

Rwanda Economic Update

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Inclusiveness of Foreign Direct Investment in Rwanda

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WORLD BANK GROUP

Rwanda Economic Update

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June 2023

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ACRONYMS

AfCFTA	African Continental Free Trade Area
BIT	Bilateral Investment Treaties
CBR	Central Bank Rate
CPI	Consumer Price Inflation
DRC	Democratic Republic of Congo
EAC	East African Community
FDI	Foreign Direct Investment
FPC	Foreign Private Capital
FY	Fiscal Year
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IMF	International Monetary Fund
MBRP	Manufacture and build to recover program
NBR	National Bank of Rwanda
NISR	National Institute of Statistics of Rwanda
NLF	National Labor Force
NST	National Strategy for Transformation
OECD	Organisation for Economic Co-operation and Development
PAYE	Pay As You Earn
RDB	Rwanda Development Board
Rwf	Rwanda Franc
SDR	Special Drawing Right
SEZ	Special Economic Zones
SSA	Sub-Saharan Africa
UNCTAD	United Nations Conference on Trade and Development
US\$	United States Dollar
VAT	Value-added tax

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The Rwanda Economic Update (REU) analyzes recent economic developments and prospects, as well as Rwanda's policy priorities. The REU is intended for a wide audience of policymakers, business leaders, other market participants, analysts of Rwanda's economy, and civil society. It draws on data reported by the Government of Rwanda and additional information collected by the World Bank Group in its regular economic monitoring and policy dialogue.

Published twice a year, each issue has a special feature spotlighting a particular topic. The 21st edition of REU focuses on the Inclusiveness of Foreign Direct Investment in Rwanda. The current edition, led by Calvin Zebaze Djiofack (Senior Economist) and Peace Aimee Niyibizi (Economist), is a collective endeavor and involved staff from several parts of the World Bank. The team includes Bernard Hoekman, Rohit Ticku, Marco Sanfilippo, Daniel Erich Prosi and Erwin R. Tiongson. The team is grateful to Philip Schuler (Lead Economist) for invaluable inputs on the structure and messaging of the report.

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Views expressed in the REU are those of the authors and do not necessarily reflect the views of the World Bank Group, its Executive Directors, the countries they represent, or the Government of Rwanda.

ABSTRACT

The Rwanda Economic Update No. 21 reviews the country's macroeconomic performance and prospects and includes a special section focusing on the impact of foreign direct investment (FDI) on the domestic economy. After growing by 8.2 percent in 2022, Real GDP expanded by 9.2 percent in the first quarter of 2023. However, this growth momentum may have been halted by disastrous flooding and landslides from the recent rains. Inflation has eased but remained well above the National Bank of Rwanda (NBR) target range in the first half of 2023, despite a tightening of monetary policy since January 2022. Rwanda's current account deficit improved in 2022, with higher export revenues and remittances outweighing rising import prices. The fiscal deficit narrowed in FY2022/23 thanks to a large decline in public spending, and strong growth which combined to reduce Rwanda's debt as a share of GDP. Prospects for continued high growth are good, and the fiscal and debt positions are expected to improve over the next few years. The special topic emphasizes the large size of FDI inflows, encouraged by a favorable regulatory environment and improvements in governance. FDI in Rwanda appears to generate significant employment benefits, both in terms of job creation by FDI firms and related increases in hiring by domestic firms. FDI firms also appear to have strong linkages with local firms, particularly domestic suppliers, and tend to provide higher-quality jobs than domestic firms, in terms of access to social security. However, forecasts of the volume of inflows and of employment provided when registering with the Rwanda Development Board turned out to be highly optimistic, raising concerns on both limits on FDI firms and the potential for misrepresentation to gain access to incentives. FDI projects tend to be concentrated in Kigali and surrounding districts, which have much lower poverty rates than the national average, and in general there is a negative association between the level of poverty and FDI inflows. Policies to improve the impact of FDI on inclusiveness could involve encouraging FDI projects in poorer districts, promoting greater participation by women and youths, enhancing corporate social responsibility initiatives, strengthening the monitoring and expost performance assessment of FDI, improving linkages between FDI projects and domestic suppliers, and encouraging the home country of investors to enforce mandatory standards that enhance the sustainability and inclusivity of FDI.

EXECUTIVE SUMMARY

Recent Economic Developments

Rwanda's economy was performing well before the recent floods. GDP increased by 9.2 percent in the first quarter of 2023 (year-on-year), after increasing by 8.2 percent in 2022. This growth momentum continued to be fueled by strong private consumption as well as some improvement in net exports, as export growth outpaced import growth. By contrast, the pace of investment declined as the government curtailed its capital spending to support fiscal consolidation. On the supply side, the services sector continued to lead the growth with contact-sensitive services, i.e. trade, transport and hospitality services, expanding at brisk rates. Industrial growth increased in the first quarter as growth in construction activities returned into positive zones and manufacturing growth strengthened on account of the extension of the Manufacture and Build to Recover Program (MBRP). The agricultural contribution to GDP remained moderate due to unfavorable weather conditions. Employment indicators improved in the first quarter of 2023, with the greatest improvement among women and the youth. This strong momentum might have been weakened by heavy rainfall in late April and early May that caused loss of life, flooding, landslides and significant damage to infrastructure and agricultural production. The report estimates that total losses (e.g., production flows) and damages (assets destruction) would result in the 2023 real GDP growth rate falling to 5.8 percent, against a pre-disaster forecast of 6.2 percent.

Despite some decline from the unprecedented high levels in 2022, inflation remains well above the central bank's upper-bound inflation target of 8 percent. Headline inflation (the change in the urban consumer price index) peaked at 21.7 percent in November 2022, before moderating to 14.1 percent in May 2023. The bad harvest has boosted food prices, while the passthrough of internal oil prices and franc depreciation maintained a core

inflation (computed excluding fresh food and energy items) above the inflation target. The National Bank of Rwanda (NBR) raised its benchmark rate—the central bank rate (CBR)—from 4.5 percent in January 2022 to 7 percent in February 2023, resumed its mop up operations in June 2022, and raised the reserve requirement ratio back to 5 percent effective January 1, 2023. Market interest rates have been trending upward, in line with the CBR increases. As fiscal and monetary tightening takes effect, inflation is expected to gradually return within NBR's target of 5 percent over the medium term.

Rwanda's international trade flows continued to rise in the first quarter of 2023, with a widening current account deficit linked to weakening secondary income. The narrowing current account deficit in 2022 was linked to higher export growth, especially higher re-exports and travel services (linked to tourism) as well as larger secondary incomes, both remittances and external grants. Overall, exports of goods and services increased by 41.9 percent, largely outpacing a 27.6 percent expansion in import payment. Thus, the current account deficit fell from 11.1 percent of GDP in 2021 to 9.8 percent in 2022. While export and tourism earnings continued to rise in Q1 of 2023, there was deceleration in secondary incomes, due to fewer external grants, leading to the widening current deficit.

The government reduced spending to cut the fiscal deficit in FY2022/23. Total government spending is estimated to have fallen by 3.7 percentage points of GDP in FY2022/2023 compared to the previous year. This improvement was due to declines in subsidies and in domestically financed capital expenditure, reflecting the completion of major infrastructure projects in the previous year. Tax revenues are estimated at 15.2 percent of GDP in FY2022/23, thus 0.6 percentage points below

their level in the previous year. The fiscal deficit is estimated to have narrowed to 6.2 percent of GDP in FY2022/23, 1.3 percentage points lower than in the previous fiscal year.

In 2022, strong growth coupled with some reduction in the fiscal deficit led to an easing of Rwanda's debt position. Rwanda's public and publicly guaranteed debt increased from 34.4 percent of GDP in 2015 to 73.3 percent in 2021, driven by borrowing to meet development needs and the robust COVID-19 response, but then fell to 67.1 percent in 2022. However, most of Rwanda's external debt is owed to multilateral donors on concessional terms. The World Bank-IMF debt sustainability analysis of December 2022 maintained the moderate debt risk rating.

Rwanda's outlook remains one with strong prospects for growth. Accounting for a potential impact of the recent floods, GDP growth is expected to moderate to 5.8 percent in 2023, against a pre-disaster forecast of 6.2 percent. Economic activity is expected to regain momentum in 2024, driven by some improvement in global tourism demand and a pickup in construction with the new airport. Inflation is likely to remain elevated in 2023 but is

expected to gradually return within NBR's target of 5 percent over the medium term. The current account deficit is projected to widen to 11.3 percent of GDP in 2023 and start narrowing thereafter, but remain at around 10 percent of GDP over the medium term due to continued private sector investment growth, supported by the extended Manufacture and Build to Recover Program (MBRP). Concessional borrowing and Foreign direct investment are expected to be sufficient to cover Rwanda's external financing needs. Expenditure rationalization as well as the recent tax reform are anticipated to reduce the fiscal deficit to 3.2 percent of GDP by FY2025/2026.

This outlook is subject to substantial downside risks. Commodity prices could be higher or more volatile than anticipated due to supply shocks generated by geopolitical tensions and conflict. Global economic activity could decelerate by more than forecast, softening demand for Rwanda's exports. And an increasing frequency of droughts and floods could reduce agricultural output and lead to higher food prices. Downside risks could pose significant challenges to maintain Rwanda's macroeconomic stability which will need to be met with a credible policy response.



The Benefits of Foreign Direct Investment

Rwanda has received substantial inflows of foreign direct investment (FDI). While FDI slowed during the pandemic, FDI inflows at their peak equaled almost a fifth of gross fixed capital formation (GFCF), similar to that of South-East Asian countries (e.g., Thailand and Vietnam), and well above the average of SSA and the EAC countries. Information on registered FDI projects provided by the Rwanda Development Board (RDB) also show a consistent increase in the number and estimated size of FDI in Rwanda, although below that projected by firms in their initial registration with the RDB. Policy reforms, including favorable regulatory treatment (e.g., corporate tax income exemptions, duty-free imports of inputs, no restrictions on foreign ownership, and one of the most open visa regimes in the region) as well as improvements in governance (particularly in comparison to most other countries in Sub-Saharan Africa) have encouraged FDI inflows. Rwanda also has entered into 14 bilateral investment treaties (6 of which are now in force), as double taxation treaties (DTTs) with 15 countries, and investment provisions are included in broader trade agreements with regional partners, the United States, and the European Union.

FDI projects are concentrated in richer districts.

The districts of the Kigali region (Gasabo, Kicukiro and Nyarugenge) accounted for 81 percent of FDI projects, 72 percent of investments, and 82 percent of projected jobs over the period 2016–22. By contrast, only 23.5 percent of total establishments were based in these three districts. The average headcount poverty rate in the three districts in 2016–17 was 13 percent, compared to a national average of 39.3 percent. As such, districts that received the largest shares of FDI are also those with the lower poverty rates in the country.

FDI has a significant impact on employment and sales.

FDI firms employ 170 percent more workers in Rwanda and their sales are approximately 370 percent larger, compared to domestic private sector firms. Employment in FDI firms tends to increase in the first three years from start up, although these average employment figures are driven by a few large firms. However, the number of jobs generated by FDI projects is a fraction of what was initially projected when foreign firms registered with RDB. It is important to understand whether these inaccurate forecasts (along with similar inaccuracies concerning the size of anticipated flows) reflect policy-driven constraints on FDI projects or data constraints of even firms' misreporting in order to gain the fiscal incentives offered by the RDB.



FDI firms may also provide higher-quality jobs. Compared to domestic firms, an FDI firm is 11 percentage points more likely to have a social security fund for its employees, and FDI firm social security contributions were more than 3 times larger than those provided by domestic firms. However, there is no significant difference between the share of casual workers in FDI firms compared to domestic firms, although only about one-fifth of the firms in the 'pay as you earn' database provide compositional details of their employment.

FDI appears to encourage job creation by domestic firms. For example, increases in employment due to FDI in a district may increase the demand for goods and services from domestic firms in that district, thus stimulating hiring by local firms. This multiplier effect is most likely to be driven by the entry of (domestic) migrant workers and by more educated workers, and is greatest for manufacturing FDI. On the other hand, there is no evidence of a significant relationship between increases in FDI jobs and women- or youth-specific employment in the district, and there is evidence of an increase in informal jobs following FDI jobs.

FDI firms appear to have substantial connections to local firms, thus increasing the benefits of FDI to the economy. On average, Rwandan FDI firms

have a much larger number of corporate suppliers than comparable local firms, and do not tend to have fewer domestic buyers than domestic firms. This analysis, however, provides no direct indication of the types of goods and services traded and the volume of these transactions, and the VAT data used in the analysis is available only for 2020, so the results were likely affected by the impact of the COVID-19 pandemic.

The analysis of FDI projects indicates some areas where policy initiatives could improve the impact of FDI on growth and development in Rwanda:

- Encouraging FDI projects in areas outside the Kigali area could increase the impact of FDI on poverty reduction. This would require an assessment of the factors that underlie successful FDI projects in poorer regions. One approach would be to create special economic zones with the availability of higher-quality infrastructure and human capital in the poorer districts of Rwanda, which is in line with the Government's current plans.
- The inclusiveness of FDI could be improved by modifying the incentive framework to encourage investments in women-led startups, to provide ancillary services that facilitate greater female employment (e.g., childcare and more flexible work conditions), to expand training for women



- and youths, or to encourage investment in sectors that tend to employ more casual workers, an important source of employment for women. The government could encourage foreign firms to enhance corporate social responsibility initiatives, to support better working conditions and health and safety in the workplace.
- Efforts to strengthen the monitoring and ex post performance assessment of FDI would contribute to the evaluation of the incentives regime and to improving government policies towards FDI firms. A targeted survey of FDI firms would support this effort. The results of such evaluations could be used to condition additional incentives based on inclusion-related metrics.
 - Policies could focus on improving linkages between FDI projects and domestic suppliers. A more in-depth assessment of the linkages between FDI and domestic firms, using an expanded database, would help identify how different types of FDI projects (by location, sector, activity) affect domestic firms and the districts they are located in, thus providing a robust basis for developing policy recommendations.
 - Cooperation with home governments is a potential channel to encourage sustainable FDI projects, perhaps through the imposition of mandatory standards that are enforced in the home country of investors.



PART ONE

RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK



1.1. Global and regional context¹

Uncertainties and poor growth prospects continue to beset the world economy. A confluence of factors—the repercussions from Russia’s invasion of Ukraine, persistent inflationary pressures and aggressive monetary policy tightening to curb them, recent banking sector stress in the United States and Europe, and natural disasters stemming from climate change—continues to loom over the global economy. According to the World Bank’s June 2023 Global Economic Prospects, while the risks of global stagflation have now abated, global demand continues to be soft. After growing 3.1 percent in 2022, the global economy is set to slow substantially in 2023, to 2.1 percent, before a tepid recovery in 2024 to 2.4 percent.

Growth in Sub-Saharan Africa (SSA) is projected to slow to 3.2 percent in 2023, as external headwinds, persistent inflation, higher borrowing costs, and increased insecurity weigh on activity. Recovery from the pandemic remains incomplete in many countries, with elevated costs of living tempering the growth of consumption. Fiscal space has narrowed further, while surging import bills and higher debt burdens have heightened financing needs. Growth in SSA is expected to slow from 3.7 percent in 2022 to 3.2 percent in 2023, with a moderate improvement to 3.9 percent in 2024. Although the baseline projection for 2024–25 envisions a pickup in growth, per capita incomes are expected to expand much more slowly than what is needed to reduce extreme poverty. Risks to the baseline remain tilted to the downside. These include a deeper-than-expected global economic slowdown, deteriorating terms of trade, higher inflation along with further domestic and international monetary policy tightening, renewed financial distress in advanced economies, and more adverse weather events. Materialization of these risks would not only dampen growth but also exacerbate poverty and limit the ability of many countries to strengthen climate resilience.

¹ This section draws on World Bank (2023).

1.2. Recent economic development

Preliminary Post-disaster impacts of the April–May 2023 floods on Economic Activity

The disasters resulted in significant loss of life and destruction of infrastructure, and are expected to have a significant impact on output growth in 2023. GDP growth is likely to be impacted directly and indirectly by the floods. The direct effect of the flooding was to reduce production by an estimated at US\$31.1 million, resulting in an estimated decline in GDP (relative to the pre-disaster forecast for the year) of about 0.17 percent based on an input-output model.² The indirect effect on GDP reflects the interruption in economic activity resulting from the massive damage to key assets and infrastructures (road, bridges, land, factory, etc.), which are estimated at US\$156 million in 2023. This is equivalent to the destruction of about 0.55 percent of the total capital stock. A computable general equilibrium (CGE) model estimate shows that, in the absence of a timely response, the destruction of capital caused by the flooding would likely lead to a reduction of GDP by 0.23 percent in the first year of the disaster. Consequently, total losses (e.g., production flows) and damages (assets destruction) would result in the 2023 real GDP growth rate falling to 5.8 percent, against a pre-disaster forecast of 6.2 percent.

The disaster is expected to affect food prices.

The decline in the supply of food crops caused by the disasters could have a significant impact on price increases, as food and non-alcoholic beverages account for 39.0 percent of the consumer price index (CPI).

Poverty, inequality, and human capital levels are at risk of deteriorating due to the disasters.

Persistently high food price inflation could delay or even reverse poverty gains in the next few years.³ Seven of the nine disaster-affect districts exhibited headcount poverty rates greater than the national average of 38.2 percent in 2016/17 (Figure 1.2) prior to

² The approach to estimate the direct effect – e.g., the impact of the losses of production flows on real GDP – is based the Input-Output matrix. The approach to estimate the indirect effects – e.g., the impact of the damages to infrastructure on real GDP – is generated by a CGE model used for the Rwanda CCDR published in September 2022.

³ Macro-Poverty Outlook, April 2023, page 2, The World Bank.

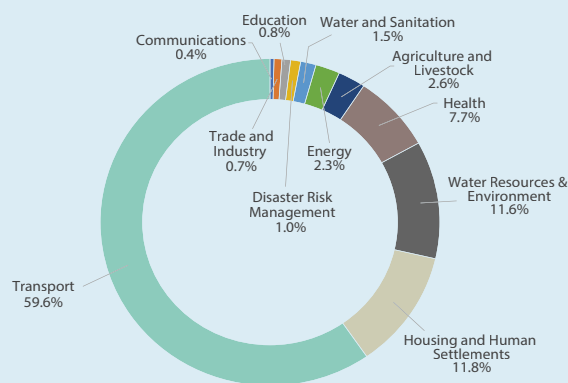
Box 1.1: Summary of damages and losses of Rwanda's recent floods

Rwanda experienced climate-related shock that led to life losses in the night of May 2 and 3, 2023. In late April and early May 2023, particularly on 2–3 May, heavy rainfall hit the northern, western and southern provinces of Rwanda, causing floods, triggering landslides and leading to casualties and damage. The districts most severely affected by the flood include Rutsiro, Nyabihu, Rubavu, and Ngororero in the Western Province; Burera, Gakenke, and Musanze in the Northern Province; and Nyamagabe in the Southern Province. According to the Government of Rwanda, 135 people have died across the affected provinces, 110 injured people and one still missing.⁴ In the aftermath of this disaster, the Government of Rwanda started response interventions and coordinated efforts to ensure rescue, evacuation and provision of humanitarian assistance to affected communities as well as expediting initial rehabilitation of damaged infrastructure to ensure business continuity. More than 20,300 people were evacuated to 83 temporary accommodation sites as nearly 6,000 houses were destroyed.⁵

There were also significant damages and losses in terms of assets and infrastructure. Key damaged assets and infrastructure include 5,963 houses, 58 schools, 2 health centres, 29 bridges, many national and district roads, numerous voltage lines as well as 12 power stations. In agriculture, disasters caused tremendous damages and losses in both crop and livestock farming. Landslides and floods affected 3,115.9 hectares (ha) of land, including 1,037.2 ha for cereal crops; 1,076.0 ha for pulses; 59.7 for oil crops; 658.3 ha for vegetables and root tubers; 166.5 ha for fruits and 118.03 ha for cash crops plantations. There were livestock losses (4,255 animals, of which 79 cattle, 3,605 chickens, 15 turkeys, 144 pigs, 133 goats, 91 sheep and 188 rabbits). This is likely to reduce access to food and income among the affected households in the short-term. Early estimates indicate that damages estimated are about Rwf184 billion (approximately US\$160 million). Additionally, the storm is estimated to have caused Rwf39 billion (about US\$33.6 million) in material loss. Early estimates of total recovery needs for the physical damages and economic losses are at Rwf629.38 billion (US\$547.29 million).

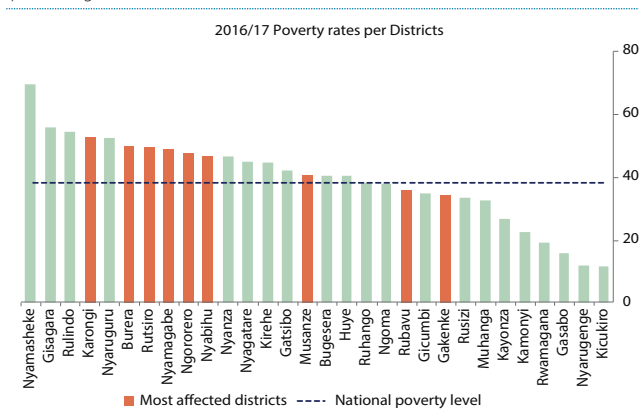
Figure 1.1: heavy rains have led to significant infrastructure damage and losses

(Total disaster effect, in percent)



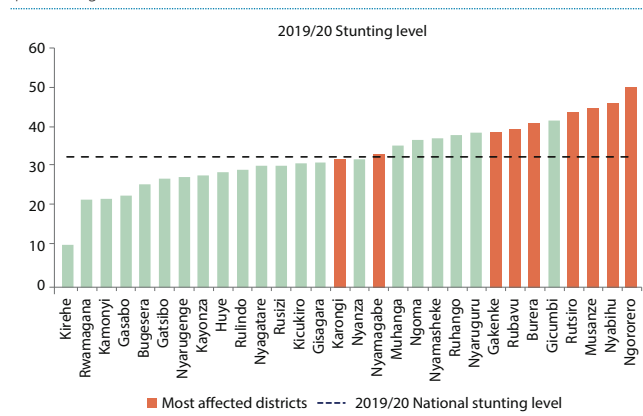
Source: Ministry in charge of Emergency Management (MINEMA)

Figure 1.2: Headcount poverty rates in disaster affected districts
(percentage)



Source: World Bank staff estimates based on 2016/17 Integrated Household Living Conditions Survey (EICV)

Figure 1.3: Stunting levels in disaster affected districts
(percentage)



Source: World Bank staff estimates based on 2019/20 Demographic and Health Survey

⁴ MINEMA, "Latest Updates on 2–3 May Disaster," <https://www.minema.gov.rw/updates/news/latest-updates-on-2-3-may-disaster>
⁵ "MINEMA," accessed May 25, 2023, <https://www.minema.gov.rw/>.

the heavy floods and severe landslides, and poverty could increase significantly if adequate support is not provided quickly to affected communities and households. Production losses and damages are concentrated in economic activities that provide livelihoods and basic services to the poor and vulnerable, such as health, agriculture, wholesale and retail trade, and transport. Moreover, the crisis is likely to accentuate stunting challenges. Some of the affected districts are also the ones with the highest level of stunting and rely on own agriculture activities for their nutrition.

Strong growth momentum continued in early 2023, despite weaker investment

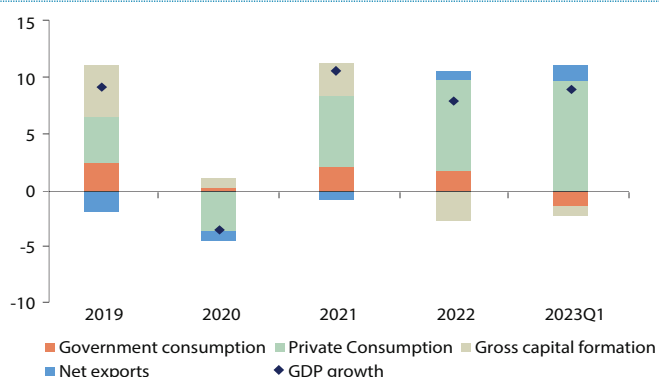
Rwanda's economy continued to stage a strong growth momentum in early 2023 fueled by robust private consumption. Real GDP expanded by 9.2 percent in Q1 2023, up from 7.9 percent in the same period of 2022. This strong growth came after a two-year average growth of 9.5 percent (10.9 percent in 2021 and 8.2 percent in 2022, see Box 1.2). Despite high inflation pressures since mid-2022, real GDP growth was powered by robust private consumption (Figure 1.4A). Robust private consumption reflects some improvements in the labour market (see the labour market section). On the other hand, investment declined for the third consecutive quarter, as most infrastructure projects undertaken as part of the post-COVID recovery plan were completed in the first half of 2022 and inflation continued to push up business costs. Quarterly GDP

data of the Q1 of 2023 indicated that the investment deflator has averaged 29.3 percent for the last three quarters (Q3 and Q4 of 2022 and Q1 of 2023). Public consumption also declined, for the second consecutive quarter, thus exerting a drag on GDP growth. The contribution of net exports to GDP remained in positive zones, for the third consecutive quarter as real export growth continued to outpace the real import growth.

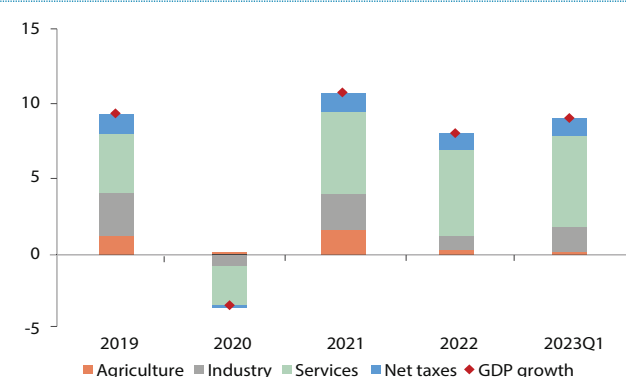
From the supply side, services continue to drive growth, aligned with strong private consumption (Figure 1.4B). Services have been the biggest driver of the post-COVID growth, in line with the pre-crisis trends. Expanding by 13.4 percent, the services sector contributed the most at 6.1 percentage points (more than 65 percent) to the 9.2 percent GDP growth in Q1 of 2023. Growing at 20.0 percent in Q1 of 2023, contact-sensitive services such as trade, transport and hospitality services led the expansion of the services sector. Property-related services, i.e. real estate activities, the second largest services after trade services, have registered strong growth since Q2 of 2019. Industrial growth recovered as growth in construction activities returned into positive zones and manufacturing growth strengthened on account of the extension of the Manufacture and Build to Recover Program (MBRP). Growth in mining and quarrying sectors remained strong in early 2023. Meanwhile, the growth contribution of agriculture remained moderate, likely due to unfavorable weather conditions.

Figure 1.4: Private consumption and services continue to drive GDP growth

A. GDP demand components
(Percent y/y; percentage points)



B. GDP sectoral decomposition
(Percent y/y; percentage points)



Source: WBG staff computation based on National Institute of Statistics of Rwanda (NISR)

Box 1.2: Growth performance in 2022

In 2022, Rwanda's economy shows a strong post-pandemic recovery amidst uncertain global and domestic conditions. After a strong recovery in 2021, Rwanda's economy encountered multi-faceted challenges. Externally, the economy experienced setbacks stemming from the slowdown in global growth, and rising global inflation exacerbated by spillovers from the war on Ukraine. The war on Ukraine has triggered a slowing global recovery from the pandemic-induced recession of 2020 and elevated inflation—driven by a combination of surging commodity prices and persistent supply disruptions. Rwanda's economy was hit by higher oil prices, which are not only increasing the import bill for energy products, but also raising transport costs for all other imported items, including food items. Domestically, agriculture underperformed due to unfavorable weather conditions coupled with less use of inputs like fertilizers as a consequence of higher prices linked to global supply chain disruptions. Despite these challenges, Rwanda's economy has shown some resilience by growing at 8.2 percent in 2022.

Domestic demand was the main driver on the 2022 real GDP growth, despite mixed picture. Growth in private consumption was robust, especially in the second half, despite high inflation pressures (Figure 1.4). However, following declines in capital spending in 2022, investment declined. Most of infrastructure projects undertaken as part of the post-COVID recovery plan were completed in the first half of 2022. The contribution of net exports to real GDP growth turned slightly positive on account of high export growth. Contrary to the first half of 2022, the contribution of net exports (i.e., external demand) to real GDP growth turned negative in the second half, while remaining slightly positive for the entire year overall.

On the production side, 2022 real GDP growth was mainly driven by the services sector, primarily boosted by the rebound in tourism activities. While the growth continued to be broad-based in the second half, services sector growth was driven by wholesale and retail trade, hospitality, transport, and information and communications, as well as by public-led services (public administration and education). These six sub sectors generated more than 85 percent of the overall services growth and more than 60 percent of real GDP growth in the second half. In 2022, the number of tourist arrivals more than doubled compared to the previous year—a reversal of a 2-year declining trend—but remained at about 70 percent of pre-pandemic levels. This trend has boosted output in hotel and restaurants services—increasing by 87.3 percent in 2022—with about 60 percent of growth happening in the first half due to the June 2022 Commonwealth Heads of Government Meeting (CHOGM) meeting.

Industrial and agricultural contribution to growth were benign throughout the year. The industrial growth decelerated, weighed down by contraction in the construction sector—the important driver of the post-COVID recovery—in the second half of 2022 as most infrastructure projects were completed. The agriculture sector experienced poor performance in 2022, undermined by high costs of inputs due to trade disruptions as well as unfavorable weather conditions. Food crop production was the most affected, leading to food price pressures.

Source: WBD Staff based on NISR GDP database.

labor market showed some improvement in the early 2023

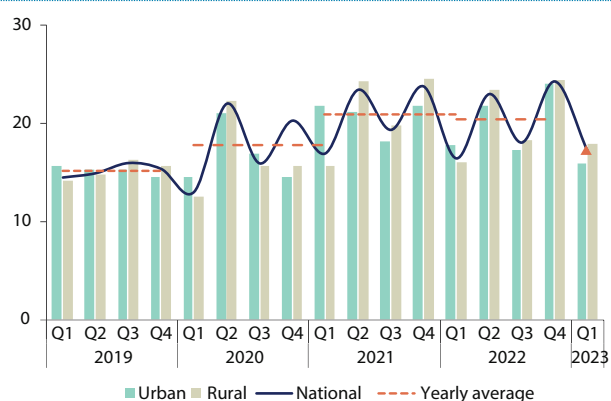
The labor market improved significantly in Q1 of 2023, with some shifts in the labor market towards urban jobs (Figure 1.5A). The employment-to-population ratio increased by 3.3 percentage points while the unemployment rate plunged by over 7 percentage points, on average. The decline was more in the urban area with a 4.4 percentage points, versus 2.6 percentage points in rural areas. This reflects the

fact that most of new jobs were created in urban areas. In Q1 of 2023, 35.5 percent of the employed population were in urban areas, up from 24.0 percent, on average, in 2022 (Figure 1.5B). According to the labor force survey (LFS) of February 2023, the decline in unemployment was also more evident among youth (-9.3 percentage points) and women (-9.0 percentage points). The employment-to-population ratio has reached its highest quarterly post-COVID level, driven mainly by female employment.

Figure 1.5: Rwanda's labour market

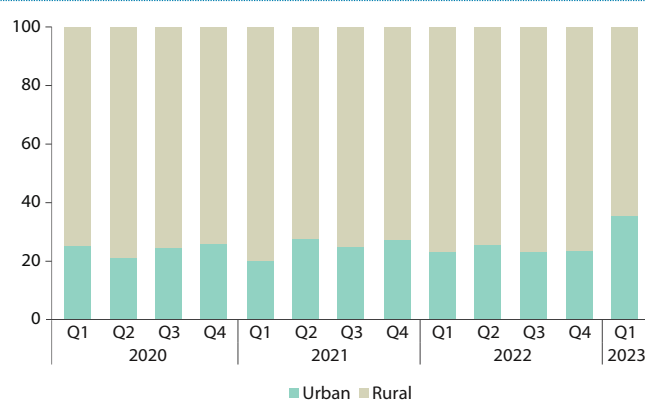
A. Unemployment rates

(Employment-to-population ratio(%))



B. Share of jobs: Urban area vs Rural area

(Percent)



Source: Rwanda Labor Force Surveys, various issues

In Q1 of 2023, improvements in the labor market were in line with real sector activities. The employment expansion was driven by contact-related services, i.e., trade, transport and hospitality services as well as the manufacturing industry, in line with their contribution to the real GDP growth in that period (Table 1.1). There were job declines in agriculture and construction activities, reflecting trends in the respective output.

Table 1.1: Employment by selected sectors

(percent changes)

	2023 Q1 vs 2022 Q1
Employed population	6.1
Agriculture, forestry and fishing	-6.4
Mining and quarrying	48.1
Manufacturing	23.2
Construction	-6.5
Contact-related services	37.7
Others	14.8

Source: Rwanda Labor Force Surveys, various issues.

Rwanda's international trade flows continued to rise

Rwanda's international trade flows maintained strong momentum in early 2023 with export growth, outpacing import growth in the first four months of 2023. Exports of goods increased sharply, by 30.6 percent, in the first four months of 2023. Despite this strong growth, performance is mixed across export items. The main drivers of exports were gold exports, coffee and reexports, which increased

by 82.1 percent, 119.2 percent and 32.3 percent respectively. On the other hand, there were declines in some export items, such as tea (-0.4 percent), cassiterite (-38.0 percent), wolfram (-32.1 percent), and hides and skin (-79.1 percent), driven mainly by falls in their prices. Expanding by 24.8 percent, imports increased across most categories except for intermediate goods. Preliminary data indicate a narrowing current account deficit in Q1 of 2023 on account of declining external grants. In Q1 of 2023, external grants were less than 1 percent of GDP compared to 4.3 percent of GDP in the same period of 2022.

In 2022, strong export growth and larger secondary income flows narrowed the current account deficit. The substantial increase in global prices for oil and other commodities led a 27.6 percent expansion in import payments in 2022. This was partially offset by a 41.9 percent increase in exports, mainly driven by higher re-exports of fuel and food items to the Democratic Republic of Congo (DRC), as well as travel services (linked to the tourism recovery). Remittance inflows increased by 21.8 percent year-on-year to reach US\$461 million (equivalent to 3.5 percent of GDP) in 2022. With these trends, the current account deficit narrowed to 9.8 percent of GDP in 2022, falling below 10 percent for the first time since 2018.

Table 1.2: Balance of payments, 2018–2023
(Percent of GDP, unless otherwise indicated)

	2020	2021	2022	2021Q1	2022Q1	2023Q1
Current account balance	-12.1	-11.2	-9.8	-9.5	-8.4	-12.2
<i>Trade balance (goods and services)</i>	-16.2	-16.1	-14.9	-14.0	-13.5	-14.6
Exports	19.0	19.1	22.5	16.0	20.8	22.8
o/w tourism	1.2	1.4	3.0	0.9	1.9	2.9
Imports	35.2	35.2	37.4	30.0	34.3	37.4
<i>Primary income</i>	-2.0	-2.0	-2.3	-2.2	-2.8	-1.6
<i>Secondary income</i>	6.1	6.8	7.4	6.8	7.9	4.1
o/w external grants to government	3.0	3.5	3.9	3.8	4.3	0.6
o/w remittances inflows	2.7	3.4	3.5	3.1	3.6	3.4
Capital account balance	3.1	3.4	2.4	3.0	2.5	2.8
Financial account balance	11.0	10.1	5.9	3.9	0.1	12.6
Direct investment	1.5	2.1	3.0	1.5	2.6	2.5
Portfolio investment	0.3	2.5	-0.5	0.0	-0.1	0.0
Loans and other flows	9.5	7.9	2.9	2.4	-2.3	10.1
o/w government borrowing	9.3	8.8	2.8	6.8	4.2	12.1
Net errors and omissions	1.3	-0.9	0.5	-1.7	-0.8	-6.7
Change in reserves (+: increases)	3.2	1.4	-1.0	-4.3	-6.5	-3.5

Source: WBG staff calculation based on NBR and NISR data.

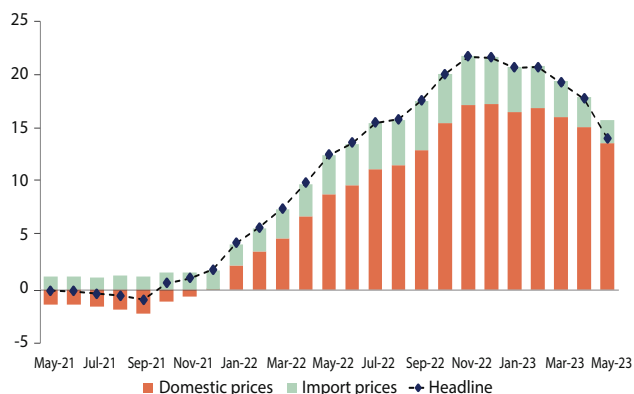
Foreign direct investment and government borrowing partially financed the current account deficit, leading to a drawdown of foreign reserves. Foreign direct investment (FDI) inflows continued to recover, reflecting the improvement in economic activities. Affected by the COVID pandemic, FDI declined to 1.9 percent of GDP in 2020. Following a gradual reopening of economic activities, FDI had recovered to 3.0 percent of GDP in 2022 but still remained below the pre-crisis levels. The other important source for financing the current account deficit is government borrowing, which fell by about 4 percent from 2021, largely reflecting the base effect emanating from the Eurobond issuance and SDR allocation in 2021. The small overall balance of payments deficit was financed by drawing on foreign reserves in 2022, after several years of reserve accumulation (Table 1.2). Nevertheless, foreign exchange reserves remain at a comfortable level of 4.2 months of import cover. The level of reserves, together with the high demand for imports, has led to 11.3 percent depreciation of the franc against the US dollars between end-2021 and end-May 2023.

Inflation and monetary policy

Following the unprecedented high levels of inflation in 2022, there has been some easing off in early 2023, but inflation remains well above the NBR's inflation target (Figure 1.6). After peaking at 21.7 percent in November 2022, the inflation rate measured by the urban consumer price index, decelerated to 14.1 percent in May 2023.⁶ Food inflation contributed most to inflation trends since May in 2022, following the poor food harvest in that year. In 2023, food inflation remains elevated and the largest contributor to inflation. Reflecting the passthrough of higher international prices of food and oil, higher credit growth and franc depreciation, core inflation (excluding fresh food and energy items) also remained above the NBR inflation target. In addition, some services have recently experienced price increase. These include: i) hotel and restaurants (due to higher food prices—sugar, rice, cooking oils, cereals and flours—in line with trends in their domestic and international prices); ii) transport (due to fuel prices and the surge in cars' prices); and iii)

⁶ Rwanda uses the urban consumer price index as the main inflation indicator for macro-economic policy, especially for monetary policy purposes.

Figure 1.6: Rising domestic food prices led to inflation pressures
(percent change, year-on-year, and contribution to percent change)



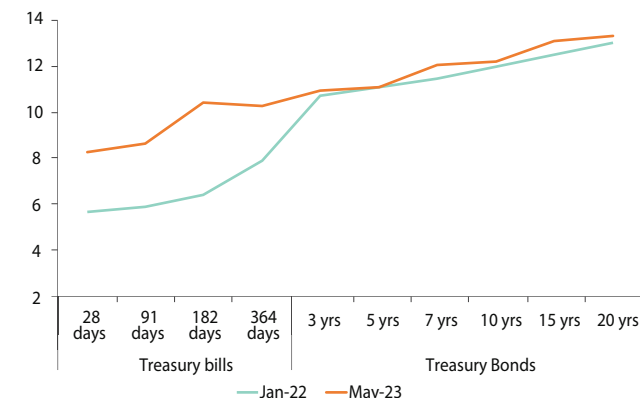
Source: World Bank staff calculation based on NISR data

housing related products (driven by gas prices). Pressures from food prices had been more noticeable in rural areas, where food items constitute the bulk of the consumption basket (48 percent), thus affecting the poorer households. In May 2023, rural inflation was 28.2 percent, down from the recent high of 42.9 percent, mainly due to declines in the price of cereals and vegetables. This reflects the start of the Season B green harvest in mid-April.

NBR tightened monetary policy in 2022 as inflation reached historical records. From January 2022 to February 2023, NBR has raised its benchmark rate—the central bank rate (CBR)—by a cumulative 250 basis points, from 4.5 percent to 7.0 percent. Furthermore, the NBR resumed, in June 2022, its mop-up operations, which were last done before the COVID pandemic and which were replaced by injection operations to provide enough liquidity to the economy during that time. The reserve requirement ratio was also raised back to 5.0 percent effective January 1, 2023. With these actions, the real growth of the credit to the private sector, measured as the nominal credit growth minus the headline inflation, has been in negative zones since July 2022. With this negative credit growth, one could argue that the monetary policy actions has been to some extent effective.

Interest rates have been trending upward, in line with the CBR increases (Figure 1.7). Between January 2022 and April 2023, the largest increase

Figure 1.7: Rwanda's yield curve, January 2022–April 2023
(percent)



Source: WBG estimates based on NBR Monthly Interest Rates

was in the 182-day treasury bill (TB) rate (+365 basis points), followed by the interbank rate (+252 basis points). Overall, TB rates reported large increases (+262 basis points in weighted average rate), reflecting the fact that the government relied more on domestic options to finance the fiscal deficit in the first half (July-December) of FY2022/2023. With a small increase in lending rate (+15 basis points), the interest rate spread (between deposit and lending rates) has declined below 7 percent in Q1 of 2023, a level last seen in May 2013.

Fiscal Sector and Debt Sustainability

The government made large spending cuts in FY2022/23 that contributed to narrowing the budget deficit. Both revenue and expenditure declined as a share of GDP. However, the decline in revenues was less than the one recorded in expenditure. Overall, total government spending is estimated to decline to 28.9 percent of GDP in FY2022/2023, which is 3.7 percentage points lower than in the previous fiscal year. This was mainly driven by declines in the use of goods, capital expenditure, and subsidies. In FY2022/2023, the government of Rwanda undertook spending rationalization measures focusing on improved efficiency of government services, limits to subsidies, more efficient capital expenditure, and general public finance management (PFM) reforms. Fiscal revenues are also expected to have declined to 22.7 percent of GDP in FY2022/23. The government has recently started implementing changes to the tax code, which

Table 1.3: Rwanda's Public finance, FY2020/21-FY2023/24
(percent of GDP)

	FY2020/21	FY2021/22	FY2022/23 End year estimates	FY2023/24 proj.
REVENUE	23.4	25.1	22.7	21.8
Taxes	15.7	15.8	15.2	15.4
Taxes on income, profits, and capital gains	6.8	6.8	6.6	6.6
Taxes on goods and services	7.6	7.6	7.1	7.0
Taxes on international trade and transactions	1.2	1.2	1.3	1.5
Other taxes	0.0	0.2	0.2	0.3
Other revenues	3.0	3.8	2.5	2.6
Grants	4.7	5.5	5.0	3.8
EXPENDITURE	31.3	32.6	28.9	27.1
Expenses	20.3	20.4	19.1	18.1
Compensation of employees	2.8	2.9	2.5	2.7
Use of goods and services	6.1	6.1	4.8	4.4
Interest	1.5	1.8	2.3	2.4
Subsidies	2.7	2.5	2.0	1.8
Grants	5.3	5.3	6.4	5.7
Social benefits	0.3	0.4	0.3	0.3
Other expense	1.5	1.3	0.8	0.8
Net Investment in nonfinancial assets	11.0	12.2	9.8	9.0
Foreign financed	5.8	6.7	5.3	5.6
Domestically financed	5.2	5.5	4.5	3.4
Net lending borrowing				
Including grants	-7.9	-7.5	-6.2	-5.3
Excluding grants	-12.6	-13.0	-11.2	-9.1
Primary balance	-6.4	-5.8	-3.9	-2.9
Net financing	7.9	7.5	6.2	5.3
Domestic	-2.3	1.1	0.3	-1.1
Foreign	10.2	6.4	5.9	6.4

Source: WBG staff computations based on various budget executions reports and budget framework papers.

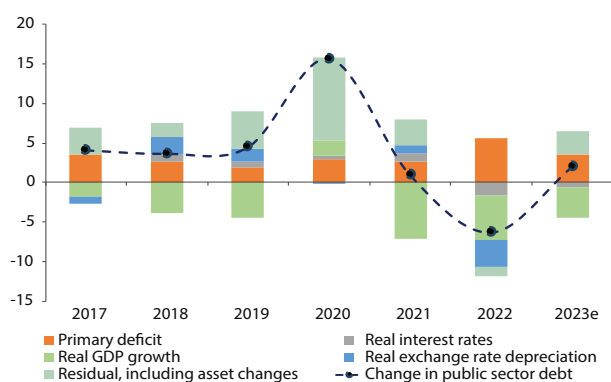
may reduce the growth of revenues (an exemption of value-added tax (VAT) on rice and maize flour, reduction of the corporate income tax rate, limits on excise duties, and some reduction in property taxes), but also included steps to broaden the tax base, improve tax compliance and curb tax evasion. This underlines the need for strong implementation of the latter reforms going forward. However, reductions in revenue were less than the one recorded in expenditure. Thus, the fiscal deficit is estimated to narrow to 6.2 percent of GDP in FY2022/23 from 7.5 percent of GDP in FY2021/22.

Fiscal consolidation and strong economic growth reduced Rwanda's debt burden in 2022 for the first time since 2013. Public and publicly guaranteed (PPG) debt fell by 6.2 percentage points in 2022 to 67.1 percent of GDP, reversing the trend that saw PPG debt almost double as a share of GDP during 2015–2021, driven by borrowing to finance public investment but also from the robust COVID-19 response.⁷ Most of Rwanda's external debt is owed to multilateral donors on concessional terms. The

⁷ The government's response to the pandemic added about 16.5 percentage points of GDP to Rwanda's PPG debt in 2020 and 2021.

share of concessional borrowing accounted for over 80 percent of total public external debt by the end of 2022. The debt sustainability analysis (DSA) of December 2022 maintained the moderate debt risk rating. In terms of drivers of debt declines in 2022, high economic growth, the exchange rate depreciation as well as favorable interest rates have more than offset the impact of the primary fiscal deficit that had been leading recent increases (Figure 1.8).

Figure 1.8: Decomposition of public debt changes, 2017–22
(Percent of GDP)



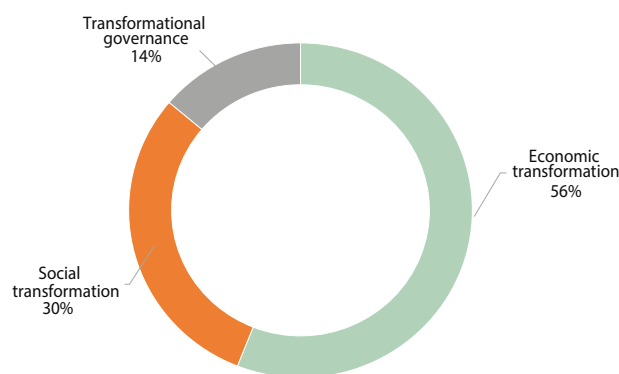
Source: WBG staff estimates based on DSA data

The FY2023/2024 budget envisaged a further reduction of capital spending. According to the budget framework paper (BFP) for 2023/24 – 2025/26, the overall spending is expected to decline by 1.7 percentage points of GDP to 27.1 percent in FY2023/24. Capital expenditure is expected to decline to 9 percent of GDP, its lowest level since the last decade. Recurrent expenditures are also expected to drop by 1 percentage point. Overall, the fiscal deficit is projected to be 5.8 percent of GDP (Table 1.3). The fiscal deficit financing for FY2023/24 is mostly from external borrowing. The announced fiscal consolidation path is expected to reduce the accumulation pace of public debt (projected at 69.1 percent of GDP in June 2021).

The FY2023/24 budget priorities are National Strategy for Transformation (NST1) pillars. The government has allocated 56.0 percent of the FY2023/24 budget (approximately 16.5 percent of GDP) to the economic transformation pillar. Among

other areas, the focus will be on: a) increasing agricultural and animal productivity and postharvest management to ensure national food and nutrition security; b) scaling up access to infrastructure, improving their efficiency, and ensuring their maintenance; and c) enhancing disaster prevention and response measures. A share of about 30 percent of the FY2023/24 budget is allocated to the social transformation pillar, with the overarching objective of developing Rwandans into a capable and skilled people with quality standards of living and a stable and secure society. The transformational governance pillar is allocated about 14 percent of the budget with the overarching objective of consolidating good governance and justice as building blocks for equitable and sustainable national development.

Figure 1.9: FY2023/24 budget allocation by NST1 pillars



Source: Budget Framework Paper 2023/24–2025/26

1.3. Rwanda's economic outlook and risks

After softening in 2023, Rwanda's economic growth is expected to regain momentum in 2024–2025. The recent floods are expected to have weighed on an already softening growth in 2023, which reflected additional fiscal consolidation and monetary policy tightening to rebuild policy buffers, as well as weaker agricultural output. Growth is projected to improve in 2024–2025.

In 2024, agriculture is expected to rebound. Industrial production is expected to continue benefiting from the extension of the Manufacture and Build to Recover Program (MBRP). Industrial activity is expected to benefit from the pickup in

construction of the new airport and the subsequent boost to the services sector in line with the global growth outlook and the expected decline in domestic inflation. Inflation is expected to slowly decline in 2023, as the NBR envisages to continue monitoring it to take appropriate actions. Inflation will remain elevated in 2023 as food prices remain stubbornly higher. As fiscal and monetary tightening takes effect, inflation is expected to gradually return within NBR's target of 5 percent over the medium term.

The current account deficit is projected to widen to 11.3 percent of GDP in 2023 and start narrowing thereafter. Rwanda had been running structural external deficits consistent with its high investment needs, where this investment is financed with foreign savings. While the government is expected to reduce its expenditure over the medium term, it is expected that investment momentum will continue, led by the private sector and supported by the extended MBRP and foreign direct investment inflows related to the construction of the new airport. This is expected to lead to larger import bill amid declining foreign grants. The import bill is expected to be enlarged due to the recovery needs for the physical damages and economic losses in the sector that are mostly

affected by the of the April–May 2023 floods. Therefore, the current account deficit is projected to remain at around 10 percent of GDP over the medium term. The level of foreign reserves should remain adequate as concessional borrowing and FDI are expected to continue covering Rwanda's external financing needs. Construction activities for the Bugesera Airport are expected to lead to a higher FDI increase over 2024–2025.

Expenditure rationalization and tax reform is projected to gradually reduce the fiscal deficit to 3.2 percent by FY2025/26. Total expenditures are projected to decline by 1.6 percentage points to 27.4 percent of GDP between FY2022/23 and FY2025/26 as the government continues its expenditure rationalization measures, on both recurrent non-wage and capital spending. In April 2023, the government adopted a number of tax reforms to broaden the tax base, improve tax compliance, and curb tax evasion. Designed as part of the Medium-Term Revenue strategy (MTRS), these reforms are expected to increase tax revenues by 1 percentage point of GDP by FY2025/26. With a credible fiscal consolidation, the debt trajectory is expected to remain sustainable.



The outlook is subject to uncertainty about developments in global commodity markets, the degree of additional global and domestic policy tightening needed to subdue persistent inflation, and the resilience of the world economy and global financial system to a prolonged period of tight monetary policies. Commodity prices may remain unusually volatile and vulnerable to further shocks if disruptions to the supply of major commodities worsen—for example, because of intensifying geopolitical tensions or conflicts. The main risk on the domestic front is linked to the increasing frequency of weather and climate shocks (e.g., drought and floods), which could harm agricultural output and thereby impact many farms and households in Rwanda. Decreased production could also lead to higher food prices to the detriment of poor households.



PART TWO

INCLUSIVENESS OF FOREIGN DIRECT INVESTMENT IN RWANDA



2.1. Introduction

Foreign direct investment (FDI) is an important source of finance for economic development and contributes to domestic employment, capital formation and diffusion of external knowledge to the local economy. Evidence from two decades of empirical research points to growth-enhancing effects of FDI at the macroeconomic level (Alfaro and Charlton, 2013; Alfaro, 2017; Javorcik, 2019), higher levels of employment, particularly for the more highly skilled (Hoekman et al., 2023) and improvements in the performance of domestic firms, especially those that benefit from the establishment of direct linkages with foreign investors (e.g. Alfaro-Urena et al., 2022). A key motivation underlying investment promotion policies is that FDI may give rise to a mix of vertical and horizontal spillover effects on domestic firms (Farole and Winkler, 2014). The incidence and magnitude of FDI spillover effects operate through a range of different channels, each of which may be influenced by the business environment, macroeconomic conditions, political and governance variables, and differences in managerial ability, access to finance and absorptive capacity of firms, among other factors.⁸ The benefits of attracting FDI may extend beyond purely economic effects. Attracting “quality” FDI can help improve living standards along several dimensions of well-being, including Sustainable Development Goal (SDG) 9, by supporting inclusive and sustainable industrialization, fostering innovation and development of infrastructure.



⁸ See, e.g., Javorcik (2019), Lay and Tafese (2020) and Godart et al. (2020).

Empirical analysis that is granular enough to account for the heterogeneous features of FDI projects that may influence their potential to generate spillovers has been limited in the African context. Only a handful of studies provide evidence on the consequences of domestic firms' exposure to FDI. Most of the literature focuses on horizontal, intra-industry effects.⁹ Evidence on vertical spillovers in African contexts is particularly limited. Newman et al. (2020) use survey data to investigate the prevalence of backward and forward vertical linkages associated with FDI and conclude these are rare in Africa, but argue that conditional on establishing a linkage, spillovers and technology transfers are likely to be strong.¹⁰

Investigating the implications of attracting FDI is important for Rwanda given the national development objective of promoting economic growth by fostering private sector development. The National Strategy for Transformation (NST) highlights the promotion of public and private investment as a key strategic goal. The institution in 2017 of the “*National Investment Policy*” in place of the “*National Public Investment Policy*” is a clear sign of attention to the role of the private sector. Increases in domestic savings and, especially, the attraction of foreign capital in the form of FDI are at the core of NST.¹¹

⁹ In an analysis of Zambian manufacturing firms, Bwalya (2006) finds no support for horizontal productivity FDI spillovers. Waldkirch and Oforu (2010) find that FDI has a negative association with average total factor productivity of a sample of domestic competing firms in the manufacturing sector. Also focusing on horizontal spillovers, a firm level analysis of FDI spillovers by Demena and van Bergeijk (2019) finds evidence for competition spillover effects but not for learning and mobility spillover effects. Demena and Murshed (2018) use firm-level surveys for eight sub-Saharan Africa countries over the period 2006-2014, finding evidence for demonstration (learning) spillovers, but not for labor mobility-related technology diffusion or competition effects. Similarly, using an ad-hoc survey on a cross-section of African countries, Sanfilippo and Seric (2016) find evidence of agglomeration spillovers when foreign firms co-locate in the same cities as domestic firms. Abebe et al. (2021) in contrast find that the entry of large scale FDI in manufacturing activities in Ethiopia has pro-competitive effects on domestic incumbents.

¹⁰ Bwalya (2006) provides evidence for vertical spillovers from FDI on Zambian firms in the manufacturing sector.

¹¹ FDI represents about 74% of total foreign capital flows in Rwanda, according to the last census by the National Bank.

Recent data demonstrate the benefits of FDI inflows for Rwanda. The data show a consistent increase in the number and estimated size of FDI in Rwanda, which is driven by projects in the manufacturing, construction, and services sectors. The analysis shows that registered FDI firms are an important source of employment in the country.¹² Jobs offered by foreign investors are increasing during the period considered, with job creation not only at the year of entry of FDI projects but also in subsequent years of operation. On a less positive note, the analysis reveals that the number of jobs generated by FDI projects is a fraction of what was initially projected when foreign firms register with RDB. There is some evidence of a “multiplier” effect of FDI on employment generated within the district in which a project occurs. This role of FDI as a local employment multiplier is stronger for manufacturing projects. The analysis also provides suggestive evidence that FDI firms have a strong capacity to involve domestic suppliers and customers in their supply chains. Although data limitations preclude identification of detailed linkage effects, the literature on FDI noted above finds that these types of relationships can be expected to be associated with spillovers on the economic and employment performance of domestic firms, in turn influencing the impact of FDI on inclusivity.

The remainder of the section is structured as follows. First, a descriptive overview of the size and distribution of FDI in Rwanda is provided. Next, an assessment of the inclusiveness of FDI in Rwanda is conducted by combining project-level FDI data with firm-level data to investigate the extent to which foreign investors contribute to job generation in Rwanda both directly and indirectly, using nationally representative data on the labor force. The analysis also provides a snapshot of firm-to-firm relationships, identifying the supply chain relationships settled up

by foreign investors in Rwanda. Finally, the conclusion draws some policy implications suggested by the findings and the broader literature on FDI policies for inclusive development.¹³

2.2. Rwanda provides a favorable environment for FDI

The government of Rwanda has promoted a series of reforms to improve the investment climate and encourage private investment, especially FDI. The latter includes a range of favorable regulations, e.g., corporate tax income exemptions, duty-free imports of inputs, no restrictions on foreign ownership and one of the most open visa regimes in the region (NBR, 2023). While it is difficult to assess whether and to what extent the provision of fiscal incentives is a driver of FDI inflows, the establishment of a business environment that is supportive of private sector activity has been emphasized in the empirical literature as a main determinant of FDI (Bloningen and Piger, 2014). Rwanda’s good track in terms of governance is therefore an important factor influencing potential entry by foreign investors. Over time, the country has made visible improvements in some of the dimensions of governance that are found by the literature to be valued by foreign investors. For instance, data from the World Bank’s World Governance Indicators (WGI) show that over the last 20 years Rwanda moved to the highest percentiles of the world’s distribution in terms of control of corruption, effectiveness of the government, political stability, regulatory quality, and the rule of law (Figure 2.1). Importantly, this makes Rwanda a regional outlier, closer to the values recorded by East Asian countries. Over the same time span the sub-Saharan African region did not improve accordingly.

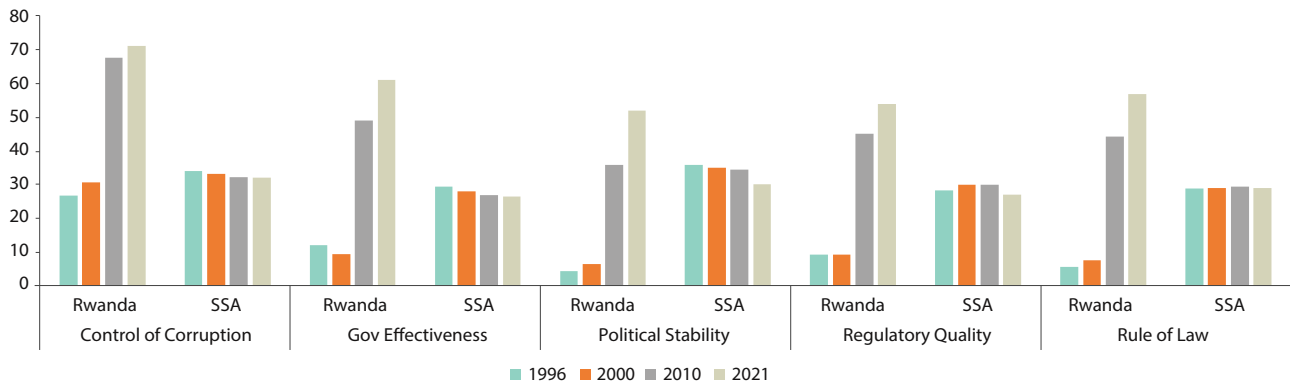
¹² In this paper we use the term ‘FDI firm’ to denote an inward foreign investment project.

¹³ This section analyzes the role of FDI in Rwanda by exploiting granular project-level information on registered FDI projects provided by the Rwanda Development Board (RDB) to (1) describe the pattern of FDI projects into the country over time, industries and location; and (2) assess the consequences of the entry of FDI in terms of (direct and indirect) employment generation, relationships with domestic firms and potential implications for inclusiveness. As foreign firms must register to be eligible for fiscal incentives provided by the Government, this dataset provides a representative picture of foreign investments in the country. The analysis focuses on the most recent years when the number and the size of FDI projects in Rwanda increased substantially.

It is therefore not surprising that in the annual Foreign Private Capital (FPC) conducted by the National Bank of Rwanda, foreign investors in Rwanda report a favorable opinion about several dimensions related to doing business in the country. The most recent census (National Bank of Rwanda, 2023) shows an overall high level of satisfaction by foreign firms, especially in relation to specific dimensions such as the legal framework (almost 90 percent report satisfaction), governance (82.7 percent) and tax incentives and the investment framework (81.6 percent).

The investment climate is also influenced by international treaties to protect foreign investors after they have established operations. Rwanda has so far signed 14 bilateral investment treaties (BITs), 6 of which are currently in force (including one with the U.S., South Korea, and Singapore; see Table 2.1). Provisions on investment are also included in broader trade agreements with other regional partners (EAC, COMESA). Rwanda has adopted the Investment Protocol of the African Continental Free Trade Area (AfCFTA) that aims to help member states put in place rules to protect investors from regulatory risks and improve their investment competitiveness by setting up dispute prevention and grievance mechanisms.

Figure 2.1: Percentile rank (0 to 100), selected governance indicators, Rwanda and SSA average
(percentage)



Source: Elaboration based on World Governance Indicators (WGI), the World Bank

Table 2.1: BITs signed by Rwanda

	Status	Signature	Entry into force
Democratic Republic of the Congo – Rwanda BIT	Signed	2021	
Central African Republic – Rwanda BIT	Signed	2019	
Qatar – Rwanda BIT	Signed	2018	
Singapore – Rwanda BIT	In force	2018	2020
Rwanda – United Arab Emirates BIT	In force	2017	2020
Rwanda – Turkey BIT	Signed	2016	
Morocco – Rwanda BIT	Signed	2016	
Korea, Republic of – Rwanda BIT	In force	2009	2013
Rwanda – United States of America BIT	In force	2008	2012
BLEU (Belgium-Luxembourg Economic Union) – Rwanda BIT	Signed	2007	
Mauritius – Rwanda BIT	Signed	2001	
Rwanda – South Africa BIT	Signed	2000	
BLEU (Belgium-Luxembourg Economic Union) – Rwanda BIT	In force	1983	1985
Germany – Rwanda BIT	In force	1967	1969

Source: Investment Policy Hub (UNCTAD)

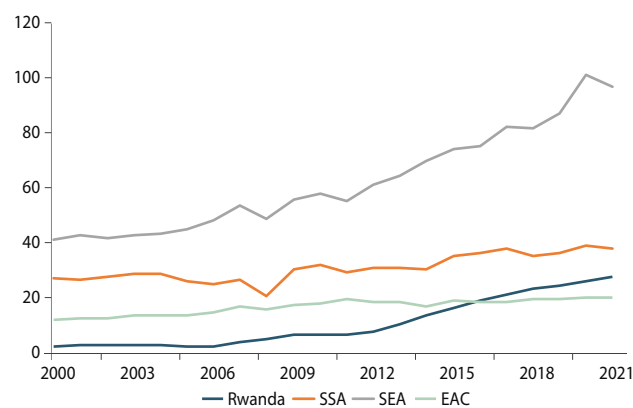
Rwanda has been a leader in its focus on investment facilitation to complement the investment protection focus of BITs. By providing a one-stop shop for registering and addressing applicable requirements relating to business registration, environmental protection and other regulations, as well as investment incentives, Rwanda’s investment promotion regime embodies many of the best practices that have been identified by organizations like UNCTAD, the OECD, and the World Bank Group. BITs are increasingly subject to critical global scrutiny by both developing and developed countries because of their potential to undercut the legitimate policy space of governments to revise regulations that reflect domestic goals and apply equally to national and foreign investors.¹⁴ An illustration is the adoption of the 2016 Pan-African Investment Code that shifted emphasis from investment protection to investment facilitation (Berger and Sauvart, 2021).

2.3. Rwanda has received substantial inflows of foreign direct investment

FDI in Rwanda has played an increasingly important role as a source of private investment. At its peak, the share of FDI inflows in gross fixed capital formation (GFCF) was almost 20 percent, a value similar to that of South-East Asian countries (e.g.,

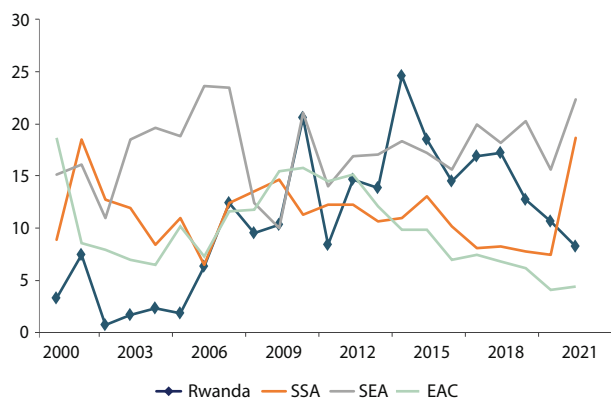
Thailand and Vietnam), and well above the average of SSA and the EAC countries (Figure 2.2). While the stock of FDI to GDP has increased and exceeds the EAC average, this ratio remains below the average level observed in SSA (Figure 2.3) and is less than that in comparator countries, e.g., Uganda or Ethiopia, where the ratio currently is above 30 percent.

Figure 2.3: Stock of FDI as a share of GDP (percent)



Source: Elaboration based on UNCTADSTAT

Figure 2.2: FDI inflows as a share of total investments (percent)



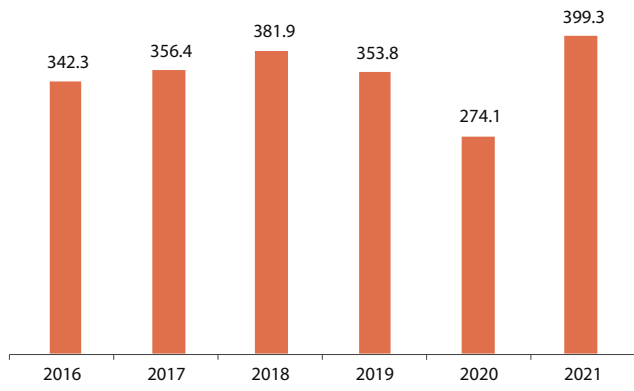
Source: Elaboration based on UNCTAD STAT (United Nations Conference on Trade and Development statistic database). Note: SSA: Sub-Saharan Africa, SEA: South-Eastern Asia, EAC: East Africa Community

FDI inflows slowed because of the pandemic (2020–21). According to the 2022 edition of the FDI inflows amounted to US\$399 million in 2021. This represents a 45.7 percent increase over the previous year (Figure 2.4).¹⁵ This increase was driven by both the debt and equity components associated with FDI inflows.

¹⁵ The 2021 figures from the National Bank of Rwanda (NBR) differ from those provided by the latest World Investment Report (UNCTAD, 2022). According to UNCTAD, Rwanda received US\$212 million in 2021, 23% less than the previous year. Note that the figures for all the other years (2016 to 2020) are exactly the same in both sources. To the best of our knowledge, details explaining such differences are not available. The NBR figures were published more recently (May 2023) and might be more updated compared to those published by UNCTAD, whose report came out in July 2022. A surge in FDI in 2021 is also consistent with project level data presented elsewhere in this report. Note that for reasons of comparability with other countries and regional aggregates, in the remaining of this Section we use UNCTAD data to report the trends in FDI compared to GFCF and GDP. In light of what discussed, while we are cautious about discussion of the 2021 drop, the discussion about longer term trends should not be affected as they are consistent with the National Bank’s data.

¹⁴ For discussion on the growing scrutiny of BITs, see Dietz et al. (2019), Kurtz (2012) and Monebhurrin (2017).

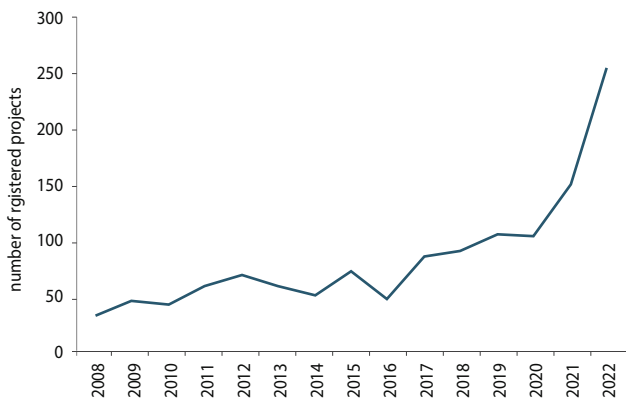
Figure 2.4: FDI inflows (US\$ million) in Rwanda
(percentage)



NBR. 2022 Foreign Private Capital survey

Rwanda has received a large number of FDI projects. Between 2008 and 2022, the Rwanda Development Board (RDB) recorded 1,279 investment projects in the country (Figure 2.5).¹⁶ These projects were projected to involve a total value of investment of about US\$13.5 billion and to create some 200,000 jobs. Projected investment inflows grew from an average of US\$530 million in 2008-2015 to US\$1.3 billion in 2016-2022.

Figure 2.5: Growth in the number of registered FDI projects, 2006–2022



Source: Calculations based on FDI data from the RDB and tax register data.

¹⁶ This analysis relies on project-level information from the Rwanda Development Board (RDB). The database covers all foreign investors registered with RDB and includes information on the sector, the year of entry and the estimated value of each investment (in U.S. dollars), as well as the number of jobs that the project is expected to generate. An important feature of the data is that they provide anonymized taxpayer identification number (TIN) codes, allowing them to be merged with financial and employment information from the Corporate Income Tax (CIT) and Pay As You Earn (PAYE) databases. Although this provides information on the economic activity and employment associated with FDI, because firms are not required to register with RDB, the resulting dataset does not cover all FDI in the country.

The initial investment that firms report when they register with RDB tend to be significantly greater than the realized inflows. Similarly, foreign investors tend to overestimate the number of jobs they expect to create when registering their FDI projects with the RDB. As discussed subsequently, the reasons for the discrepancy are unclear and call for further investigation, as they are likely to have policy implications. These are important to understand and will differ depending on the underlying cause. If the cause reflects untapped capacity caused by unforeseen constraints, it suggests a focus on determining whether and how the constraining factors can be addressed. If the difference reflects efforts by investors to access specific tax or other incentives provided by the investment code that depends on the magnitude of the investment (the estimated magnitude of the investment and number of jobs that will be created (e.g., under Article 8 of the Investment Code), it may be important for policy makers to revisit the design of the incentives.¹⁷

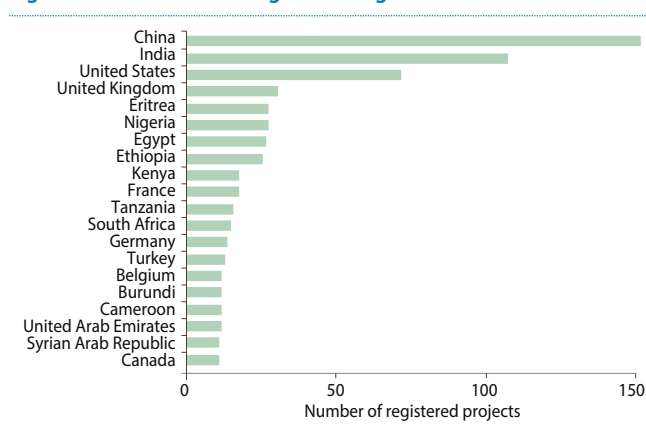
The sources of FDI in Rwanda are quite concentrated. According to the detailed FDI project information, 41 percent of registered FDI projects in Rwanda during 2016–2022 were financed or co-financed by investors from China, India, and the United States. Most of the investors from the region were from Nigeria, Eritrea, and Egypt, which together financed 7 percent of projects (Figure 2.6).¹⁸ For global investors, this ranking approximately corresponds to the largest sources of investment by registered investment volumes in U.S. dollars contributed by the foreign investor with China, India and the United States responsible for 36 percent of projects (see Appendix Figure 1). For regional investors, focusing on investment volumes yields the DRC and Nigeria as the largest sources of investment, but these figures are driven by few very large

¹⁷ See <https://rdb.rw/wp-content/uploads/2022/02/Investment-code-2021.pdf>

¹⁸ Since some projects are co-financed by investors from various countries, the number of projects by country of origin does not sum up to the effective number of projects actually counted in the country.

investment projects.¹⁹ The ranking of the largest countries of origin contrasts to data on origins of FDI stocks that are based on Balance of Payments, i.e., those provided by the National Bank. The balance of payments statistics shows that about three-fifths of the stock of FDI originates in other African countries (principally Mauritius, Kenya and South Africa), the US and India.²⁰

Figure 2.6: Countries of origin of foreign investment since 2016



Source: Calculation based on FDI register data from the RDB.

2.4. FDI projects are concentrated in a few sectors and regions

FDI is concentrated in a few sectors

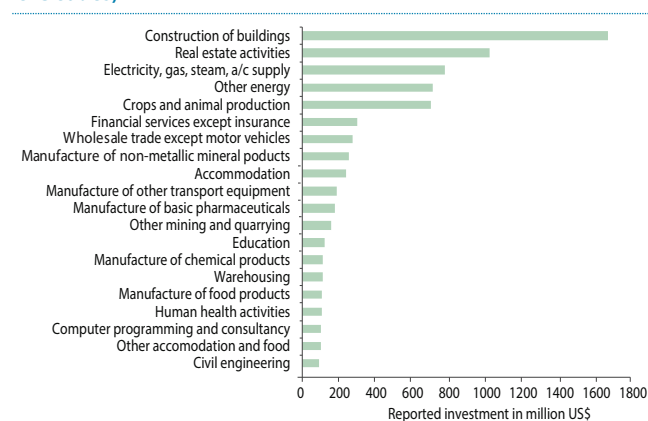
FDI inflows in Rwanda are dominated by few sectors in services and industry. Data on the sectoral distribution of FDI differ by the source. The National Bank of Rwanda’s Foreign Private Capital (FPC) census indicates that aggregate FDI inflows are spread among the financial sector, construction, tourism and the manufacturing sector. Along with ICT, these are also the sectors that are important in terms of the accumulated stock of foreign capital in the country. By contrast, data on the sub-sample of investment projects registered during the years

¹⁹ For the DRC, investment volumes are driven by a joint hydropower project with Rwandan investors as part of a Private-Public-Partnership with self-reported investment volumes of US\$120 million. For Nigeria, a single project in the real estate sector with self-reported investments of US\$250 million drive the results.

²⁰ The Foreign Private Capital (FPC) census undertaken by the National Bank of Rwanda indicates that FDI inflows mostly originated in Mauritius, India and China. Due to lack of specific data, it is not possible to identify causes of discrepancies on composition of FDI reported in the different datasets. One potential explanation is that countries like Mauritius, which has a double taxation treaty with Rwanda, are a conduit for some investments made by foreign nationals (e.g., investment of Indian origin).

2016–2022 (geographical and sectoral information is not available consistently for earlier periods) indicate that most of the estimated registered investment was in construction, real estate and utilities (Figure 2.7).²¹

Figure 2.7: Sectoral distribution of FDI projects (by 2-digit ISIC codes)



Source: Calculations based on FDI data from the RDB and tax register data. Sectoral decomposition of the Rwandan FDI stock accumulated since 2016, 2-digit ISIC codes correspond to tax-register entries of the company registering the FDI. Only ISIC codes with at least US\$25 million investment are reported.

FDI projects are concentrated in richer districts

Most FDI projects are located in and around Kigali (Figure 2.8). The districts of Kigali City (Gasabo, Kicukiro and Nyarugenge) accounted for 81 percent of projects, 72 percent of investments and 82 percent of projected jobs over the period 2016–2022. By contrast, according to the latest establishment census,²² in 2017 only 23.5 percent of total establishments (of any type, including informal ones) were based in these three districts.

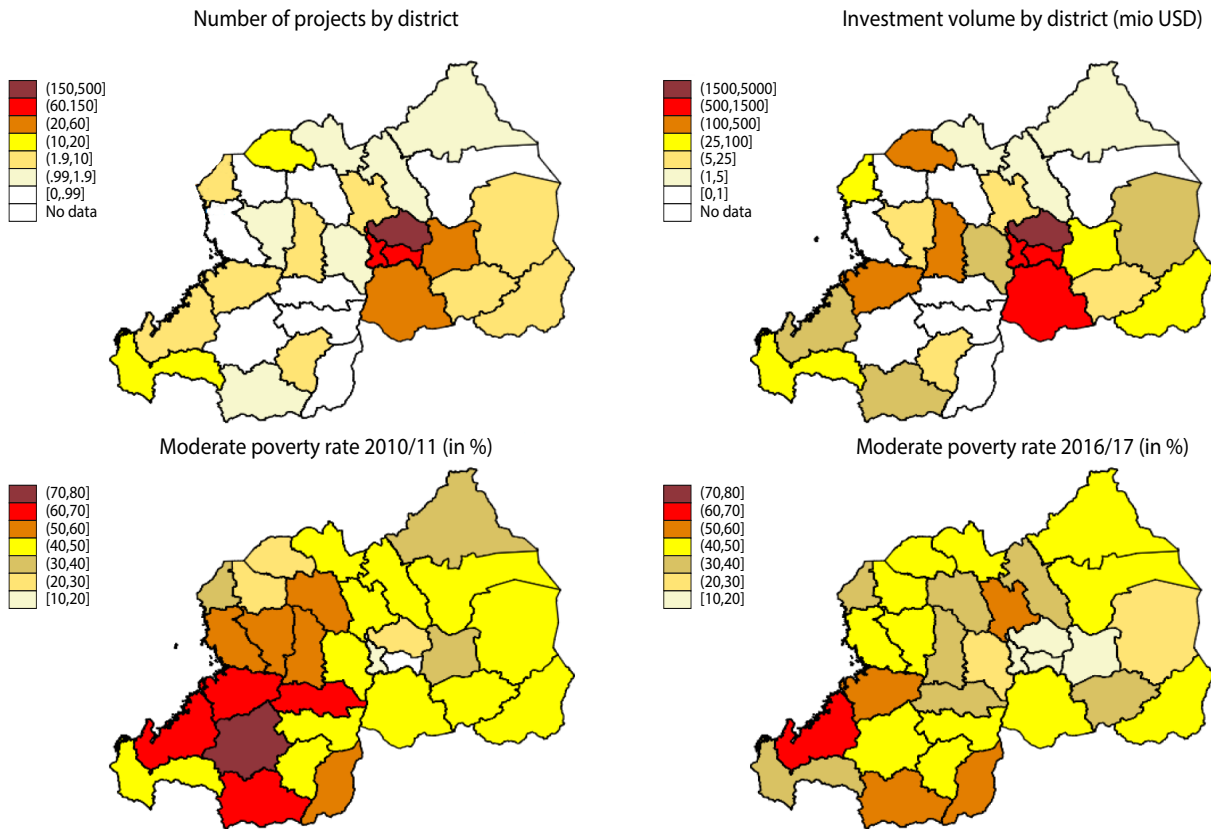
FDI tends to be concentrated in districts with low poverty rates. There is a strong negative association between total FDI received by districts over the period 2016–2022 and their poverty rate at the beginning of the period (Figure 2.9, left panel), as well as between the change in investment across districts and their poverty rate (Figure 2.9, right

²¹ This information is based on the detailed codes that firms report in their tax declarations. In terms of number of projects the top sectors are real estate; wholesale trade excl. motor vehicles, and crop and animal production.

²² <https://www.statistics.gov.rw/publication/1719>

Figure 2.8: Regional distribution of FDI and socio-economic conditions of Rwandan districts

(post-2016)



Source: FDI data is compiled from the RDB and RRA tax register data. Poverty data is sourced from the fifth Integrated Household Living Conditions Survey (EICV5). Moderate poverty rate is obtained by comparing real consumption per adult equivalent to the poverty line (RWF 159,375 per year).

panel).²³ Poorer districts not only attract less FDI but their attractiveness as an investment destination does not appear to improve by the end of the sample period.

This agglomeration of foreign investors in a few, more prosperous locations is a common characteristic of FDI. Concentration is often related to the need to gain access to public goods (e.g., infrastructure, connectivity) and human capital that in developing countries is often concentrated around major urban areas (Sanfilippo and Seric, 2016). In the Rwandan context, it becomes evident that manufacturing projects outside of Kigali are situated in industrial areas of urban centers in other parts of the country. Examples include a cement factory in Muhanga Industrial Park and various

projects in the Rwamagana Industrial Area, some of which produce advanced products like syringes for medical use.

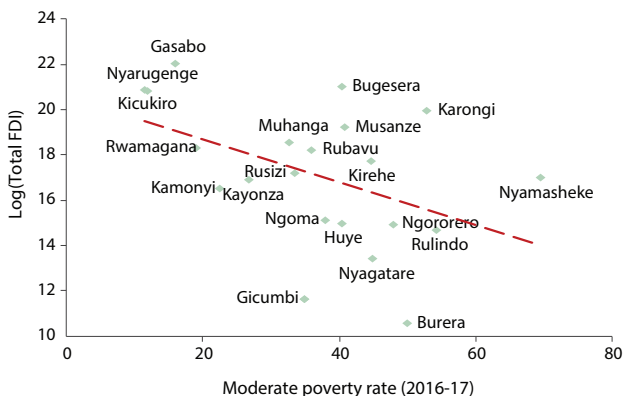
Rural areas with higher poverty rates are more likely to attract FDI in energy, agriculture, agricultural manufacturing, or tourism. In terms of investment inflow, few projects in capital-intensive industries such as the energy sector are complemented with large investments in agriculture. In terms of number of investment projects, the agricultural and tourism sectors are predominant, indicating that these sectors may be able to induce economic benefits that are less concentrated in single central locations (see Appendix Figure 3).²⁴

²³ The within-district change in investment is computed for 2017–2022. We do not use 2016 as the initial year because we do not have the corresponding information on the location of the investment for that year.

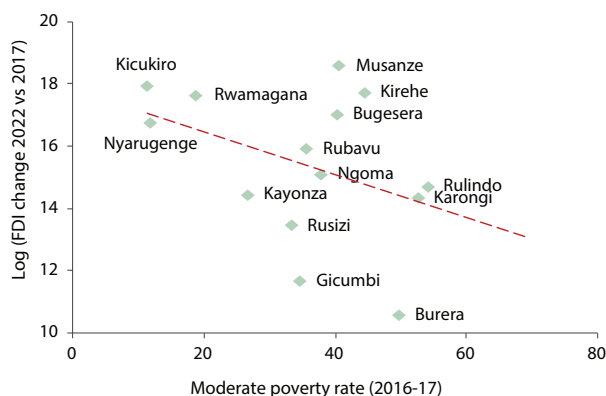
²⁴ An example is FDI in the coffee sector, which have recently increased in Rwanda, and are sparse around the country. Recent empirical analysis by Macchiavello and Morjaria (2022) shows that foreign acquisitions of coffee mills have brought improvements in production capacity, and hence in their performance and employment.

Figure 2.9: Geographic distribution of FDI and socio-economic conditions of Rwandan districts

(FDI and poverty rate)



(FDI Change and Poverty Rate)



Source: Calculations based on FDI and poverty headcount data. FDI data is compiled from the RDB and RRA tax register data. Poverty data is sourced from the fifth Integrated Household Living Conditions Survey (EICV5). Moderate poverty rate is obtained by comparing real consumption per adult equivalent to the poverty line (RWF 159,375 per year).

2.5. FDI boosts job creation and sales in Rwanda

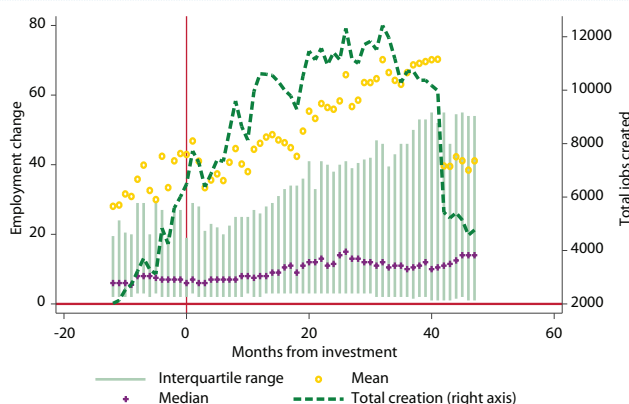
FDI creates jobs directly

FDI has a substantial impact on employment and sales.²⁵ Foreign firms tend to be larger than domestic firms globally (Helpman et al., 2004), and in Rwanda FDI firms employ 170 percent more workers (Appendix Table 4, column 1) and their sales are approximately 370 percent larger, compared to domestic private sector firms (Appendix Table 4, column 2 and Appendix Box 1).

Employment in FDI firms tends to increase in the first three years from start-up: on average, foreign investors employ 60 workers three years after registering their investment. Figure 2.10 displays employment creation by firms that registered an FDI project as a function of the time in months to the registration of the FDI project with RDB. As the median company employs only around 10 people after three years, so; the total employment figures are driven by employment generated by a few large firms. The decrease in employment towards the end of the sample can be explained by the short time span of observation comprising data for the period

2016–2022. A firm that enters after 2018 cannot be observed for months more than three years after entry. However, focusing on a time span roughly two–three years after entry, the analysis reveals a total creation of approximately 12,000 employees in Rwanda, the majority of which took place in the manufacturing sector (see Appendix Figure 2).

Figure 2.10: Jobs generated by FDI firms acting as first-time

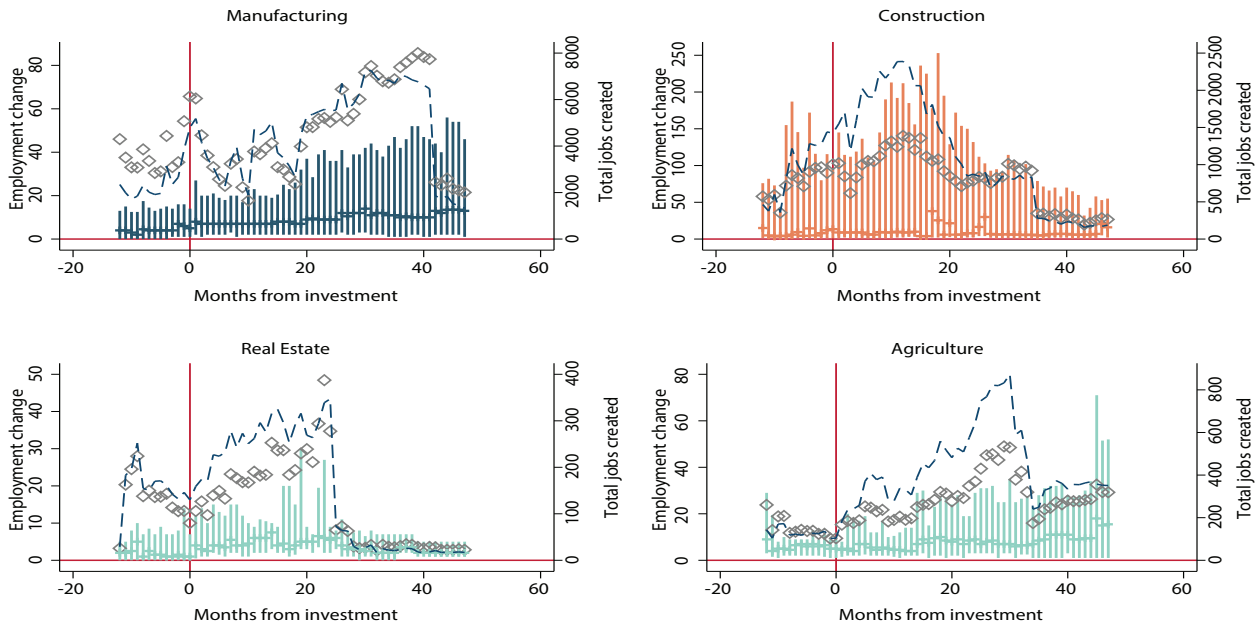


Source: Elaboration based on RDB and PAYE data

The amount of employment creation varies considerably across sectors. The manufacturing sector accounts for about 8,000 of the 12,000 jobs created directly in the long term (Figure 2.11). The large spread between mean and median employment generated in manufacturing shows that some outliers in terms of employment creation drive these results. Two projects are particularly important, accounting for approximately 5,000 employees in

²⁵ The analysis in this section comprises mainly descriptive exercise to identify the potential spillovers of FDI in Rwanda. The focus is on the labor market, for which we can measure changes in relation to two main sources: (1) the Pay As You Earn (PAYE) database, reporting information at the level of the firms on all workers employed; and (2) the National Labor Force (NLF) surveys, which provide nationally representative data on individuals' employment conditions.

Figure 2.11: Jobs generated by FDI firms (by sector)



Source: Elaboration based on RDB and PAYE data

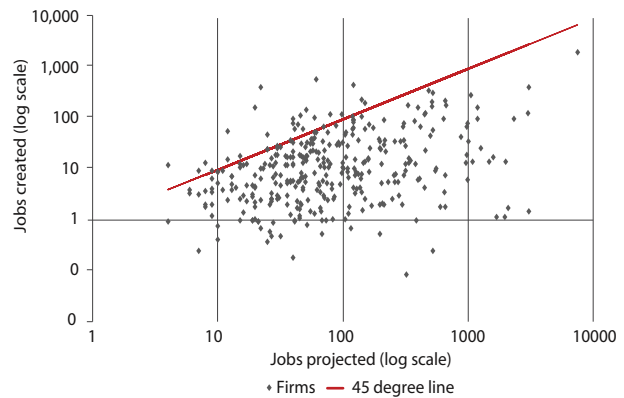
the PAYE data: one is in the apparel industry and the other is engaged in the manufacturing of products related to tea.

Construction, the second largest sector in terms of observed employment generation, follows a very different dynamic over time. In the construction sector employment created by foreign investors peaks between 12 and 24 months after investment and decreases thereafter. Similar, shorter-term, employment generation effects are found from projects in the real estate and agricultural sectors.

The PAYE employment data indicate that the employment creation *projections* from the RDB's One-Stop Centre FDI register are substantially overestimated. Figure 2.12 compares employment data for all 410 firms that are included in PAYE and for which employment projections are available, with the red line representing the case in which both figures correspond.²⁶ Most observations lie below

the red line, implying that the majority of firms that registered FDI projects in Rwanda overestimated the amount of employment they would create at the time they registered the project with the RDB.

Figure 2.12: Jobs generated by FDI firms (actual vs projected)

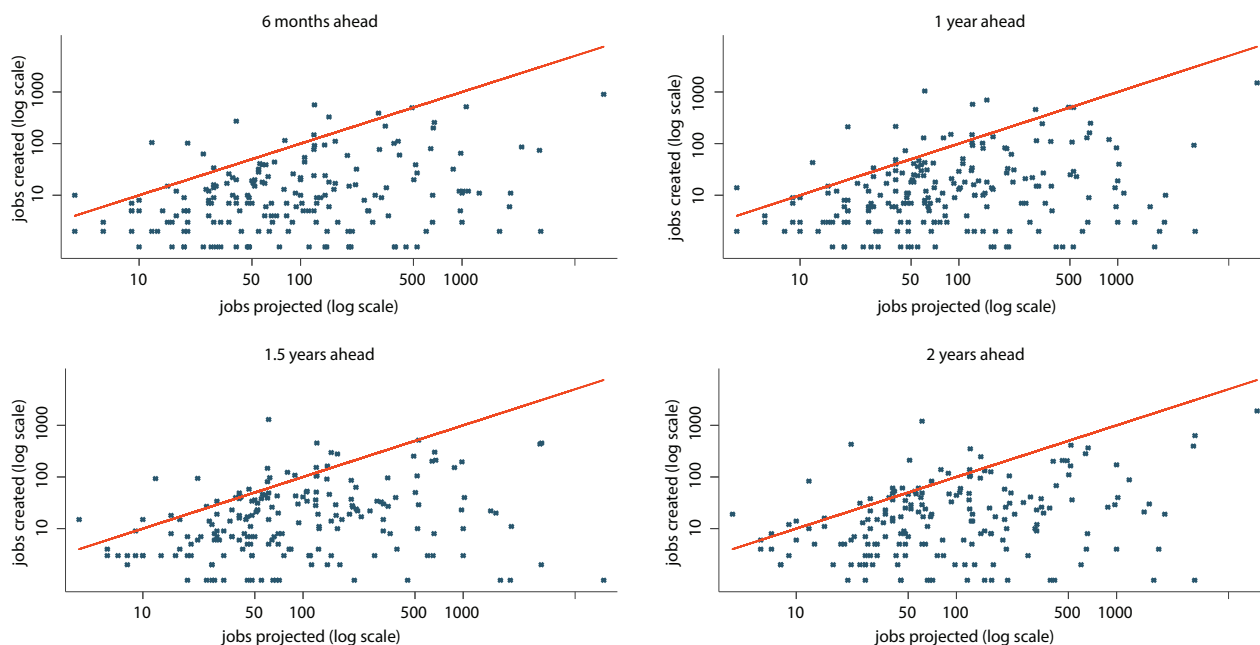


Source: Elaboration based on RDB and PAYE data

The discrepancy between projected and actual employment by FDI firms is not mainly due to the fact that firms' employment creation takes time to manifest. Figure 2.13 compares firms' employment projections on registration with RDB with their employment levels at different time intervals (from six months to two years) following

²⁶ For the PAYE data, the study uses the average figure of employment creation (including full-time and casual employees and employees with multiple jobs) covering all observed periods after investment.

Figure 2.13: Jobs generated by FDI firms (actual vs projected, over time)



Source: Elaboration based on RDB and PAYE data

registration. Although some firms transition above the 45-degree line, implying they meet their projections after an implementation period, most FDI projects keep reporting employment levels below the 45-degree line.

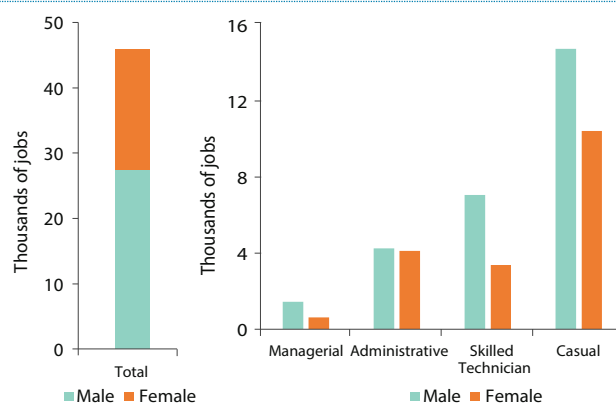
Job quality within foreign firms

FDI firms also improve the type and quality of jobs in Rwanda by offering better non-remuneration benefits or full-time employment.²⁷ Compared to domestic firms, an FDI firm is 11 percentage points more likely to have a social security fund for its employees (column 1 of Appendix Table 5), and an FDI firm’s social security contributions were more than 3 times larger than those provided by domestic firms (Column 2 of Appendix Table 5). By contrast, there is no statistical difference between the share of casual workers in FDI firms compared to domestic firms (column 3 of Appendix Table 5). The third result should be interpreted with some caution since only about one-fifth of the firms in the PAYE database provide compositional details of their employment.

²⁷ These results reflect a simple estimation in which a dummy variable identifying foreign investors is regressed on outcomes measuring the share of quality jobs within the firm.

FDI has also contributed to the creation of jobs for women. Data from the 2022 FPC Census by the National Bank of Rwanda show that female workers represented 40.2 percent of total employment in foreign firms (Figure 2.14, left panel). This is an improvement compared to the pre-2020 value, which was around 30 percent.²⁸ The share of women is relatively higher in administrative positions, where they count for about 49 percent of the total (Figure 2.14, right panel).

Figure 2.14: Job creation of foreign firms, by gender (2021)



Source: Elaboration based on FPC 2022 Census

²⁸ In 2020, the share went up to 51%, due to a large increase in the number of casual work by women. The data seem to show that this jump was specific to 2020. For casual workers, the 2021 numbers are in fact closer to the pre-2020 values.

The finding that FDI does not have a positive association with female and youth employment raises concerns. While the evidence is inconclusive on whether women and the youngest in the population are positively affected by the entry of FDI, current investment promotion policies do not appear to target such dimensions of inclusion, instead targeting specific sectors (e.g., financial services, energy, transport), activities (e.g., start-ups; philanthropy) or locations (e.g., special economic zones [SEZs]). These types of investment and projects are all very relevant from a sustainable growth and development perspective, but the current framework that is defined in the law on investment facilitation and promotion does not specifically call on firms to consider how their activities can be made to be more inclusive. In some respects, the priorities reflected in the law are likely to further increase concentration, e.g., the goal to make Kigali a hub for innovative startups reflected in the Kigali Innovation City in the Kigali SEZ.

FDI creates jobs indirectly, as well

Increases in employment by FDI firms—the direct impact of FDI on employment—tend to stimulate employment increases in other firms in the district receiving the investment. The indirect impact of FDI on employment is estimated using the procedure described in Appendix Box 2. Increases in employment due to FDI in a district may increase the demand for goods and services from firms in that district, thus stimulating hiring by local firms. This multiplier effect is likely to reflect the entry of (domestic) migrant workers and by more educated workers (columns 4 and 6 of Appendix Table 6). There is no evidence of a statistically relevant relationship between increases in FDI jobs and either women or youth employment in the district (Appendix Table 6, columns 2 and 3), and some evidence of an increase in informal jobs following FDI (column 5). The impact of jobs created by manufacturing FDI on employment in non-manufacturing sectors is greater than that shown in Appendix Table 6. Thus, every new job created by FDI in manufacturing has

a high potential to stimulate the demand for local non-manufacturing products, most likely services, a key source of employment (World Bank 2022).

Linkages between FDI and domestic firms

A key motivation for attracting FDI is to increase the opportunity for local firms to interact with foreign investors through supply chain relationships. This can directly generate local demand, improve the quality of domestic firms' products and lead to the sharing of good practices with local businesses.

On average, Rwandan FDI firms have a much larger number of corporate suppliers compared to domestic firms (Appendix Table 7). They also rely on a larger number of corporate buyers locally, even though the evidence in this case is less statistically significant (Appendix Table 8).²⁹ The analysis also indicates that FDI firms interact substantially with local firms, but the findings are subject to important limitations. The analysis provides no direct indication of the types of goods and services traded and the volume of these transactions. This information was only available to the team for 2020, which prohibited an assessment of the role FDI plays as a driver of domestic firm performance over time. The cross-section analysis is also not ideal in assessing potential sectoral patterns of FDI-associated spillovers on domestic firms because 2020 was not a representative year, given the heterogeneous sectoral repercussions of the COVID-19 pandemic. Thus, the estimation of the relationship between FDI and local firm performance should be interpreted as indicative only. It serves, however, to illustrate the importance of such analysis using panel data that cover a longer time period.

²⁹ To investigate whether FDI firms integrate into local supply chains, we compare the number of corporate customers, and suppliers, of FDI firms using transaction-level VAT data that are available for approximately 22,000 Rwandan firms. We regress the number of firms supplying to (i.e., suppliers) and buying from (i.e. customers) any firm in our sample on a dummy variable indicating whether the firm is a new FDI entrant in 2020. We also account for some firm characteristics, including firm age and size (corporate income from CIT data and/or the number of employees from PAYE data). We include fixed effects for the industry (at the 2-digit level of the International Standard Industrial Classification (ISIC)) and the district in which firms are located

2.6. Conclusion and policy implications and recommendations

Rwanda has been able to attract a large number of foreign investment projects. The country's conducive business environment and an investment promotion and facilitation regime is internationally recognized as representing best practice in many aspects. The 2021 revised investment law provides a range of services and innovations to investors. The country provides a strong institutional environment and is highly ranked by foreign investors in the country. The contribution of FDI to capital formation is higher than the regional average and comparable to some Asian countries in the 1990s. FDI is a source of net job creation, both directly and indirectly, generating new jobs not just when FDI projects are initially launched but also over time. The prevalence of sustained increases in employment varies across sectors and is mostly observed in manufacturing. Projects involving construction or investment in utilities are more likely to generate jobs in the months following entry. Relative to domestic firms, foreign investors tend to have a larger share of their workers covered by social security. However, a new generation of reforms is required to boost FDI inflows in Rwanda, allow FDI firms to achieve their job creation potential; and enhance inclusive FDI.

i) Policy to boost FDI in Rwanda

Efforts to attract FDI could be strengthened. Attracting FDI through deal accelerator and investment marketing should be continued, selecting some of the priority sectors by phases. Investor outreach efforts could be expanded. RDB's recently deployed investor relationship management system (CRM) could be used to compile all challenges reported by potential investors. This would help the RDB in identifying systemic issues to be addressed by legal/regulatory reforms or changes in government conduct.

Ensuring that signed investment treaties enter into full force is essential. These include the Economic Partnership Agreement between the EAC

and several EU and bi-lateral partnerships, such as with Turkey, South Africa, and Mauritius.

It is critical to invest in SEZ infrastructure and integrate SEZs into national logistic infrastructure, such as the new Bugesera Airport, to increase investment and leverage their export potential (Steenbergen and Javorcik, 2017), coordinated by the Special Economic Zone Authority of Rwanda.

Leverage trade policy and treaties to attract more FDI. Trade policy is critical to create economies of scale needed by foreign firms looking for market opportunities. The creation of the African Continental Free Trade Area (AfCFTA) is likely to enhance FDI entry into Africa by enabling foreign firms to access the common market. Rwanda can attract potential investors by liberalizing trade in services, in digital activities, and implementing AfCFTA investment protocol, competition policy, and intellectual property rights, which are key drivers for FDI.

ii) Policy for FDI firms to achieve their job creation potential in Rwanda

It will be essential to establish an investment tracking system to understand company by company why FDIs cannot achieve their potential. Understanding why this is the case is important from a policy perspective. On the one hand, if the reason relates to firms seeking to obtain greater tax or other incentives, this suggests that the incentive regimes may need to be reconsidered. On the other hand, if firms would in fact want to expand their operations closer to levels originally envisaged when projects were registered, then action to understand what drives the difference between expected and realized investments is very important as it can then be determined to what extent the reasons can be affected by government policies. Ascertaining the underlying reasons calls for a targeted survey of FDI firms complemented by structured interviews with local managers and corporate headquarters of the investors. The Chief Investment Office at RDB was tasked to create an investment tracking system at the firm level that will help with tracking investors'

performance, especially for those who benefit from performance-related incentives. However, this system has not yet been developed. An efficient tracking system at firm level will also make it possible to apply the investment code accurately by rigorously linking incentives to actual performance.³⁰

iii) Policy to make FDI more inclusive in Rwanda

The following discusses policy recommendations to strengthen the inclusiveness of FDI in Rwanda, focusing on three dimensions: i) incentives measures; ii) institutional reforms; and iii) infrastructure investments need.

▷ *Reforms incentives to ensure FDI job creation for women, youth, and in disadvantaged areas*

It is essential to amend incentives in the law to encourage investors to consider how they might increase participation by women and youth or to locate in more disadvantaged regions of the country. Integrating these dimensions more centrally into the incentive framework could help to promote more inclusive FDI. Some of the activities that are highlighted in the law will benefit women and youth, but the point is that this is not a specific objective, nor are there specific incentives to encourage performance on these dimensions. Examples would include incentives that target women-led startups, training for women and youth, measures to encourage participation of women or youth, e.g., by encouraging investors to provide ancillary services to address constraints that impede participation by women (e.g., childcare and more flexible work conditions), or training for youths. These could be integrated into the implementation of the provisions of the law. Many of the activities and sectors prioritized in the law provide significant

potential for greater inclusion in that they lend themselves to participation by women and youth, and to investment in poorer districts. Examples include tourism activities (hotels, adventure and agrotourism, and skills development, e.g., ICT-related digital skills training and facilities to help offset training costs more generally). Such activities are included in the law, to be sure, but it may help to add an explicit focus on fostering greater inclusivity through the allocation of incentives.

Conditioning additional incentives for ex post performance on inclusion-related metrics could be considered as a complementary (additional) element of the investment promotion and incentive framework in Rwanda. There are two types of approaches towards promoting FDI. In one, investors report on a periodic basis how much has been invested and/or jobs have been created in the country, and what has been done to enhance inclusion and achieve development impacts and based on this, get “red carpet services” or access to fiscal or other types of incentives. In the other, which is more common, investors commit to contribute resources and associated job creation that makes them eligible to benefit from investment incentives and related benefits. The first model can be more effective in inducing realization of sustainability goals.

Investment promotion policies should target activities that are more likely to create jobs for women, and to benefit youth. Policy instruments to do so could help offset the pattern of high concentration of FDI (by value) in construction, real estate and energy, and focus more on manufacturing. In addition, promoting investment in sectors that tend to employ more casual workers (see Figure 2.14), an important source of employment for women, provide another mechanism to bring more women into the workforce through foreign investment.

³⁰ To apply the preferential CIT rates based on share of turnover coming from exports in particular, a firm-level investment tracking system is needed. The new Investment Code (Law no. 006/2021 of 05/02/2021) enacted in 2021 determines different preferential corporate income tax (CIT) rates based on the share of the total turnover coming from export of goods and services. Registered investors having between 30% and 50% of their total turnover coming from the export of goods and services are charged a 25% CIT, while a 15% CIT is applied to investors exporting at least 50% of their production. These incentives are applicable to eligible investors for a maximum of five years commencing from the first year of exporting.

▷ ***Institutional reforms to reinforce the inclusiveness of FDI in Rwanda***

A greater emphasis on corporate social responsibility (CSR) by foreign firms would complement the observed higher spending on social security benefits by FDI firms. This would support better working conditions, and health and safety in the workplace, benefiting more vulnerable segments of the workforce. Appointing more women to decision-making roles in foreign firms could be another mechanism to improve female participation in their workforce.

Bolstering dialogue between government (RDB), investors, and home country governments is another channel for enhancing the sustainability and inclusivity of FDI. The focus of investment promotion efforts in Rwanda, as in other countries, is to improve the transparency and predictability of investment measures, simplify and speed up administrative procedures, and offer investment incentives. The potential role of action by home country governments should be considered in investment promotion efforts as source country governments do more to strengthen regulation of outward FDI and implement production process standards for the supply chains used to produce goods and services for export by firms located in developing countries. Cooperation with home governments is a potential channel to encourage inflows of sustainable FDI, i.e., projects that are both commercially viable and contribute to the economic, social, and environmental development, through mechanisms that go beyond voluntary corporate social responsibility initiatives by imposing mandatory standards that are enforced in the home country of investors. The effectiveness of this channel in enhancing inclusivity will depend on policies in source countries. Fortunately, policies in high-income countries, notably the EU, a major source of FDI for Rwanda, are moving in this direction.

▷ ***Infrastructure development efforts to boost the inclusiveness of FDI in Rwanda***

The inclusiveness of FDI could be increased by measures to encourage greater investment in activities that are more likely to benefit poorer districts. Creating SEZs in the poorer districts of Rwanda, and offering higher quality infrastructure and human capital inputs, could alleviate the lopsided concentration of FDI and improve foreign investment's capacity to create inclusive growth. This is in line with government planning. The revised SEZ policy of 2018 explicitly states the aim of "further developing secondary cities and strategic locations around the country."³¹ A first step is to assess the factors that underlie successful FDI projects in poorer regions as well as the constraints to such investment. This would inform the design of support activities to replicate and expand successful investments, and to learn from those that are less successful by highlighting factors that have impeded the development and growth of projects that are deemed by investors to be viable and profitable in principle. This will call for interaction and consultations with the investors that have undertaken such projects, the local stakeholder communities, and groups that are important from an inclusivity dimension.

Increase the linkages with domestic firms by encouraging supplier development programs to expand the number and capacity of qualified local enterprises that can contract with foreign affiliates as well as supplier databases to help investors identify potential subcontractors. The literature on FDI has documented that policies can be effective in increasing the contribution of FDI to sustainable development through increased linkages with domestic firms. Moran (2014) summarizes the experiences of Costa Rica, Malaysia, the Czech Republic, and Morocco, showing that active engagement of the government through their investment promotion agencies was mostly

³¹ The revised SEZ policy indicates the following zones: Bugesera, Huye, Kicukiro SME Park, Muhanga, Musanze, Nyabihu, Nyagatare, Rusizi and Rwamagana. https://www.minicom.gov.rw/fileadmin/user_upload/Minicom/Publications/Policies/SEZ_Policy_-_January_2018_v2.pdf

targeting the establishment of public-private partnerships for specific training of local workers and firm, as well as improving infrastructure, as a way to provide investors with the possibility to integrate their new production sites smoothly into their global supplier networks. A World Bank note summarizing supplier development programs

around the world recommends combining incentives to source domestically with interventions to reduce information barriers among the local suppliers and to invest in their capacity (Sabha et al., 2020). The latter seem to work better if they involve foreign investors, as they are clearly more aware of their demand needs.



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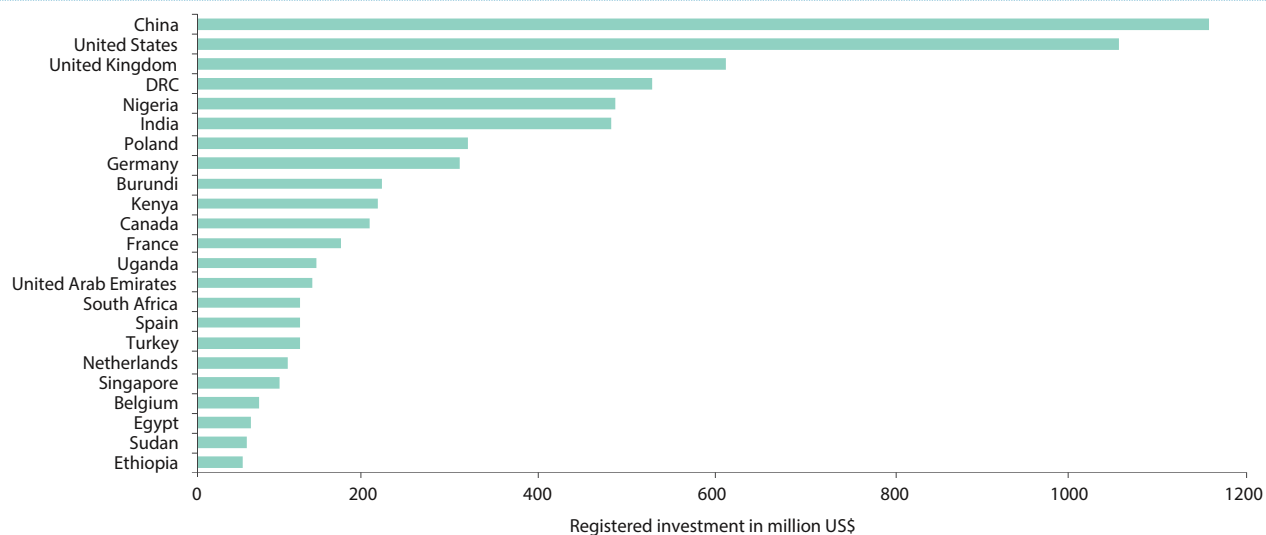
APPENDICES

Appendix Table 1: Rwanda's gross domestic product

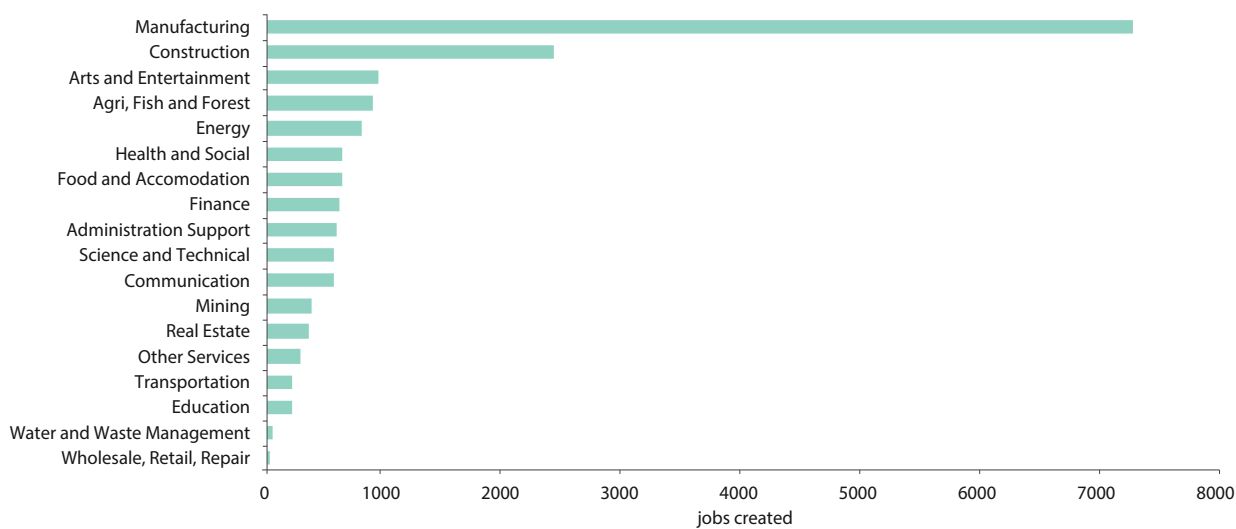
Real growth in percent, year-on-year

	2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GROSS DOMESTIC PRODUCT (GDP)	3.5	20.6	10.1	10.3	7.9	7.5	10.0	7.2
Agriculture	6.7	7.3	6.3	5.2	0.7	2.0	1.5	2.3
Food crops	7.1	7.1	6.6	6.6	-1.3	-1.3	-0.5	-0.5
Export crops	3.7	-4.0	2.3	-6.7	-14.3	16.7	-2.2	11.9
Livestock & livestock products	10.2	8.2	7.9	6.2	9.2	10.6	7.4	7.2
Industrial growth	9.6	30.0	11.8	5.3	9.9	6.2	-1.3	5.3
Mining & quarrying	3.3	86.4	30.0	5.7	16.1	7.3	5.1	27.0
Manufacturing	8.2	22.7	7.0	6.3	11.1	9.5	9.3	13.6
Construction	14.1	32.8	15.3	4.0	6.5	0.0	-17.7	-10.6
Services growth	-0.4	24.0	11.3	14.4	10.8	11.9	16.6	9.5
Maintenance & repair of motor vehicles	27.3	150.0	15.4	14.3	14.3	6.7	6.7	0.0
Wholesale & retail trade	-0.5	34.4	3.8	14.7	6.9	16.7	19.9	11.6
Transport	-13.9	48.5	19.1	18.6	19.4	27.6	25.5	14.9
Hotels & restaurants	-35.0	33.3	63.2	70.8	80.8	190.0	93.5	36.6
Information & communication	17.0	29.6	15.5	16.1	16.4	7.1	32.8	20.0
Financial services	11.5	19.2	10.9	30.2	12.1	11.3	6.6	9.8
Real estate activities	2.6	6.8	4.5	2.5	5.2	1.9	0.0	-0.6
Taxes less subsidies on products	3.4	26.5	11.2	13.0	9.9	3.2	23.4	12.3
Expenditure side								
Government	-0.3	19.9	28.4	8.5	24.7	0.9	18.5	12.4
Households and NGOs	0.8	25.1	-1.6	14.9	1.8	18.7	21.2	0.6
Gross capital formation	4.5	6.7	55.7	-5.7	2.8	-8.5	-30.4	-2.8
Exports of goods & services	-18.5	38.7	-21.2	33.2	39.1	27.1	37.1	20.1
Imports of goods & services	-15.4	27.6	-6.0	16.6	15.4	27.1	21.2	1.7

Source: WBG staff computation based on NISR database

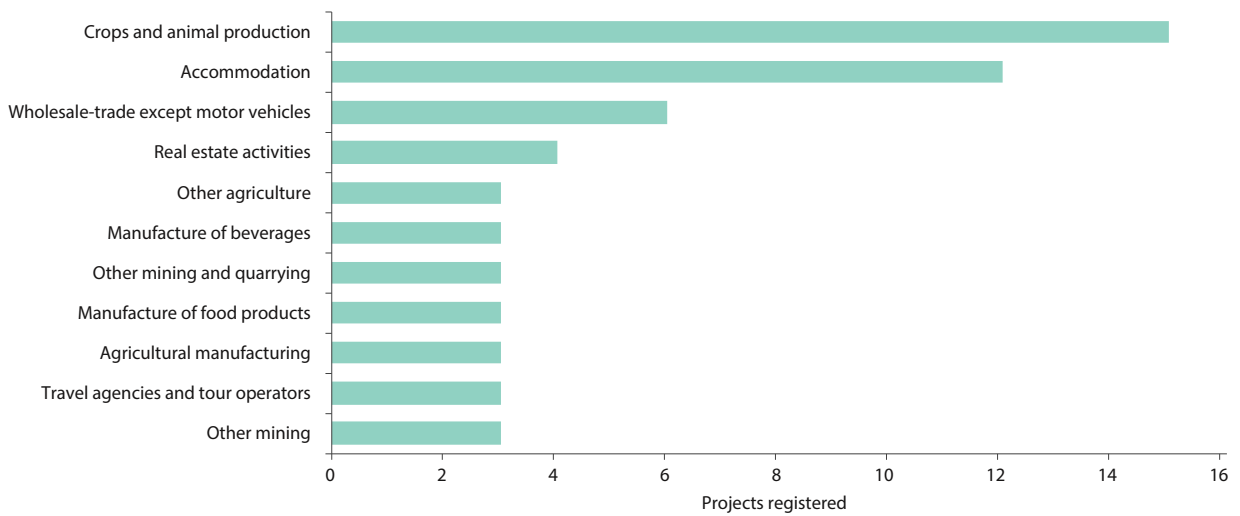
Appendix Figure 1: Countries of origin of foreign investment since 2016, U.S. dollars


Note: Values are self-reported by investors upon registering their project with RDB.

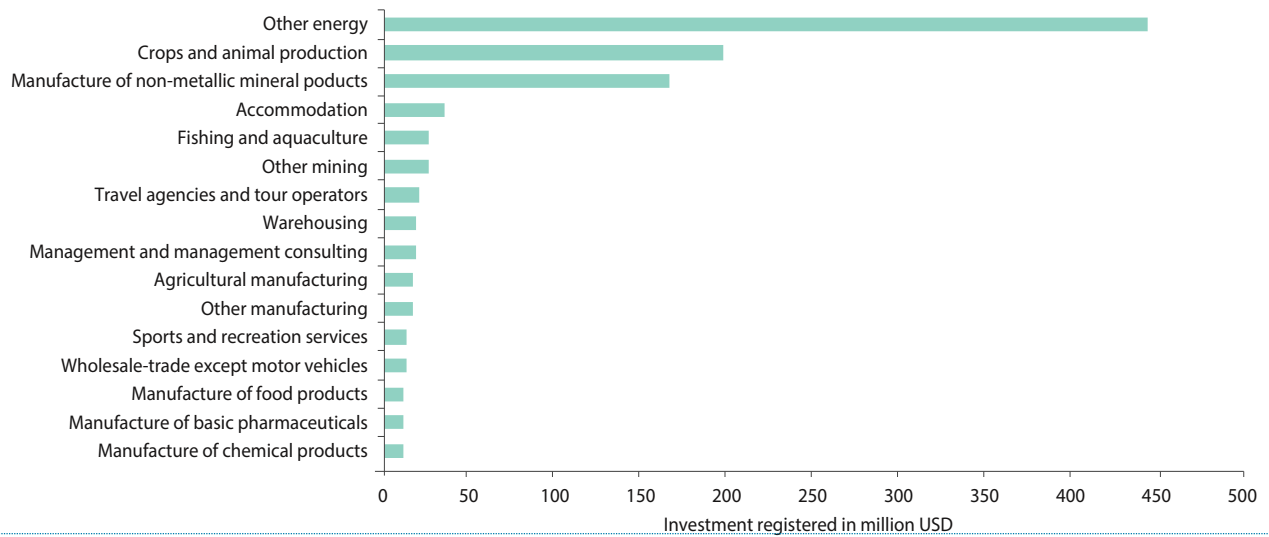
Appendix Figure 2: Jobs created by FDI firms in Rwanda since 2016


Note: For each firm, jobs created are taken as the maximum of employees reported in the PAYE by an FDI firm at any point after investment.

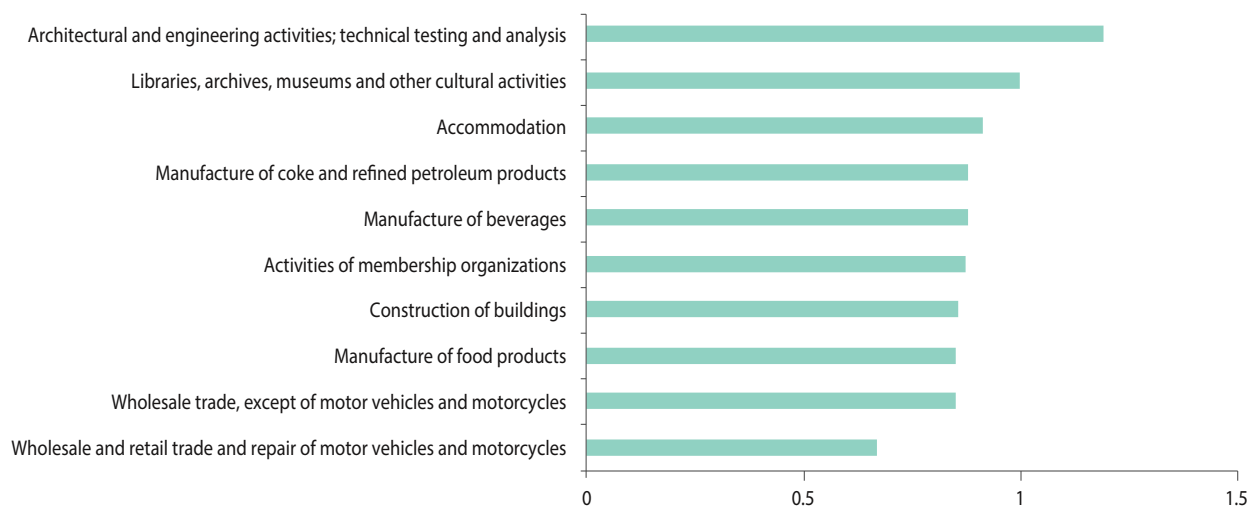
Appendix Figure 3: Sectoral breakdown of FDI in all districts excluding Gasabo, Kicukiro, Nyarugenge, and Bugesera



Appendix Figure 4: Discrepancy between jobs projected and jobs created by industry



Note: Jobs created by an FDI project are the maximum value of employees reported in the PAYE data in any period after investment. Job projections are self-reported in the RDB dataset.

Appendix Figure 5: Ratio of casual workers (By ISIC Code-2 Description)

Appendix Table 3

	(1)	(2)	(3)	(4)	(5)	(6)
	employment	women	youth	educated	insurance	Domestic migrant
FDI employment	6.584***	0.838	-0.295	2.262***	-1.556***	6.769***
	(1.660)	(0.814)	(0.776)	(0.727)	(0.338)	(1.155)
N	62	62	62	62	62	62
R square	0.79	0.77	0.79	0.78	0.80	0.76

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: The outcome variables are the change in jobs in non-manufacturing sectors in a district between 2017 and 2019 excluding jobs generated in FDI firms. For columns (2) through (6) the outcome is the change in jobs for the subset of the population indicated. The explanatory variable is jobs created in FDI firms in the manufacturing sector. District-clustered standard errors in parentheses. All columns include year and geographical district fixed effects.

Appendix Table 4. The size premium of FDI firms

Variable	(1) Employees	(2) Sales
FDI-firm	1.715***	3.764***
	(0.154)	(0.626)
Firms	9044	33726
N	391652	988642

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the firm-level in parentheses. All columns include industrial sector, month and geographical location fixed effects. The dependent variable in column (1) is the log of the average number of employees in a firm in a month. The dependent variable in column (2) is the log of sales in a firm in a year. Employment data is sourced from the Pay As You Earn (PAYE) database. Sales data is obtained from the Corporate Income Tax (CIT) database. Firm-location and sector information is obtained from RRA's tax registry.

Appendix Box 1 : Estimates of employment and sales of FDI firms

The analysis combines information on the foreign firms in our sample with PAYE data, which are available on a monthly basis for the period 2010–2022. While it is only possible to match slightly less than 50 percent of the firms in the sample (410 of 833), in aggregate they represent 73 percent of the FDI projects by value and 66 percent of the projected number of jobs. The analysis estimates the relationship between a dummy variable taking 1 if the firm is foreign owned and zero otherwise and measures of the size of each firm in our sample (either total employment or sales, both reported in log). Estimates are conditional on the sector, the month in a given year in which observations are measured and location of projects (the district). To estimate the direct contribution of FDI on employment, the study focuses on employment creation by first-time investors since these are unconfounded by pre-existing employment. A first-time investor is defined as a firm that was registered in Rwanda's tax register up to five years before the first FDI project that can be observed in the RDB's One-Stop Centre register. Two-thirds of first-time investors according to this definition were registered the year before investment registration, and 90 percent within three years before FDI investment. The analysis treats all employment by first-time investors as directly created by FDI and reports results for employment defined as the sum of full-time employees, employees with multiple jobs and casual employees. The results are qualitatively robust to focusing on full-time employees only. Overall, about 80 percent of the reported employment created by FDI firms comprises full-time employees.

Appendix Table 5: The quality of jobs (FDI vs domestic firms)

Variable	(1) NSF Dummy	(2) NSF contribution	(3) Casual emp. ratio
FDI-firm	0.112***	3.176***	9.801
	(0.019)	(0.380)	(26.129)
Firms	9236	9236	1684
N	415810	415810	32093

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the firm-level in parentheses. All columns include industrial sector, month and geographical location fixed effects. The dependent variable in column (1) is a binary variable that equals one if a firm reported social security (NSF) contributions in a month. The dependent variable in column (2) is the log of NSF contribution reported by a firm in a month. The dependent variable in column (3) is the share of casual employees within the total employment of a firm in a month. Employment data is sourced from Pay As You Earn (PAYE) database. Sales data is obtained from Corporate Income Tax (CIT) database. Firm-location and sector information is obtained from RRA's tax registry.

Appendix Table 6: FDI multipliers

Variable	(1) employment	(2) women	(3) youth	(4) educated	(5) insurance	(6) Domestic migrant
FDI employment	4.313***	0.573	-0.194	1.104*	-1.344***	4.484***
	(1.274)	(0.643)	(0.562)	(0.637)	(0.282)	(0.957)
N	62	62	62	62	62	62
R square	0.82	0.78	0.79	0.78	0.80	0.76

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Notes: The outcome variables are the change in jobs in a district between 2017 and 2019 excluding jobs generated in FDI firms. For columns (2) through (6) the outcome is the change in jobs for the subset of the population indicated. The explanatory variable is jobs created in FDI firms. District-clustered standard errors in parentheses. All columns include year and geographical district fixed effects.

Appendix Box 2: Estimating the indirect impact of FDI on employment

The study combines information on FDI with district-level data from the NLF surveys implemented in 2017 to 2019.³² NLF surveys are representative surveys run to monitor the trend in employment and labor underutilization at the national, province and district level. Samples in each year are constructed using a two-stage sampling procedure. In the first stage, a stratified sample of enumerator areas from the latest population census is drawn with probabilities proportional to size. In the second stage, a fixed number of households is selected with equal probability from each sample area. All qualifying household members in the sample households are then selected for survey interviewing. The individual-level information is aggregated to obtain a district-level panel dataset on a sample restricted to the working-age population. This information is used to investigate the existence of local multipliers effects from attracting FDI. Following Moretti (2010) and Toews and Vezina (2022), it is evaluated whether each job created by new FDI projects stimulates the creation of additional jobs. The study estimates the local multiplier by correlating the number of new jobs created by foreign firms in a given district using variations cumulated over the sample period (from 2017 to 2019). All specifications account for district and time (last year) fixed effects, with standard errors clustered at the district level. Given the richness of the information available in the NLF surveys, the analysis can run this exercise considering a range of different measures related to job creation: total number of employed individuals; women employment; youth employment; employees with high levels of education; employees with social insurance; and domestic migrants.

³² Data are available for 2020 but are excluded since employment levels were affected by the COVID pandemic.

Appendix Table 7: Firm-to-firm relationships (demand)

	(1) Customers	(2) Customers	(3) Customers	(4) Customers
FDI-firm	25.129**	9.171	8.591*	7.024
	(10.492)	(5.598)	(4.848)	(6.044)
Employees		0.032***		0.021**
		(0.006)		(0.009)
Business income			0.002***	0.002***
			(0.000)	(0.000)
Firms	21729	6021	20375	5608
N	110894	58085	102631	54448

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Notes: The outcome variable is the number of corporate customers that a firm had in 2020 based on transaction-level VAT data. FDI-firm is a dummy-variable for firms that are registered as having received FDI. Employees is the number of employees of the firm in 2020 according to the PAYE dataset. Business income is taken from Corporate Income Tax data. Industry-clustered standard errors in parentheses. All columns control for firm age and include ISIC2-level industrial sector and geographical district fixed effects. Omission of these fixed effects does not qualitatively change the results.

Appendix Table 8: Firm-to-firm relationships (supply)

	(1) Customers	(2) Customers	(3) Customers	(4) Customers
FDI-firm	37.951***	33.739***	33.717***	29.340***
	(5.679)	(5.736)	(5.095)	(5.404)
Employees		0.083*		0.064
		(0.046)		(0.039)
Business income			0.003***	0.003***
			(0.001)	(0.001)
Firms	21729	6021	20375	5608
N	110894	58848	103499	55175

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Notes: The outcome variable is the number of corporate suppliers that a firm had in 2020 based on transaction-level VAT data. FDI-firm is a dummy-variable for firms that are registered as having received FDI. Employees is the number of employees of the firm in 2020 according to the PAYE dataset. Business income is taken from Corporate Income Tax data. Industry-clustered standard errors in parentheses. All columns control for firm age and include ISIC2-level industrial sector and geographical district fixed effects. Omission of these fixed effects does not qualitatively change the results.



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