastructure.

Africa as a whole. This is compounded by the low quality of education, which is worse than that in the rest of the region. One of the main reasons for this deficit is the change in the language of instruction in 2008[13], when English replaced French. Almost 85% of the teachers did not speak English at that time but still had to teach in English.

Overall, Rwanda's Human Development Index (HDI) has improved significantly and is comparable to that of other countries in the region. The country now ranks 157th out of 189 countries, on a par with Tanzania and Uganda (159th), but slightly behind Kenya (147th) (See Table 1).

Another significant obstacle to improving the living conditions of the population is the precariousness of the labor market. The average monthly wage in Rwanda is estimated to be around EUR 50[14]. The effective absence of a minimum wage, which was set in the early 1970s but has not been revised since, means that wages cannot be regulated. The rate of participation in the labor force is low: in 2019, it was just 53.4% of those aged 16 and over (NISR 2020). In addition, 15.2% of the working population are unemployed. About a quarter of the working-age population are engaged in subsistence farming, while another quarter are shut out of the labor market altogether. Three-quarters of the working population have no education at all or only primary education, thus rounding out the picture on the level of education among the population. The precariousness of the labor market can also be seen in the percentage of informal labor, which amounts to 89.5% of all jobs. While almost all of the agricultural sector is informal, the prevalence of informal labor in the non-agricultural employment market is still high (70.3%).

On the other hand, there is one point on which Rwanda is particularly advanced: gender equality. Because more men than women were killed in the 1994 genocide, women played a new and decisive role in the reconstruction of the country, both as heads of households and in leading roles in the economy and politics. Since then, the authorities have promoted gender equality in all the public policies they have implemented, whether in terms of the family, economic opportunities, women's place in politics, and so on. The many initiatives that have been taken have led to an improvement in gender equality indicators (IMF 2020a). For instance, the World Economic Forum Global Gender Gap Index (World Economic Forum 2019) ranked Rwanda first in sub-Saharan Africa and ninth globally. As regards the labor market, although the distribution differs by sector, the level of women's participation overall

Table 1 - Human development indicators, regional comparison (2019 or most recent available data)

	RWANDA	ETHIOPIA	TANZANIA	UGANDA	KENYA	SUB-SAHARAN AFRICA
Income level per capita (in USD PPP)	2,210	2,140	2,570	2,110	4,230	3,705
Life expectancy at birth	68.7	66.2	65.0	63.0	66.3	61.3
Average length of schooling (in years)	4.4	2.8	6.0	6.1	6.6	-
Primary school completion rate (%)	86.6	54.1 (2015)	68.7	52.7 (2017)	99.7 (2016)	68.8
Secondary school completion rate (%)	36.8	29.5 (2015)	29.6	26.4 (2017)	79.2 (2016)	44.1
HDI ranking	157	173	159	159	147	-

Source: World Bank (WDI) and UNDP.

13 There were several reasons for this change: regional integration (given that Rwanda's neighbors are predominantly English-speaking) and international integration; cutting the cost of education, which now uses two languages, English and Kinyarwanda, as opposed to the previous three; a system that favors members of the RPF, who are English-speaking; and leaving the French sphere of influence.

14 This average monthly wage is an estimate based on household expenditures, and applies only to paid employment.

is almost the same as for men. Girls' school-enrolment rates are comparable to those for boys at both the primary and secondary levels and their average attendance rates are higher overall. The literacy rate among those aged 15 to 24 is now higher for women (88%) than for men (84%). At the other end of the spectrum, the Rwandan authorities have set up a gender budget to assess and focus on public policies that have an impact on reducing inequality. The Rwandan Constitution also enshrines the role of women by imposing a minimum of 30 per cent of women in political decision-making positions. In practice, women occupy a much greater place. For example, 61% of the seats in Parliament are held by women, the highest such percentage anywhere in the world. Similarly, parity is respected in ministerial and judicial posts.

2.
How sustainable is the Rwandan model?

The Rwandan development model is considered by many countries in sub-Saharan Africa as a possible and credible path toward emergence and toward better living conditions for their people. There have been clear successes: dynamic economic growth, greater national wealth, a reduction in poverty and an advanced governance framework. However, while state interventionism in the economy has succeeded in bringing about some new activities, the private sector is struggling to take over sufficiently. After two decades of strong growth, the Rwandan model could seize up as constraints in public finances, foreign trade imbalances or structural issues increase.

2.1 – Drawing on public finances to support economic growth serves to deplete them

The Rwandan central government's budget is running a structural deficit. If grants are taken into account, the budget deficit has averaged about 5% of GDP over the last five years. This result is consistent with the IMF's requirements under the Policy Coordination Instrument (PCI)[15]. Indeed, this program sets the budget deficit target at 5.5%, while leaving a margin over and above that figure to stabilize the level of debt (calculated at 6.7% by the Rwandan authorities) (World Bank and IMF 2019). Dynamic growth and highly concessional interest rates give the government more room to maneuver, and that in turn allows it to influence investments and future growth.

However, the country is facing two structural trends that limit the possibility of reducing the budget deficit in a sustainable way (see Table 2). On the one hand, the ability to increase tax revenues is constrained by the level of people's income and by the magnitude of the informal sector. According to the IMF, any increase in tax revenues could not come to more than 2 or 3 percentage points of GDP in the long run (IMF 2020b). On the other hand, the high level of public investment, which represents an average of 12% of GDP over the period and is necessary to sustain the pace of economic growth, appears at this point to be unavoidable, given the weakness of the private sector..

15 The Policy Coordination Instrument (PCI) is a non-financial tool that can be used by all IMF members. It allows them to signal their commitment to reform and to promote alternative sources of funding.

Table 2 - The Rwandan government's financial operations (% of GDP)

	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
TOTAL REVENUE (including grants)	23.7	26.1	25.3	24.4	22.7	23.1	23.7	23.3	23.7
Total revenue (excluding grants)	15.9	16.8	17.9	18.5	18.1	18.6	19.2	18.8	17.9
Tax revenues	14.0	14.9	15.5	15.8	15.5	15.9	16.3	16.2	15.5
Direct taxes	6.1	6.1	6.7	6.4	6.6	6.8	7.1	7.3	6.7
Taxes on goods and services	6.8	7.5	7.7	8.1	7.6	7.8	7.9	7.7	7.6
Taxes on international trade	1.2	1.3	1.1	1.3	1.3	1.2	1.3	1.3	1.2
Indirect taxes	1.8	2.0	2.3	2.7	2.5	2.6	2.9	2.6	2.3
of which PKOs*	1.3	1.6	1.6	1.9	1.8	1.9	1.7	1.8	1.4
Grants	7.8	9.3	7.4	5.9	4.6	4.5	4.5	4.5	5.8
Budget support	4.1	3.3	3.1	3.2	2.6	2.4	1.9	1.7	2.9
Grants: projects	3.8	5.9	4.3	2.7	2.0	2.1	2.7	2.7	2.9
TOTAL EXPENDITURES AND NET LENDING	28.7	30.0	30.6	27.8	27.3	27.7	30.0	32.4	32.2
Current expenditure	13.6	15.2	14.9	15.0	15.0	14.9	15.4	16.0	14.8
Wages and salaries	3.6	3.7	3.6	3.8	3.7	4.1	4.2	4.3	5.4
Purchases of goods and services	2.6	2.8	2.8	2.9	2.9	2.7	2.6	2.7	1.9
Interest on debt	0.7	0.8	0.8	0.9	1.0	1.2	1.2	1.5	1.9
of which domestic debt	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.8	1.3
of which external debt	0.3	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6
Transfers	5.0	5.6	5.4	4.9	5.2	4.6	4.7	5.1	3.8
PKOs and demobilization			2.2	2.5	2.2	2.3	2.4	2.4	1.3
Capital expenditure	12.1	13.9	13.7	11.4	10.7	10.8	12.3	12.7	12.8
Financed from domestic resources	5.1	6.2	6.9	7.1	5.9	5.9	7.2	6.9	7.0
Financed from external resources	7.0	7.6	6.8	4.3	4.8	4.9	5.2	5.8	5.8
Net lending and privatization receipts	3.0	1.0	1.7	1.4	1.6	2.0	2.3	3.7	4.5
TOTAL BALANCE (including grants)	-5.0	-3.9	-5.4	-3.4	-4.6	-4.7	-6.3	-9.1	-8.5

*PKOs: Peacekeeping operations

Source: IMF (Article IV).

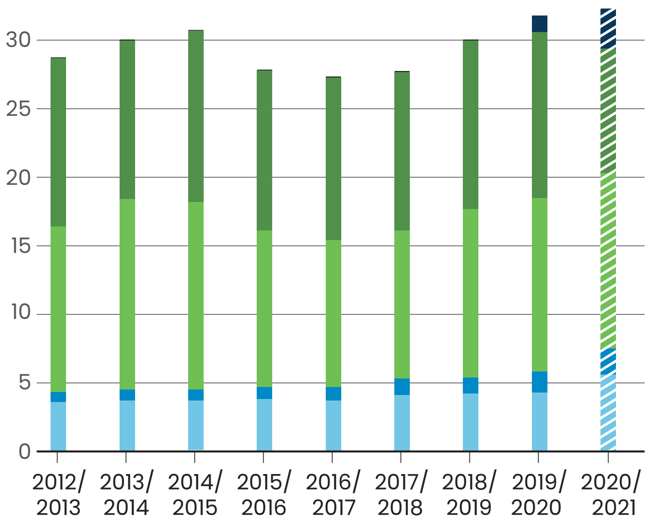
Government revenues have averaged about 24% of GDP over the last five years. While this share appears to be relatively stable, we may be seeing an improvement in the make-up of government revenues. Indeed, dependence on grants is gradually decreasing: grants accounted for less than 20% of government revenue in 2018/2019[16], as against almost 33% in 2012/2013. The leveling off in the share of grants is being accompanied by an improvement in the collection of taxes over the same period. Thus tax revenues, including direct taxes and those levied on goods and services, have increased, and came to 16.3% of GDP in 2018/2019—2.3 percentage points higher than in 2012/2013). However, the mobilization of domestic resources may have hit a ceiling. Over the long term, the country has seen a considerable increase in tax revenues, which came to less than 10% of GDP in the early 2000s. Rwanda's share of tax revenue in GDP now stands well above the LIC average and is almost on a par with levels in LMICs. In 2018, the IMF estimated that Rwanda's tax frontier[17] was 16.4% of GDP, a level that has already been reached (IMF 2018). Thus, in view of the previous path the increase has taken, the level that has already been reached and comparisons with countries that have similar incomes, the margins for further improvement would appear to be narrow—and all the more so given that the costs of transport and energy in particular, which are borne by both producers and consumers, are already particularly high. In this context, an increase in the tax burden would harm the competitiveness of Rwandan businesses.

Public spending, meanwhile, has hovered around an average of 29% of GDP over the last five years. Current expenditures went up by two percentage points between 2012/2013 and 2018/2019, when they reached 15.4% of GDP, driven by a moderate increase in wages from 3.6% of GDP in 2012/2013 to 4.2% in 2018/2019, and in interest payments from 0.7% to 1.2% of GDP over the same period. Wages are under control, while interest on the public debt remains particularly low, thanks to the highly concessional character of the loans made to the Rwandan government. Investment spending is quite significant, holding steady at around 12% of GDP (See Figure 11). In the long run, it is this spending that

16 The fiscal year in Rwanda runs from July to June.

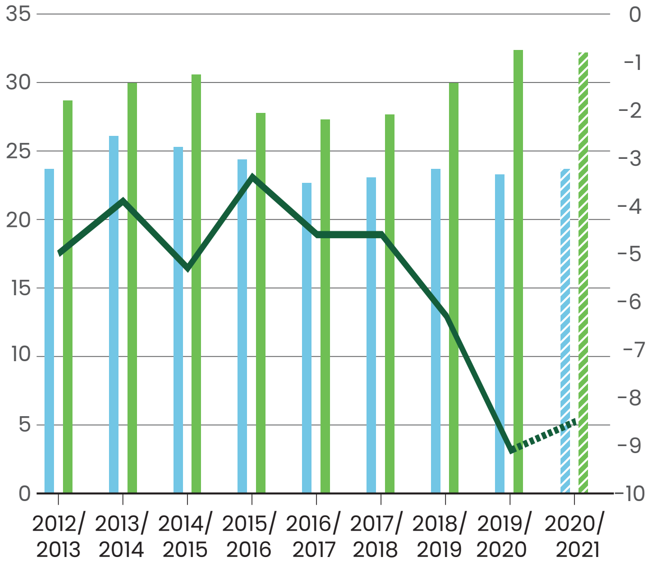
17 The "tax frontier"—that is, the theoretical fiscal capacity a country has—can be defined as the maximum level of tax revenue (usually measured as a percentage of GDP) it should be able to reach, given the specifics of its macroeconomic and institutional circumstances (IMF 2018).

Figure 11 - Breakdown of public spending (% of GDP)



Source: IMF (WEO).

Figure 12 - Government revenue and expenditure, and budget balance



Source: IMF (WEO).

gives the state considerable room for maneuver when it comes to improving its public finances and gradually passing the baton to the private sector.

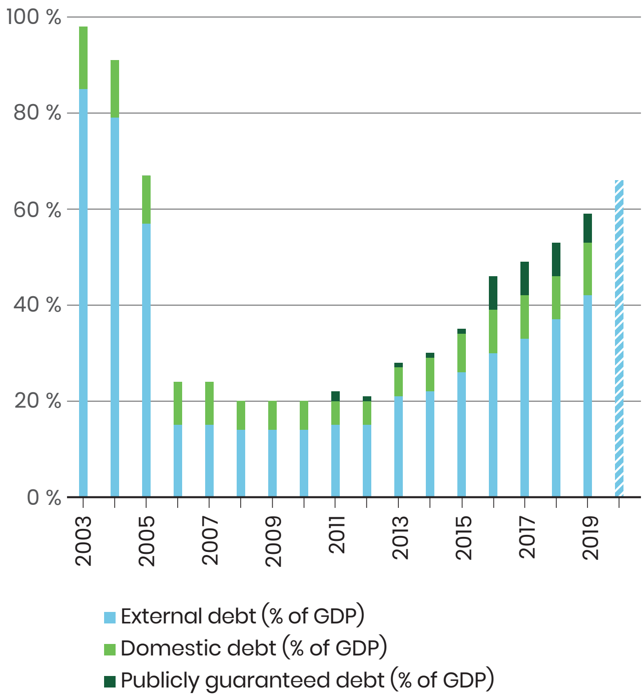
Overall, the trend over the last few years has been for the deficit to grow from 4.7% of GDP in 2017/2018 to 6.3% in 2018/2019. As a result of the crisis caused by the COVID-19 pandemic, the government deficit could potentially reach 9.1% in 2019/2020 and 8.5% in 2020/2021 (Figure 12). It could be that government revenues will remain stable, falling from 23.7% of GDP, the level they were at in 2018/2019, to 23.3% in 2019/2020 and then going back up to 23.7% in 2020/2021. On the other hand, government spending could go up to 32.4% of GDP in the 2019/2020 fiscal year, from 30%, the level it was at in 2018/2019, and stay more or less at that level in 2020/2021 (32.2%). Spending in response to the COVID-19 crisis in particular accounts for 2.2% of GDP, including through the economic recovery fund that supports private sector endeavors, such as RwandAir, alongside purely health-related spending.

After a stabilization phase following the Heavily Indebted Poor Countries (HIPC) Initiative, public debt has been on the rise again since 2012 (21.5 % of GDP) and has been increasing fast ever since. Thus, total public debt, including public debt proper and guaranteed debt, increased by 37 percentage points of GDP between 2012 and 2019, and was forecast to reach 65.9% of GDP in 2020 (Figure 13).

Given how small the local market is, Rwandan public debt is mainly external and denominated in foreign currency[18]. In 2019, external public debt, including guaranteed foreign currency debt[19], was 46.6% of GDP, while domestic public debt was just 10.7%. The share of external debt denominated in foreign currency is on the increase, since 79.1% of overall public debt in 2019 was external and 20.9% was internal, whereas in 2012 it was 75% external and 25% internal. All of the external public debt is long-term, while 40% of the domestic debt is short-term. In addition, 78.5% of external debt is held by multilateral donors and 11.8% by bilateral donors, while the remaining 10% or so comes from the Rwandan government's issuance of a USD 400 million Eurobond in 2013[20].

External public debt is theoretically a vulnerability, because the debt depends particularly on changes in the exchange rate for the national currency. In Rwanda's case, the fact that 90% of this debt is held by institutional lenders gives some cause for comfort, since they allow the country to borrow at highly concessional rates. The average nominal interest rate on external public debt is thus still quite low: in 2019 it was 2.3%. Even so, the IMF revised Rwanda's risk of debt distress upwards from low to moderate in its latest debt sustainability analysis (DSA) in June 2020 (IMF 2020c). While a change over the medium term was anticipated before the onset of the COVID-19 crisis, it was the crisis that precipitated the IMF review.

Figure 13 - Breakdown of public debt



Source: IMF (WEO) and NBR.

And the crisis has indeed had an impact on growth, exports, and public revenues, all of which increases the need for external financing. While the country did not face a major liquidity problem in 2020 and was able, thanks to support from the IMF and other donors, to meet its need for financing, it seems inevitable that its solvency will decline.

18 It should be noted that there is no difference between the two concepts here, as external debt is entirely denominated in foreign currencies.

19 In 2019, 74% of the guaranteed debt on Rwandan public enterprises was denominated in foreign currency.

20 The Eurobond has a 10-year maturity period, at a rate of 6.625%.

The stress tests that the IMF carried out[21] point to a greater vulnerability to external shocks than was the case before the crisis. In particular, the ratios of external debt, and of its servicing, to exports are expected to exceed the IMF's thresholds in view of the sharp decline in exports that is expected in 2020. Moreover, the maturity of the Eurobond in 2023 (see below) will put quite some pressure on public finances when it is refinanced.

Despite high GDP growth and low interest rates, the ratio of public debt to GDP has risen sharply in recent years, even if the accumulation of primary deficits cannot account for all of the increase. In particular, significant and unexplained increases in this ratio have been recorded on numerous occasions (particularly in 2013, 2016, and 2017), thus underscoring the lack of transparency surrounding budgetary data that actually give a poor sense of the full extent of the deficit. This revision highlights the risks to the current growth model and makes clear that the trend for Rwanda's indebtedness cannot continue if growth is to be sustained over the medium term. The country will have to find both alternative sources of financing, particularly by leveraging domestic resources, and alternative ways to grow, by developing the private sector. Otherwise, it will have to redefine its priorities.

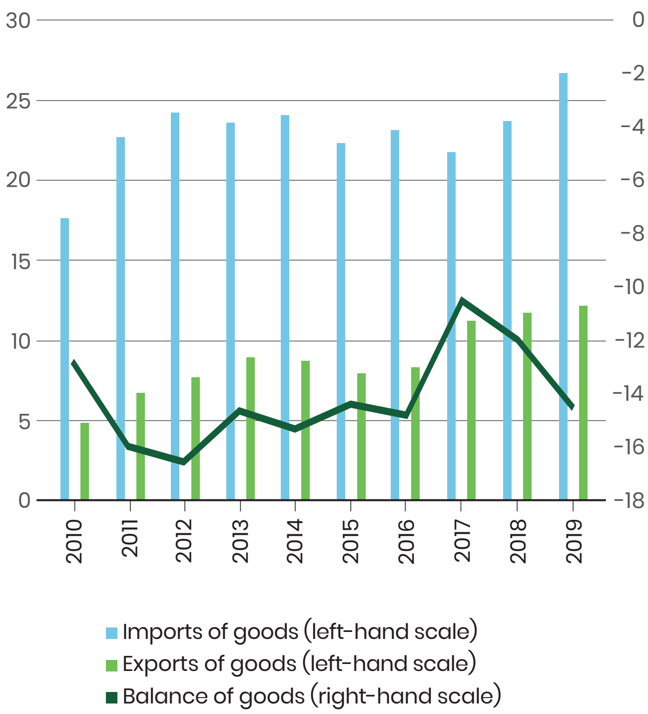
2.2 – External structural imbalances whose financing depends mainly on donors

Even though, or perhaps because, it is landlocked, Rwanda is a moderately open country. Its openness rate in 2019 was 53%[22]. All the same, it has experienced a slow but almost continuous increase in this rate since the 1990s, gradually catching up with the average for sub-Saharan Africa (58%) and now ahead of the average for LICs (49%).

The country is running a structural deficit in its balance of trade for goods, averaging almost 14% of GDP over the last 10 years. The increase in exports from 5% of GDP in 2010 to over 12% in 2019, in line with the increase in imports from 18% to 26% of GDP over the same period, has led to a stagnation in the balance of goods deficit (Figure 14). Indeed, after holding steady at more than 15% of GDP between 2011 and 2016, and despite a considerable reduction in 2017 and 2018 to less than 10% of GDP, the deficit has risen again to 14.5% of GDP in 2019.

More specifically, tea, coffee and minerals account for two-thirds of goods exports by value. These exports suffer from a heavy dependence on international prices and the vagaries of the climate. The other exporting sectors, particularly in industry (automobile, textile), are struggling to take up a large enough share of the market to reduce the volatility in exports. Imports of everyday consumer goods account for almost one-third of all imports, but growth here is less significant than that in imports of equipment and intermediate goods. These imports are driven by major infrastructure projects and the construction sector. The cost of energy—mainly fuel for the transport sector—is stable, accounting for around 10% of all imports (see Box 4). These import items are particularly sensitive to growth, which limits the ability to reduce them.

Figure 14 - Imports, exports, and balance of trade in goods (% of GDP)



Source: IMF (WEO and BOP).

21 The stress tests conducted by the IMF as part of the DSA aim to measure how susceptible a country's external public debt is to shocks that, while unlikely, could still happen.

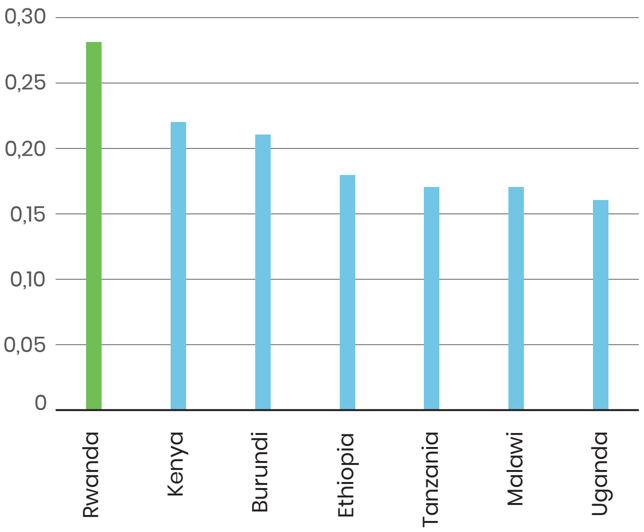
22 This is the sum of all imports and exports of goods and services as a percentage of GDP.

Box 4 – Rwanda's energy resilience

Rwanda's energy mix is 85% biomass (especially wood used for fuel by all rural households), 11% oil products (mainly for transport, power generation and industry), and 4% hydroelectricity. While Rwanda has potential crude oil and natural gas deposits in the Lake Kivu region, no exploitation is currently taking place. In the absence of any local production, oil is imported to meet the country's consumption needs.

The wide use of wood, especially for cooking, is a definite threat to this resource. At the moment, wood is being burned at twice the rate that would be required for supplies to be sustainable and the trend is worsening. Deforestation is increasing as a result of this demand, which exceeds the capacity of forests to regenerate.

Figure 15 - Cost of electricity
(in USD per megawatt-hour)



Source: World Bank.

The electricity sector has seen significant improvements over the past decade. Generating capacity went up from 88 MW in 2010 to 221 MW in 2019. Hydroelectricity accounts for 48% of production, oil for 26%, methane for 14%, peat for 7%, and solar power for 5%. The share of households connected to the electricity grid increased from 11% in 2010 to 37% in 2019, while 14% of households get their electricity off-grid. As a result, access to electricity rose from 11% of households in 2010 to 51% in 2019. This progress, coupled with an improvement in the quality of service, as measured by a decline in the frequency, extent, and impact of outages, makes Rwanda a model in the region. That being said, the cost of electricity remains high and is a major constraint to the development of the private sector (World Bank and Government of Rwanda 2020).

The Rwandan government's goal is to achieve universal access to electricity by 2024. Under the plan, 52% of households would have a direct connection to the grid, while 48% would use off-grid electricity. Generating capacity is also expected to double in the coming years to 512 MW, thanks to the commissioning of new hydroelectric plants. While this new capacity would give the country more than it needs, the establishment of an interconnected network with neighboring countries would allow Rwanda both to export energy and to have access to cheaper sources of electricity.

The country is also running a structural deficit in its balance of trade for services, averaging almost 1.7% of GDP over the last 10 years. It seems difficult to establish a clear trend, as year-on-year volatility is relatively high. In 2019, the deficit in the balance of trade for services stood at 0.2% of GDP, down from 2% in 2018. The government's focus on the services sector has certainly helped boost tourism revenues, which grew from 3.4% of GDP in 2010 to 4.5% in 2019. These now exceed the combined export earnings from minerals, tea and coffee. However, growth in the tourism sector is still limited, especially considering how much has been invested in it, and it cannot seem to counteract the persistent imbalances in foreign trade. In addition, because the country is landlocked, imports of transport services are structurally high.

The overall structural deficit in the country's balance of trade for both goods services has thus averaged almost 15.8% of GDP over the last 10 years. An improvement is underway: after growing to almost 19% of GDP in 2015, the deficit in the balance of trade dropped to 14.7% of GDP in 2019. Reflecting these developments, the ratio of exports of goods and services to imports rose from 34% to 60% between 2015 and 2019.

There is also a deficit in the country's balance of primary income, which has averaged 2.3% of GDP over the last 10 years. The primary deficit grew steadily from 0.9% of GDP in 2010 to 3.4% in 2019. This increase resulted from higher interest payments on public debt, including for project loans and budget support as well as loans taken out to finance the Kigali Convention Center, RwandAir, and Bugesera International Airport in Kigali, but also from a rise in the amount of foreign direct investment (FDI) income that was repatriated.

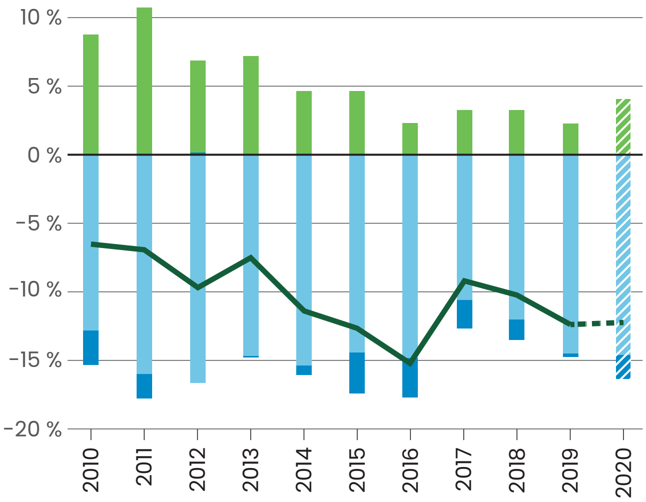
The balance of current transfers is in surplus, averaging nearly 8% of GDP over the last 10 years. Nevertheless, this surplus has declined during this period. Having peaked at 12% of GDP in 2011, it was down to 5.8% in 2019. Indeed, the increase in migrant remittances, from 1.7 to 2.5% of GDP between 2010 and 2019, did not compensate for the decline in transfers linked to development aid, which fell from 8.6 to 3.7% of GDP over the same period.

Overall, since 2010 Rwanda has been running a structural deficit in its current account of close to 10% of GDP on average. In June 2016, after two years in which the current account deficit grew (11.2% and 12.6% of GDP in 2014 and 2015, respectively), the IMF offered a Standby Credit Facility (SCF) to the Rwandan government. The purpose of this USD 204 million line of credit was to help the country deal with its external imbalances and, in particular, to increase its reserves. After peaking at 15.2% of GDP in 2016 and hovering for the next two years around 10%, the current account deficit grew again to 12.4% of GDP in 2019 (See Figure 16).

The current account deficit is financed mainly by international donors, through budgetary support in the form of long-term loans and project grants, all grouped under the capital and financial accounts of the balance of payments, and averaging nearly 8% of GDP over the last decade. The favorable investment climate that has been created has also allowed the country to attract FDI that is equivalent to about 3% of GDP, while the inflow from portfolio investments is still marginal (see Figure 17). It is also worth noting that errors and omissions account for a significant part of the financing of the current account deficit. The most likely hypothesis is that some informal or even illicit trade at the borders, particularly in gold, is not being properly accounted for.

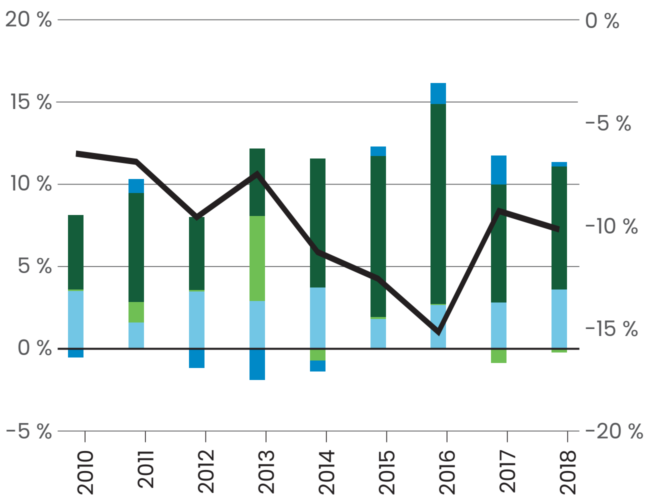
With its requirement for external financing generally covered, Rwanda has been able to

Figure 16 - Breakdown of the current account balance (% of GDP)



Source: IMF (WEO and BOP).

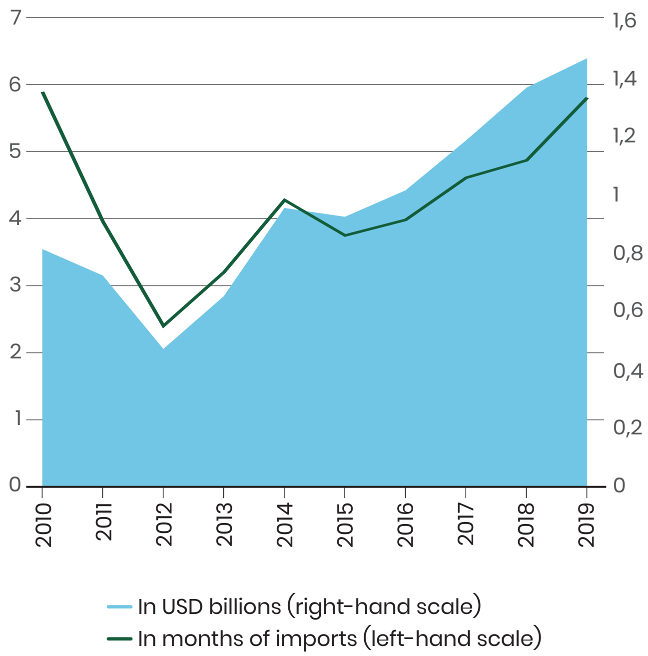
Figure 17 - Financing of the current account deficit (% of GDP)



Source: IMF (BOP).

consolidate its foreign exchange reserves. Foreign exchange reserves have thus grown since 2012, except in 2014 and 2015, rising from USD 500,000 in 2012 to USD 1.5 million in 2019, representing 2.4 and 5.8 months' worth of imports in goods and services, respectively (See Figure 18). These numbers are considered safe: the IMF estimates that the optimal level of reserves for Rwanda is between 4 and 5 months' worth of imports in goods and services.

Figure 18 - Foreign exchange reserves

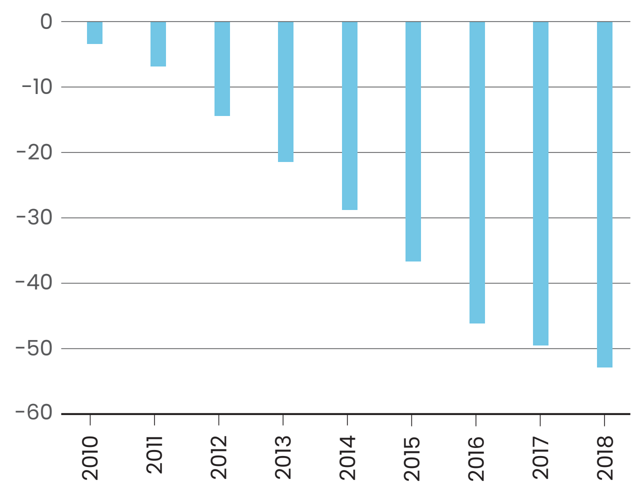


Source: IMF (IFS and BOP).

Rwanda's external debt stood at 53.9% of GDP in 2019, having risen rapidly starting at the beginning of the decade, when it stood at about 15% of GDP. The majority of external debt, 87%, is public, including 13% of guaranteed debt on public enterprises. Private external debt, which was almost non-existent in the early 2010s, has grown rapidly since then to reach 8.5% of GDP in 2019. All external debt is long-term. In its latest DSA, in June 2020, the IMF revised upwards, from low to moderate, the risk of debt distress regarding external debt.

Overall, Rwanda's net international investment position is in substantial deficit, standing at 53% of GDP in 2019 (Figure 19). Its position has been worsening fast, as a result of increasing external debt and FDI inflows: it stood at just 3% of GDP in 2010.

Figure 19 - Net international investment position as a % of GDP



Source: IMF (BOP).

In 2020, the COVID-19 pandemic was expected to have a substantial impact on Rwanda's foreign trade imbalances and to highlight the fragility of the current model, which depends on external financing. Imports were expected to decline by 6.7% over 2019 as a result of the slowdown in economic activity and falling oil prices. The fall in oil prices led to a reduction in energy costs from 2.5% to 1.5% of GDP, or from 11.3% to 7.5% of all imports in 2019 and 2020. At the same time, exports of goods were expected to drop by 19%, thanks to the combined effect of lower global demand and lower world commodity prices. Thus, the deficit in the balance of goods was expected to increase slightly in 2020 to 14.6% of GDP (from 14.5% in 2019). On the other hand, the deficit in the balance of services was expected to increase significantly from 0.2% of GDP in 2019 to 1.7% in 2020, as the partial closure of global borders led to a sharp decline in tourism and air traffic. On the other hand, it was anticipated that the surplus in the balance of income and current transfers would increase to 4.1% of GDP in 2020, primarily as a result of continued inward remittances, representing 2.4% of GDP, and increased ODA-related current transfers. As a result, the current account deficit was expected to stay at 12.2% of GDP in 2020.

The global economic crisis triggered by the COVID-19 pandemic has led to a sharp drop in investor confidence, particularly in emerging and developing markets. Rwanda has been no exception and a decline of about 30% in FDI was predicted for 2020. In response to the decline in sources of financing for its current account deficit, Rwanda benefited from the disbursement of 100% of the quotas available from the IMF under the Rapid Credit Facility (RCF), which amounted to USD 220 million. It would seem that this disbursement is enough to cover the current account deficit, especially since Rwanda did not want to participate in the G20 Debt Service Suspension Initiative. While the COVID-19 crisis has taken on unprecedented global proportions, it highlights Rwanda's dependence on external financing and the limits to the resilience of the current model.

2.3 – The challenges confronting the emergence of the private sector and the persistence of structural constraints

The COVID-19 crisis is thus impacting Rwanda's public finances and foreign trade imbalances, putting the spotlight on the fragility of the country's development model in an economic downturn. The IMF expected GDP to fall by 0.2% in 2020. It was anticipated that the services sector would be hit particularly hard by partial or total border closures around the world. As a result, business travel (for international meetings and conferences), tourism and air transport—all high-priority sectors for the country—have all but ground to a halt. Similarly, direct investments, especially those related to public works, have been put on hold and this is having a particular impact on the construction of the new Bugesera International Airport in Kigali. Household consumption will also be less brisk this year, because of the heightened uncertainty and/or because of the impact that the crisis has been having on workers in the informal sector. The disruption of value chains is also having a significant impact on trade in this landlocked country. Thus some import-dependent sectors such as trade, transport, manufacturing and construction cannot function properly. The country's exports are being hurt both by the drop in world demand and by the logistical difficulties associated with sporadic and repeated border closures. Finally, the banking sector's exposure to tourism, particularly the hotel industry and import-dependent sectors, could lead to a slowdown in the provision of credit to the private sector. While the 5.7% increase in GDP forecast by the IMF for 2021 would mark a return to dynamic growth, the pace would be more moderate than that before the crisis.

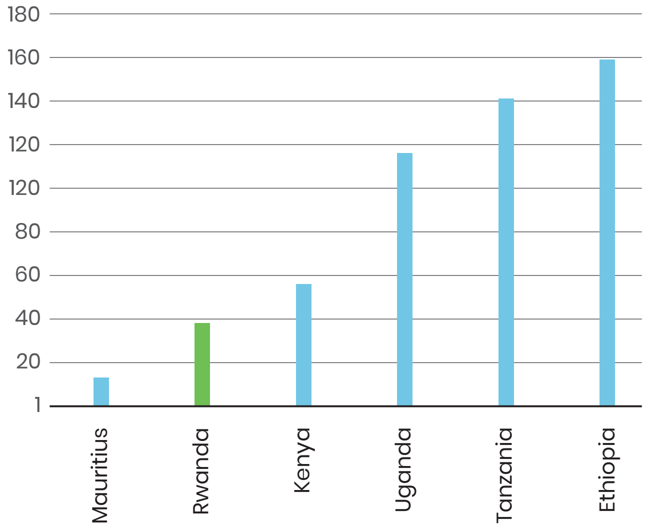
Beyond these cyclical events, it appears that the pace of growth in the country may not be sustainable over time. The limitations on public finance described above raise questions about a model that is heavily dependent on public investment. Such investment is indeed required within the framework of "Vision 2050," especially when it comes to the creation of infrastructure. However, the past and current dynamics around public debt, which have made this growth possible in the first place, cannot be prolonged indefinitely, even with concessional rates (see section 2.1 above). In order, then, to avoid crowding out the private sector and exacerbating foreign trade imbalances, public initiatives will have to be progressively cut back, and efforts will have to be made to improve the efficiency of the private sector. The private sector is the key, in the medium and long term, to achieving the country's economic objectives.

However, there are still many hindrances to this sector's development. The World Bank's Doing Business ranking (World Bank 2019a) is actually deceptive on this point. Rwanda is ranked 38th for 2020 (Figure 20), second in Africa[23] and at the same level as Portugal and Switzerland, for example. It is worth noting that the country ranks third in property transactions and fourth in obtaining loans. For example, in this last area, while the indicators taken into account by the World Bank reflect the genuine ease with which a loan can be taken out, especially as regards the legalities involved, they do not take account of another reality. In 2019, the average interest rate charged by commercial banks on loans to the private sector was 16.5%. Rates that high thus make it difficult for many companies to finance their development.

More generally, because Rwanda is landlocked, its private sector faces high costs related to energy and logistics (IFC 2019). Trade is hampered by the absence of a direct maritime outlet, which increases the actual cost of products, since some part of the transport must necessarily take place by land or air. Similarly, the small size of the market, particularly in comparison with those in neighboring countries, does not allow for economies of scale and is thus a natural disadvantage, whether this is because the territory itself is small, because the population is small in absolute terms, or because of the average standard of living. Another challenge is the low level of skills among the workforce.

23 Behind the Republic of Mauritius, which ranked 13th.

Figure 20 - Doing Business (DB) Ranking (2019)[24]



Source: World Bank (DB)

In addition, despite the ambitious rhetoric, the Rwandan authorities are not so interested in or keen on developing an independent private sector. Currently, much of the economic activity (the construction industry, real estate, furniture imports, agricultural processing, energy, mining, telecommunications, media and the internet) is actually controlled by companies run by people who are close to the party or the military and who are loyal to the RPF (Gökgür 2012). This system, which has its origins in the privatization process in the 1990s, gives the authorities *de facto* control over the economy and allows them to distribute benefits via arrangements based around patronage. These companies, which are close to the government, are thus protected from competition thanks to state support in terms of taxation and have an advantage when it comes to winning public contracts or getting access to credit. This system stymies the entry of new players, both domestic and foreign, and is a major impediment to the development of the private sector.

The regional environment, which is theoretically promising in economic terms, also poses a significant risk for Rwanda. The country has difficult relations with its neighbors. Burundi considers Rwanda an "enemy" of the nation[25] and accuses it of financing and training Burundian rebel groups. Political tensions with Uganda have already led to the closure of the border, thus limiting trade. In a particularly unstable environment (the war in Kivu in the DRC is one example), it is still not certain what benefits can be expected from strengthening the East African Community (EAC)[26], of which Paul Kagame is currently president.

Furthermore, Rwanda still depends on international aid. If this were to dry up further to the adoption of retaliatory measures in response to the country's domestic or international policies, for instance, the financing of Rwandan growth would be severely undermined.

Finally, the growth and distribution of the Rwandan population are also potential hindrances to development. Population growth will have a direct impact on the country's population density, which is already very high: Rwanda had 525 inhabitants per square kilometer in 2020 and is thus one of the 25 most densely populated countries in the world (See Figure 21). If the country's population doubles by 2050, that could lead to agricultural plots being subdivided. As it stands, the average farmer owns just 0.3 hectares. This trend could therefore lead to an increase in the pressure on available space, which could result in (i) conflicts related to land ownership and (ii) the persistence of low agricultural productivity.

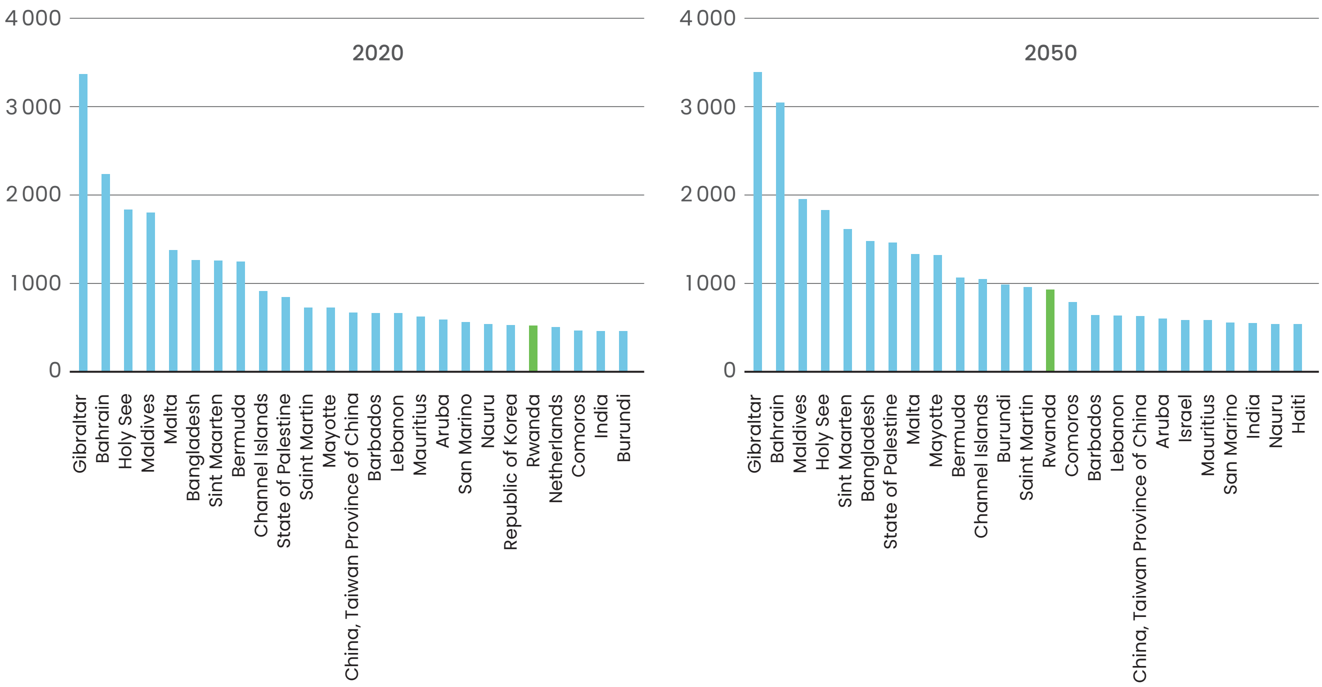
Rwanda is, moreover, still a largely rural country. In 2020, only 17.4% of the population lived in cities, an increase of 2.5 percentage points over 2000. According to UN projections, the number of people living in cities is expected to continue to rise slowly, so that about 20% of the population will live in cities by 2030, and about 30% by 2050. By way of comparison, 29% of people in East Africa and 43.5% of everyone on the continent as a whole live in cities, and those numbers are projected to rise to 47% and 59%, respectively, by 2050 (See Figure 22). It seems clear, then, that Rwanda is lagging behind when it comes to urbanization. That limits the productivity gains that are traditionally associated with the effects of agglomeration and the structural transformation of economies.

23 The scale ranks each country according to how easy it is to do business there, 1 being the easiest; 190, the hardest.

25 In the words of former Burundian President Pierre Nkurunziza, who died in June 2020.

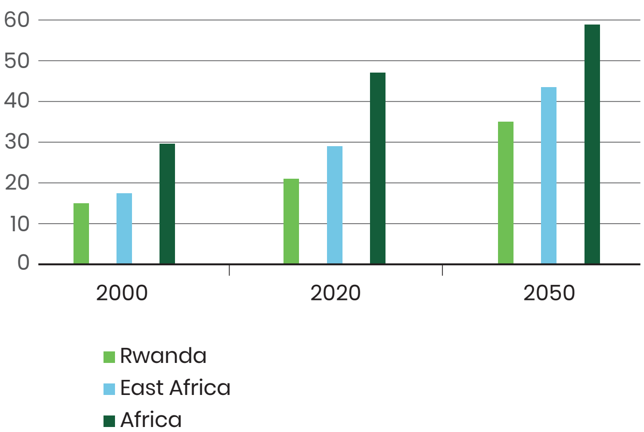
26 The EAC is made up of Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda.

Figure 21 - Population density (number of inhabitants per square kilometer)[27]



Source: UN, World Population Prospects 2019.

Figure 22 - Urbanization rate
(percentage of population living in cities)



Source: UN, World Urbanization Prospects 2018

27 Data for Monaco, Macao, Singapore, and Hong Kong have been omitted to make this figure easy to read.

Conclusion

Rwanda has come a long way since the 1994 genocide. Since the 2000s, its GDP has grown at one of the highest rates in the world, ranking second in Africa, behind Ethiopia. The country is now at peace and has modern and effective governance mechanisms. Poverty, and economic and gender inequality, have declined. Nevertheless, the growth model, which is based on strong state interventionism, is reaching its limits from the standpoint of public financing. Public debt is now only moderately sustainable, according to the IMF, and foreign trade imbalances will need structural financing from donors. At this point, the private sector is not in a position to take up the baton and ease the pressure on public finances or diversify the economy. Structural limitations related to the country's geography and population density, for instance, are also hampering its long-term development.

Is the current development model, with its undeniable strengths and limitations, capable of leading Rwanda on the path to emergence? An attempt to approach this rather vague economic concept has been made by Chetboun and Puloc'h (2021). They argue that emergence is characterized by "(i) sustained economic growth over the long term; (ii) the ability to integrate into world trade and attract private investment; and (iii) dynamic demographics and the emergence of a middle class, which allow endogenous growth, based on the development of a domestic market and internal consumption, to take over from extroverted development."

According to these criteria, Rwanda would now be halfway along the road to emergence. The sustained economic growth of the past 20 years is a valuable achievement that can be expected to continue in the medium term. The country is gradually integrating into world trade, despite the obvious limitations it is facing as a small landlocked country with limited comparative advantages. Private capital is beginning to come in, thanks to an attractive business climate, but it faces the same structural constraints. By contrast, the demographic criterion is being met only partially. Indeed, challenges related to population density and urbanization remain to be addressed if the country is to take full advantage of its burgeoning demographics. Finally, half of the population still lives on less than USD 1.90 a day and one-third are still living from subsistence farming. For a majority of Rwandans, then, consumption entails simply meeting basic needs. There is still a long way to go before there is enough of a middle class to power solid endogenous growth.

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List of acronyms and abbreviations

B	Billion(s)
BOP	Balance of payments
CRI	Global Climate Risk Index (Germanwatch)
DB	*Doing Business* (World Bank business-climate ranking)
DRC	Democratic Republic of the Congo
DSA	Debt sustainability analysis
EAC	East African Community
EUR	Euro
FDI	Foreign direct investment
FT	*Financial Times*
GDP	Gross domestic product
GFCF	Gross fixed capital formation
HDI	Human Development Index (UNDP)
HIC	High-income country (World Bank ranking)
HIPC	Heavily Indebted Poor Country
IFC	International Finance Corporation
IFS	International Financial Statistics (IMF)
IMF	International Monetary Fund
LIC	Low-income country (World Bank ranking)
LMIC	Lower-middle-income country (World Bank ranking)
M	Million(s)
MIC	Middle-income country (World Bank ranking)
MW	Megawatt(s)
NBR	National Bank of Rwanda
ND-GAIN	Notre Dame Global Adaptation Initiative
NISR	National Institute of Statistics of Rwanda
NST1	National Strategy for Transformation 2017–2024
ODA	Official development assistance
OECD	Organisation for Economic Cooperation and Development
PCI	Policy Coordination Instrument (IMF)
PKOs	Peacekeeping operations
PPP	Purchasing power parity
RCF	Rapid Credit Facility
RPF	Rwandan Patriotic Front
SCF	Standby Credit Facility (IMF)
SDGS	Sustainable Development Goals (United Nations)
UMIC	Upper-middle-income country (World Bank ranking)
UN	United Nations
UNDP	United Nations Development Programme
USD	United States Dollar
WDI	World Development Indicator (World Bank)
WEO	World Economic Outlook (IMF)
WGI	Worldwide Governance Indicator

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75012 Paris | France
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