

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

**Country Case Study:  
RWANDA**

**Institute of Policy Analysis and Research  
(IPAR-Rwanda)**

**DRAFT REPORT**

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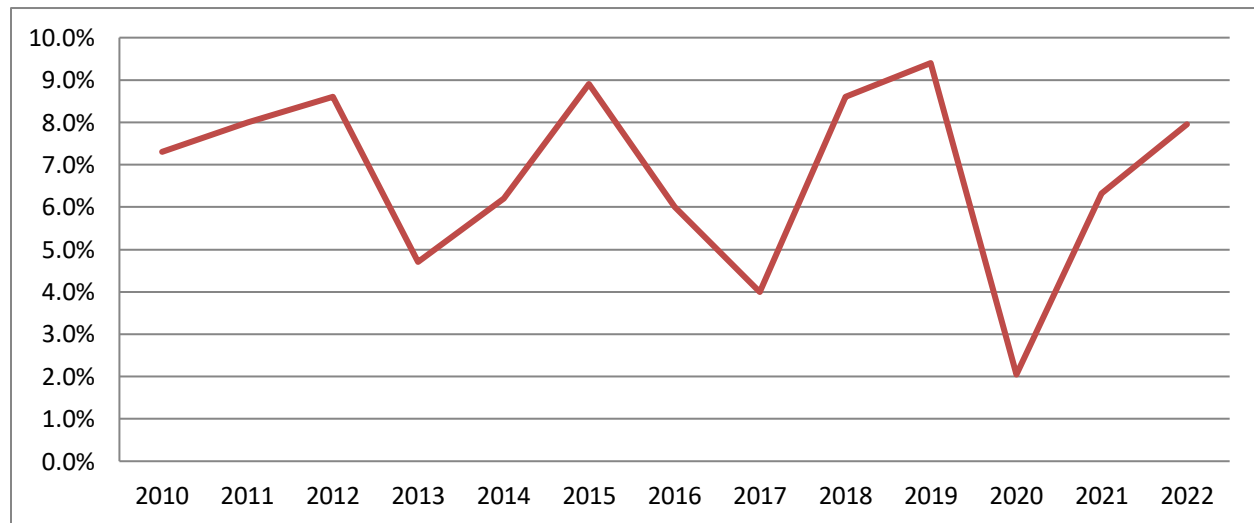
# Chapter 1: Introduction

## 1.1. Trends in Rwanda’s economic development

During the decade spanning 2010 to 2019, Rwanda’s economic growth has been remarkable, with average annual GDP growth rates of 7.5% prior to the start of the COVID-19 pandemic (See Figure 1). In addition, GDP per capita rose from US\$229 in 2000 to US\$773 in 2018. However, due to the COVID-19 pandemic, aggregate GDP in 2020 declined by 3.4 percent<sup>1</sup>. The pandemic depressed economic performance through induced demand and supply shocks, adding to the impact of adverse weather conditions on agricultural production. The 2020 economic decline cut across all economic sectors. During the 2020/21 financial year, real GDP started to recover, rising to 4.4 percent from 2.3 percent in the 2019/2020 financial year. In addition, headline inflation was maintained within the National Bank of Rwanda (NBR) inflation benchmark band of 2 percent to 8 percent in 2020/21 despite COVID-19 shocks.

This economic recovery has been helped by supportive fiscal and monetary policy measures in addition to easing COVID-19 containment measures (National Bank of Rwanda, 2021)<sup>2</sup> The NBR maintained an accommodative monetary policy stance by keeping the central bank rate at 4.5 percent throughout the year to further support the financing of the economy. In addition, it allowed lending institutions to restructure loan contracts of borrowers affected by COVID-19, especially those in the hospitality industry, transport, commercial real estate, and education sectors, as well as in the associated value chains. These and other measures helped to ensure that there was adequate liquidity in the economy and eased the cost of borrowing for both corporate companies and individuals.<sup>3</sup>

Figure 1. Real GDP growth, 2010-2022 (%)



Source: Macroeconomic Framework Public Dataset, MINECOFIN, 2020.

<sup>1</sup> IMF Data Mapper, October 2021 - <https://www.imf.org/en/Countries/RWA>

<sup>2</sup> National Bank of Rwanda Monetary and Financial Stability Statement , March 2020

<sup>3</sup> National Bank of Rwanda Annual Report for 2020/2021; <https://www.bnr.rw/news-publications/publications/annual-reports/>

## 1.2. Fiscal performance

As the economy has grown, the country's revenue as a percentage of GDP has improved, from 6 percent in 2000 to 24 in 2019. However, the positive growth rate in revenue has been outstripped by the growth in total expenditure, up from about 6 percent of GDP in 2000 to about 32 percent of GDP in 2019. This has led to growth in the overall deficit and public debt in the form of grants and borrowing. Prior to COVID 19, Rwanda's trade deficit rose from Rwf 133 billion in 2010/11 to Rwf 492 billion in 2018/19. However, the COVID-19 pandemic led to an upward spike in COVID-19 containment expenditure and a decline in government revenues which increased Rwanda's fiscal deficit to Rwf1,226 billion. This deficit is projected to remain at over Rwf 900 billion in the short term as the economy recovers from the pandemic (Table 1). The current account deficit is projected at about 11 percent of GDP in 2021 and is expected to narrow over the medium term, financed by FDI and concessional loans.

Although Rwanda's medium-term outlook is positive, there is some uncertainty about the prospects of sustaining economic recovery and resilience. Pandemic scars such as school disruptions, learning losses, protracted unemployment, and rising poverty, especially among women, if not addressed, risk reversing the economic and social gains hard won over the last two decades (IMF, 2021).

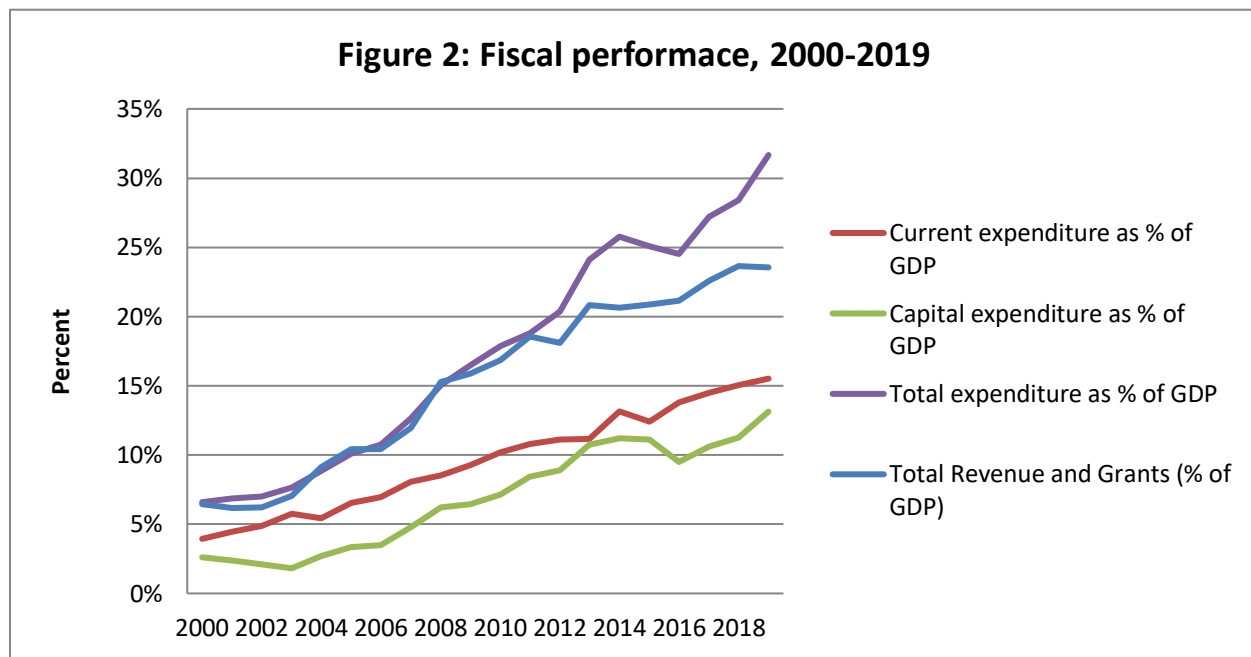
Table 1. Fiscal performance, 2010 to 2022

Year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Revenue and grants	863	1,049	1,101	1,339	1,419	1,540	1,616	1,820	2,065	2,082	2,172	2,386	2,714
Total revenue	484	592	736	864	1003	1166	1286	1462	1670	1650	1679	1862	2129
Total grants	379	457	365	474	416	374	330	359	395	432	492	524	585
Total expenditure and net lending	984	1,098	1,336	1,543	1,721	1,736	1,943	2,188	2,612	3,253	3,110	3,259	3,556
Current expenditure	527	614	634	780	835	927	1070	1177	1344	1558	1670	1779	1932
Capital expenditure	439	483	565	712	770	721	760	850	1072	1295	1140	1237	1361
<b>Overall deficit (cash basis)</b>													
Including grants	-133	-63	-243	-220	-297	-224	-347	-392	-492	-1226	-974	-912	-882
Excluding grants	-512	-520	-608	-694	-713	-597	-677	-751	-886	-1,658	-1,466	-1,436	-1,466

Rwanda's Fiscal Consolidation Strategy (FCS) has continued to aim at achieving fiscal and debt sustainability relative to the East African Community macroeconomic convergence criteria. In addition, the FCS has sought to reduce the external current account deficit and the country's reliance on external financing, as well as to improve prioritization and efficiency of public expenditure. The government has also continued with fiscal consolidation in order to safeguard external and macroeconomic stability, while supporting growth. Therefore, the tight fiscal policy stance (evidenced by the slowdown in capital spending) is likely to continue due to the lower level of external project grants available to Rwanda, as well as the need to gradually reduce the overall deficit toward EAC convergence criteria (National Bank of

Rwanda, 2019). Given that capital spending is very important for changing the structure of the economy, a decrease in capital spending may limit the pace of economic transformation, more so, in an environment where external financing is limited in a COVID-19 recovery context.

Figure 2. Fiscal performance, 2000-2019

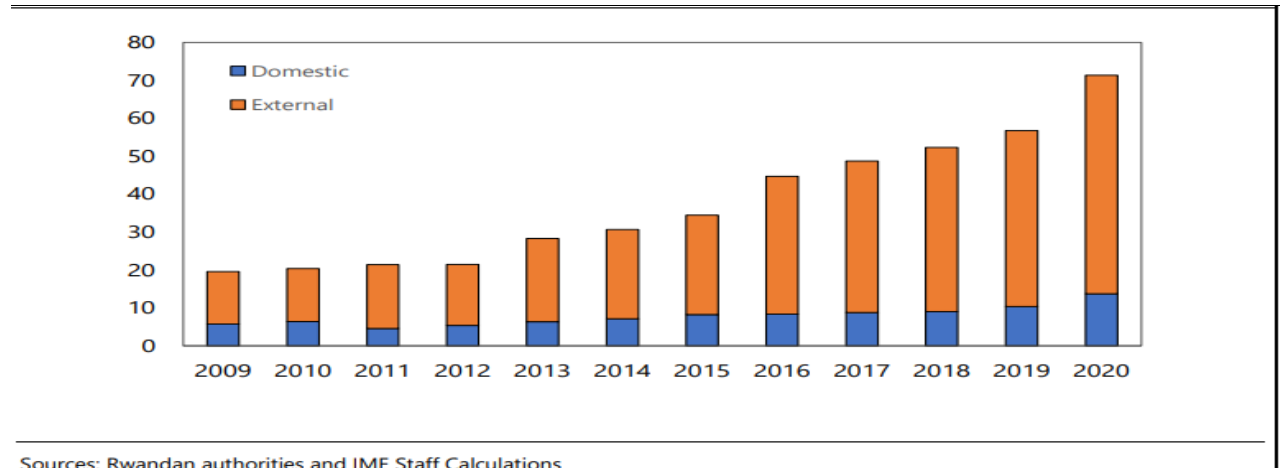


Source: Macroeconomic Framework Public Dataset, MINECOFIN, 2020.

Rwanda’s public and publicly-guaranteed<sup>4</sup> external debt-to-GDP ratio increased by 33 percentage points over the last six years, driven by borrowing to meet not only the development needs envisaged in the National Strategy for Transformation (NST), but also from the robust COVID-19 response. Out of the NST came the construction of the Kigali Convention Centre (KCC), completed in 2016, the expansion of the national airline, Rwanda-Air (now completed), and the construction of a new airport in the Bugesera district. These developments contributed to public and publicly guaranteed external debt increasing by 21.7 percentage points in the five years preceding the COVID-19 crisis. At the same time, the increase in the fiscal deficit due to revenue shortfalls and a scaling up in spending to address the COVID-19 crisis led to sharp debt increase in 2020 by an additional 11.3 percentage points. As a result, external PPG debt has risen from 22.6 percent of GDP in 2014 to 55.6 percent in 2020 (IMF, 2021). The current debt-to-GDP ratio of 55.6 percent is slightly above the debt sustainability threshold of 50 percent but can be accommodated within the prevailing context of a COVID-19 recovery period.

<sup>4</sup> Public and publicly guaranteed debt comprises long-term external obligations of public debtors, including the government, public corporations, state-owned enterprises, development banks and other mixed enterprises.

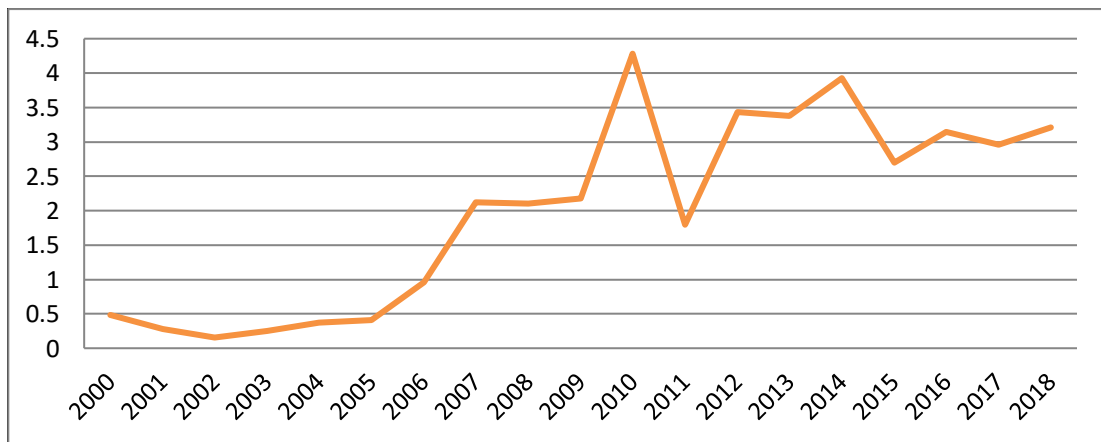
Figure 3. Debt-to-GDP ratio, 2009-2020 (%)



### 1.3: Foreign direct investment

As a share of GDP, net flows of investment into Rwanda increased steadily from about half of GDP in 2000 to about twice GDP in 2007-2008. Thereafter, net FDI inflows into Rwanda stagnated at over twice the annual GDP, probably because of the uncertainty arising from the global financial crisis. After 2009, net FDI inflows shot up to four times the GDP, but later plunged in 2011. After 2011, net FDI inflows recovered and fluctuated around three times the GDP until 2018. From a low base of about half of GDP in 2000, net FDI inflows grew to three times the GDP in 2018 (World Bank, 2020). This growth is a result of initiatives implemented by the Rwanda Development Board (RDB) to attract FDI and is also due to policies such as doing-business reforms, which have promoted Rwanda as a favourable investment destination. According to the 2019 World Bank Doing Business Indicators report, Rwanda was ranked the 29<sup>th</sup> easiest place to do business in the world.

Figure 4. FDI net inflows as a proportion of GDP, 2000-2018 (%)



Source: World Bank, World Development Indicators, 2020

According to Table 2, the sectors that consistently attracted the most FDI between 2012 and 2018 were ICT, financial services, tourism and the wholesale and retail trade. Key sectors that did not attract



adequate FDI during this period include education and agriculture. Within agriculture, more investments are needed in the agro-processing sub-sector in order to add value to agricultural produce and create more jobs. Rwanda's investments in ICT as an enabler are one of the driving factors behind the emerging economic transformation as they have led to significant growth in productivity in the services sector. These gains in the services sector have been driven mainly by Rwanda's policy of streamlining ICT within all sectors, including e-health, e-government and the *Irembo* platforms for accessing and paying for government services.

Rwanda's ambition is to become an ICT hub in the region and the government has made significant investments in ICT infrastructure, leading to 52 percent internet penetration by 2018. Coverage by high-speed broadband infrastructure has now reached large parts of the country. A state-of-the-art cybersecurity facility has been operationalized to protect business and government systems from cyber-attacks. The number of electronic services has increased significantly, fuelled by disruptive advancements in electronic financial services, including Tap and Go which have improved efficiency in the public transport sector (Rwanda ICT policy, 2015).

Table 2: FDI inflows into Rwanda, by sector, 2012-2018

	2012		2013		2014		2015		2016		2017		2018	
	FDI inflows (USD million)	Percentage of FDI inflows, by sector	FDI inflows ((USD million)	Percent	FDI inflows ((USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)	Percent	FDI inflows (USD million)	Percent
Administrative and support service activities	0.3	0.1%	0.0	0.0%	0.2	0.1%	0.0%	0.0%	0.6	0.2%	1.4	0%	0.5	0%
<b>Agriculture</b>	10.7	4.2%	20.5	8.0%	8.7	1.9%	17.3	4.6%	5.5	1.6%	15.5	4%	15.2	4%
Construction	1.0	0.4%	2.4	0.9%	1.5	0.3%	22.0	5.8%	7.4	2.2%	1.5	0%	2.0	1%
Education	0.0	0.0%	1.2	0.5%	2.6	0.6%	2.5	0.7%	0.0	0.0%	1.5	0%	1.9	0%
Electricity, gas, steam	0.2	0.1%	0.3	0.1%	0.0	0.0%	76.1	20.0%	21.9	6.4%	45.8	13%	144.8	38%
<b>Financial and insurance activities</b>	22.3	8.7%	38.0	14.7%	68.8	15.0%	57.9	15.2%	70.3	20.5%	36.0	10%	72.0	19%
Human health and social work activities	0.6	0.2%	0.0	0.0%	0.0	0.0%	0.6	0.2%	1.3	0.4%	2.2	1%	0.8	0%
<b>ICT</b>	167.3	65.6%	20.5	7.9%	116.2	25.3%	76.7	20.2%	113.1	33.1%	50.2	14%	81.4	21%
<b>Manufacturing</b>	34.9	13.7%	64.0	24.8%	21.2	4.6%	14.5	3.8%	41.1	12.0%	106.9	30%	28.4	7%
Mining	0.1	0.0%	99.3	38.5%	136.2	29.7%	7.1	1.9%	6.7	2.0%	4.3	1%	2.7	1%
Other service activities	1.9	0.8%	0.4	0.1%	0.2	0.0%	0.3	0.1%	0.5	0.2%	-0.3	0%	0.1	0%
Professional, scientific and technical activities	0.0	0.0%	0.0	0.0%	2.0	0.4%	1.0	0.3%	0.4	0.1%	0.7	0%	4.2	1%
Real estate activities	0.0	0.0%	0.3	0.1%	0.0	0.0%	7.7	2.0%	11.0	3.2%	8.0	2%	0.5	0%
<b>Tourism</b>	1.7	0.7%	2.0	0.8%	71.8	15.6%	66.9	17.6%	4.4	1.3%	37.4	11%	2.8	1%
Transportation and storage	5.8	2.3%	1.0	0.4%	-0.1	0.0%	3.2	0.8%	0.5	0.2%	3.2	1%	8.7	2%
Water supply	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0%	0.0	0%

Wholesale and retail trade	8.1	3.2%	7.9	3.1%	29.6	6.4%	26.0	6.9%	57.4	16.8%	42.0	12%	15.9	4%
TOTAL	255.0	100%	257.6	100.0%	458.9	100.0%	379.8	100.0 %	342.3	100.0 %	356.4	100%	381.9	100%

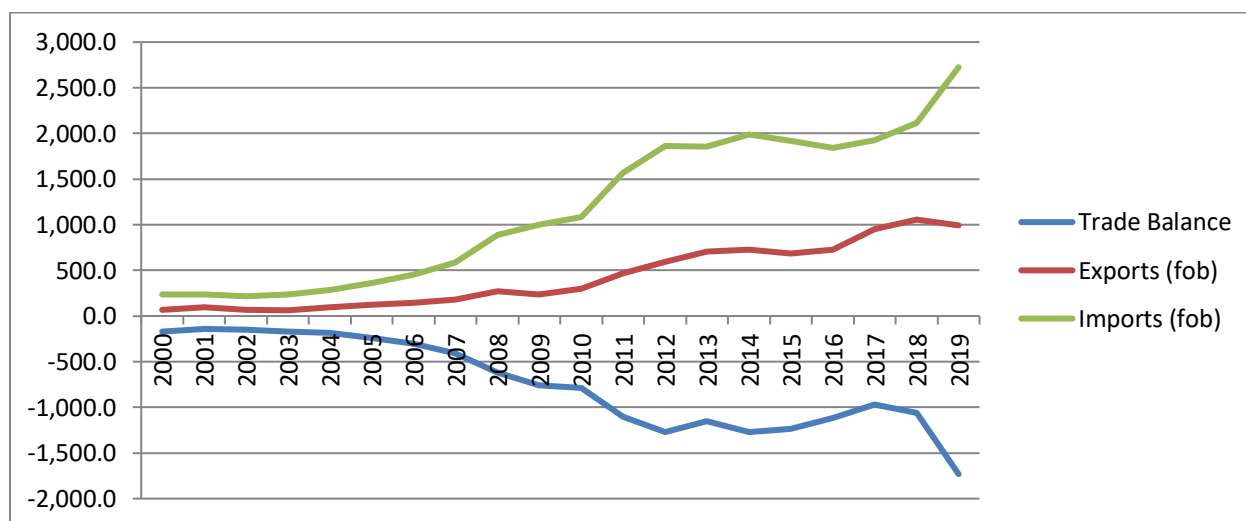
Source: NISR, Foreign Private Capital Census Report 2019

There have been fluctuations in FDI inflows by sector, as well as in sectoral shares between 2012 and 2018. While ICT and manufacturing were the most attractive sectors in 2012, accounting for 65 percent and 14 percent respectively of all FDI inflows, financial and insurance activities had the most steady and rising share of FDI, from 8.7 percent in 2012 to 20.5 percent in 2016, rising to second position from third. In 2013 and 2014 tourism received a sizable share of FDI, at 16 percent and 18 percent, respectively.

## 1.4. Trade

Rwanda's exports increased significantly from US\$69 million in 2000 to US\$993.5 million by 2019 a result of the efforts by the government to address the trade deficit. However, imports have experienced a bigger increase, from USD238.3 million to 2,725.2 million USD within the same time frame. This has led to an increase in the trade deficit from US\$169 million in 2000 to US\$1309 million in 2016, falling to US\$861 million in 2017. From 2017 to 2019/2020 the trade deficit surged to a level of US\$1,731.65 million. The 2020 deficit was on the account of the surge in imports of gold for processing coupled with increased demand for consumer goods, following the government initiative to provide food to vulnerable people during the lockdown period. To counter the growing trade deficit, the government has implemented policies including the National Exports Strategy (NES) and the "Made in Rwanda" policy that was implemented to recapture the domestic market by promoting locally made goods and services.

Figure 5. Trends in exports, imports and trade balance, 2000-2019 (US\$ million)



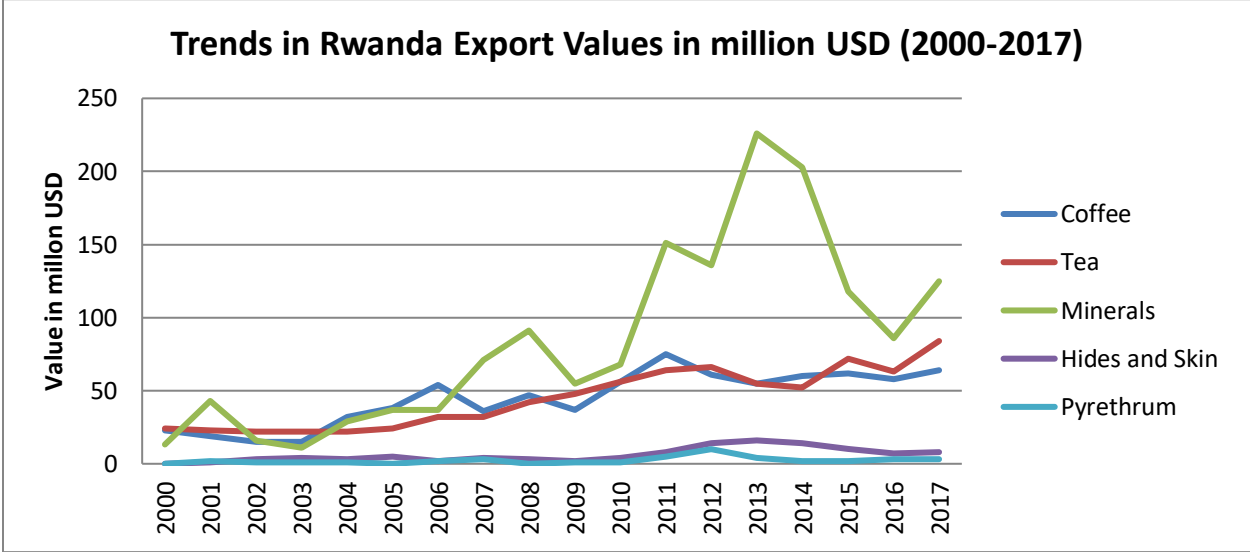
Source: Authors' calculations from Rwanda Updated Macroeconomic Framework database, 2020

Although exports have been somewhat diversified over time, Rwanda's main exports are traditional primary products including coffee, tea, cassiterite, coltan, hides and skins and pyrethrum. The composition of the main exports makes the country vulnerable to price variations and climate change. For

instance, coffee export revenue increased to US\$75 million in 2011 only to fall to US\$64 million in 2017, despite an increase in volume, a feature that has characterized other primary products.

To address the challenges, the government has invested tourism and turned it into the major export revenue earner over the past decade.

Figure 6. Trends in export values, 2000-2017 (US\$ million)



### 1.5. Monetary policy developments

**Interest rates:** Although interest rates have been stable, lending rates are still high, averaging about 17 percent over the past 10 years. In order to rectify this problem, the National Bank of Rwanda (NBR) has maintained an accommodative monetary policy stance in order to support continued financing of the economy by the banking sector. For example, the NBR reduced its policy rate (key repo rate – KRR) from 6.25 percent in December 2016 to 6.0 percent in June 2017 and 5.5 percent in December 2017. Interest rates have generally been stable over the year, which partly explains the stable macroeconomic environment the economy has experienced. Over the past 10 years, the key repo rate has ranged between 6.7 percent and 5.5 percent, with a recent decline to 5.71 percent as the central bank endeavors to reduce the cost of capital for the private sector.

Table 3. Evolution of interest rates, 2009-2018 (%)

	2009– 2010	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018
Key repo rate	6.5	6.25	6	6	5.5	5.5	5.5	6.35	5.71
Discount rate	10.5	10.25	10	10	9.5	9.5	9.5	10.35	9.71
Repo rate	3.62	4.99	4.42	4.11	4.21	3.98	4.38	4.8	4.19
T-bill rate	7.29	9.42	8.78	7.42	7.07	6.27	5.92	8.79	6.88
Interbank rate	5.93	6.1	6.4	5.76	5.85	5.24	5.58	6.38	5.71
Deposit rate	7.94	7.84	7.92	7.86	8.7	8.23	8.33	7.83	7.82
Lending rate	16.95	16.85	16.76	17.33	17.19	17.08	17.3	17.25	17.15
Spread	9.01	9.01	8.84	9.47	8.49	8.85	8.98	9.42	9.33
Real deposit rate	2.4	0.11	3.15	4.1	8.03	7.38	5.45	1	5.54

Source: National Bank of Rwanda Annual Reports

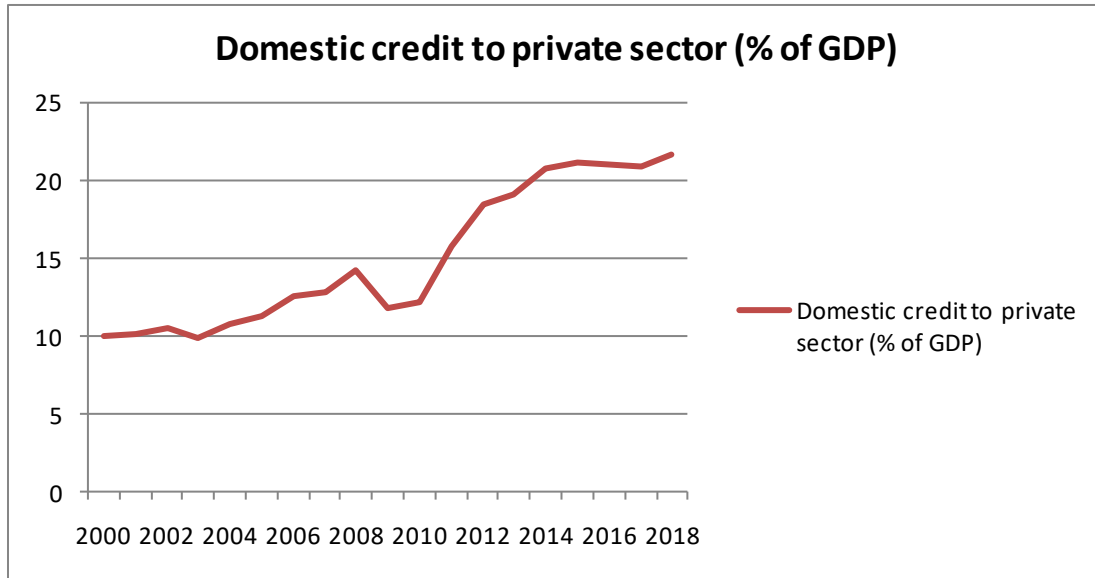
Despite the stable interest rates, the lending rate has remained significantly high at approximately 17 percent, making the cost of capital for the private sector high and an impediment to private sector growth and investment. This is one of the critical challenges the government must address if private sector investment is to grow and, equally, remain sustainable. Table 3 shows that the spread between the interest charged on bank loans to the public and the interest paid on bank deposits has remained high, averaging about 9 percent over the past 18 years. Commercial banks claim that the low savings rate in Rwanda pushes them to acquire capital from foreign sources at higher cost, which then translates into higher lending rates and subsequently a large spread.

In order to rectify this problem, the National Bank of Rwanda has maintained an accommodative monetary policy, reducing the policy rate to 5 percent in May 2019 from 5.5 percent. This is intended to translate into lower interest rates charged on loans and subsequently to narrow the spread (NBR, 2019). During the peak of the COVID-19 pandemic in 2020, the National Bank of Rwanda maintained its repo rate at 4.5 percent to further support financing for the economy. In addition, the National Bank of Rwanda implemented financial literacy programmes among the public to raise awareness of the benefits of savings. Finally, the NBR has been pushing for more use of digital payment methods (such as online payments and e-wallets, such as tap-and-go for city commuters) to promote a cashless economy, thereby increasing the amount of credit available to the private sector.

### **Credit to the private sector**

As the economy has expanded over the years, domestic credit to the private sector has grown from 10 percent in 2000 to 21 percent in 2018. The trend has not been all positive, as the economy contracted in 2009. In the last few years it has fluctuated between 19 and 21 percent.

Figure 7. Domestic credit to the private sector, 2000–2018 (% of GDP)



Source: National Bank of Rwanda Annual Reports, 2018

In absolute terms, the main sectors absorbing the new loans include public works and buildings, commerce, restaurants and hotels, transport, warehousing and communications, and manufacturing, while mining has received the least loans. As a proportion of total new authorized loans to the private sector, commerce, restaurants and hotels have dominated private sector credit, averaging about 40 percent, followed by public works and buildings, which averaged about 24 percent over the past 20 years. This is in line with the high growth experienced in the service and construction sectors during the period. However, credit to the agriculture sector has averaged only about 2 percent because of its inherent risk. More effort needs to be put into reducing the risk by increasing access to agricultural insurance in order to increase credit access for the sector.

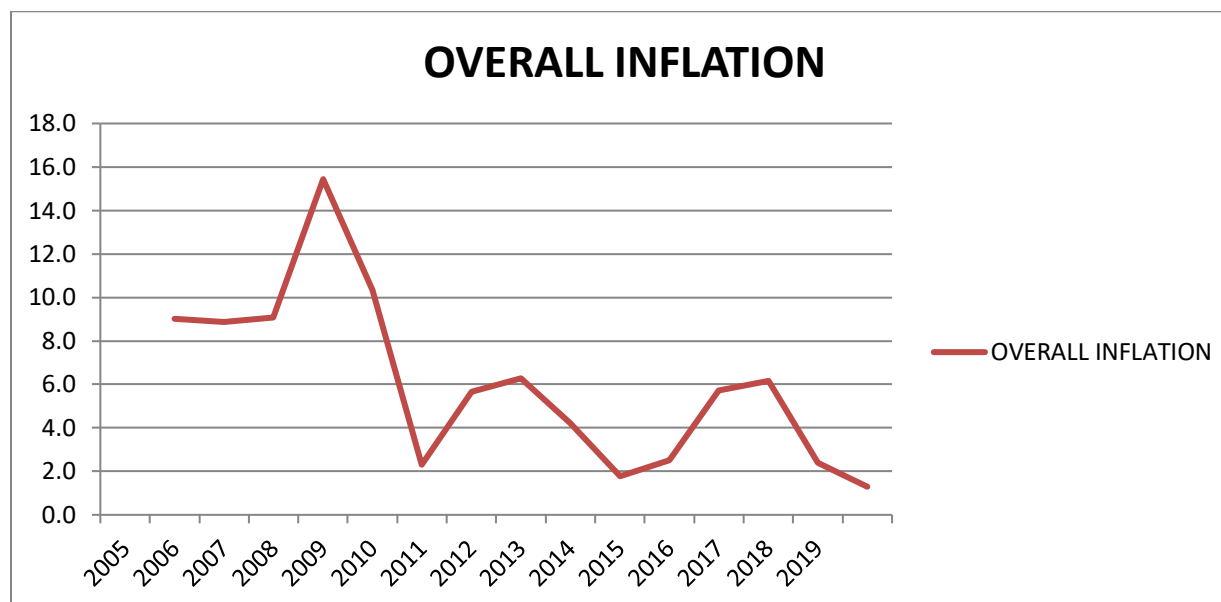
Table 4. New authorized loans, by economic sector, 2007-2018 (% of total loans)

	2007	2008	2009	2010– 2011	2011– 2012	2012– 2013	2013– 2014	2014– 2015	2015– 2016	2016– 2017	2017– 2018
Non-classified activities	6%	7%	9%	12%	17%	14%	11%	9%	9%	11%	12%
Agricultural fisheries and livestock	3%	1%	1%	3%	2%	2%	1%	2%	2%	1%	1%
Mining activities	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.09%	0.21%	0.09%	0.05%
Manufacturing activities	10%	6%	9%	8%	4%	9%	13%	6%	9%	7%	8%
Water and energy	0.1%	0.1%	1.1%	0.8%	0.1%	0.9%	3.7%	1.6%	1.0%	3.3%	1.4%
Public works and buildings	20%	30%	21%	24%	25%	20%	20%	27%	26%	27%	28%
Commerce, restaurants and hotels	46%	41%	36%	39%	40%	43%	42%	41%	44%	39%	35%
Transport, warehousing communication	11%	10%	18%	7%	6%	6%	5%	7%	6%	7%	10%
OFI & insurance and ONFS	2%	1%	3%	3%	3%	2%	0%	1%	1%	1%	0%
Services provided to the community	2%	5%	2%	3%	2%	3%	3%	5%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: National Bank of Rwanda Annual Reports

**Inflation:** Apart from 2008, Rwanda’s inflation has consistently been in single digits, averaging 6.9 percent in the past decade. Local inflation has averaged 6.9 percent, as against an imported inflation average of 5.1 percent. The major drivers of inflation have been food, housing and education. Overall Rwanda’s inflation has been within the government target of 5 percent and the prospects are that it will remain stable. However, it is still prone to volatilities in the agricultural sector and international oil prices.

Figure 8: Overall inflation, 2005-2019 (%)



## 1.6. Labor market developments

According to the 2018 Labor Force Survey, the annual unemployment rate in Rwanda stood at 15 percent. Unemployment rates for the years prior to 2018 had been less than 2 percent simply because of the definition of employment that identified an employed person as one who had worked for at least an hour in the past seven days irrespective of whether they had been paid or not. The 2018 Labor Force Survey definition of employment excluded unpaid family workers, which led to the reported unemployment rate of 15 percent. According to this survey, the unemployment rate was higher among women (17.1 percent) than among men (13.5 percent) and higher among young people (18.7 percent) than among adults (12.3 percent). It was also higher in urban areas (16.5 percent) than in rural areas (14.7 percent)

Rwanda's working age population has increased gradually from 4 million in 2000 to the current 6.7 million. This has been complemented by an increase in both employed and unemployed people. The total labor force participation rate has ranged between 80 percent and 86 percent, while the employment-to-population ratio averages 86 percent between 2010 and 2017. The inactive rate increased tremendously in 2016 because those who were initially classified as unemployed were reclassified as inactive.

Table 5. Selected indicators, 2000–2017

Indicator	2000–2001	2005–2006	2010–2011	2013–2014	2016–2017
Working age population (000)	4,118	5,116	5,888	6,400	6,756
Employed	3,571	4,299	4,783	5,479	5,825
Unemployed	488	735	994	810	109
Inactive	59	81	110	112	931
Labor force participation rate (%)			83.1	87.4	87
Employment-to-population ratio (%)			81.2	85.6	86

Source: Authors' calculations from EICV surveys.

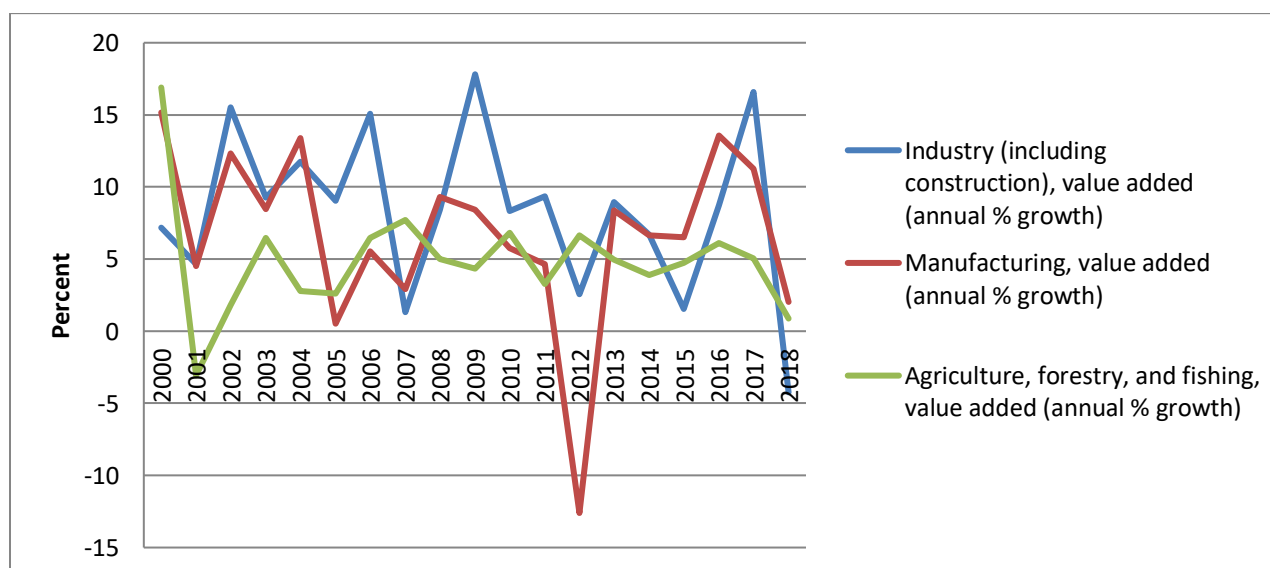
Table 6: Total employment and labor productivity, 2000-2017

Year	Total employment	Nominal GDP (Rwf)	National labor productivity	Real GDP (Rwf)	National labor productivity (real GDP; Rwf)
2000–2001	3,571,000	676,000,000,000	189,303		
2005–2006	4,299,000	1,439,914,990,482	334,942		
2010–2011	4,783,000	3,366,608,332,281	703,870	4,241,000,000,000	886,682
2014–2015	5,479,000	5,466,207,499,041	997,665	5,697,000,000,000	1,039,788
2016–2017	5,825,000	6,672,000,000,000	1,145,408	6,397,000,000,000	1,098,197

Source: Authors' calculations from national statistics and EICV survey data

In real terms, labor productivity in Rwanda in terms of output per worker has grown from Rwf 886,682 per year in 2010 to Rwf 1,098,197 per year in 2017

Figure 9: Annual sectoral productivity growth, 2000-2018 (%)



Source Authors' calculations from World Bank, World Development Indicators

A break-down of productivity growth by sector shows that value added has averaged 8.3 percent, 6.7 percent and 4.91 percent in the industrial, manufacturing and agricultural sectors respectively over the



last 20 years (See Figure 10). This implies that compared with manufacturing and industry, productivity growth in Rwanda’s agricultural sector has been lower.

An analysis of the impact of economic growth on structural transformation and employment in Rwanda shows that prior to the COVID-19 pandemic in 2020, economic development was coupled with employment generation. A breakdown of GDP growth in terms of per capita value added between 2005 and 2017 shows that 88 percent of Rwanda’s GDP growth was linked to increased productivity, 6 percent to changes in the employment rate and 6 percent to the increase in the proportion of the working-age population (see Appendix 1). As opposed to the jobless growth witnessed in other developing countries, economic growth in Rwanda was accompanied by job creation.

In terms of employment, the most dynamic sectors over the past decade include construction, transport (by 53 percent), information and communications technology (ICT) (56 percent), tourism and recreation (120 percent), and services (113 percent). Evidence from the 2021 mid-term evaluation of the National Strategy for Transformation which was conducted by IPAR-Rwanda shows that the major policies driving the progress include the following:

- In the construction sector, Rwanda Housing Authority and the City of Kigali have implemented measures to reduce high costs and streamline procedures for obtaining construction permits.
- In the ICT sector, Rwanda’s ambition is to become an ICT hub in the region. This has led to significant investment, including in high-speed broadband infrastructure and cyber security systems. These have transformed the country into one of the most connected in Africa.
- In the tourism sector, Rwanda has continued to position itself as a hub of “meetings, incentives conferencing and exhibitions” (MICE) tourism by making investments in Rwanda Air (the national carrier) and building conference facilities such as the Kigali Convention Centre and the Kigali Arena.
- In addition, Rwanda has partnered with European football clubs (such as Arsenal and Paris Saint-Germain) to promote the “Visit Rwanda Campaign”, all of which have led to employment and revenue growth in the tourism sector. Employment in the services sector has been boosted by the above-mentioned Made-in-Rwanda program, a government-led domestic market recapturing strategy aimed at encouraging citizens to buy goods and services from both local and foreign companies located in Rwanda.

### **1.5. Poverty and Inequality**

Rwanda’s policy agenda in the past two decades has been geared towards reducing household poverty. Against the national poverty line currently at Rwf 159,375 (NISR, 2018), poverty has fallen over the years. The policies implemented include free or subsidized access to education, and infrastructure development through rural road construction. These, among other policies, have reduced poverty from 58.9 percent in 2000 to 38.2 percent by 2017, as against the targeted 30 percent under Rwanda’s National Strategy for Transformation (NST1).

Table 7. Poverty and inequality indicators, 2000-2017

	2000– 2001	2005– 2006	2010– 2011	2013– 2014	2016–2017
Headcount poverty rate	58.9%	56.7%	44.9%	39.1%	38.2%
Poverty gap rate			14.8	12	11.7
Working poverty rate		54.9%	40.9%	34.9%	33.6%
GINI coefficient	0.473	0.522	0.49	0.447	0.429

Source: Integrated Household Living Conditions Survey, NISR (2006, 2011, 2014, 2017).

Over the past 20 years, poverty rates in Rwanda have declined consistently, from 58.9 percent in 2000 to 38.2 percent in 2017. In addition, the level of inequality as indicated by the Gini coefficient has fallen from 0.47 in 2000 to 0.43 in 2017 implying that the gap between the poor and the well-off people is still relatively high. Given that Rwanda started from a very low base with high poverty rates of about 6 percent, reducing the poverty rate to about half within the past 20 years has been a remarkable consequence of the job-creating growth achieved in Rwanda. Findings from the estimation of the employment elasticity of growth show that Rwanda's economy has expanded in tandem with employment growth in the past two decades. This relationship reflects the positive jobs spill-over from economic growth or rather a positive employment elasticity of growth of 0.203\*\*\* as shown below.

Table 8. Employment elasticity of growth in Rwanda, 2000-2017

	Log total employment	
Lngdp	0.203***	
	(13.09)	
_cons	9.578***	
	(21.65)	
R-sq	0.983	
t statistics in parentheses		
** p<0.05	** p<0.01	*** p<0.001"

However, there is still need to address the current low productivity of the significant proportion of the population that is mainly employed in agriculture in order to further reduce poverty and income inequality (see Figure 10 above on productivity trends by sector) . These efforts will include provision of skills-based education, improved health care and increased use of inputs in agriculture.

### **Rwanda's demographic transition**

With a median age of 19 years, the population of Rwanda is dominated by young people and this looks set to persist into the future. The predominantly low level of education, however, threatens the expected demographic dividend. This is manifest in the high percentage of young people not in education or employment or training (NEET), which currently stands at 33.7 percent, having fallen from 35.9 percent in the past decade. The majority of NEET youths are women, at 43 percent, with men at 23.5 percent. Promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all requires the government and development partners to address school drop-out rates, while at the same time supporting private sector development in order to create employment opportunities for young people.

## Chapter 2. Development policies and economic transformation

### 2.1. National plans and sectoral policies and strategies

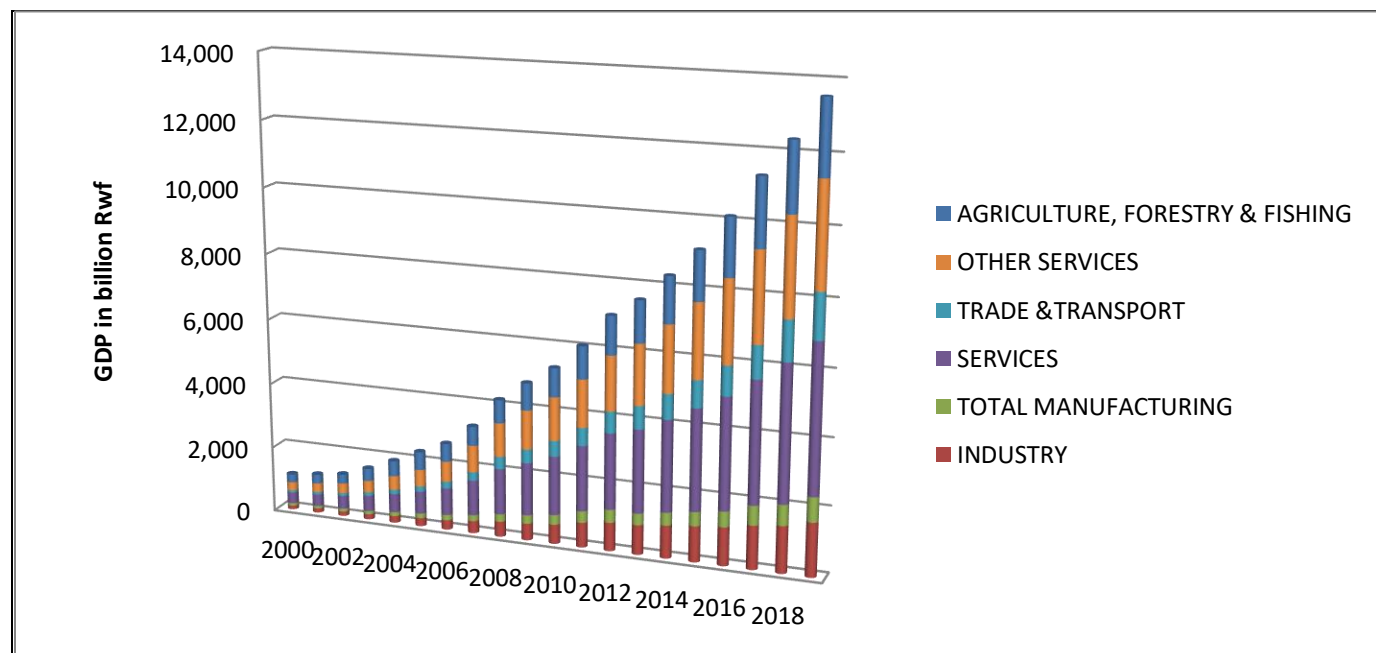
Rwanda's development plans over the last 20 years start with Vision 2020 which has been implemented through a series of medium-term strategies. The Vision 2020 was launched in 2000 after a rigorous consultative process with the overarching goal of transforming Rwanda into a lower middle-income nation in which Rwandans are healthier, more educated and generally more prosperous.

Vision 2020 was implemented through the Interim Poverty Reduction Strategy (I-PRS), the Poverty Reduction Strategy Paper (PRSP), the Economic Development and Poverty Reduction Strategies (EDPRS) 1 and 2 and the National Strategy for Transformation (NST-1) for its final phase. While the first four national strategies were formulated to ensure systematic implementation and target achievement under Vision 2020, the NST1 serves as a transitional strategy between Vision 2020 and Vision 2050.

#### 2.1.1. Sectoral policies

An analysis of the sectoral contributions to GDP over time show that the contribution of services to Rwanda's economy has increased and overtaken agriculture. The contribution of manufacturing to GDP has remained low and stagnated while the contribution of industry has risen due to increased investments in construction and infrastructure works linked to MICE promotion.

Figure 10. Sectoral contributions to GDP, 2000-2019



Source: Authors' calculations from MINECOFIN updated Macroeconomic Framework 2021

## **Agriculture**

The major policy that is being implemented is the Strategic Plan for Agricultural Transformation (PSTA). The current (and fourth) phase of implementation (i.e. PSTA4) runs from 2018 to 2024 and emphasizes commercialization, intensification, value addition and diversification into new non-traditional agricultural commodities with an export focus. This has led to productivity increases and a 3 percent reduction in agricultural employment between 2005 and 2017. Nevertheless, key agricultural sector challenges include land limitation, climate change impact on productivity, and subsistence methods which affect productivity of the sector

## **Manufacturing**

Rwanda's manufacturing sector has not kept pace with the services sector in terms of value addition and this is due to constraints such as limitations in capital investments, low levels of technology, a small domestic market, and the relatively high cost of utilities. Several initiatives have been implemented in the last 20 years to boost the manufacturing and industry sector including: operationalizing the Kigali Special Economic Zone (SEZ); developing four provincial industrial parks and other district industrial parks in secondary and tertiary cities (Office of the Prime Minister, 2017), and the issuance by the Rwanda Standards Board (RSB) of 2,051 standards and 369 product certifications to meet international standards. Although these policies have boosted investment, exports and jobs, there is still room for improvement in terms of boosting investment for industrial zones in the secondary cities which have attracted limited investment over the last 10 years.

## **Construction**

As part of the ongoing government reforms to improve the business climate in the country, three major reforms have been instituted that decrease bureaucracy in the construction sector. In addition to ensuring timely electricity provision for investors, the Rwanda Housing Authority and City of Kigali have implemented measures to reduce high costs and streamline procedures for obtaining construction permits. Procedures that have been revised include geo-technological studies, topographical surveys and environmental impact assessment. Reducing the bureaucracy involved in obtaining construction permits helps reduce losses incurred by property developers from high interest on loans and mortgages due to late issuance of construction permits.

## **ICT and transport**

As it is Rwanda's ambition to become an ICT hub of the region, the government has invested significantly, making it the most connected country in Africa. High-speed broadband infrastructure has now reached all corners of the country. A state-of-the-art cyber security facility has been operationalized to protect business and government systems from cyber-attacks. Government services are now accessible on the *Irembo* platform and payment is possible electronically. The number of electronic services has increased significantly, fuelled by disruptive advances in electronic financial services, such as Tap-and-Go, which has increased efficiency in the public transport sector by enabling passengers to swipe preloaded cards to make payments for their fares rather than paying cash. These electronic payment systems have reduced cash leakages, they are more efficient, facilitate tax collection from the sector and have created job opportunities within the sector.

## **Tourism**

Over the past 10 years, Rwanda has continued to position itself as a hub of MICE tourism by investing in Rwanda Air, the national carrier, building conference facilities such as the Kigali Convention Center and Kigali Arena, and attracting local and foreign investments in hotels. In addition, Rwanda has partnered with Arsenal Football Club and Paris Saint-Germain FC to promote the “Visit Rwanda” campaign. All have led to employment and revenue growth in the tourism sector.

## **Services**

In line with Rwanda’s ambition of becoming a middle-income, services-based economy, sustained policies such as improving the business environment have attracted both local and foreign direct investment in the real estate, education, health and social sectors. This has led to 144 percent growth in the number of jobs in the services sector over the past 10 years.

## **2.12. Strengths and weaknesses of Rwanda’s development policies**

### **Strengths**

#### **Coordination**

The establishment of coordination mechanisms and division of labor during the implementation of Rwanda’s development policies has led to improvements in the effectiveness of Rwanda’s development policies. Accrued benefits from coordination include reduced duplication of projects and interventions within and across sectors, efficient resource allocation, and priority setting to ensure that timely implementation of planned interventions.

During the implementation of development policies and strategies, the role of the lead ministry is instrumental for sector-level performance. The more aggressive the lead ministry is in coordinating and ensuring sector-level interventions, the more the actors in the sector are likely to contribute to effective implementation.

However, there is room for improvement in the implementation of development plans and strategies. For example, there is need for more efficient collaboration in priority areas that require a multi-sector approach such as food and nutrition security, job creation, sustainable environmental action and gender equality. These efficiency gains are likely to help improve labor allocation, responsibility sharing, resource mobilization, and accountability frameworks (through joint performance contracts). Implementation and follow-up of development policies is done through joint sector working groups comprising ministries, development partners and other policy makers.

## Weaknesses

### Capacity gaps in sector working groups

In order to ensure more benefit from the established platforms such as the sector working groups, more technical assistance is needed to support resource persons. Such people need to be capable of assessing and providing guidance on the following: priority areas, program implementation gaps at sector level, and sector-level policy analysis to improve the performance of ministries and agencies in the concerned sector.

## 2.2 Structural and economic transformation in Rwanda, 2005-2017<sup>5</sup>

### 2.21 Employment, output, productivity and population

Rwanda's GDP in terms of value added almost doubled from Rwf 3,143 billion in 2005 to Rwf 5,970 billion in 2017. According to the 2018 Labor Force Survey, the annual unemployment rate in Rwanda stood at 15.1 percent. The unemployment rate was higher among women (17.1 percent) than among men (13.5 percent) and higher among young people (18.7 percent) than among adults (12.3 percent). In addition, productivity in terms of output per worker has increased by 60 percent, while the employment rate has increased by 3 percent over the past decade. The proportion of working-age people has increased from 84 percent in 2005 to 87 percent in 2017.

Table 9. Employment, output, productivity and population, 2005-2017

	2005/6	2016/17	% change
GDP (value added) (Rwf million)	3,143	5,970	90
Total population	10,674,689	11,893,228	11
Total population of working age	8,966,739	10,299,535	15
Total number of employed	4,906,000	5,825,000	19
GDP (value added) per capita	294,435	501,966	70
Output per worker	640,644	1,024,893	60
Employment rate <sup>6</sup>	55	57	3
Share of population of working age	84	87	3

Source: Authors' calculation from NISR Rwanda surveys including EICV4 and EICV5

### 2.22. Dynamic sectors in terms of employment, 2005-2017

In terms of employment, the most dynamically growing sectors over the last 12 years include construction (53 percent), transport and ICT (56 percent), tourism and recreation (120.5 percent), and services, including health, education, real estate activities and household enterprises (113 percent) (Table 10). Falling employment in financial services are mainly attributed to increasing digitalization in the sector,

<sup>5</sup> From the National Household Surveys of 2005/6, 2010/11 and 2016/17. The 2000 Household Survey's coverage was limited hence its exclusion from the analysis.

<sup>6</sup> Unemployment rates prior to the changes in definition of employment before 2018 were very low and less informative given that every person who worked for at least an hour in the past one week was regarded as employed.

with an increase in electronic banking and banking agents who have brought banking services closer to the people as opposed to mainstream banking. In addition, the manufacturing sector had a slight reduction in employment due to the relatively low investment and productivity in the sector over the study period. Currently, the government is implementing the Manufacture and Build to Recover initiative which is intended boost investment and productivity within the manufacturing and construction sectors during the post-COVID-19 economic recovery period.

Table 10. Employment, by sector of economic activity, 2005-2017

	Sectoral employment					Employment/population of working age		
	2005	2005 Percent	2017	2017 Percent	% change	2005/6	2016/17	% change
Agriculture, fishing, forestry	3,596,000	73.3%	4,065,850	70%	13.1	40.1	39.5	-1.6
Mining and quarrying	48,000	1.0%	52,425	1%	9.2	0.5	0.5	-4.9
Manufacturing	112,000	2.3%	122,325	2%	9.2	1.2	1.2	-4.9
Utilities	10,000	0.2%	11,650	0%	16.5	0.1	0.1	1.4
<b>Construction</b>	<b>146,000</b>	<b>3.0%</b>	<b>256,300</b>	<b>4%</b>	<b>75.5</b>	<b>1.6</b>	<b>2.5</b>	<b>52.8</b>
Trade	444,000	9.1%	495,125	9%	11.5	5	4.8	-2.9
<b>Transport and communications</b>	<b>91,000</b>	<b>1.9%</b>	<b>163,100</b>	<b>3%</b>	<b>79.2</b>	<b>1</b>	<b>1.6</b>	<b>56</b>
Financial services	20,000	0.4%	17,475	0%	-12.6	0.2	0.2	-23.9
Government	211,000	4.3%	81,550	1%	-61.4	2.4	0.8	-66.4
<b>Recreation and tourism</b>	<b>23,000</b>	<b>0.5%</b>	<b>58,250</b>	<b>1%</b>	<b>153.3</b>	<b>0.3</b>	<b>0.6</b>	<b>120.5</b>
<b>Other services (real estate, education, health &amp; social work, household enterprises)</b>	<b>205,000</b>	<b>4.2%</b>	<b>500,950</b>	<b>9%</b>	<b>144.4</b>	<b>2.3</b>	<b>4.9</b>	<b>112.7</b>
Total	4,906,000	100.0%	5,825,000	100%	18.7	54.7	56.6	3.4

Source: Authors' calculations from EICV 4 and EICV5. National Institute of Statistics Rwanda (NISR)

- (i) Changes in the proportions of factors (e.g., labor) employed in the various sectors of the economy

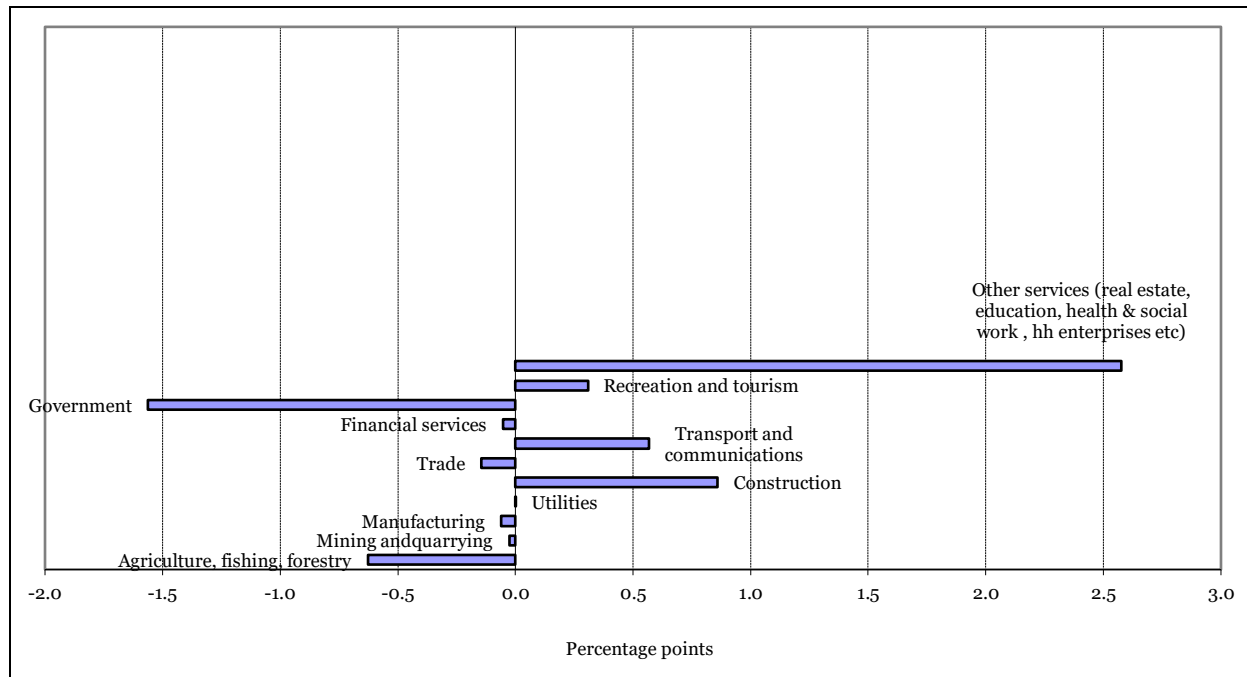
Figure 12 shows the contribution of each sector to the overall change in the employment-to-population ratio in Rwanda over the past 10 years. The contribution of each sector is calculated by dividing the employment in a given sector by the working age population in 2005 and 2017. This provides the difference between these two ratios for each sector to determine sectoral changes in the employment-to-population ratio. The overall change in this ratio is obtained by subtracting the national employment-to-population ratio in 2005 from the ratio in 2017. The sectoral changes are normalized to 1 and then multiplied by the national change in order to obtain the sectoral changes in percentage points.

The findings show that in terms of contribution to the changes in Rwanda's employment-to-population ratios, services was the most dynamically growing sector, with a contribution of 2.6 percentage points.



This is in line with Rwanda’s NST ambition of becoming a middle-income, services-based economy by 2030. Services were followed by construction, transport and ICT and tourism.<sup>7</sup>

Figure 11: Contribution of each sector to changes in the employment-to-population ratio, 2005 to 2017 (percentage points)



Source: Authors’ computations from EICV4 and EICV5 NISR Household Surveys

### 2.2.3. Dynamic sectors in terms of productivity, 2005-2017

In terms of productivity, government services, financial services, trade, utilities and construction enjoyed the highest growth over the past 10 years in Rwanda. Productivity in government services increased due to the policy of ICT mainstreaming in all government institutions. Here, registration and payment for government services can now be done electronically on the *Irembo* platform. Productivity in the financial industry improved through a series of digital interventions such as electronic banking, mobile banking and electronic payments, all of which are in line with Rwanda’s policy of promoting a cashless economy.

Within the trade sector, electronic billing machines (EBMs) were introduced to increase efficiency in the payment of taxes. As part of the ongoing effort to improve the business climate, three major reforms were instituted to decrease bureaucracy in construction, ensure timely electricity provision for investors, and reduce the amount of time exporters spend at Customs. Currently, exporters are able to obtain certificates of origin online. In addition, exporters are able to apply for phytosanitary certificates from the Ministry of Agriculture and Animal Husbandry online. This has facilitated businesses that export tea, coffee and other agricultural products.

<sup>7</sup> ICT and tourism are classified separately from other services due to their strategic and enabling importance within Rwanda’s economy, warranting separate monitoring. Tourism is a key service, while ICT is an enabler that cuts across other sectors.

Table 11. Changes in output per worker, by sector, 2005-2017 (2014 Rwf)

	2005/ 2006	2016/ 2017	% change
Agriculture, fishing, forestry	308,954	430,414	39
Mining and quarrying	2,166,667	2,956,605	36
Manufacturing	1,937,500	3,139,178	62
Utilities	3,300,000	7,896,996	139
Construction	1,041,096	1,802,575	73
Trade	454,955	943,196	107
Transport and communications	516,484	803,188	56
Financial services	1,750,000	6,008,584	243
Government	1,146,919	7,332,925	539
Recreation and tourism	3,000,000	2,128,755	-29
Other services (real estate, education, health and social work, household enterprises)	4,541,463	3,397,545	-25
Total output per worker	640,644	1,024,893	60

Source: Authors' computations from EICV4 and EICV5 NISR Household Surveys

i) Economy-wide productivity growth and contribution of labor

A breakdown of GDP growth in terms of per capita value added between 2005 and 2017 shows that 88 percent of GDP growth was linked to increased productivity (output per worker) within the different economic sectors, 6 percent to changes in the employment rate and 6 percent due to the increase in the share of the working age population. This implies that economic growth in Rwanda has been accompanied by job creation, which shows a significant positive elasticity of growth.

Table 12. Composition of growth in per capita value added, 2005-2017

	2014 Rwf	Percentage of total change in per capita value-added growth
Total growth in per capita GDP (value added)	207,532	100
Growth linked to output per worker	182,366	88
Growth linked to changes in employment rate	13,105	6
Growth linked to changes in share of population of working age	12,061	6

Source: Authors' computations from EICV4 and EICV5 NISR Household Surveys

#### 2.2.4. Inter-sectoral shifts in employment and productivity

Analysis of growth in terms of value added per capita by sector shows that in most sectors, increases in productivity have been a major contributor to observed growth compared with employment and inter-sectoral shifts over time<sup>8</sup>. Overall, increases in productivity contributed 73 percent of the observed growth, while employment changes, inter-sectoral shifts and demographic changes contributed 6 percent, 15 percent and 5.8 percent, respectively. Sectors in which growth has predominantly been driven by productivity increases rather than employment increases include trade, construction and the government sector. Despite the movement of people out of the government sector, productivity increased in that sector because of increasing automation through platforms such as *Irembo*. The productivity increase offset the reduction in output per capita due to employment shifts, leading to an overall government service contribution of 12.4 percent.

On the contrary, per capita growth in the services sector has been driven mainly by inter-sectoral shifts (accounting for 32 percent) and the creation of new jobs (accounting for 9 percent) rather than productivity. It implies that in addition to the creation of new jobs, workers have moved from low productivity activities to higher productivity activities in Rwanda's services sector over time. Furthermore, with the appropriate training programmes, there is still scope for labor to move from low-productivity agriculture into the services sector.

Given the high contribution of inter-sectoral changes within the services sector and the movement of labor out of the agricultural sector, increased upskilling of current workers through TVET and other on-the-job training programmes is needed to enable these transitions and achieve government targets.

<sup>8</sup> The Jobs Generation and Growth (JOGGS) methodology uses Shapley decompositions, which is a simple additive method that links changes in a particular component to changes in total per capita GDP, by taking into account the relative size of the sector or component, as well as the magnitude of the change. The aim of this methodology is to understand how growth is linked to changes in employment, output per worker and population structure at the aggregate level and by sector. In order to draw the profile of Rwanda's growth, the sources of output per worker growth are disentangled, including: total factor productivity (TFP) growth, movements of employment from one sector to another, or changes in the capital-labor ratio.

Table 13. Contribution to total growth in GDP (value added) per capita, 2005-2017 (%)

	Contribution of within-sector changes in output per worker (%)	Contribution of changes in employment (%)	Contributions of inter-sectoral shifts (%)	Total (%)
Sectoral contributions				
Agriculture, fishing, forestry	19.9	-2.2	3.7	21.4
Mining and quarrying	1.7	-0.1	-0.3	1.3
Manufacturing	6	-0.2	-0.7	5.1
Utilities	2.1	0	0	2.1
Construction	6.4	2.9	1.9	11.3
Trade	9.8	-0.5	0.2	9.5
Transport and communications	1.5	1.9	-0.4	3.1
Financial services	3.4	-0.2	-0.8	2.5
Government	40.3	-5.4	-22.6	12.4
Recreation and tourism	-1.5	1.1	2.1	1.7
Other services (real estate, education, health and social work, household enterprises)	-16.7	8.8	31.7	23.8
Subtotals	73.1	6.3	14.8	94.2
Demographic component	-	-		5.8
Total				100
	Total % change in value added per capita 2005/6-2016/17			70.5

Source: Authors' computations from EICV4 and EICV5 NISR Household surveys

In terms of inter-sectoral shifts, Tables 13 and 14 identify sectors that have been net recipients and net losers of workers in Rwanda over time. Construction, transport and ICT, tourism and recreational plus services have been net recipients, while the primary sectors of agriculture fishing, forestry, mining and quarrying have been the main net losers of workers. The shifting of workers from the agricultural sector, however, is a positive development which has contributed 25 percent of the inter-sectoral shifts observed within Rwanda's labor market over time. Other sectors that have been net losers of workers include manufacturing, finance, and government possibly due to the on-going digitalization and technological developments within these sectors.

Table 14. Decomposition of inter-sectoral shifts, Rwanda, 2005-2017

	Direction of employment share shift	Contribution to intersectoral shifts (%)
Sectoral contributions		
Agriculture, fishing, forestry	-	25
Mining and quarrying	-	-2.1
Manufacturing	-	-4.8
Utilities	-	-0.3
Construction	+	12.9
Trade	-	1.1
Transport and communications	+	-2.5
Financial services	-	-5.1
Government	-	-152.5
Recreation and tourism	+	14.2
Other services (real estate, education, health & social work, household enterprises)	+	214
Total contribution of inter-sectoral shifts		100

Source: Authors' computations from EICV4 and EICV5 NISR Household surveys

### 2.3 Policies that influence progress, constraints and opportunities

Overall, Rwanda has had a positive economic transformation trajectory over the past two decades. This has been mainly driven by (i) increased diversification of economic activities and exports; and (ii) improved standards of wellbeing among Rwanda's population. Rwanda's overall African Transformation Index (ATI) score rose between 2003 and 2013 after which it started to decline. GDP growth rose sharply between 2004 and 2007 then declined from more than 9 percent in 2007 to slightly over 6 percent in 2017.

Between 2005 and 2010, Rwanda marked a steep increase in economic transformation, which raised its ATI score from 11.23 to 15.54 (ACET, 2021). However, volatility in key agricultural commodity markets led to a gradual decline in economic transformation from a peak ATI index of about 16.5 in 2013 to an ATI index of about 14.5 in 2017. An analysis of the macroeconomic trends shows that the overall economy has grown at a significant rate, averaging annual GDP growth of 8 percent during this time.

**Growth:** Average growth in GDP growth in 2015 to 2018 was 7.4 percent a year, however, from 2001 to 2010, GDP growth averaged 6.4 percent a year, and GDP per capita growth 4.2 percent. In the 20 years from the end of the 1994 genocide against Tutsi, Rwanda's GDP per capita was US\$146. In 2017 it rose to

US\$774 and reached around US\$819.652 in 2018<sup>9</sup>. Growth in GDP per capita has averaged 5 percent per year since 2006<sup>10</sup>.

**2.31. Diversification:** The overall diversification of both economic activities and exports has increased, as shown by the positive growth trend in the ATI diversification index from about 23.7 in 2000 to about 33.4 in 2010. However, there was a slight decline in export and income diversification between 2011 and 2017. The decline observed in 2017 could be attributed to regional trade disruptions that limited Rwanda's exports within the East African Community. Despite this, there is still room to diversify exports given that Rwanda started from a low base of 3.5 percent in 2000 and increased to 23 percent within 20 years.

The share of manufacturing in GDP is low — down from 7.2 percent in 2000 to 6.8 percent in 2010 but rising to 9 percent in 2019. But the share of the top five export products was less than 6 percent in 2005 then trebled to 18 percent and further increased to 25 percent, tapering off slightly to 23 percent by 2017, a very significant improvement in commodity export diversification. The share of manufacturing and services in exports rose from 32 percent to 50 percent over the period, again, a significant movement on export diversification. Reflecting these movements, Rwanda's rank in diversification improved from 19<sup>th</sup> in 2010 to 18<sup>th</sup> in 2018.

#### **Policies underlying Rwanda's diversification results**

The government since 2000 adopted a wide range of reforms to stimulate export growth, which include; joining the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA), making significant improvements in the investment climate, and establishing an integrated set of strategies to address both general and sector-specific challenges. In 2010, however, Rwanda's general robust increase in diversification was due to the implementation of the National Export Strategy, implemented over the next five years with a key objective of increasing the value of Rwanda's exports, reducing the trade deficit and reducing donor dependence.

The implementation of Rwanda's export strategy has increased diversification of Rwanda's exports portfolio by raising agro-processing exports from zero to 4 percent of all exports in 2016. In addition, their share of Rwanda's goods exports<sup>11</sup> increased from 5 percent in 2006 to 11 percent in 2012 but fell to 9 percent in 2016. However, Rwanda initiated a made-in-Rwanda policy in 2015, which is a domestic market-recapturing strategy through promotion of patronage of locally manufactured products. This has led to the growth of companies assembling mobile phones (Maraphone), cars (Volkswagen), and a made-in-Rwanda textiles industry.

However, the manufacturing sector has not kept pace with the services sector in terms of value addition due to constraints such as low capital investment, low levels of technology, a small domestic market, and the relatively high cost of utilities. Several initiatives have been implemented in the last 20 years to boost the manufacturing and industry sector, including: Operationalizing the Kigali Special Economic Zone (SEZ); developing four provincial industrial parks and other district industrial parks in secondary and tertiary cities, and the Rwanda Standards Board (RSB) issuing 2,051 standards and 369 product certifications to meet international standards. As a result, over 100 industries have been set up within the Kigali Special Economic Zone ranging from heavy and light manufacturing industries; large-scale industrial plants;

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<sup>9</sup> IMF Country Report 2019

<sup>10</sup> World Bank: Rwanda Systematic Country Diagnostic June 25, 2019

<sup>11</sup> World Bank, future drivers of economic growth, 2020

industries requiring excellent national/international communication networks; industries requiring close links with other firms (which produce component parts for the same product or those involved in separate stages of the same industrial process); wholesalers; chemical, pharmacy and plastics; warehousing; tourism and service industries; and telecommunications, among other services. However, more effort is needed to attract investment to the industrial zones in the secondary cities.

### **2.32 Export competitiveness of Rwanda's economy**

According to ATI scores, the overall competitiveness of Rwanda's exports has increased as shown by the positive growth trend in the diversification index from 23.7 in 2000 to 33.4 in 2010. Despite the slight decline in exports competitiveness between 2011 and 2017, the overall growth in the competitiveness of Rwanda's exports has been robust. One of the factors that have contributed to the competitiveness of Rwanda's exports is product differentiation, which has been done through establishing niche markets for Rwanda's coffee and tea, despite the difficulty in competing with already established players like Brazil and Vietnam in these two markets. Through deliberate, robust and aggressive marketing campaigns, Rwanda has managed to establish niche markets for its coffee and tea in the European and US markets, making the brands recognizable among Western consumers.

Although Rwanda is implementing the "Made in Rwanda" policy, initiated in 2015 to promote the buying of locally manufactured products, the manufacturing sector has not kept pace with the services sector in terms of value addition. The key constraints to the expansion of the manufacturing sector include the relatively high cost of utilities such as power and water, a relatively small domestic market, and low investment in the agro-processing sector which would help add value to Rwanda's agricultural exports.

In addition, despite the fact that over half of the value added to GDP is generated from services and manufacturing, these two sectors contribute to less than half of the country's exports, with agricultural commodities and minerals dominating Rwanda's exports. The government has done a commendable job in laying the foundations for exports of services through ICT investments such as fiber optic networks, and initiatives such as one laptop per child. However, there is a need to increase digital literacy in the domestic labor market in order to increase the returns on investments in ICT infrastructure. A good example would be promoting business process outsourcing. In addition, there will be a need to ensure that the gains made in the services sector spill over into industry in general, manufacturing in particular, and agriculture also.

### **2.33 Technology, production and goods and services exports**

Although Rwanda has significantly improved its rank on technology upgrading from 20<sup>th</sup> in 2000 to 13<sup>th</sup> in 2010, the overall contribution of technology to economic transformation has been relatively low. Over the last 20 years, the level of technology upgrading in Rwanda's production activities has stagnated at a low level of about 6.6 percent in terms of the share of medium and high technology in total production activities. This implies that in addition to the manufacturing sector being small, the technologies being used in most production activities in Rwanda are low level. This translates into even a very low share of Rwanda's exports produced with medium and high technologies.

Figure 2 in Annex 1 shows that the proportion of medium- and high-technology products in total commodity exports increased by 0.6 percent between 2000 and 2005. This was mainly because until 2002 there was no strategy to improve the level of technology in the processing of agricultural exports, leading to low-quality exports. From 2002, Rwanda adopted a National Coffee Strategy which led to medium technologies such as coffee-washing stations, which brought improvements in export quality. The sharp increase higher technology product share between 2005 and 2010 is attributed to the Rwanda Resource Efficiency and Cleaner Production Centre (RRECPC) which was established in 2008 by the Ministry of Commerce (MINICOM) through the National Industrial Research and Development Agency (NIRDA) together with the United Nations Environment Program (UNEP) and the United Nations Industrial Development Organisation (UNIDO). This center provides capacity building and spearheads the adaptation and adoption of more efficient production technologies in the industrial sector. RRECPC also helps companies to identify their skills needs and sensitize them about the benefits and specifications of modern equipment. During the restructuring of public institutions that took place between 2010 and 2014, the National Industrial Research and Development Agency (NIRDA) helped to disseminate technology across sectors once a given firm demonstrated improved competitiveness and quality due to technological advancement and R&D.

In a bid to transform the country from subsistence agriculture to a knowledge- and services-based middle-income economy, Rwanda is fast turning into a preferred location for technology and innovation through a combination of visionary leadership and investment in ICT infrastructure. As part of its commitment to digital infrastructure investment, Rwanda signed a deal with Africa50 late in 2018 to co-build the US\$2 billion Kigali Innovation City. This is an Africa-focused innovation hub and a holistic ecosystem of technology clusters. The city is expected to attract technology companies from all over the world to create an innovation ecosystem in a knowledge-based economy. It is forecast to generate US\$150 million in ICT exports annually and over 2,600 students are expected to graduate every year from its universities, increasing the technology talent pool. (Rwanda ACET Report on Workforce Readiness for the Fourth Industrial Revolution, 2020)

### **2.33 Productivity**

Overall, labor productivity in Rwanda has increased significantly, from US\$189 in 2000 to US\$1,145 in 2017. Utilities, financial services, and government services have had the highest productivity growth due to the ICT innovations and mainstreaming implemented in these sectors (ILO, 2020). Compared with the manufacturing sector where annual productivity per worker increased four-fold from about US\$7,271 in



2005 to US\$21,271 per worker in 2017, worker productivity within the agriculture sector has increased only slightly, from about US\$266 per worker per year in 2000 to about US\$548 per worker per year. The significant increase in worker productivity in the manufacturing sector over the last 20 years has been due to more capital investment, as more local and foreign investors have imported capital equipment to improve efficiency in the production process, raise worker productivity, and further reduce the cost of production. Overall FDI inflows in Rwanda have increased from about 20 percent of GDP in 2010 to about 25 percent of GDP according to the World Bank (2020). The flow of FDI into Rwanda has been facilitated by a conducive business environment where Rwanda has been consistently ranked high in the World Bank doing business indicators. Improvements in the business environment have been coupled with efforts by the Rwanda Development Board to promote Rwanda as a favorable investment destination with an attractive investment code and tax incentives.

Other gains in worker productivity in Rwanda's manufacturing sector are attributed to significant efficiency gains derived from improvements in the quality of human capital and from the effects of other economic reforms – notably through higher investment in TVET and ICT. In addition, Rwanda has been a star performer in doing business reforms over the last 20 years and a good business environment has also increased worker productivity as workers can now focus on their core productive functions rather than the red tape (World Bank Doing Business Report , 2020)

In addition, since 2004, the government has developed and implemented three consecutive Strategic Plans for Agriculture Transformation – PSTA I from 2004; PSTA II from 2009; and PSTA III 2013). They have all aimed at improving productivity, commercialization, and modernization of the agriculture sector, leading to the observed gains in labor productivity. However, there still exists a set of unique challenges in the agriculture sector including negative impact of climate change on productivity, limited access to finance, low use of modern inputs, and low value addition.

On the other hand, productivity in government services has seen a tremendous increase as a result of the policy of ICT mainstreaming in all government institutions, where registration and payment for government services have been pioneered on the *Irembo* platform (accessed electronically). Productivity in the financial industry has also been improved through a series of digital interventions, such as electronic banking, mobile banking, and electronic payments, all of which are in line with Rwanda's National Payment Strategy 2018-2024 which sets out detailed steps for how to transition to a cashless economy.

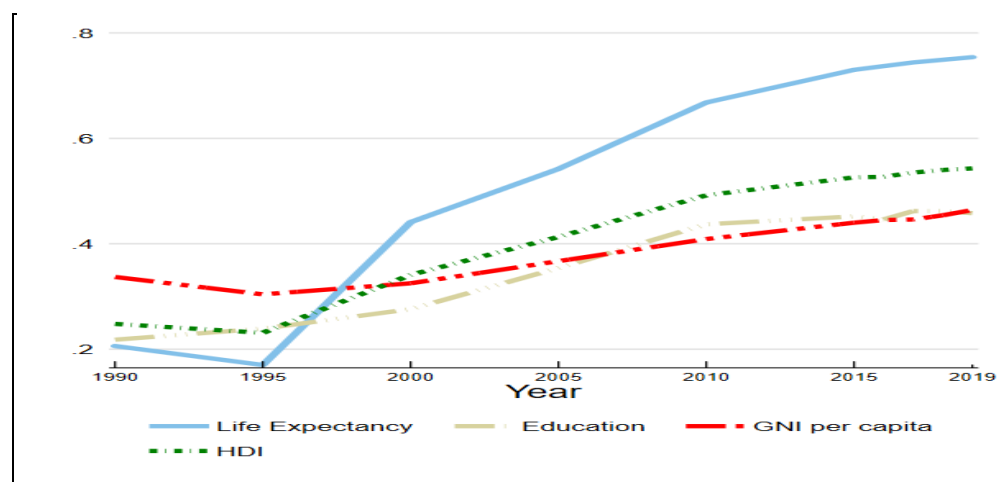
In the trade sector, three major government reforms to improve the business climate have been instituted that decrease bureaucracy in construction, ensure timely electricity provision for investors, and reduce the number of time exporters spend at Customs but rather use online platforms

### **2.35 Human well-being**

Rwanda's ATI score on well-being increased from 16.33 in 2000 to 25.82 in 2017 while the country's ranking improved from 24<sup>th</sup> to 17<sup>th</sup> position over the same period. Improvements in human well-being have been one of the greatest contributions to the economic transformation observed in Rwanda over the last 20 years. This is due to the progress made in the human development indicators such as life expectancy at birth, years of schooling and gross national income. Between 2000 and 2019, Rwanda's Human Development Index (HDI) value increased by 119 percent from 0.248 to 0.543. Between 2000 and

2019, Rwanda's life expectancy at birth increased by 35.6 years, mean years of schooling increased by 2.7 years, and expected years of schooling increased by 5.5 years. Rwanda's GNI per capita increased by 130.9 percent between 1990 and 2019 .

Figure 12. Trends in HDI component indices 1990-2019



Source: UNDP, Human Development Index Report ,2020

The above improvements in human well-being have led to a healthy and productive workforce that has been key in making progress with economic transformation. The 2005 Rwanda Health Policy, which was revised in 2015, and three health sector strategic plans (2005-2009, 2009-2012, 2012-2018) have guided the implementation of Vision 2020 in the health sector. Key interventions implemented between 2000 and 2020 include:

- i) Establishing the National Childhood Development Agency to coordinate preparation and monitoring of the implementation of a joint action plan to eradicate malnutrition.
- ii) Training of 1,015 health care providers and 6,325 community health workers on the maternal, infant, and young child nutrition (MIYCN) programs, with radio broadcasts on stunting prevention, maternal, and child nutrition and breastfeeding,
- iii) Delivery of early childhood development services, child protection, early learning as well as the inclusion of children with disabilities in 30 districts. In addition, there has been an increase in health insurance coverage from 38 percent to 69 percent of the population between 2000 and 2020, according to the NISR.

Figure 13. Growth and overall ATI index, 2000-2017

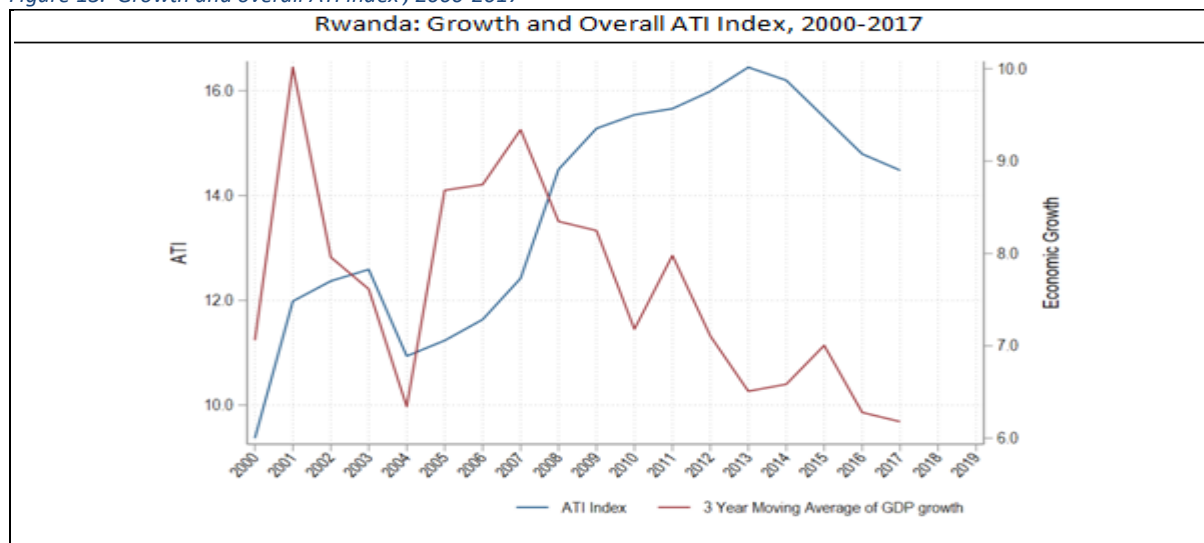


Table 15. Growth and overall ATI index, 2000-2017

Rwanda: ATI Overall and Dimension Indexes					
ATI Dimensions	Scores				
	2000	2005	2010	2015	2017
Overall ATI Index	9.37	11.23	15.54	15.50	14.48
Diversification	23.66	24.63	33.58	31.54	30.40
Technology Upgrading	4.08	7.95	14.93	11.84	7.93
Productivity	2.76	1.89	3.68	6.11	6.63
Export Competitiveness	0.02	0.17	1.79	2.04	1.62
Human Wellbeing	16.33	21.54	23.74	25.96	25.82
ATI Dimensions	Rankings				
	2000	2005	2010	2015	2017
Overall ATI Index	30	29	27	28	28
Diversification	23	25	19	16	18
Technology Upgrading	31	30	25	29	31
Productivity	30	30	30	27	27
Export Competitiveness	31	30	30	27	28
Human Wellbeing	24	17	17	17	17

Note: The values are averages of the Overall Transformation Index taken over 3-year periods centered on the year indicated on the horizontal axis. Thus the values for 2017 are averages for the three years 2016, 2017 and 2018.

Source: Source: ACETATI2021 Edition, preliminary results. March 2021

### 3.6 Challenges facing economic transformation and resilience

According to a 2018 ILO study on estimating productive jobs in Rwanda,<sup>12</sup> the major challenges facing Rwanda's economic transformation and resilience include the following:

- *Agricultural productivity constraints*, such as prolonged droughts, land scarcity and inadequate soil fertility in some districts; and
- *Industrial productivity constraints*, such as the relatively high cost of utilities; mismatches between the skills demanded by employers in the private sector and the skills acquired by graduates; limitations in access to finance among entrepreneurs in the private sector due to high interest rates on SME loans; and structural challenges, as labor supply still outstrips demand in Rwanda.

<sup>12</sup> See Malunda et al., 2018. Estimating productive jobs in selected districts in Rwanda. Geneva: ILO



- **Agricultural productivity constraints**

Prolonged droughts, land scarcity and inadequate soil fertility in some districts are some of the major factors that impede the growth of productivity within the agricultural sector. In addition, some feeder roads are not accessible during the rainy season, which helps to slow down transformation in the rural economy. In order to handle drought, the government has rolled out the small-scale irrigation technologies program, a subsidized scheme in which smallholder farmers purchase irrigation equipment and pay into a revolving fund which enables other farmers to obtain irrigation equipment over time. In addition, the government is implementing a program aimed at developing secondary cities in order to promote planned urbanization. Through this program, more feeder roads have been built to link rural agricultural areas to the urban centres.

**Box 1: Constraints in the transformation of Rwanda’s agricultural sector**

Despite implementation of the private sector-focused and commercialized Agricultural Strategies for Transformation program, the agricultural sector is still constrained by the following factors: i) Limited availability of arable land, leading to small plot sizes which constrain productivity among smallholder farmers; ii) The agriculture sector currently fails to maximize the contribution of, and benefits to, women and youth. Women have a higher propensity to work in agriculture than men. Due to their limited access to inputs, women farmers’ plots are typically less productive than those of worked by men. Additionally, women in agriculture are more vulnerable to climate change and land degradation because they generally have no other alternatives to earn their families’ living; (iii) The skills gap in agriculture limits productivity and profitability. Formal education levels among farmers are generally low. Farmers require a range of agronomic and “farming as a business” skills to optimize land and cropping practices and to make well-informed investment choices for greater production and/or profitability; (iv) Constraints in value chains, including market infrastructure, market access, sanitary and phytosanitary measures, market information, logistics, and regulations in trade inhibit the flow of agricultural products from the farm gate to processors, export markets, and consumers. The key lesson is that transformative policies have to be tailored to the needs of the local population if they are to achieve inclusive and long-term benefits for large sections on the population. Highly commercialized initiatives that are not anchored in the realities of the local population may have limitations in achieving a transformative impact on local populations (Rwanda Fourth Strategic Plan for Agriculture, PSTA 4, 2018)

- **Industrial productivity constraints**

There are still constraints that limit industrial productivity and consequently limit total productivity and economic transformation in Rwanda. In some industrial zones within secondary cities, the cost of acquiring land to set up industries is high. In addition, three-phase electricity lines are needed to support industrial production in the secondary and tertiary towns and cities. The inadequate supply of agricultural raw materials to feed the budding industrial sector means that industries are operating below capacity and this further affects jobs growth, productivity and economic transformation. In order to mitigate some these challenges, the Rwanda Electricity Group (REG) has invested in new hydro-electric dams to generate more electricity. To mitigate problems of inadequate raw materials for industries, farmers have been encouraged to produce in cooperatives, which can then supply adequate raw materials, such as milk, to processing plants. In districts such as Nyagatare, the government has mapped out and earmarked 16,000 hectares for the Gabiro agricultural hub. This land will be irrigated using water from the Akagera River to

produce maize and other crops on a large scale to feed the planned agro-processing industries in the region.

### **Financial constraints to business productivity**

There are limitations in access to finance for businesses in the private sector such as high interest rates on SME loans. This reduces their options. High collateral requirements are another problem. Although the National Bank of Rwanda has regularly reduced the cap rates at which commercial banks borrow, this has not resulted in reduced interest rates for private sector loans. Commercial banks sometimes attribute this to low domestic savings rates, which means that they have to draw on foreign capital. High interest rates on loans limit business growth and expansion and thus the creation of more productive jobs in the informal business sector. To mitigate this problem, the government has implemented the Business Development Fund (BDF), which is aimed at increasing credit access to SMEs through loan guarantees.

## **3.7 Lessons underlying Rwanda's economic transformation outlook**

### **Lessons:**

- 1) The transformation vision in Rwanda over the last 20 years leaned heavily on the formulation and effective implementation of medium-term and long-term development plans. The long-term development plans had clearly articulated vision including making Rwanda a services-based economy and a meetings, incentives, conferences and exhibitions (MICE) hub in the East African Region. This goal was backed by investments in Rwanda Air, hotels, convention centers and the Kigali Arena, all of which continue to attract events and tourists into Rwanda.
- 2) Reforms to the public service structure were crucial for success. This entailed a sustained period of capacity building of Rwanda's workforce coupled with improvements in their health and well-being, attracting the right skills into the public service and digitalizing the service to improve efficiency in service delivery.
- 3) Political will coupled with accountability mechanisms such as performance contracts which are monitored and enforced on an annual basis have been key to the progress achieved in Rwanda's economic transformation.

## **Sector-specific lessons**

4) Leveraging ICT: Leveraging ICT service delivery has been a key driver of the observed gains in Rwanda's transformation. In addition, ICT use will be key in trade facilitation activities going forward due to the limitations that have been placed on export processes by the COVID-19 pandemic. Automation of processes through integrated clearance systems and capacity building of exporters in the new automated systems are critical in improving the efficiency of procedures.

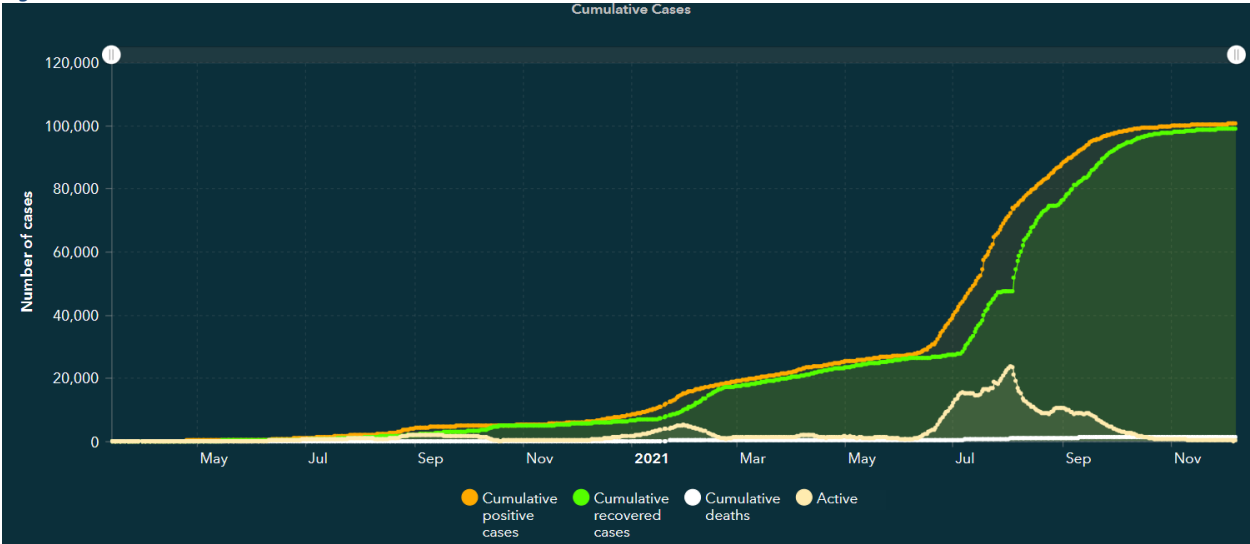
5) Exploiting niche markets is important for increasing export revenues, more so in agricultural commodity markets where international prices are volatile. Given the limitations to expanding the quantity of coffee exports in volatile markets given the stiff competition from high-volume countries like Brazil and Vietnam, Rwanda entered into the niche market of high-quality coffee and tea, which contributed to increased export revenues.

# Chapter 3. COVID-19 response and lessons

## 3.1. Evolution of the COVID-19 pandemic in Rwanda

Between January 2020 and December 2021, there have been 100,429 confirmed cases of COVID-19 with 1,343 deaths in Rwanda. By the end of November 2021, a total of 8,482,389 vaccine doses have been administered (WHO website, 2021). The government put in place measures to limit the spread of the COVID-19 virus. After a review following an improvement in the pandemic situation, preventive measures were lifted and new guidelines implemented.

Figure 14: Trends in COVID-19 cumulative cases in Rwanda



Source: Rwanda Ministry of Health website, 2021

Between 14 March and 31 May 2020, the government put in place the first preventive measures to control the COVID-19 pandemic spread in the country, with these preventive measures reviewed every two weeks. The main measure put in place was total lockdown nationwide. The Rwanda Biomedical Center (RBC) cumulatively recorded 370 confirmed COVID-19 pandemic active cases from which 64.19 percent fully recovered, 30.54 percent were active and 0.2 percent died. The first death due to COVID-19 was registered on 30 May 2020.

Between 1 June and 30 September 2020, cumulative positive, active, recovered and death cases continued to grow. To understand the prevalence of the pandemic, the government decided to introduce mass screening and testing. The first mass screening and testing was conducted in the capital city, Kigali, on 17-18 July then in the 8 districts that were in lockdown. In this period, in daily records, the gap between cumulative recovered cases and cumulative active cases was narrow and the increase in new confirmed cases was more than in new recovered cases.



By 31 December 2020, Rwanda had registered a total of 8,383 cumulative COVID-19 positive cases: 6,542 cumulative recovered cases, i.e. 78.04 percent of cumulative positive cases, 1,749 cumulative active cases (20.86 percent of cumulative positive cases) and 92 cumulative deaths (1.09 percent of cumulative positive cases).

Between 1 January and 31 March 2021, Rwanda recorded an increasing number of patients recovering from COVID-19 pandemic compared to the new cases. By 31 March 2021, Rwanda had confirmed 22,167 positive cases cumulatively showing an increase by 164.43 percent compared with 31 December 2020. During this period, the number of cumulative deaths caused by the pandemic continued to rise from 94 deaths by 1 January to 310 deaths by 31 March, an increase by 229.78 percent .

Between 1 April and 7 December 2021, cumulative recovered cases increased by 387.15 percent while cumulative active cases decreased by 86.636 percent .

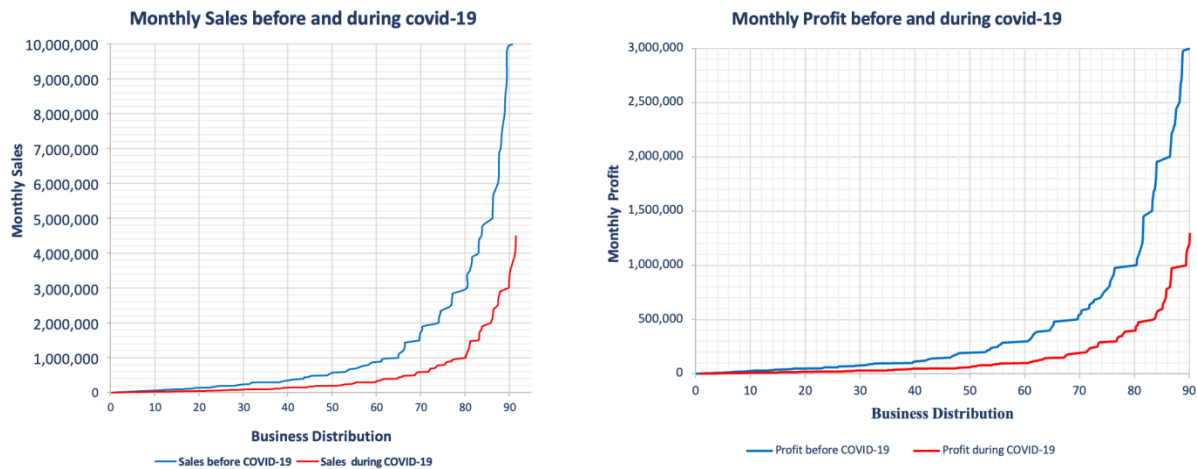
The measures put in place by the government of Rwanda to control the spread of COVID-19 included: prioritizing electronic payments and online banking; restricting late night movements; working from home for non-essential government employees; momentarily closing schools and other non-essential sector of the economy; social distancing, closing places of worship, gyms and recreational centers. All these measures affected businesses and household welfare negatively as shown in the next section.

### **3.2. Economic impact of the pandemic on businesses**

Findings from the Institute of Policy Analysis and Research (IPAR) survey of businesses show that overall, there was a very large impact on sales and profits, in some cases with reductions of around 50 percent in February 2021 compared with the previous year. The services sector was most severely hit, followed by industry then agriculture. There was no significant variation in the impact of COVID-19 by gender of business owner, firm size, province, or age of business. Businesses with more than one employee reported that during COVID-19 they reduced employment by around a third. While these figures are self-reported and may be exaggerated, they show that there was a significant fall in performance for most businesses as a result of COVID-19, at least during February 2021.

Figure 16 shows what businesses reported before COVID-19 (the blue lines) and during COVID-19 (the red lines). They show that at all stages, sales and profit during COVID-19 were lower than before COVID-19. In general, sales and profits have tended to fall by around half at each stage of the distribution. For example, the monthly profit before COVID-19 for businesses at the 80<sup>th</sup> percentile was around Rwf 1,000,000, while during COVID-19 this was around Rwf 400,000.

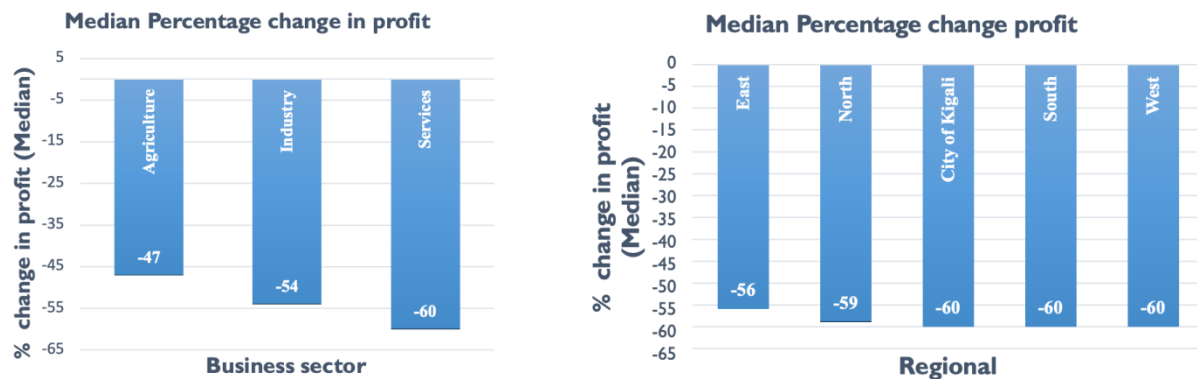
Figure 15. Monthly sales and profit before and during COVID-19



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

There is some variation in sales and profit by business sector, although all sectors faced large reductions. Services saw the largest impact – with a median reduction of 56 percent in sales and 60 percent in profits. This is unsurprising given service activity requires greater interaction between people, which was intentionally reduced to limit the spread of COVID-19. Agricultural businesses saw the lowest reductions and businesses in the industry sector were in the middle.

Figure 16. Changes in profit due to COVID-19, by sector (%)



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

### 3.3 Measures to mitigate the economic impact on households, businesses, government finances and the health system

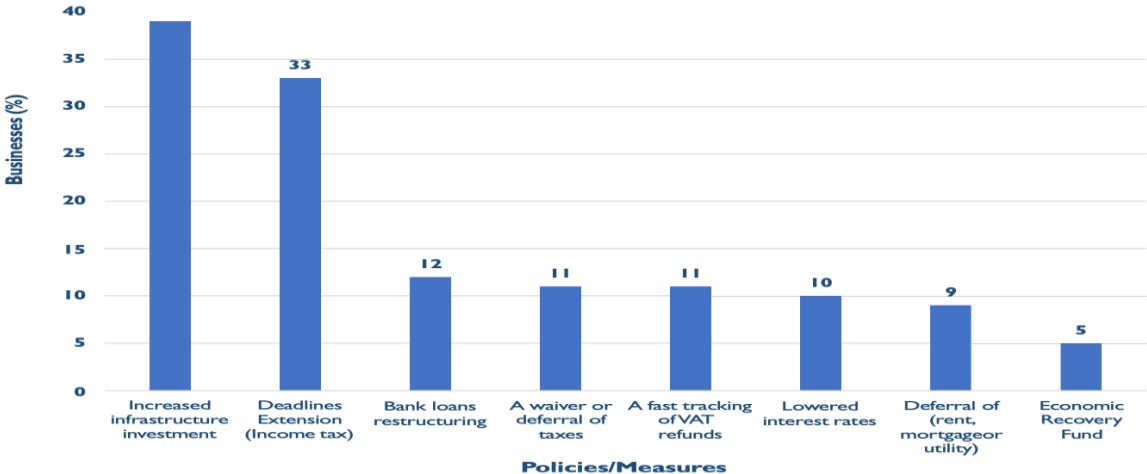
The government has taken an effective range of measures to support businesses during COVID-19 as well as to accelerate economic recovery.

As well as increasing spending to strengthen the health system and contain the pandemic, a range of measures have been taken to support economic recovery. For example, the Economic Recovery Fund will continue to be a key tool for supporting the private sector. This as well as the Manufacture and Build to Recover program will support businesses to invest and drive the economic recovery. This is a new scheme to support manufacturing and construction, encouraging private sector investment and increased production of construction materials, agro-processing, as well as hygiene and sanitation products. It will be implemented by reducing the cost of setting up industries of selected products as well as existing firms who would like to expand their current operations. This scheme will provide incentives through the tax system, e.g. VAT exemptions on raw materials used as inputs for manufacturing and construction activity; tax credits; and reduced Pay-as-you-earn (PAYE) payments. It is meant to complement the Economic Recovery Fund by helping other sectors get affordable raw materials and will run until December 2022. Other measures include the Made-in-Rwanda policy which has been effective in reducing the trade deficit and increasing economic resilience. Finally, investment in public infrastructure is supporting businesses by reducing costs as well as increasing jobs.

On top of this, the National Bank of Rwanda implemented a range of measures early in the COVID-19 crisis. This included providing regulatory relief for financial institutions, supporting digital payments by reducing transaction fees, and modifying monetary policy to support the economy. Overall, 66 percent of the businesses surveyed reported receiving national or local government support measures in response to COVID-19. This shows that policy support was effectively distributed to a large proportion of the economy.

**Support from the government took many different forms.** Policies which supported the highest number of businesses were: extended deadlines for completing corporate income tax, which supported 33 percent of businesses; and increased investment in infrastructure, which supported 39 percent of businesses. These two policies are therefore highly effective ways for the government to reach a large number of businesses. The Economic Recovery Fund supported 5 percent of businesses in our sample, which suggests it was more targeted than other support measures.

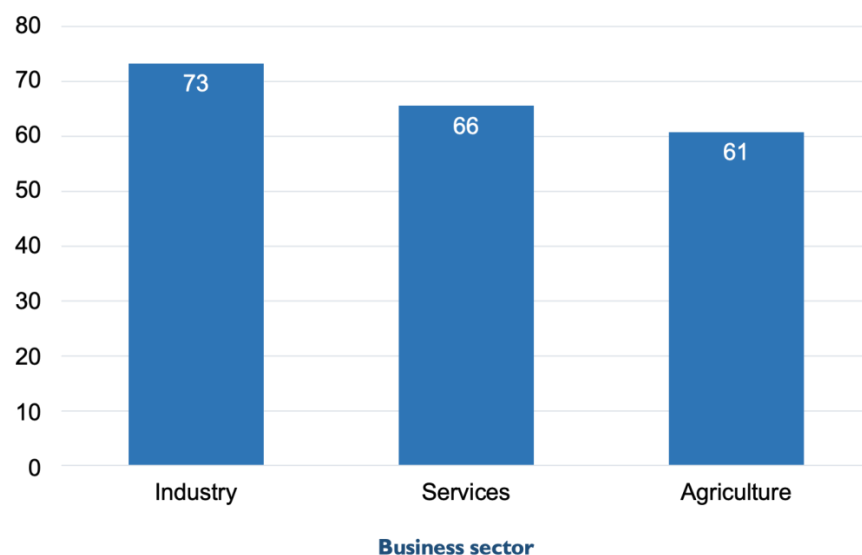
Figure 17. Proportion of businesses that benefited from government support measures (%)



Source: IPAR-Rwanda COVID-19 Business Survey, 2021

**The number of businesses that received support was consistently high across different sectors.** Industry was the sector where the highest proportion of businesses received support, at 73 percent. Services and agriculture also saw high levels of support, with 66 percent and 61 percent of businesses reporting that they had received support in response to the crisis since 1 March 2020.

Figure 18. Proportion of businesses that benefited from government support, by sector (%)



Source: IPAR-Rwanda COVID-19 Business Survey

### 3.4 Key post-pandemic recovery challenges faced by government, households and private businesses

These include the following:

**Reductions in domestic resource mobilisation which may affect achievement of national development priorities:** The government has established a number of frameworks to monitor progress towards national development targets by 2024 as enshrined in the National Strategy for Transformation (NST1). These include the annual evaluation of performance contracts; and mid-term end-line evaluations of development frameworks such as the NST and Vision 2050. However, uncertainties occasioned by the COVID-19 pandemic have led to re-prioritization within some government programs with aspects such as vaccination and health care taking the forefront as opposed to other programs that had been planned at the initiation of the NST1. In addition, domestic resource mobilization has been affected due to measures that have been implemented to contain the pandemic including movement restrictions between districts, and curfew hours for business operations. Reductions in domestic resource mobilization have been coupled with delays in disbursements from development partners (who face uncertainty in their own economies) and increased borrowing by developing countries in order to cover budget deficits occasioned by the COVID-19 pandemic. In addition, the pandemic has led to a lowering of projections of rates of economic growth, rates of employment and rates of poverty reduction that had been envisaged while setting initial targets in national development strategies such as the NST 1. This implies that some of the

original targets could be missed if not well monitored. This therefore calls for regular monitoring of the progress for key indicators of the NST1 on annual basis to determine which indicators are lagging behind, which have had reversals in terms of progress, what impact have these reversal had on peoples' livelihoods and businesses, and what measures the government can adopt or change in order get on track with achieving planned NST targets by 2024.

**Worsening fiscal position with growing national debt becoming a serious issue.** Rwanda's public and publicly guaranteed (PPG) external debt-to-GDP ratio increased by 33 percentage points over the last six years, driven by borrowing to meet the needs envisaged in the National Strategy for Transformation (NST), but also to support the robust COVID-19 response. The current debt-to-GDP ratio of 55.6 percent is slightly above the debt sustainability threshold of 50 percent but it can be accommodated within the prevailing context of a COVID-19 recovery period.

**Reversals to gains made in poverty reduction.** The World Bank estimates that 500,000 people have fallen into poverty as a result of COVID-19. This is more in urban areas and in *Ubudehe* categories 2 and 3, as opposed to rural areas in category 1. Rwanda's NST aims to eradicate extreme poverty by 2024 and to reduce poverty to 10 percent. Since the early 2000s, Rwanda has been performing well in poverty reduction: the country's poverty rate fell from 56.7 percent in 2005/06 to 44.9 percent in 2010/11, 39.1 percent in 2013/14 (NISR, 2015) and 38.2 percent in 2016/17. To continue on this path, there is a strong need to look at the determinants of poverty in the country and generate new ways to tackle them. Improving the quality of research and making it available to policy makers is certainly key. As such, the development of institutional mechanisms to focus on the interest of the poor and the poorest is considered a priority. This need is exacerbated by the recent effects of the COVID-19 pandemic which have led to reversals in the poverty reductions gains made prior to the COVID-19 outbreak in 2020. It has been well noted that temporary gaps in employment and education can have lasting effects on earnings and living standards and as a result, it is important to address them proactively.

**Inclusive growth challenges.** According to IPAR consultations with the World Bank, the link between poverty reduction and economic growth in Rwanda has been weakening. The reduction in poverty corresponding to each percentage point increase in GDP per capita was 0.36 between 2005/06 and 2010/11, whereas between 2010/11 and 2016/17 it dropped to 0.24. Previously, economic policy had a greater focus on agriculture, which more directly reduced poverty. And that while public investment in recent years has continued to drive economic growth, it has not directly supported people on lower incomes. Post-COVID recovery measures should help Rwanda return to high growth and also promote poverty reduction and inclusion.

#### **3.4.1. Recommendations for resilient and inclusive economic recovery post-COVID-19**

To help businesses, including small and micro enterprises, access finance more easily: **the initial piloting of and then rolling out of a targeted long-term access to finance scheme focused on businesses that will drive inclusive growth – an “Inclusive and Resilient Development Fund”**. This would learn lessons from the success of the Economic Recovery Fund. As well as attractive interest rates, the scheme could be combined with education and awareness raising for borrowers to increase financial literacy and ensure all groups are able to access the scheme.

- To help further ensure resilient future economic growth: **consideration of additional priority target economic sectors for government support.** Three strong candidates to be prioritized for support from the government are: pharmaceuticals and vaccine manufacturing; digital financial services; and Rwanda becoming an e-commerce hub for Central and Eastern Africa.
- To help reduce poverty and ensure more equal growth: **A debate, including with employers, on options for increasing and effectively implementing a minimum wage.** Rwanda is yet to complete drafting a new minimum wage policy. The existing minimum wage was set at Rwf 100 per day in the 1970s. Along with Uganda and Burundi, Rwanda is the only country to have a minimum wage that is not above the extreme poverty line. Any introduction of a meaningful minimum wage would require careful consideration and further policy development, and now is the right time for this debate.
- To help reduce input costs for businesses, particular smaller businesses, to support inclusive growth: explore options including **expanding the Manufacture and Build to Recover scheme into additional sectors and use it to target micro and small firms**, with further investments in electricity transmission technology and infrastructure to reduce utilities bills.
- To help boost SME-led industrial development and growth: **introduce tax incentives to new local investors.** Current incentives are targeted at foreign investors. In addition, tax incentives for local investors could be targeted at specific businesses such as SMEs or those in job-intensive sectors. This could mean a more cost-effective that more directly supports inclusive economic growth.
- To help MSMEs access international markets, **an e-Commerce Recovery Challenge Fund targeted at SMEs in priority sectors could be implemented.** This could be based on a market assessment of which MSMEs have the potential to access international markets, including in the context of the AfCFTA. It could bring together the existing strong policies on promoting exports with the government’s focus on e-Commerce for maximum effect.

### 3.5 Lessons learned from policy responses to the COVID-19 pandemic

1. **The need for responsive policies for a more vibrant private sector that can weather future shocks**  
With the COVID-19 pandemic, findings from IPAR studies show reductions in business revenues, profits and employment, with a number of businesses closing altogether. A number of policy interventions including the Economic Recovery Fund, loan restructuring, VAT repayments, and tax delays have been implemented to enable business recovery. However, it is not entirely clear yet what impact these interventions are having on enabling business recovery in an environment where purchasing power is low and economic recovery slow. Continued progress will require major shifts in Rwanda’s development model where government will continue to act as both a delivery agent for development and as an enabler of private sector development, most notably through establishing backward and forward linkages between local private sector actors and international actors.
2. **The need to leverage ICT interventions in conducting local and international trade through E-commerce in order to promote economic resilience during future shocks**

Despite the numerous ICT innovations, it is not clear how the new start-ups in the private sector have fared in utilizing ICT innovations to improve productivity and profitability of their businesses in this COVID-19 era. In addition, the role of ICT in terms of business sustainability, impact and scalability in order to create new jobs for new labor market entrants is not yet clear. There is an opportunity to assess how the private sector is facing the challenges and taking advantage of ICT innovations and new digital technologies in order to drive forward the knowledge-based economy agenda in Rwanda.

**3. The need for positioning Rwanda to take advantage of opportunities from regional trade through the African Continental Free Trade Area, given the small domestic market**

COVID-19-induced supply chain shocks have shown that there are large interdependencies between African countries, with delays at ports of entry leading to delays in industrial processes and consequent domestic inflationary pressures. This implies that land-locked countries such as Rwanda need to position themselves in order to leverage the benefits that come with wider regional integration through the AfCFTA.

## Chapter 4. Economic resilience

### 4.0. Key vulnerabilities and risks faced relative to *Global Drivers of Change*

#### 4.1 Climate, environment and natural resource stress

##### 4.1.1. Risks and vulnerabilities

Like many other countries, Rwanda has been experiencing an increasing trend of extreme weather events associated with climate change. According to Rwanda's first voluntary national review report (MINECOFIN, 2019), the country's mean surface temperature increased by 1.4°C between 1970 and 2010 and is expected to increase further by 2.5°C by 2050 relative to 1970 levels. Rainfall seasons are becoming increasingly unreliable and intense, and average annual rainfall is expected to increase by 20 percent by 2050 relative to 1970 levels. In the Northern and Western provinces, rainfall is becoming increasingly intense while alternating rainfall deficits and excesses are more common in the Eastern Province. The heavy reliance on rain-fed agriculture as a source of livelihood and exports renders the country highly vulnerable to climate change. At the launch of NST1 in 2017, forest cover was 29.8 percent of surface area and 14.1 percent of public forests were managed by private operators. The high reliance on wood as a source of cooking energy (79.9 percent) also meant severe deforestation and rapid depletion of the country's forest resources and necessitated policy action to reverse the trend.

##### 4.1.2. Initiatives and policies to mitigate climate, environmental and natural resource stress

###### ***Key interventions and targets***

The key interventions to mitigate climate change under the National Strategy for Transformation (NST1) include (i) increasing forest cover as a proportion of total surface area; (ii) increasing the proportion of public forests allocated to private operators and reducing the proportion of households relying on biomass as a source of cooking energy. These indicators have an intended outcome of increasing forest cover and improving the management of the created forests as well as reducing the degradation of the environment through deforestation. Table 16 presents the interventions implemented to mitigate climate change, along with their respective targets.



Table 16. Key interventions and targets

Key interventions	Targets
Continue to strengthen forest management and, working with the private sector, ensure their sustainable exploitation	Increase privatization of management of public forests from 14.1 percent (2017) to 55 percent (2021) and 80 percent (2024)
Increase and sustain the area covered by forest through landscape restoration, incorporating afforestation and reforestation into district forest management plans	From 29.8 percent in 2017 to 30 percent by 2024
Halve the number of households depending on firewood as a source of energy for cooking	From 79.9 percent (2016/17) to 42 percent in 2024;
Develop a project to manage water flows from the volcano region and other rivers to mitigate related disasters and improve water resource management	No explicit target
Strengthen land administration and management to ensure optimal allocation and use of land	No explicit targets

Source: IPAR-Rwanda NST Mid-Term Evaluation Report, 2021

#### 4.1.3. Achievements and impact

Considerable success has been registered regarding environmental protection, particularly increasing the proportion of forest cover, which has been surpassed by 0.4 percentage points. Forest cover was increased by the planting of 724,666 hectares of different varieties including fruit and bamboo trees along rivers, planting new forests and rehabilitating degraded ones. In the effort to improve forest management, 38.45 percent of public forest plantations have so far been allocated to private operators (Ministry of Environment, 2021), against a baseline (2016/17) of 14.1 percent. The privatization rate in 2019/2020 amounted to 69.9 percent of the (2020/2021) target of 55 percent and 48.1 percent of the end-line (2023/2024) target of 80 percent. This trend reveals a moderate pace of privatization and the need for further efforts to fast-track the realization of the 80 percent target by 2024.

There are ongoing efforts to map and discuss the terms of agreements between the government and private operators, of which six were in the final stage of discussion while eight were under joint management and concession agreements by 2020. From the energy sector perspective, efforts to protect the environment included raising awareness regarding the benefits of using clean energy cooking solutions such as biogas and liquefied petroleum gas (LPG) in an attempt to minimize reliance on firewood as a source of cooking energy. Table 17 presents additional achievements in 2019/2020 as per the three core indicators of this priority area.

Table 17. Summary of key performance indicators

Indicator	Baseline	2020/2021 target	2023/2024 target	Status 2019/2020	Status as proportion of 2020/2021 target (%)
Forest cover as % of total surface area	29.8	30	30	30.4	101.3
% of public forest plantations allocated to private operators	14.1	55	80	38.45 (2020/2021)	69.9
% of households using firewood for cooking	79.9	66.6	42	80	83.3

Source: *Environment and Natural Resources Retrospective Joint Sector Review Report 2020*

#### 4.1.4. Opportunities and enabling factors

Achievements in this priority area greatly leveraged ongoing policy commitment to the global sustainable development agenda. Rwanda revised its nationally determined contributions (NDCs) in May 2020, which emphasized the reduction of biomass usage for cooking, directly in line with the third core indicator of this priority area (GoR, 2020). Similarly, the first core indicator of increasing the percentage of surface area covered by forests was enhanced by the updated NDCs which emphasized afforestation as a contribution to climate change mitigation in the agriculture, fisheries and forestry sector. The Voluntary National Review (VNR) of 2019 further stressed the country's commitment to combat climate change and report on, among other indicators, hectares of land covered by forests and agro-forests as well as number of households with off-grid energy access (GoR, 2019). Additionally, the engagement of private sector operators reduced deforestation and degradation of planted forests and improved their management for sustainability and profitability. Decentralized efforts in environmental protection also enhanced smooth implementation of programs. For example, all sectors and districts regularly complete and submit an environmental mainstreaming checklist developed by the Ministry of Finance and Economic Planning (MINECOFIN), Ministry of Environment and Rwanda Environmental Management Authority (REMA). A new monitoring and evaluation framework from the Rwanda Forestry Authority (RFA) further facilitated monitoring of performance at local and national levels.

Other driving factors included implementation of the National Land Use and Development Master Plan (NLUDMP) and the Urban Wetland Master Plan. The establishment of a new cook stove testing laboratory at Rwanda Standards Board further facilitated the production of cook stoves by providing a quality

benchmark and guidance to private producers. Finally, the Ministry of Environment proactively led resource mobilization and coordination of other government institutions and agencies (Ministry of Local Government, MINECOFIN and the Local Administrative Entities Development Agency along with development partners (World Bank, Nordic Development Fund, etc.) to pilot the adoption of the revised NDCs in selected districts.

#### **4.1.5. Challenges and constraining factors**

The main challenges in this priority area of the environment were encountered mainly in the third core indicator: percentage of households using firewood for cooking. The challenges were mostly related to delays in executing planned interventions for several reasons. First, there were delays in conducting the biomass energy study which impeded establishing a benchmark for monitoring and evaluation purposes. By the time the sector review report was drafted, the study was not completed and the indicator was approximated from EICV5 data. According to consultations with the Ministry of Infrastructure, the survey was halted due to bankruptcy of the consultant. Second, there were delays in tendering for the supply of improved cook stoves; the tender was advertised thrice without a successful bidder. Third, the environment and natural resources sector has had dwindling budget allocations for the past three fiscal years, which curtailed the implementation of some projects. The outbreak of COVID-19 and associated containment measures meant that some planned projects that needed physical presence had to be delayed while others operated at 50 percent of the workforce required, which slowed progress. Some funds initially earmarked for forest planting were reallocated to social protection to deal with the adverse consequences of the pandemic. Both the publication of biomass study findings and distribution of cook stoves were postponed to the 2020/2021 fiscal year. Additionally, deforestation and the use of premature trees limited the expansion of forest coverage, despite overachievement of this target. Finally, limited knowledge and understanding of environment and climate mainstreaming is a further constraint to green growth. Other constraints include the high cost of LPG which limited its use, delays in the methane gas production project, and deforestation.

## 4.2. Key lessons and policies for economic transformation and resilience

- (1) Transformation in Rwanda has leaned heavily on the formulation and effective implementation of medium-term and long-term development plans. The long-term development plans clearly articulated a vision that included making Rwanda a services-based economy and a meetings, incentives, conferences and exhibitions (MICE) tourism hub in the East African region over the last 20 years. This goal was backed by investments in Rwanda Air, high-end hotels, convention centers and the Kigali Arena, all of which continue to attract events and tourists into Rwanda.
- (2) Reforms to the public service structure were crucial for success. This has entailed a sustained period of building the capacity of Rwanda's workforce coupled with improvements in the health and well-being of Rwandans, attracting the right skills into the service and digitalizing the public service system to improve efficiency in service delivery.
- (3) Effective public-private collaboration is crucial for transformation. Rwanda has invested heavily in doing business reforms to attract private investors into the country, coupled with an attractive investment code with tax incentives for foreign investors to invest in well-organized free trade zones such as the Kigali economic zones. These reforms made it easy to register and operate businesses in Rwanda.
- (4) Political will coupled with accountability mechanisms such as performance contracts which are monitored and enforced on an annual basis have been key to the progress achieved in Rwanda's economic transformation.

### 4.21 Policies to ensure rapid, inclusive growth and a resilient economy

- **Access to finance focused on post-COVID-19 and other business shocks.** In order to ensure rapid inclusive growth and a resilient economy in Rwanda, there are lessons to learn from the short-term measures that have been implemented (including the Economic Recovery Fund), and to apply longer term. One of the measures is to set a "bridge-lending window" that is available to businesses that have been hit by any kind of economic shock in the medium and long term. Borrowing from aspects of the COVID-19 Economic Recovery Fund, this window could provide subsidized interest rates for certain businesses or groups of people and longer grace periods for loan repayments in specific sectors or businesses that have been hit hard by any kind of external shock. There are ongoing discussions between the World Bank and Rwanda's Business Development Fund on how to set up a "bridge-lending window" . Access to finance needs to be coupled with the provision of financial literacy training for businesses and individuals to develop their use of financial services. This could, for example, focus on improve awareness of requirements of loans, including issues such as grace periods. One way to do this would be to have a regulation that requires banks to explain loan terms in a clear and accessible way to potential borrowers<sup>13</sup>.

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<sup>13</sup> See a more detailed evaluation on financial education schemes at <https://www.poverty-action.org/study/financial-education-through-savings-and-credit-cooperatives-saccos-Rwanda>

### ➤ **Diversification of priority sectors to drive economic growth and resilience**

Key findings from IPAR’s consultations with policy makers on charting the policy priorities for post-COVID-19 economic recovery and resilience indicate that crucial importance of diversification in the key priority sectors. Prior to the onset of COVID-19, the government had invested heavily in the services sector, especially the MICE sector. However, the services and tourism sectors were badly hit by the pandemic. This has increased the impetus for diversification from the Rwanda Development Board in order to support sustainable economic growth and resilience. To ensure inclusive growth, other priority sectors include investments aimed at integrating smallholder farmers into agricultural value chains, value addition through agro-processing, and promoting linkages to improve market access among smallholder farmers.

The government is already promoting diversification in key priority sectors such as manufacturing and construction sectors. This is through the Manufacture to Build and Recover initiative and the Made in Rwanda policy which is aimed at supporting inputs made in Rwanda (e.g. cement for infrastructure development, including Bugesera airport). This will mean Rwanda does not have to pay high costs on international imports.

The Economic Recovery Fund (ERF) and the Manufacture to Build and Recover initiatives are generally well-designed policies and have evolved over time to address initial COVID-19 recovery challenges. Businesses were generally happy with the scheme and their main complaint was that they wanted the ERF to be scaled up. Although there is need for more time to evaluate the impact of the ERF on businesses, there also needs to be increasing awareness of the ERF among local businesses. This could be done in collaboration with the Private Sector Federation and other entities.

### ➤ **Improving the business environment and competitiveness of Rwanda’s manufacturing sector**

The key aspects to improving the competitiveness of Rwanda’s exports involve electricity costs, skills, logistics, and regulation. The Rwanda Electricity Generation (REG) company needs to **set a tariff for electricity that would reduce the pressure on business viability and reinforce the competitiveness of Rwandan businesses in the region**. According to the Willingness to pay studies conducted by IPAR-Rwanda in 2021, this price should be around Rwf 80 per kilowatt hour for large industries, and between Rwf 100 and Rwf 110 per kilowatt hour for small and medium industries as well as hotels.

**Improve grid reliability:** In addition, REG should put in more effort to deal with distribution system reliability, and should consider replacing old networks and using modern technologies.

**Specific interventions to improve the local business environment include business support services to:** (i) increase awareness of what support is available to businesses in times of distress or shocks; and (ii) setting up an “after-service” to help people get through administrative processes such as registering new businesses.

- **Strengthening the private sector in order to promote a private sector-led and knowledge-based economy**

This is a priority in Rwanda's National Strategy for Transformation (NST1). However, it has not been completely achieved although it is key to promoting economic recovery and resilience. This is due to limitations in the domestic market, limitations in credit to the private sector, skills gaps and other challenges. One of the ways of strengthening the role of the private sector in economic growth is through de-risking private sector investments. Agriculture is a key sector where the Smart Nkuganire program has been implemented. Here, exhaustive and reliable data have been collected and stored in a database. This enables the provision of services such as agricultural insurance and consequently increases access to credit. Although agricultural insurance has been piloted in the livestock sector, it needs to be scaled up in the crops sector. Another de-risking scheme entailing the provision of subsidized loans has been to promote affordable housing. All these schemes need to be scaled up to meet the increasing demand for affordable housing and the provision of credit in the private sector.

Another avenue for strengthening the private sector would be through increasing its **role in infrastructure investment** through avenues such as municipal bonds and local content policies for infrastructure projects. International bonds offered by Rwanda in the past have been over-subscribed, implying that these successes could be replicated at local levels if local capacity is built. There needs to be provision for local content in all infrastructure projects in Rwanda in order to enable private sector actors (including youth and women) to access sub-contracts from foreign contractors on big infrastructure projects. In addition, the promotion of labor-intensive works for local youths and women within large infrastructure projects will increase the purchasing power of local citizens who will demand goods and services to enable economic recovery and resilience.

- **Positioning Rwanda to maximize the benefits of the AfCFTA agreement**

According to policy makers, the African Continental Free Trade Area (AfCFTA) is a great opportunity for trade policy development during the post-COVID-19 recovery period. Given the limitations of Rwanda's small domestic market for both services and goods, the AfCFTA which boost trade in goods services and e-commerce. Rwanda is well placed to take advantage of the services and e-commerce protocols of the AfCFTA. Rwanda has an impressive focus on digital trade as part of the National Strategy for Transformation (NST1) which recognizes ICT as an enabler. The government has rightly identified the potential opportunities, with many more businesses now connected and experienced with using e-government, and many also having already switched their operating model to using e-commerce. The government rightly adopted an ambitious agenda for expanding digital trade through a series of five-year strategies to support the progressive roll-out of digital infrastructure, public e-service, increase digital skills and position Rwanda as a regional ICT hub, underpinned by strong institutions and leadership (World Bank, 2020). However, there is a need to increase digital literacy within the population and carry out negotiations which will enable Rwanda to derive maximum benefits from the AfCFTA protocols on services, goods and e-commerce.

## References

- Human Development Indicators. Available at: [Indicators | Data \(worldbank.org\)](#). IPAR-Rwanda. (2020). Baseline Survey for TMEA-funded Management Information System for Rwanda.
- IPAR-Rwanda/ MINECOFIN: Mid-term evaluation of the NST 1 and Vision 2020, 2021
- IPAR- Rwanda and ACET Ghana 2020 Report on Workforce readiness for the 4<sup>th</sup> Industrial Revolution, 2020
- Malunda, D. (June 2020). Accelerating structural transformation towards SDG goals: Macroeconomic and sectoral policies for full and productive employment in Rwanda. Working Paper No.5. ILO/SIDA partnership on employment. Available at: [https://www.ilo.org/emppolicy/projects/sida/18-19/WCMS\\_749219/lang--en/index.htm](https://www.ilo.org/emppolicy/projects/sida/18-19/WCMS_749219/lang--en/index.htm).
- Malunda, D. and B. Kiberu. (2015). Employment Diagnostic Analysis and Geographical Estimation of the Deficit of Productive Jobs in Selected Districts in Rwanda. Geneva: ILO.
- Malunda, D. (2013). The employment intensity of growth in Rwanda, IPAR, CSAE Oxford Conference.
- Ministry of Education. Educational Statistical Year Books, 2011-2019. Available at: [Publications \(mineduc.gov.rw\)](#).
- National Institute of Statistics of Rwanda. Integrated Household Living Conditions Survey (EICV) 1, 2, 3, 4, 5, 6. Available at: [Integrated Household Living Conditions Survey \(EICV\) | National Institute of Statistics Rwanda](#).
- National Institute of Statistics of Rwanda. Rwanda Demographic and Health Survey 1992, 2000, 2005, 2010, 2014/5, 2019/20. Available at: [Demographic and Health Survey \(DHS\) | National Institute of Statistics Rwanda](#).
- National Institute of Statistics of Rwanda. Statistical Year Books 2006-20. Available at: [Statistical reports | National Institute of Statistics Rwanda](#)
- World Bank. (2020) Rwanda Economic update January 2020: Accelerating Digital Transformation in Rwanda. Kigali: World Bank. Available at: <http://hdl.handle.net/10986/33247>

## Annex 1. Methodology used to decompose GDP growth into its components parts

We used the World Bank analytical tool, Jobs Generation and Growth (JOGGs), which breaks down GDP growth into its component parts, including growth due to changes in employment rate, growth due to changes in productivity (output per worker) and growth due to changes in the proportion of the working age population. In addition, we will analyse changes in employment and productivity at the sectoral level in order to determine which sectors have been growing dynamically in terms of both employment and productivity. Lastly, we analyse dynamic shifts in employment between the different sectors over the past 10 years to determine the sectors that employees are leaving and joining. The analysis of inter-sectoral shifts gives an indication of the effectiveness of policies aimed at transitioning workers from low-productivity farm jobs into more productive off-farm jobs over time.

The methodology uses Shapley decompositions, which is a simple additive method that links changes in a particular component to changes in total per capita GDP, by taking into account the relative size of the sector or component, as well as the magnitude of the change (World Bank JOGGS Manual, 2015). Here, GDP growth is decomposed using several consecutive steps. In the first step, growth in per capita GDP (proxied by per capita value added) is decomposed into employment rate changes, changes in output per worker and demographic changes. In the second step, employment changes are further decomposed into changes in employment by sectors. The third step decomposes changes in output per worker into changes linked to variations in output per worker within sectors and changes linked to relocation of workers between sectors. A fourth step goes further in understanding the role played by each sector in the aggregate effect of employment relocation across sectors, while the fifth step looks at the role of capital and total factor productivity as sources of changes in output per worker at the aggregate level. A sixth step puts all the elements together, to see how each factor affected total per capita growth. The key findings of the decomposition are shown below.

### Growth in per capita value added, 2005 to 2017

	2014 (Rwf)	Total change in per capita value-added growth (%)
Total growth in per capita GDP (value added)	207,532	100
Growth linked to output per worker	182,366	88
Growth linked to changes in employment rate	13,105	6
Growth linked to changes in the proportion of working age population	12,061	6

Source: MINECOFIN updated Macroeconomic Framework Dataset, 2020



# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
**TUNISIA**

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## Abbreviations

AfDB	African Development Bank Group
Econ4Tunisia	Economists for Tunisia Think Tank
GEDI	The Global Entrepreneurship and Development Institute
IRENA	International Renewable Energy Agency
IMF	International Monetary Fund
ITCEQ	Institut Tunisien de la Compétitivité et des Etudes Quantitatives (Tunisian Institute of Competitiveness and Quantitative Studies)
ITES	Institut Tunisien d’Etudes Stratégiques – Tunisian Institute of Strategic Studies
ITU	International Telecommunication Union
OECD	Organization for Economic Cooperation and Development
PMN	Programme de Mise à Niveau – National Program for Upgrading the Industrial Sector
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNFCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
WEF	World Economic Forum
WIPO	World Intellectual Property Organization
WRI	World Resources Institute

## 1. Introduction

Tunisia's growth and economic transformation over the last 20 years can be divided into two periods. The division is marked by the events that took place between 17<sup>th</sup> December 2010 and 14<sup>th</sup> January 2011 when the people (particularly the youth) revolted against the incumbent political regime, forcing a democratic transition that came to be known as the "Arab Spring". The events of the Arab Spring are relevant for the current study for two reasons: a) they are rooted in deep-seated structural features that partly reflect past weaknesses of the growth and transformation process and its failure to respond to the expectations of the people; and b) they continue to have significant economic implications as the democratic transition has become a long and at times chaotic process, which has delayed attainment of a national consensus on the economic reforms and transformative policies needed to promote an inclusive, sustainable and resilient economy.

According to the Institut Tunisien de la Compétitivité et des Etudes Quantitatives (ITCEQ, 2020d), the average real rate of gross domestic product (GDP) growth fell from 4.4 percent between 2002 and 2010 to 0.7 percent between 2011 and 2020 while GDP per capita regressed sharply from 3.4 percent to -5 percent. There was also a decline in public consumption (by 0.9 percent to 0.5 percent of GDP) and private consumption (from 2.7 percent of GDP to 2.1 percent of GDP) as well as an investment rate that declined from 23.3 percent of GDP to 19.4 percent of GDP after the revolution. In fact, average gross fixed capital formation (GFCF) during 2011-2020 was negative (-4.7 percent compared with 3.3 percent for the preceding period).

These underperformances are due, essentially, to the breakdown of the traditional levers of growth in Tunisia: exports, investments, tourism, and phosphate mining. Marked by the pandemic, 2020 registered a decline in growth rate by 4.2 percent in the first quarter, a contraction by 16.9 percent in the next quarter then a positive rebound by 16.5 percent during the third quarter. The economy struggled to go back to normal levels in 2021 with a decline of -2 percent in the second quarter.

The decline in growth, as well as the negative dynamic of macroeconomic variables resulted in GDP per capita falling below US\$3,500 in 2017 after being maintained in the bracket of US\$4,100-4,330 between 2010 and 2014. Moreover, inflation in non-tariff food products peaked in double figures and core inflation (obtained by excluding food products and energy products) remained constant at under 5 percent during the post-revolutionary period. Non-tariff products had a rate of inflation twice as high as that for administered prices. The index of prices for family consumption (base year = 100 in 2015) rose by 78 percent between January 2011 and November 2021. The adverse impact on the quality of life of Tunisians has not been counteracted by a growth in salaries, and the erosion of Tunisian competitiveness has been doubly eroded by the depreciation of the dinar and fluctuations of the prices of raw materials during the last years.

These gaps impacted the balances of public finances. Average external debt went from 37.4 percent in 2010 to 79.5 percent of GDP in 2020 and will exceed 100 percent towards the end of 2021. Debt service in percentage of exports of goods and services weighs increasingly heavily, moving from 10.5 percent during the first period to 16.5 percent in 2020. The breakdown took place in 2017-2018 when public debt reached 80 percent and state debt exceeded the critical level of 70 percent. The lack of national political consensus led to a loss of control over the social dialogue and an absence of a clear fiscal strategy.

**Table 1. Evolution of public finances, 2002-2010 and 2011- 2020 (% of total budget)**

<b>Period</b>	<b>2002-2010</b>	<b>2011-2020</b>
<b>Evolution of expenses (excluding debt service)</b>		
Management expenses	100	140
Public remunerations	84	150
Service means	68	154
<b>Fiscal revenue</b>		
Direct taxes	149	104
Income tax	114	211
Corporate tax	200	3
Indirect taxes	74	95
Customs duties	-5	119
Consumption duties	50	97
<b>Non-fiscal revenues</b>		
Gas pipeline payments	132	20
Revenue from shares	111	-40
External endowments	-42	276
<b>Loan revenues</b>		
Internal borrowing >1 year	-64	733
Treasury bonds CT 52 weeks	-84	554
BTA – State bonds in TND	-38	239
External borrowing	-24	99

Source: Ministry of Finance; percentages calculated by authors

Imbalances of public finances are illustrated by an acceleration in public spending in a post-revolutionary context characterized by weak growth and inability to implement economic reforms. The imbalance was as flagrant as the evolution of borrowing seven times more rapidly between 2011 and 2022 than fiscal revenue, while the period from 2002 to 2010 saw a slowdown in the recourse to debt.

The post-revolutionary period is marked by strong fiscal pressure weighing on wage earners (+211 percent in income tax against +3 percent in corporate tax) in contrast to more balanced pressure during the preceding period. Consequently, the locking of the budget deficit in the

region of 3 percent of GDP, which was the norm between 2002 and 2010, ended from 2012 (5.2 percent) and peaked above 10 percent in 2020.

The budget deficit worsened, with a parallel deficit in the commercial balance. The rate of imports-to-exports-coverage was systematically above 72 percent between 2002 and 2010 and almost reached 80 percent in 2007. In contrast, coverage was below 70 percent for the period 2011-2020 excluding 2011, a year of transition and the year 2020 when the decline in international trade artificially improved the coverage rate.

The overall negative evolution of macroeconomic indicators was accompanied by a rise of poverty from 15 percent in 2015, to peak at 20 percent in 2020, while child poverty rose between 6 percent and 10 percent in 2020 alone, according to the International Monetary Fund (IMF) citing a UNICEF study. Unemployment also rose, pushing more young people into the informal sector. According to an ITCEQ<sup>1</sup> study, informal economy represented less than 21 percent of the GDP before 2005 but reached 34 percent in 2010 and peaked at around 42 percent.

Parallel to impoverishment, the fiscal revenue deficit went from 7 percent of GDP to almost 10 percent in 2018. Another study<sup>2</sup> indicates that the active and unofficially employed population went from 0.09 percent in 2006 to 0.04 percent in 2010, only to go back to 0.46 percent in 2015. Regulating the situation of those involved in the informal economy could, besides reducing inequalities in social and medical support, compensate for a significant part of the current budget deficit.

The question of public sector employment remains a blocking point. Whereas the share of public employment in overall employment declined to 18 percent in 2010, it reversed course to reach almost 20 percent in 2014. Political issues and unionist tensions have made the debate on controlling this tendency very delicate since 2011<sup>3</sup>.

Other notable tendencies throughout this period include the increasing enrollment of girls at all levels of education, which has improved their representation in economic activity. The proportion of women graduates went from a little less than 7 percent in 2004 to more than 12 percent in 2014. However, women continue to be more discriminated against and more vulnerable to unemployment than men. The unemployment rate of graduate women before 2010 did not exceed 50 percent while after 2011, it came close to 70 percent, or three times the unemployment rate of graduate men. These rapid changes in society put pressure on the most conservative sections of the population.

The contribution of productive sectors to growth has varied across time, with an increasingly notable weakness in the role of manufacturing. This delay in the transformation of the Tunisian

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<sup>1</sup><http://www.itceq.tn/files/politiques-sociales/economie-non-observee-en-tunisie.pdf>

<sup>2</sup><http://www.itceq.tn/files/emploi/bilan-evolution-marche-travail.pdf>

<sup>3</sup><https://globalvoices.org/2021/06/22/to-save-its-economy-can-tunisia-reform-its-oversized-public-sector/>

economy turns out to be the result of the presence of sectors with weak productivity and technological content, and, therefore, weak added value. The level of export sophistication remains low, with few new activities that have high complexity and high technology. Constraints remain, such as slow progress in innovation and technology adoption, the weak commercial diversification and the insufficiency of logistics infrastructure, besides an unattractive business climate and financing difficulties.

These quantitative and qualitative aspects lead to a summary of the situation: Tunisia has made uneven progress in its process of economic transformation, which would be the key to boosting its overall economic performance and improving social well-being. The logical consequence of this delay in structural transformation is the weak resilience of the Tunisian economy. This resilience was seriously shaken by the first episode of democratic transition in 2011. A groundswell of social movements emerged and led the country into a future marked, unfortunately by political and social tensions.

Underlying these tensions were not only the overrepresentation of graduates among the unemployed, nor uniquely in the increasing impact of women in society, but also in the unequal access to all resources and all public services according to location, whether in the interior or in a coastal region. The decline in access to education, healthcare, drinkable water, and employment translates into significant disparities in development and poverty levels. The challenge facing Tunisia during the 2002-2010 decade was mainly the unequal distribution of wealth and economic opportunities between regions and social classes. The next challenge in 2011-2020 was to complete the political transition journey with all its social and economic challenges.

## **2. Development policies and economic transformation**

### **2.1. Coherence and consistency of national plans and development strategies**

#### ***2.1.1. National Plan 2002-2006: economic flexing***

Having achieved a remarkable 5.2 percent average economic growth rate throughout the 9<sup>th</sup> Plan period from 1997 to 2001, according to the National Statistics Institute (INS), Tunisia's 10<sup>th</sup> Development Plan for the period 2002-2006 aimed to boost economic growth, create jobs, maintain fiscal balance, open up the economy further, and consolidate the pillars of sustainable development. To sustain the pace of economic growth, special attention was given to boosting private investment and adapting sectoral policies to the challenges of globalization and the knowledge economy. The focus was also on increasing exports due to their essential role in boosting growth and national savings, rationalizing consumption, and reducing the pressure on the balance of payments.

Sectoral policies included strengthening the production and productivity in the agricultural sector, improving the competitiveness of industries, and modernizing services. In agriculture, the program included expanding irrigation, optimizing farms, and putting into production new fruit arboriculture plantations, along with improving the productivity of animal husbandry and developing fishery resources. Another objective was to achieve self-sufficiency in the production of fodder, cereals and vegetables to meet internal demand and export abroad.

Aiming to increase the competitiveness of industrial firms, an industrial upgrade program was launched to facilitate technical assistance, accreditation, acquisition of licenses and protection of intellectual property. Other features included improving monitoring, modernizing training methods and tools, and strengthening distribution and planning. This was complemented by support for the creation of sectoral conglomerates in order to ensure the development of internal trade and subcontracting. More attention was also paid to power production and prospection of new oil and gas fields.

Modernization of the services sector relied on the extension of the telecommunications network, use of modern technologies, implementation of new strategies for the tourism sector based on innovation, creativity, and quality, as well as boosting competitiveness in the fields of transport, and banking and other financial services. Despite these initiatives and programs, there was a slowing down of growth engines and a decline in the pace of wealth creation. The GDP growth rate went from an average of 5.2 percent during the 9<sup>th</sup> Plan period to 4.5 percent during the 10<sup>th</sup> Plan period, despite the good performance of agriculture and tourism.

This decline was a natural consequence of a combination of internal and external factors. The internal ones were linked to insufficient support for exporters as well as the emergence of uncertainty and insecurity in the business climate. Many entrance barriers were raised to protect investors close to the old regime<sup>4</sup> and corruption increased<sup>5</sup>. Regarding the external factors, there was a gradual increase of competition from East and Central European countries as well as from Asia<sup>6</sup>. Growth was propelled especially by global demand (notably public consumption). The main consequence was the stagnation of job creation compared with the pace of the previous five years, and a rise in the average unemployment rate (Table 2).

The decline of growth and the increase of the unemployment rate reflect the decrease of engagement of public and private actors. According to Table 3, the investment rate declined in the main sectors. In agriculture and fisheries, it went from 30.2 percent during the period 1997-2001 to 23.2 percent over the period 2002-2006, notably due to the increase of urbanization, the low valuation of products (packaging and marketing) and the increasing scarcity of financing.

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<sup>4</sup>The average investment rate varied from 24.6 percent of GDP during the 9<sup>th</sup> Plan period to 22.7 percent during the 10<sup>th</sup> Plan period, according to INS.

<sup>5</sup> The perception corruption index moved from 36 in 2002 to 54 in 2006, according to Transparency International.

<sup>6</sup> The trade deficit moved from 3,762.3 million dinars to 4,445.4 million dinars in 2006 according to the Central Bank of Tunisia.



**Table 2. Evolution of growth rates and employment indicators, 1997-2006 ( %)**

	9 <sup>th</sup> Development Plan (1997-2001)	10 <sup>th</sup> Development Plan (2002-2006)
GDP (at market prices)	5.2	4.5
Global consumption	5.2	4.7
Gross fixed capital formation	7.1	1.9
Exports	7.3	2.1
Imports	7.5	1.5
Total employment (per 1,000 workers)	2.7	2.7

Source: ITCEQ

For manufacturing, the investment rate declined from 19.8 percent during the period of the 9th Plan to 17.1 percent during the period of the 10<sup>th</sup> Plan, essentially due to excessive reliance on a narrow internal market and a persistence of protectionist barriers. Finally, the investment rate in the services sector also fell, from 23.5 percent during the period 1997-2001 to 21.8 percent over the period 2002-2006, particularly due to an absence of new forms of leisure and the persistence of a product based on the sun and the beach.

**Table 3. Investment rates, by sector (gross fixed capital formation/value added; %)**

	1997- 2001	2002- 2006	2007- 2010	2011- 2015	2016- 2020
Agriculture and fisheries	30.2	23.2	21.1	16.6	12.3
Manufacturing industry	19.8	17.1	16.1	15.4	12.7
Agro-food Industry	26.4	20.3	17.4	18.2	16.7
Building materials, ceramics and glass	22.4	29.8	37.2	35.1	20.4
Mechanical and electrical industries	17.4	15.2	12.5	8.9	8.5
Chemical industries	14.3	12.7	16.3	25.0	21.0
Textile, clothing and leather	18.3	12.5	11.4	7.3	6.7
Various industries	20.4	20.5	15.5	18.4	14.2
Non-manufacturing industries	30.8	28.0	42.2	28.2	39.8
Mines	22.0	25.5	25.8	25.0	34.9
Oil and natural gas	31.8	33.0	55.0	30.2	57.5
Electricity	105.4	77.8	106.1	81.5	125.7
Water	51.8	64.5	50.7	69.6	71.4
Building and civil engineering	9.6	9.5	10.0	9.7	10.9
Trade service activities	23.5	21.8	20.1	16.9	13.4
Trade	6.0	6.1	5.7	6.3	6.3
Transport	43.2	35.9	41.6	40.9	37.2
Post and telecommunications	45.0	43.1	34.0	18.2	17.6
Hotel and restaurant services	21.0	15.5	13.5	9.7	7.6
Banks and insurance	9.8	8.5	8.6	6.5	6.1
Other services	22.3	23.1	16.0	16.0	9.6
Collective equipment	17.4	15.2	16.1	17.4	13.6
Total economy	24.6	22.7	23.9	21.2	14.5

Source: ITCEQ

### **2.1.2. National Plan (2007-2011): economic downturn**

The 11<sup>th</sup> Development Plan emphasized the consolidation of economic stability and boosting integration in the world economy to improve local capacities and accelerate growth in an increasingly knowledge-based economy.

The Plan provided for sectoral policies that promoted modernization and diversification of the economy by raising the share of activities with high value addition and a high knowledge content. More specifically, transformation efforts were based on greater liberalization of the services sector, notably the information and communications technology sector (ICT), which is considered as a strategic sector with a potential for job creation.

Manufacturing was also considered a pillar of growth and the objective was to increase value addition of products and exports to better respond to external shocks. For example, it was decided to encourage a changes in the textile sector from subsidization to co-contracting and to extend this change to the mechanical and electrical industries sector. Food, chemical and biochemical and other non-traditional industries with high added value were also targeted in this Plan, notably through the promotion of partnerships, technopoles and other private initiatives. Lastly, the Plan aimed to boost agriculture, which made a stable contribution to GDP, notably by strengthening traditional sub-sectors which had not reached European quotas (such as olive oil) as well as new sub-sectors (such as bio farming).

However, the results of the Plan after five years included a decreasing growth rate in the main engines (industry and tourism) as well as a rise in unemployment (especially among young graduates). This downturn was explained by progressive decay of the educational system, bureaucratic rigidity, a sclerotic public sector, growth in corruption, and deepening social and spatial disparities and inequalities. These trends provided evidence of an obsolete development model, unable to respond to the aspirations of a society seeking freedom and dignity, and opening the door to the social movements in 2010-2011 (Alaya, 2018).

**Table 4. Job creation growth, 2007-2011 (%)**

	<b>10<sup>th</sup> Development Plan (2002-2006)</b>	<b>11<sup>th</sup> Development Plan (2007-2011)</b>
GDP at market prices	4,5	4,2
Total consumption	4,7	4,6
Gross fixed capital formation	1,9	5,1
Exports	2,1	4,1
Imports	1,5	5,4
Overall employment (per 1,000 workers)	2,7	2,2

Source: ITCEQ

The growth rate fell from 4.5 percent on average during the period of the 10<sup>th</sup> Plan to an average of 4.2 percent under the 11<sup>th</sup> Plan, reflecting a slowdown in the pace of job creation and an increase in the complexity of the unemployment problem.

This situation is not at all surprising given the extent of the 2007-2008 economic and financial crisis and the degradation of the business climate which caused a decline in investment rates in all sectors, except non-manufacturing industries (see Table 3). Indeed, despite the net increase of investment rate in the overall economy (from 22.7 percent to 23.9 percent) following good performance in the mining and energy sector, the last years of the Ben Ali regime were characterized by crony capitalism, predation, favoritism, and the protection of the interests of those close to power. The authorization system that imposed an entrance barrier to many investors as well as the proliferation of bureaucratic procedures discouraged private investment. Moreover, the slowness in the management of property issues and the insecurity in the treatment of legal disputes complicated the situation.

This economic downturn reflected the insufficiency of transformation in Tunisia, a result of the weakness of the main economic sectors. In particular, the progressive decline of tourism was due to its inadequacy in the face of market developments which were at the origin of a slowdown in investments as well as many financial difficulties for hotels and banks. The latter industries have suffered the consequences of an increase in non-performing loans and the decline in the quality of their assets<sup>7</sup>. Meanwhile, the outsourcing practices did not favor the transfer of technologies and the creation of decent jobs in many manufacturing industries which faced increasing competition from European products<sup>8</sup>. This outsourcing became a factor of exploitation of a low-quality workforce which aggravated precarity and inequality. Agriculture also faced the slow execution of many projects, particularly in the areas of irrigation and breeding.

### ***2.1.3. Post-revolution strategies of development (2011-2021): economic decadence***

Following the revolution of 2011, Tunisia was unable to establish a five-year plan. The task was limited to yearly budgets through the contribution of different actors (administration, private sector, and civil society). The follow up of public projects in the different state budgets was done every three months and monthly for projects facing difficulties. The evident costs of the absence of planning and strategic vision for the country pushed the freshly elected government to prepare a five-year development plan (2016-2020). This plan was to truly transform the Tunisian economy, a long awaited and postponed objective. It consisted, in particular, in transforming the structure of the economy by diversifying production, especially in favor of

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<sup>7</sup> The bank non-performing loans/gross loans average ratio was 15.9 percent during the period 2007-2011 (St. Louis FED database).

<sup>8</sup> The Multi-Fiber Agreement (which protected textile sector from huge competition) ended in 2005 and the association agreement between Tunisia and European Union entered into force on March 30, 2008.

sectors with high technological content. It consisted also in promoting private investment by improving the business climate which had degraded significantly. Another aim was to boost economic integration through the diversification of partners.

Despite all the good intentions, economic performance was disappointing. The 2016-2020 Plan turned out to be a collection of projects without coherence and guarantee of feasibility and financing, with a lack of economic, environmental and social impact studies. Economic growth fell from 4.2 percent over the 2007-2011 period to just 0.7 percent during the post-revolution decade, especially due to political economy considerations. Indeed, political instability was one of main factors that explain the decline. Political institutions set up after the revolution was not operating and the country lacked accountability, transparency and social justice.

The significant decline in investment reflected the proliferation of regulations and permits as well as logistic weaknesses (especially, at the Port of Rades) and the deteriorating relationship between the government and the labor unions. The post-revolutionary period also featured the growing weight of the informal sector, which had a 35 percent share of GDP<sup>9</sup>, while the 2016-2020 Plan projected its reduction to 20 percent.

There was deterioration of the investment climate and a decline in overall entrepreneurial momentum, with the investment rate falling continuously over the last decade in all sectors, except non-manufacturing industries.

Even total consumption, which had maintained a positive growth rate in the past, saw an important decline, notably due to inflation. Imports fell, especially of equipment, translating weak engagement from investors in the presence of a morose situation.

The degrading situation of employment in Europe also affected the behavior of European consumers, which in turn disrupted demand for Tunisian exports and caused the collapse of tourism. Total receipts have moved from 1,853 million euros in 2010 to 1,790 million euros in 2019, before collapsing to 0.68 million euros in 2020 because of COVID-19.

Moreover, the employment market could no longer absorb the growing workforce, aggravating total unemployment. All this led to the crumbling of not only state finances but also of the external account of a country suffering from a political deadlock and an economy with stalling growth and in need of deep reform. The public deficit rose from 1 percent of GDP in 2010 to 8.8 percent of GDP in 2021 while public debt has reached a record level, moving from 38.8 percent in 2010 to 90.1 percent in 2021.

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<sup>9</sup>Nabli, M-K, 2019 *“J’y crois toujours » : au-delà de la débâcle...une Tunisie démocratique et prospère*. SUD Editions.

**Table 5. Evolution of tourist receipts, 2010-2020**

Year	Receipts in millions of euros
2010	1,853
2011	1,242,2
2012	1,587,5
2013	1,495,4
2014	1,609,1
2015	1,081,5
2016	978,4
2017	1,039
2018	1,309
2019	1,790
2020	0.68

Source: Tunisian National Tourism Office (ONTT)

**Table 6. Public finances in Tunisia, 2010-2021**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public deficit (in millions TND)	-650	-2127	-3853	-5207	-4074	-4069	-5510	-5987	-5055	-4060	-11615	-7944
In % of GDP	1	-3.1	-5.2	-6.6	-4.8	-4.5	-5.8	-5.9	-4.5	-3.3	-9.9	-6.6
Fiscal pressure	20.1	21.1	21.1	21.7	23.1	21.9	20.8	21.9	23.2	23.6	23.2	24.6
Public debt (in millions TND)	25640	28780	31418	34987	41054	46922	55921	67830	82295	83334	93045	109236
In % of GDP	38.8	42.5	42.5	44.2	48.1	52.3	58.7	66.5	73	67.9	79.5	90.1

Source: Ministry of Finance, Tunisia

At sectoral level, it was noted that the majority of projects in the Plan were not achieved, because of the lack of impact studies and, especially, financing. The industrial decline continued, emanating from the decay of the textile sector and other industries which could not adapt to the end of the Multi-Fiber Agreement and the rise of competition from emerging neighboring countries (namely Morocco). Investment rates in manufacturing declined from 15.4 percent during the period 2011-2015 to 12.7 percent during the period 2016-2020 (Table 3). In general, Tunisia's comparative advantage based on low wages was no longer a reality with many competitor countries also offering industrial products with low labor costs. Social agitation after the revolution also affected production levels of non-manufacturing industries, while terrorist attacks and political agitation further weakened the tourism sector.

**Table 7. Employment rates after the revolution (%)**

	<b>11<sup>th</sup> Development Plan (2007-2011)</b>	<b>Post-Revolution development strategies</b>
GDP in market price	4.2	0.7
Global consumption	4.6	2.4
FBCF	5.1	-4.7
Exports	4.1	-2.2
Imports	5.4	-1.9
Total employment (per 1,000 workers)	2.2	0.4

Source: ITCEQ

In summary, the results of the last two decades were the logical consequence of the absence of a transformation of the development model of Tunisia. Economic policy kept postponing structural problems and could not avoid the deterioration of the economic and financial situation. The dynamic of decline did not stop and affected the political as much as the economic and the social sectors.

## **2.2. Policies for structural change and economic transformation**

### ***2.2.1. Sectoral drivers of growth***

The median growth rate of the Tunisian economy has kept slowing down throughout the last two decades. It went from 4.4 percent during the 2000s decade to only 0.7 percent during the post-revolutionary 2011-2020 decade. The shock of the pandemic further weakened the productive sectors and accelerated the decline of the Tunisian economy.

Throughout the 2000s decade, merchant services had the primary role, with a contribution reaching an average of 54.6 percent during that period (see Table 8). This contribution reflects the important role shouldered by the telecommunications sector as well as the other services (consulting, engineering, etc.) in Tunisia's economic growth. The size of this contribution is explained by the liberalization of these services to the private sector.

Non-merchant services also had a remarkable role in economic growth during the same decade, with an average contribution of 16.1 percent. This contribution is due to the important presence of the public sector in the economy, notably the public companies and administrations.

The contribution of manufacturing industries in economic growth rose to 11 percent on average throughout the decade, in part due to Tunisia's comparative advantages in certain industries. Strategies to attract FDI since the 1990s and a favorable position within European

value chains, especially in mechanical and electric industries and the car industry sector, also helped manufacturing make a favorable contribution to economic growth.

Agriculture and fishing contributed only 5.4 percent on average to growth during the same period. This reflects the structural deformity of the economy in favor of the secondary and tertiary sectors. Indeed, there was erratic evolution of the sector over a long period, with a negative growth rate during the drought years and positive rates during the years with good rain. This is despite the presence of hydraulic infrastructure and the continuous development of irrigated areas, which contributed to shock reduction and better food security (BAD, 2007).

For non-manufacturing industries, their average contribution to growth during the decade rose to 5.7 percent. This contribution is primarily due to the role played by construction, supported by large public investments. Comparatively, the repeated social tensions in the mining basin and the spread of corruption in the oil sector weakened the contribution of mines and energy to overall growth.

The post-revolution decade, which was characterized by a very low growth rate, saw a radical change in the contribution of every sector. Non-merchant services became dominant with a contribution valued at 70.9 percent, on average. Massive hiring in the public sector with the aim of buying social peace, as well as the constant salary raises and social grants due to union pressure made final consumption the primary engine of growth. Similarly, the contribution of agriculture and fishing was 58 percent, on average due to favorable climate conditions and good harvests, where Tunisia already possesses considerable advantages in olive oil, vegetable, legumes, fishing, and figs. The substantial contribution of these two sectors reflects the deterioration of the contribution of other sectors, mainly manufacturing and services during the last decade. For the latter, the positive contribution of 19.1 percent, on average, was attributed to telecommunications, banks and insurance as well as trade performance, while tourism continued to suffer from business cycle conditions.

The last decade was also characterized by a negative contribution of manufacturing and non-manufacturing industries in economic growth. For manufacturing, the weakness of private investment continued after the revolution which made Tunisia a country on the path to de-industrialization.

Moreover, given the small size of the local market and the decline of national demand (especially from the other sectors such as transport and trade), Tunisian industry continued to largely rely on the European market, and, thus, suffered from the variations in conditions in Europe. The COVID-19 pandemic worsened the situation by causing a halt or sharp reduction in industrial activities and hampering their supply chains. For non-manufacturing industries, the decrease of contribution to economic growth was essentially due to the natural depletion of oil wells and the climate of social tension, especially around the mining basin region.

**Table 8. Sectoral contributions to growth (%)**

	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	5.4	58.0
Manufacturing industry	11.0	- 23.6
Agro-food industry	2.5	9.6
Building materials, ceramics and glass	1.2	- 2.0
Mechanical and electrical industries	7.2	- 2.2
Chemical industries	0.4	- 12.4
Textile, clothing and leather	- 1.4	- 14.3
Various industries	1.1	- 2.5
Non-agriculture manufacturing industries	8.5	- 33.3
Non-manufacturing industries	5.7	-41
Mining and energy	1.3	- 30.5
Mines	- 0.1	- 6.5
Oil and natural gas	0.4	- 28.3
Electricity	0.7	2.7
Water	0.3	1.6
Building and civil engineering	4.4	- 10.6
Trade service activities	54.6	19.1
Trade	8.6	11.9
Transport	7.3	- 41.5
Post and telecommunications	13.9	59.1
Hotel and restaurant services	4.0	- 43.2
Banks and insurance	4.7	29
Other services	16,1	3.7
Sub-total non-agriculture market activities	7.3	-45.6
Sub-total market activities	76.8	12.4
Non-market service activities	17.1	70.9
Cost factors GDP	93.9	83.3
Net indirect taxes of subsidies on products	6	16.7
GDP (at market prices)	100.0	100.0

Source: ITCEQ



### **2.2.2. Aggregate and sectoral labor productivity growth drivers: an assessment**

Productivity in Tunisia continued to decline throughout the last two decades, from 2 percent average growth during the 2002-2010 decade to only 0.2 percent during the following decade. Political and security shocks and the general laxity in law and regulations enforcement were the main causes of this decline. The general decline in labor productivity was also due to structural factors. All sectors were affected by this decline, particularly those that contribute the most to economic growth,. In contrast, productivity in agriculture rose sharply from 0.5 percent on average during the 2002-2010 decade to 5.5 percent during the last decade. This was despite its dependence on climate conditions and the structural constraints it continues to face (for example, access to water and land, to credits, and insurance, the weight of small farmers, weak agricultural organizations, and low value addition to agricultural products)<sup>10</sup>.

Trade service activities also saw a decrease in productivity, going from 2.3 percent on average during the 2002-2010 decade to 0.1 percent during the post-revolution period. This decline is mainly attributed to the poor performance of the tourism sector, which remains vulnerable to external shocks and weakness such as the concentration on mass beach tourism.

The decline in the productivity in manufacturing industries was from 1.7 percent on average during the decade preceding the revolution to -1.1 percent during the 2011-2020 decade. This is attributed to the fact that industry was already contracting and began facing growing competition from emerging countries. Other factors included the dispersion of industries, weak supervision, insufficient commercialization and marketing activities, and the absence of links between exporting companies and others<sup>11</sup>. Finally, there was inadequate synchronization of post-crisis business cycles between Tunisia and its main trade partner, the European Union.

For non-manufacturing industries, the decline in labor productivity was spectacular over the last two decades. Mines and fuels are considered distressed sectors, having received multiple shocks. Private investment became constrained, especially after the publication of Article 13 of the Constitution, which stipulates a vote by parliament on each energy concession. Moreover, the financial distress of public companies operating in mining sector made the situation more complex, with continuous salary raises amid social unrest.

A group of experts from the Forex Club Tunisia<sup>12</sup> tried to dissect labor productivity trends using the McMillan and Rodrik method (2011). The objective was to see if the growth in labor productivity in Tunisia could be achieved through intra-sectoral progress (a “within effect”)<sup>13</sup>, or

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<sup>10</sup> See H.E. Chebbi, J.-P. Pellissier, W. Khechimi, J.-P. Rolland. Rapport de synthèse sur l’agriculture en Tunisie. [Rapport de recherche] CIHEAM-IAMM. 2019.

<sup>11</sup> See Riadh ben Jelili (2016).

<sup>12</sup> Forex Club Tunisie (2021): “LIVRE BLANC: Stratégie de Sortie de Crise, Repères Structurels de Réformes Prioritaires et Scénarii de Cadrage Macroéconomique à Moyen Terme « Résurgence d’une Economie Tunisienne Résiliente et Leviers pour une Prospérité Partagée et une Croissance Inclusive et Durable », Septembre.

<sup>13</sup> In this case, the productivity of labor is sustained by the growth in capital, technical progress, and optimized management of the labor factor.

through inter-sectoral allocation of work (a structural effect)<sup>14</sup>. This exercise demonstrated that the intra-sectoral contribution to productivity growth remains predominant, regardless of the period under consideration. Indeed, over the period 1975-2010, the “within effect”, estimated at 1.5 percent, contributed up to 71.4 percent of the growth of productivity of the Tunisian economy as a whole. This contribution became 83.3 percent in the period 2011-2019, even if this effect declined at 0.5 percent. However, the structural effect (estimated at 0.6 percent for the first period and 0.1 percent for the second one), contributed only 21.6 percent over the period 1975-2010, before declining at 16.7 percent for the period 2011-2019. This allowed the Forex Club Tunisia to conclude that the decline in the productivity of labor in the Tunisian economy is in part due to the reallocation of the workforce from sectors with high productivity to sectors where the productivity of labor became either weak or in constant regression<sup>15</sup>.

**Table 9. Productivity of labor, by sector (% growth)**

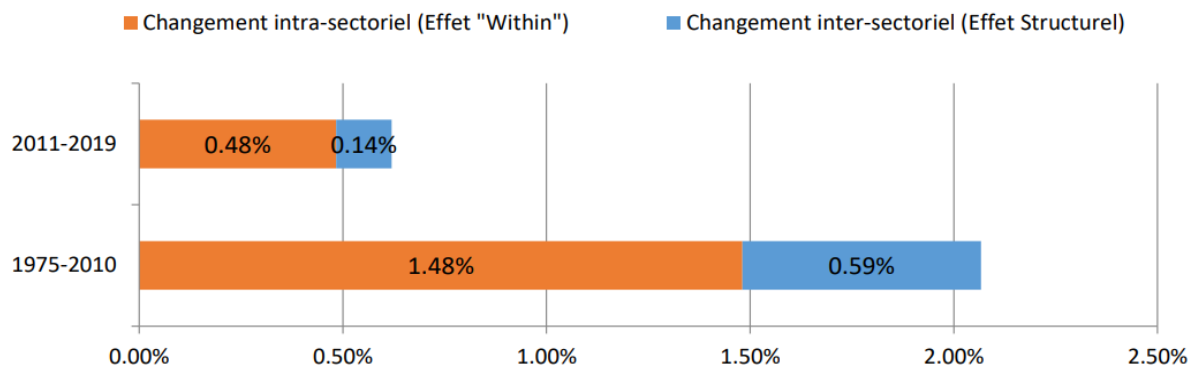
	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	0.5	5.5
Manufacturing industry	1.7	-1.1
Agro-food Industry	2.1	-0.2
Building materials, ceramics and glass	3.9	1.2
Mechanical and electrical industries	2.5	-2.6
Chemical industries	-2	-3.4
Textile, clothing and leather	-0.3	-2.6
Various industries	1.3	-1.2
Non-manufacturing industries	-1.8	-3.1
Mines	5	-7
Oil and natural gas	-4.5	-8
Electricity	3.8	3.6
Water	4	1
Building and civil engineering	0.4	-1.9
Trade service activities	2.3	0.1
Trade	0.9	0.2
Transport	1.9	1.3
Posts and telecommunications	11	-0.4
Hotel and restaurant services	0	-5.1
Banks and insurance	3.4	1.5
Other services	1.6	-0.1
Housing	0	0
Administration	3.3	1.2
Total Economy	2	0.2

Source: ITCEQ

<sup>14</sup> In this case, the growth in the productivity of labor is explained by the reallocation of the labor factor from less productive sectors to the more productive ones.

<sup>15</sup> This situation is mainly due to the choice of economic operators as well as to the influence of specific sectoral policies.

**Graph 1. Decomposition of productivity growth**



Source: Forex Club Tunisie (2021)

### **2.2.3. Economic transformation in Tunisia: opportunities and constraints**

Over the past two decades, the Tunisian economy has continued to show structural weaknesses that negatively impact growth. One of the reasons is the weakening of total factor productivity<sup>16</sup> This reflects the fact that the country has seen little technological progress because companies do not invest enough and do not sufficiently use innovation to develop new products or to modernize the production process. It could also be partly due to the decline in the quality of the workforce (Ben Jelili, 2016).

The decomposition of sectoral total factor productivity shows that decrease in growth in Tunisia is the result of a decline in technological progress in all sectors except agriculture. The latter has, in fact, registered a notable improvement in the rhythm of growth of total factor productivity, going from 0.5 percent, on average, during the 2002-2010 decade to 5.5 percent during the 2011-2020 decade.

Manufacturing industries saw a fall in their total factor productivity, whereas traditionally, it is in the industrial sector that gains in productivity are most important. The transition from total factor productivity growth of 1.9 percent, on average, during the 2002-2010 decade, to a negative -0.8 percent for the post-revolution decade proves that the manufacturing industry seems to be the "poor relative" of sectoral transformation of the Tunisian economy despite the fact it is supposed to be its true engine. Even trade services have seen a decline in total factor productivity, signaling an increasingly weak presence of technological and other progress.

<sup>16</sup> Total factor productivity is a residual term that appears in the production function. It reflects the level of technological progress.

**Table 10. Total factor productivity, 2002-2020 (% growth)**

	<b>2002-2010</b>	<b>2011-2020</b>
Agriculture and fisheries	-0.2	3.9
Manufacturing industry	1.9	-0.8
Agro-food Industry	3	0.6
Building materials, ceramics and glass	1.4	-0.2
Mechanical and electrical industries	3.6	-2
Chemical industries	-1.8	-4.6
Textiles, clothing and leather	0.5	-1.4
Various industries	1.7	-0.9
Non-manufacturing industries	-3.1	-3.6
Mines	0.2	-5.6
Oil and natural gas	-8	-8.2
Electricity	2.8	1.2
Water	4	0.3
Building and civil engineering	0.8	-2.6
Trade service activities	1.6	-0.3
Trade	1.1	-2.7
Transport	0.3	-1.2
Posts and telecommunications	10.3	5.6
Hotel and restaurant services	1.2	-3.5
Banks and insurance	2.6	1.9
Other services	0.5	0.7
Housing	0	0
Administration	2.6	0.5
Total economy	1.3	-0.7

Source: ITCEQ

Clearly, structural transformation in Tunisia is driven by vulnerable sectors. Such vulnerability is primarily due to insufficiently skilled human capital, the deficit in researchers and the lack in spending on R&D. Indeed, Tunisia dedicates 0.67 percent of its GDP to R&D, compared with 2.4 percent in OECD countries<sup>17</sup>. The indicators of technological growth and global innovation are at 23.3 and 32.9 in 2018, still inferior by almost half to OECD levels of 40.9 and 50.7 respectively. Theoretical knowledge is rarely translated into outputs transferable to the productive sector. The lack of competitiveness is apparent, although there have been a number of advances made with regard to knowledge acquisition and ICT (CUA/OCDE, 2019). According to ACET, the export competitiveness ranking of Tunisia declined after the revolution, despite the progress made over the last few years (see Table 11). Issues linked to transfer of property, difficult access to financing and corruption continue to affect resilience of the economy and constrain the transition to a new technology era (artificial intelligence, digitalization, big data, etc.).

<sup>17</sup> This is a 2010-2015 average.

**Table 11. ATI competitiveness index**

	Export competitiveness rankings	Export competitiveness score
2000	4	49.14
2001	4	41.45
2002	4	37.76
2003	4	37.23
2004	4	46.70
2005	3	57.71
2006	3	77.30
2007	2	86.64
2008	2	88.62
2009	2	85.69
2010	2	72.99
2011	2	76.42
2012	2	71.92
2013	2	72.95
2014	3	67.03
2015	3	58.19
2016	3	55.26
2017	3	77.12
2018	2	81.98

Source: ACET

Meanwhile, Tunisia still lacks high technological content, with its manufactured exports coming from a limited number of sub-sectors (clothing, textile, leather, chemistry, electric appliances, automobile parts) and depend often on imported inputs. That is why the Tunisian economy has for several years moved timidly towards high-tech exports (IT and ICT information and communication technology, aeronautics, etc.). Its exports also remain little diversified in terms of products and destinations. Price competitiveness was often based on low labor costs and a superficially stable real effective exchange rate, rather than on structural competitiveness based on product quality and sophistication. The ATI technology index confirms this finding since it shows a deterioration of Tunisian rankings in recent years. This is a result of two main factors: a lack of state support as well as moderate private sector engagement.

Moreover, the economy has remained very dependent on the European Union, which accounts for 70 percent of Tunisia's goods exports, 83 percent of tourism, 73 percent of FDI and 90 percent of Tunisian remittances from abroad. Only three countries absorb most of the low value-added manufacturing products which has made Tunisia very vulnerable to slowdown and/or exogenous economic shocks.

**Table 12. ATI technology sub-indicator index**

	Technology rankings	Technology score
2000	4	51.58
2001	2	53.98
2002	3	64.87
2003	2	69.41
2004	2	69.28
2005	2	74.38
2006	2	75.75
2007	2	91.73
2008	1	94.71
2009	1	99.83
2010	1	100.00
2011	1	100.00
2012	1	86.37
2013	1	89.28
2014	1	82.56
2015	3	70.61
2016	3	66.21
2017	3	66.32
2018	3	66.07

Source: ACET

The absence of the strategic vision to become a regional export platform as well as a hub for joint production and regional value chains makes the situation more complex with the existing insufficiencies in infrastructure and logistics. Tunisia's logistic performance index stood at 2.57 in 2018, while it was at 3.65 in Europe and Central Asia countries (see Table 13). Tunisia is, in fact, among the more inefficient countries in customs procedures and the quality of infrastructure. Transport costs are high, despite its long coastline. The costs of transshipment, difficulties in transit, and the absence of harmonization in regulations, too, remain constraining.

**Table 13. Logistic performance index, 2018**

	Tunisia	Europe and Central Asia
Timeliness	3.24	3.24
Tracking and tracing	2.86	3.27
International shipments	2.5	3.14
Customs	2.38	3.04
Logistics competence	2.3	3.21
Infrastructure	2.1	3.13
<b>LPI Score</b>	<b>2.57</b>	<b>3.65</b>

Source: World Bank, 2018

Finally, the poor business climate is a big challenge with companies confronted with problems that affect their competitiveness such as property transfer, corruption and solvency. The problem of weak institutions was made worse by a growing informal sector and the growing risk of political instability. Financing is also a big problem due to a strong risk perception, a lack of guarantees and wide disparities between urban and rural areas.

### 3. COVID-19 response and lessons

#### 3.1. Extent of COVID-19 spread and corresponding responses

A great deal of the literature links the epidemiological dimension of COVID-19 to its economic dimension<sup>18</sup>. It consists mainly of a description of the evolution of the health situation in the country and the behavioral responses to it on a microeconomic level in order to put in place macroeconomic strategies and measures. This study discusses the most important consequences of the pandemic and the countermeasures at healthcare, economic, and social levels.

Since the start of the pandemic in March 2020 and until October 2021, there have been 717,163 confirmed cases and 25,363 deaths, attributed to COVID-19 in the country<sup>19</sup>. The pandemic's growth curve in Tunisia was relatively flat from the start in March 2020, then later showed radical fluctuations corresponding to both the tightening and relaxing of health measures by authorities throughout this period. It is noteworthy that the stringency index<sup>20</sup> shows that ever since the start of the pandemic, the authorities have oscillated between draconian health measures and their relaxation according to the evolution of the pandemic.

Tunisia managed to control the number of new cases detected as well as the number of deaths through a general lockdown from March 22<sup>nd</sup>, 2020 which was extended on two occasions. However, with the reopening of frontiers on June 27<sup>th</sup>, 2020, the number of cases kept increasing until October 2020 when the government decreed a curfew, the closure of religion places, and a ban on all public and private gatherings. The relaxation of these measures at the end of November 2020 after a relative decrease in the number of discovered COVID-19 cases resulted in a substantial rise in the number of new cases and deaths, reaching a record in January 2021 (69,488 persons infected and 2,072 deaths, according to Inkyfada)<sup>21</sup>.

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<sup>18</sup>See the documentation center of the IRDES.

<sup>19</sup><https://graphics.reuters.com/world-coronavirus-tracker-and-maps/fr/countries-and-territories/tunisia/>.

<sup>20</sup> The stringency index is a composite measure based on nine response indicators including school closures, workplace closures and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the sub-national level, the index shows the response level of the strictest sub-region.

<sup>21</sup><https://inkyfada.com/fr/2021/07/06/covid-19-dashboard-tunisie/>

**Graph 2. Evolution of the Stringency Index in Tunisia**



Source: Oxford COVID-19 government Response Tracker, Blavatnik School of Government, University of Oxford, November 2021.

The government took the opportunity of January 14<sup>th</sup> (anniversary holiday of the revolution) to announce a lockdown of 4 days and closure of schools for 10 days. A few days later, the government also decreed a closure of weekly markets, a suspension of all gatherings until January 24<sup>th</sup>, 2021, and a ban on interregional travel. This slowed down the spread of the virus and brought down the number of deaths (21,639 infections and 821 deaths in March 2021, according to Inkyfada).

The beginning of March 2021 saw a relaxation of health measures and the start of the first vaccination campaign. This relaxation led to a significant rise in the number of infections, which reached another record level in April 2021. This situation pushed the government to impose restrictions, especially since it coincided with Ramadan, a month characterized by increased mobility after the breaking of the fast. The government instituted a ban on gatherings, a closure of weekly markets, a curfew on car traffic after 19:00, and prohibiting cafés and restaurants from opening after the breaking of the fast. The resulting fall in the number of cases was merely temporary and the authorities were forced to impose a lockdown on the Aid (May 9<sup>th</sup>, 2021). On this public feast, interregional travel was prohibited, and non-essential businesses were closed.

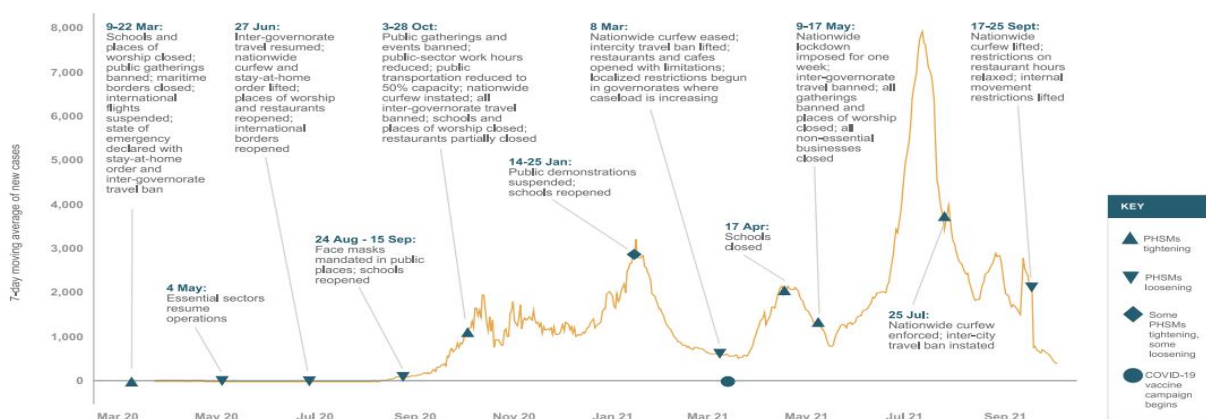
The months of June and July 2021 were considered as the deadliest in Tunisia since the start of the crisis with 80,000 new cases and over 2,000 deaths in June, followed by 170,000 tested positive and 5,000 dead in July. The lockdown declared in four governorates (Beja, Siliana, Kairouan, and Zaghouan) on June 20<sup>th</sup> and the tightening of health measures in other places at the beginning of July, coupled with the acceleration of the vaccination campaign, allowed the government to regain control of the pandemic situation in the country.



Since October 2021, the President relaxed most national restrictions. The only remaining restrictions concern the maximum number of people allowed to access an establishment, the necessity of observing health protocols at public events, and the mandatory vaccination and possession of a vaccination passport.

The following table summarizes the evolution of the health situation from the beginning of the pandemic until recently as well as the corresponding health measures:

**Graph 3. Health situation and government responses**



Source: Partnership for Evidence-Based Response to COVID-19 Survey 4

### 3.2. Impact of the pandemic and the response measures on the macro-economy

The pandemic not only cost lives in Tunisia, but also had major economic and social repercussions due to the lockdowns and drastic restrictions on people’s mobility. The year 2020 was characterized by significant macroeconomic imbalances, an -8.8 percent growth rate, and an unemployment rate of 17.4 percent. The rise in public debt and overdue payments weakened the state’s balance sheet, compromising any hopes for stabilizing debt. Towards the end of 2020, with hirings in the health sector on the one hand and a decrease in tax revenue on the other hand following the total or partial halt of production activities for companies, the budget deficit reached 10 percent of GDP while public debt reached a historic record of 79.5 percent of GDP. Economic activity resumed timidly in 2021, with a growth rate reaching only 0.3 percent in the third quarter of the year, an unemployment rate of 18.4 percent, and hopes for a yearly growth rate of only 2.6 percent.

The pandemic impacted entire swathes of the economy. Vital sectors, such as retail, leisure, tourism, transport, and public events were affected by lockdowns, closures, and curfews. Exporters were impacted by the fluctuations in demand linked to procurement problems and stock shortages. Added to this was the impact on companies that were unable to implement work-from-home solutions and social distancing rules (Forex Club, Tunisia, 2021).

INS figures on quarterly GDP showed a 9.4 percent fall in trade services in the last quarter compared with the same period in 2019, and an annual decrease of 13.3 percent. Hotels, restaurants and cafés registered the greatest decrease in activity (-49.1 percent) followed by transport (around -23 percent). In manufacturing, gross added value dropped by 9.3 percent in 2020 for most fields: chemical industries (-13.8 percent), food industry (-8.2 percent), textiles and clothing (-5.5 percent), and mechanical and electrical industries (-0.9 percent).

For non-manufacturing industries, their added value shrank by 8.8 percent for the entire year of 2020 following a fall in mining activities, especially phosphates (3.1 million tons produced in 2020 against 3.7 million tons in 2019) and gas and petroleum drilling. Added to this, was the weakening of the construction sector (-1.3 percent in the last quarter of 2020) and the electricity sector due to the drop in energy demand from the industrial sector. The only exception was the agricultural sector, which held its own against the pandemic as it registered a rise of 4.4 percent in its added value in 2020.

**Table 14. Evolution of quarterly growth for all sectors**

	2019					2020				
	T1	T2	T3	T4	Annual	T1	T2	T3	T4	Annual
Agriculture and fishing	-2	1.4	2.2	-0.6	<b>0.4</b>	6.7	3.3	3.4	4.5	<b>4.4</b>
Industry and manufacturing	-0.9	-1.1	-1.7	0.1	-0.9	-1.8	-27	-3.2	-4.5	-9.3
Non-manufacturing industries	-1.6	-3.4	-3.7	-0.8	-1.9	-4.7	-20.2	-6.9	-3.2	-8.8
Merchant services	3.5	2.7	2.4	2.2	2.6	-3.2	-29.8	-10.9	-9.4	-13.3
Non-merchant services	1	1.2	1.1	1.3	1.1	-1.9	-15.8	0	-7.6	-6.3
GDP	1.1	1	0.8	0.9	0.9	-2.1	-21.3	-5.7	-6.1	-8.8

Source: INS

For households, the pandemic proved to be a heavy burden on several levels. On the one hand, those who are active in the informal sector found themselves jobless due to the lockdown and/or other health restrictions. On the other hand, many of the elderly missed or postponed their medical appointments due to the pandemic while others could not find the medication they needed, especially those suffering from diabetes or cardiovascular diseases.

Finally, and especially during the first wave of the pestilence, a shortage of some staple goods caused a hike in the prices of food products. According to the INS, from the start of the pandemic in March 2020, inflation increased for three consecutive months (from 5.8 percent to 6.2 percent to 6.3 percent), particularly due to the increase in food prices. The pandemic also impacted social groups in varying degrees, further aggravating inequalities. Less-qualified workers, the youth, women and migrant workers were the most severely impacted while women and youth employment saw a bigger decrease compared to men and adults' employment.

### **3.3. Measures to mitigate the impacts on households and businesses**

To counteract the pandemic effects, the authorities sought to absorb the shock through measures protecting purchasing power, supporting industries, and protecting the most fragile strata of the population. To these ends, an allocation of 2,500 million dinars was made to facilitate the implementation of the exceptional measures targeting three levels: the economic, the social, and the monetary.

At the economic level, the main measures were aimed at all companies (without exception) that is to say, distressed companies as well as fully functioning exporters. For companies in all fields, a three-month delay was allowed in paying corporate tax (starting from April 2020) with a suspension of penalties for delay (apart from major corporations taxed at 35 percent) as well as a suspension of fiscal controls and fiscal verification and objection deadlines. In the same vein, companies were authorized to reevaluate their built and non-built real estate registered in their balance sheets according to their real value. An exemption of their capital gains from revaluations was also decreed, subject to non-assignment.

For distressed companies, VAT payments were relaxed, tax and Customs debts were restructured over a maximum seven-year period, the payment schedule of their social fund contributions was delayed until after mid-year by three months, and the obligation to present immediately documentary proof of their tax and duty suspension as well as other fiscal documents was relaxed as long as they committed to presenting them at a later date. Additionally, the government issued a line of credit guarantee of 500 million dinars to firms for management and operating expenses as well as a credit line of 300 million dinars to assist temporarily unemployed workers.

Export companies were allowed to increase their sales in the local market relative to their export revenue. On a social level, certain parts of the Labor Act which enabled unilateral termination of workers' employment were suspended even in exceptional circumstances. Additionally, temporary and exceptional grants of 200 dinars were given to those who were temporarily inactive. Finally, special measures to protect consumer purchasing power were adopted, notably with severe penalties for violations of competition and pricing rules.

On a monetary level, the central bank adopted monetary policy measures such as lowering the interest rate by 100 points in March 2020 and by another 5 points in September 2020; credit installment payments were suspended for seven months for companies and professionals belonging to categories 0 and 1 (with the possibility of extending this forbearance to include categories 2 and 3); as well as a more relaxed application of the credit-deposit ratio which was elevated to 120 percent. The central bank also delayed the payment of credit installments by seven months for those whose salaries lower than 1,000 dinars and by three months for those with salaries above that level. Lastly, the central bank encouraged banks to facilitate access for enterprises to needed liquidity, notably through refinancing opportunities, and to support

certain sectors (especially olive oil and tourism) through credit restructuring and/or reducing the interest rate on operational credits.

In addition to this, the central bank took measures related to the tariffs and continuity of banking services during the pandemic (Circular n° 2020-05 19 March 2020). They encouraged remote operations and reducing physical visits to banking establishments, especially by obliging banks temporarily to offer interbank ATM withdrawals free of charge; suspending, for all transactions not exceeding 100 dinars, all commissions charged to merchants and service providers for electronic payments; and providing a credit card, free of charge, to every client who owns a bank account and who requests a card.

However, all these measures turned out to be insufficient and the consequences of the shock were substantial. Resilience of the economy was at stake, especially because of the structural weakness that characterized Tunisia, even before the COVID-19 pandemic.

## **4. Tunisia's economic resilience**

### **4.1. Key vulnerabilities and risks relative to global drivers of change**

#### ***4.1.1. Economic (trade, globalization)***

Tunisia's trade balance was never positive from 1975 to 2021. In 2011, the year of the revolution, the commercial deficit increased by 4 percent compared with the previous year, with 7 percent growth in exports during the same period. Nevertheless, from 2011 to 2019, the deficit grew to 19.436 million dinars, or 2.25 times that of 2011. Imports however, grew more rapidly (+88 percent) than exports (+75 percent) between 2011 and 2019. A slight recovery was noted in 2020 largely due to the impact of the pandemic and the slowing down of international trade. It is noteworthy that the variations of imports compared to the GDP reached 61.5 percent in 2018), for example, while exports could fall to 40 percent GDP in 2016, which translates into a severe inability to cover imports through exports.

From a structural point of view, the trade deficits were caused mainly by a disequilibrium in goods trade. The trade balance of services was constantly positive but not high enough to cover other deficits. Tunisia has always been unable to rely solely on services exports to cushion the commercial deficit since they constitute only 15 percent-20 percent less than goods imports (example: 15 percent in 2015 and 19 percent in 2019). According to IMF estimates, imports growth will continue to be faster than that of exports by 1 percent to 2 percent between 2022 and 2025. According to INS figures, commercial deficit in the first 10 months of 2021 reached 13.3 billion dinars which translates into an evolution of 23 percent compared to the same period in 2020. Throughout this period, growth in exports (+20.9 percent) has been less than

growth in imports (+21.6 percent ).Tunisia’s commercial deficit, therefore, is both structural and continuous within the current economic parameters.

According to ITCEQ analysis (2021)<sup>22</sup>, imports tend to correlate with GFCF, which confirms the Tunisian economy’s dependence on imported goods and equipment, notably intermediary goods. Indeed, the importation of goods (except for agricultural and energy products) follows the variations in local demand, which remains their principal parameter. The same study indicates that a depreciating dinar can improve the commercial balance of sectors like textiles, clothing and leather, as well as agriculture and the food industry, which underscores the transient nature of the volume effect (growth in the volume of exports and fall in the volume of imports). It has always been true that the price effect would have a considerable impact on the commercial balance given the important share of fuel in the total imports (for example, about 16 percent in 2019).

In another report issued in December 2020, ITCEQ (2020)<sup>23</sup> notes that Tunisia’s efforts to diversify its exports and upgrade their quality (especially in field of high-tech<sup>24</sup>) remain modest compared to those of Morocco, Turkey, and China. External competitiveness of Tunisia’s economy remains also shackled by a negative correlation between “necessary delays” and “costs” both for importing and exporting<sup>25</sup>. According to the World Bank’s latest Doing Business report, complex, and sometimes even opaque, customs procedures and infrastructure remain the primary bottleneck preventing secure logistical operations, mastering time-to-market, and international trade operations costs.

Other problems related to relations with European Union partner countries are also hampering the Tunisian state and operators from having true rules of reciprocity<sup>26</sup>. France, Italy, Germany, and Spain are key partners. The main points of objection raise by the Europeans against Tunisian authorities are technical controls over goods through “rulebooks”, the requirement of free sale certificates for certain products, the requirement of declaring exports on paper while European procedures have become entirely digitized, and the obligation to pay an advances on import taxes and on VAT for every operation, among other grievances. It turns out that, indeed, the accumulation of archaic bureaucratic procedures is a true obstacle to improved Tunisian integration in international trade value chains.

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<sup>22</sup> ITCEQ (2021): <http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/importations-tunisiennes-quel-comportement-sectoriel.pdf>

<sup>23</sup>ITCEQ (2020): <http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/competitivite-externe-de-l-economie-tunisienne.pdf>

<sup>24</sup>Sectors of interest are: pharmaceutical products, computer products, radios, TVs, and communication products, medical and other precision instruments, aeronautics and space, and high-tech products.

<sup>25</sup> ITCEQ (2020) : From 2016 to 2020, Morocco has increased its competitiveness in terms of import and export costs faster than Tunisia.

<sup>26</sup>EU Commission(2021) : [https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc\\_159602.pdf](https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc_159602.pdf)

#### 4.1.2. Climate, environmental, and natural resources stress

According to projections by the Ministry of the Environment<sup>27</sup>, average annual temperatures in Tunisia will rise by 1°C- 1.8°C by 2050. These hikes will be felt the most in the interior low regions, regions from the seashore, and rural and agricultural regions with special development needs. Paradoxically, some of these regions will see a decrease in precipitation by 5 percent to 10 percent in 2050 and perhaps by as much as 20 percent in 2100. The risks of agricultural season and subsistence farming disruption may plunge an already fragile population further into poverty and malnutrition. These phenomena may also boost inter-regional migration, creating more urban pressure through unplanned temporary dwellings and social pressure (for example, the greater presence of unemployed youth in suburban areas), which may be the prelude to tensions during troubled times. Furthermore, besides their effects on the economy, climate change and environmental challenges will surely have an important social impact in Tunisia.

Despite its firm engagement to multiple international agreements on the climate, and the support of financial backers<sup>28</sup>, Tunisia continues to lag in reaching its objectives of reducing greenhouse gases. In reality, substantial public resources are badly needed to concretize the National Determined Contribution (NDC) through which Tunisia commits to reducing its national carbon intensity by 41 percent to 45 percent by 2030 compared to its level in 2010. However, such an objective requires financing of US\$19.3 billion between 2021 and 2030, according to UNDO estimates, and 4 percent of this amount must be provided by Tunisia.

According to the International Renewable Energy Agency (IRENA)<sup>29</sup>, electricity produced through renewable energy in Tunisia has increased from 8821 GWH in 2000 to 167,2 GWH in 2011 (+90 percent ) and to 528 GWH in 2018 (+216 percent).

**Table 15. Electricity produced through renewable energy, 2000, 2011, 2018 (GwH)**

	<b>2000</b>	<b>2011</b>	<b>2018</b>
Wind	23	10.2	453
Solar	1.21	4.3	58
Hydro	64	53.7	17
<b>Total</b>	<b>88.21</b>	<b>167.2</b>	<b>528</b>

Source: IRENA, Avoided emissions calculator

<sup>27</sup> <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/evolution-du-climat-et-projections-climatiques-en-tunisie>

<sup>28</sup> [https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d\\_appui-au-plan-solaire-tunisien/](https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d_appui-au-plan-solaire-tunisien/)

<sup>29</sup> <https://www.irena.org/Statistics/View-Data-by-Topic/Climate-Change/Avoided-Emissions-Calculator>

Theoretically, the objectives of STEG-Energies Renouvelables (STEG Renewable Energies), a subsidiary of the Tunisian Electricity and Gas Company (STEG, public monopoly of energy) created in 2010, are to reach 1,000 MW in 2016 and 4,700 MW in 2030 (that is, 40 percent of overall electric power supply in the country). Still, these projects face difficulties that prevent them from being fully implemented (for example, the solar panel fields in Tozeur<sup>30</sup>) or to become operational due to institutional issues. For example, the solar fields of Tataouine have been ready since May 2020 but are still not linked to the STEG network due to the opposition of unions to private sector production of electricity instead of the national company).

Progress in these fields is very slow and characterized by constantly high electricity production costs which require considerable subsidies from the state's subsidy fund<sup>31</sup>. Budget risks weigh heavily on government capacity to continue subsidizing the production of electricity. Global warming, especially during the summer when the demand for electricity for air conditioning peaks, also weighs heavily, with more frequent interruptions in distribution.

Even when fossil energy is factored in along with renewable energy, the energy deficit remains structural and is likely to become aggravated in the coming years. According to ITCEQ<sup>32</sup>, the level of energy independence has gone from 124 percent in 1990 to 80 percent in 2012 and 59 percent in 2016.

The Ministry of the Environment identifies water shortage as a major vulnerability in Tunisia<sup>33</sup>, notably due to the increase of water erosion, the increase in water needs, the degradation in water quality and the overuse of phreatic zones. Furthermore, the World Resources Institute ranks Tunisia 25<sup>th</sup> among the countries most at risk of water scarcity while having substantial capacity for producing electricity through renewable energy (wind and solar)<sup>34</sup>. In reality, threats to food security (environmental transformation and local farming and the decrease in some products with high water demand) and economic and social withdrawal in rural and agricultural areas can be counterbalanced by the development of renewable energy.

#### ***4.1.3. Population dynamics and social inequality***

INS figures indicate that the birth rate has fallen from 19.3 for every 1,000 inhabitants in 2010 to 16.8 for every 1,000 inhabitants in 2019. This is consistent with a marriage rate in decline over the same period from 18.2 for every 1,000 inhabitants in 2010 to 14.3 for every 1,000

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<sup>30</sup>[https://www.poledjerid.com/specialites-du-pole.php#Cluster\\_energie](https://www.poledjerid.com/specialites-du-pole.php#Cluster_energie).

<sup>31</sup>The average cost of a single KWh of electricity was 267.2 millimes in 2020 compared with 319.2 millimes in 2019, that is, a general sale price (without taxes) of respectively 248,6 millimes (2020) and 244 millimes (2019). The remaining amount is subsidized and increases the financial losses of STEG.

<sup>32</sup><http://www.itceq.tn/files/developpement-durable/politique-energetique.pdf>.

<sup>33</sup> <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/synthese-des-vulnerabilites-et-des-mesures-prioritaires-pour-l-adaptation-aux-changements-climatiques-en-tunisie>

<sup>34</sup><https://www.wri.org/insights/these-20-water-stressed-countries-have-most-solar-and-wind-potential>

inhabitants in 2019. Tunisians are getting married less, at an increasingly later age, and are having fewer children.

This is also related to the increasing number of women with higher education degrees compared with men. Women are more involved and active in civil society, claiming more social and civil rights, which has caused some social disruption that complicates some marriages and in a conservative country. Indeed, in 2019 there were 17,306 finalized divorces against 12,871 in 2010.

Studies<sup>35,36</sup> show that Tunisian girls have inferior grade retention rates compared with boys from primary to secondary level and have the weakest dropout rates. In university, they represent up to 89 percent of students in life sciences, or 85 percent of students in education sciences. However, their unemployment rate is higher than that of men both on a general population level as well as for those with higher education degrees.

This phenomenon is more pronounced in a country still dominated by a patriarchal, and perhaps even a tribal culture, particularly in the rural and agricultural interior regions of the country. Tunisian society is going through a deep transformation in which women, increasingly educated and more than ever qualified for work, and with a strong will for self-emancipation and with more urgent grievances, are seeking more active involvement of men in home management.

Living conditions differ greatly between rural and urban parts of the country. Studies show<sup>37</sup> that the poverty rates in urban and coastal regions are at around 11 percent (5.3 percent in greater Tunis) while they reach 31 percent in the mid-west. It is undeniable that generally speaking, poverty has decreased since one of four people lived in poverty in 2000 compared with one in six in 2015. Discrepancies between cities remain considerable and mostly visible in some parts of the mid-west. It turns out that five of the poorest states in the country (with a poverty rate above 55 percent in 2015) are in Kasserine. In Kairouan, more than 200,000 people survive on less than 5 dinars a day. The coastal regions also have significant disparities in the same state. In greater Tunis, the poverty rate in Carthage is at 1.6 percent compared to 15.2 percent in Tebourba. The same can be seen in the state of Sfax where the town center has a rate of 2.5 percent compared with 17.4 percent in the rural area of Bir Ali Ben Khelifa.

The same studies find that the poorest areas have difficulties accessing public services such as water, natural gas and the sanitation system. They also accumulate other social difficulties with the highest school dropout rates and unemployment rates in the country, factors correlating with a very high poverty rate.

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<sup>35</sup><https://inkyfada.com/fr/2021/09/10/inegalites-hommes-femmes-ecole-travail-tunisie/>

<sup>36</sup><http://www.itceq.tn/files/developpement-durable/realisation-objectifs-millennaires.pdf>

<sup>37</sup><https://inkyfada.com/fr/2021/08/18/vivre-moins-5-dinars-jours-carte-pauvrete-tunisie/>



The impact of the regional disparities in the economic and social development of the population is a structural factor of fragility, an endemic malfunction, and a latent source of political tensions.

#### **4.1.4. Technological changes**

Tunisia ranks 87<sup>th</sup> among 141 countries in the Global Competitiveness Index 2019, with an information and communications technology ranking of 83<sup>rd</sup> <sup>38</sup>. Although its rate of use of smartphones puts it in an advanced rank (47<sup>th</sup>), that of fiber internet is at 88<sup>th</sup>. There is a discrepancy between the wireless and the wired technology infrastructure, which handicaps certain economic activities with added value, and which require higher bandwidths. Other rankings corroborate this handicap.<sup>39</sup> They equally point to multiple difficulties concerning usage, such as the weak penetration of e-commerce.

According to the INS, the percentage of households connected to the internet in Tunisia has gone from 11.4 percent in 2010 to 51.5 percent in 2019 and the international bandwidth size of the network has gone from 50 Gb to 780 Gb during the same period. This translates into a more democratic access to the internet and a quality of bandwidth in constant improvement. The content available on a national level has become more diverse, with the number of Tunisian websites registered by the INS rising from 11,873 sites in 2010 to 42,710 sites in 2019, which translates into 260 percent growth.

Analyzing these rankings shows that Tunisia has achieved significant progress in several fields related to open data, infrastructure setup and online services usage. It is among a group of countries with rather similar levels of technological maturity including Morocco, Mauritius, Seychelles, South Africa, Egypt and Rwanda. In this respect, according to the Global Innovation Index (GII), Tunisia ranks 7<sup>th</sup> among 34 countries in the lower middle-income group and 9<sup>th</sup> among 19 North African and West Asian countries in 2020. On this basis, the country is considered as being relatively better performing than other countries with a similar level of development and as producing relatively more innovations than other countries with the same levels of investment in innovation<sup>40</sup>.

Nevertheless, difficulties and obstacles persist. The ICT development index (of the ITU) and the NRI index of Tunisia are below the international average, handicapped notably by the extent of technology usage despite the number of skilled professionals in IT above the average for countries in the same category. The digital governance index appears to be one of the substantial bottlenecks in terms of a technological takeoff, particularly when it comes to the delay in deploying e-commerce, the online use of debit cards, more secure financial transfers

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<sup>38</sup>[https://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

<sup>39</sup>See please the details of the ranking established by the International Union of Telecommunications(IUT) in the context of its CT Development Index (last updated in2017) : <https://www.itu.int/net4/ITU-D/idi/2017/index.html#idi2017economycard-tab&TUN>

<sup>40</sup>[https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021/tn.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021/tn.pdf)

between economic actors, and digitalization of transactions. In fact, despite an honorable international ranking compared with those of the other countries in the region, Tunisia has delays in the deployment of artificial intelligence and legislative handicaps impeding the adoption of the internet of things (IoT).

The Tunisian government is also struggling to accelerate digital transformation even though many common services are now available for citizens online (for example, checking a criminal record or enrolling in universities have become exclusively online) and are receiving satisfactory reviews, according to studies<sup>41</sup>. However, many bureaucratic requirements are blocking the massive deployment of end-to-end administrative processes such as authenticated signatures, which are obligatory for several economic activities and require the physical presence of the requesting citizen, entrepreneurs, and considerable financial and time costs. Substantial legislative change remains hampered by the political environment, since it touches the mechanics of the functioning of the Tunisian state, and by extension, the internal balance of powers of the administration.

## **4.2. Key challenges in addressing vulnerabilities and achieving economic resilience**

### **4.2.1. Fiscal space**

A report by the International Labor Organization (ILO) about the fiscal domain reveals the difficulty of reconciling “a budgetary margin of maneuver” which allows the state to dispatch resources for a defined objective without compromising the viability of its financial situation while promoting its long-term development objectives<sup>42</sup>.

According to the Ministry of Finance<sup>43</sup>, tax revenue has grown by 114 percent between 2010 and 2020 to reach 27.147 billion dinars. During the same period, the different fiscal aggregates have not evolved at the same pace (+244 percent of income tax against +28 percent of corporate tax) with a significant hike in indirect taxes (+118 percent in customs duties , +92 percent in VAT and +85 percent in consumption duties). The unequal tax burden shouldered by economic actors is a concrete reality and a structural impediment for public revenue collection<sup>44</sup>. When drafting the 2021 Budget, and despite a much sought decrease of 5 percent in direct taxes and a 7 percent decrease in indirect taxes compared with 2019, taxes on wage earners will increase by 6 percent while taxes on corporations will fall by 19 percent .

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<sup>41</sup><http://www.itceq.tn/files/innovation-Tic/2021/le-gov-a-l-ere-du-digital.pdf>

<sup>42</sup>[https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_565523.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_565523.pdf)

<sup>43</sup><http://www.finances.gov.tn/fr/les-indicateurs/ressources>

<sup>44</sup><http://www.itceq.tn/files/finances-publiques/2021/pression-fiscal-sur-travail-salarie.PDF>

Non-fiscal revenue is relatively weak compared with fiscal revenue and grew by +65 percent between 2010 and 2020 to reach 3.506 billion dinars. Here too, unequal distribution can be seen with oil revenues rising by +122 percent against revenues coming from the state stake in companies rising by only 17 percent. The condition of public companies in this respect is quite worrying given the weak revenue they generate, the significant resources they absorb to deal with their debts (towards banks and suppliers), or to guarantee them for third parties. The stalled restructuring of these establishments is due to, among other issues, problems of social dialogue, but also due to deficiencies in governance and financial management<sup>45</sup>.

The most worrying issue, nevertheless, remains public debt. Domestic debt has risen by around 18 times between 2010 and 2020 to reach the sum of 11,126 million dinars, of which 5,702 million dinars (48 percent) in OATs (Bons du Trésor Assimilables) payable within 52 weeks to several years. The Tunisian state has become a strong competitor against other economic actors for liquidity and financing of activities with added value. Banks are required to contribute and, thus, have to arbitrate between credits to private sector clients – who are becoming increasingly scarce- and credits to the state. In the face of the state’s difficulty to renew the IMF support program and enter foreign financial markets, banks have to drill into non-residents foreign currency accounts to lend to the Tunisian state. From 2010 to 2020, external borrowing resources grew by 290 percent. The 2021 Budget intends to raise them from 7,364 million dinars (in the 2020 Budget) to 13,015 million dinars in 2021, which translates into an increase of +77%!

Faced with a low growth rate, high inflation, rigid borrowing interest rates, and the state’s ever faster growing need for borrowing, the budget projections remain uncertain. The recent downgrading of Tunisia’s long-term sovereign rating – in dinars as well as in foreign currency – by Moody’s from B3 to CAA1 complicates access to foreign finance in a context where local actors seem to have reached the limits of their capacity. What remains then, is to find less painful ways to circumvent (or change) the rules governing central bank financing of state deficit.

The budget is fragile in the absence of structural reforms capable of improving the covering of expenses without recourse to additional fiscal pressure or borrowing. The fiscal space is already quite narrow. The international commodity markets see significant hikes in the prices of staple necessities which can turn a headlong rush from debt into a social and political crisis.

Widening the fiscal space will require a detailed review of its current coverage. Studies demonstrate<sup>46</sup> that a third of the active population works in the informal sector, while a fifth of

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<sup>45</sup>White Paper « Rapport de synthèse sur la réforme des entreprises publiques en Tunisie » ; The Presidency, March 2018 :

[https://www.leaders.com.tn/uploads/FCK\\_files/Livre%20Blanc%20\(Rapport%20de%20synth%C3%A8se%20sur%20la%20r%C3%A9forme%20de%20la%20gouvernance%20et%20des%20entreprises%20publiques%20en%20Tunisie%20\)\(1\).pdf](https://www.leaders.com.tn/uploads/FCK_files/Livre%20Blanc%20(Rapport%20de%20synth%C3%A8se%20sur%20la%20r%C3%A9forme%20de%20la%20gouvernance%20et%20des%20entreprises%20publiques%20en%20Tunisie%20)(1).pdf)

<sup>46</sup><http://www.itceq.tn/files/finances-publiques/endettement-tunisie.pdf>

wage earners are untaxed and half of the contributors identified by state services are in default, of which 63,000 are companies. The bulk of income tax (71 percent) is shouldered by wage earners, while liberal professions (representing an estimated 60 percent of taxable income) contribute barely 3 percent.

With 530 new fiscal measures between 2011 and 2016, the fiscal system is considered complex, opaque, and unstable, with a margin of interpretation that greatly favors the tax authorities. This situation has been aggravating year after year, inciting economic actors to fiscal fraud, and discouraging investors because of regulation inflation.

#### **4.2.2. Infrastructure**

According to Ministry of Equipment and Housing figures<sup>47</sup>, Tunisia has 360 km in highways and 3,938 km of paved roads in a total network of 12,750 km and more than 1,100 bridges with differing capacities. The country has 41 fishing ports, 7 airports, 39 dams, and 25 electricity production units (gas turbines, vapor turbines, combined cycles, hydraulics, wind). The country is well equipped compared with other countries in the region and ranks 5<sup>th</sup> in Africa in terms of the most integrated infrastructure, according to the regional integration index of AfDB<sup>48</sup>.

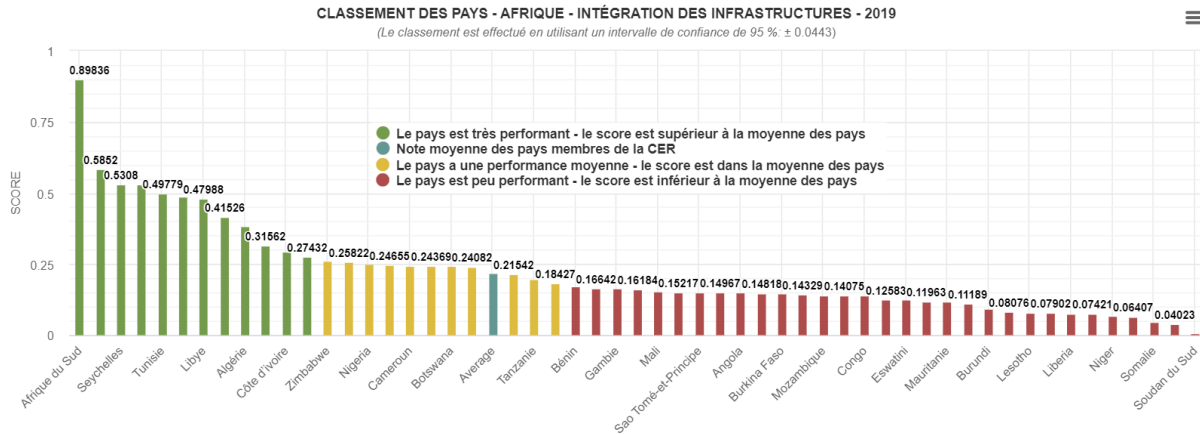
Infrastructure conditions differ according to location and sector. According to the Global Competitiveness Index (GCI) of 2019, Tunisia ranks 87<sup>th</sup> out of 141 countries in infrastructure. It turns out, upon closer scrutiny, that although there is connectivity of road and rail networks, their reliability remains hampered by their capacities. This is the key issue affecting air transport and port logistics. These aspects, considered to be in decline by the GCI of 2019, are, however, essential for attracting investment, securing international commerce, and galvanizing the tourism sector.

#### **Graph 4. Ranking of African countries by integration level of infrastructure, 2019**

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<sup>47</sup><http://www.mehat.gov.tn/>

<sup>48</sup> <https://www.afdb.org/fr/news-and-events/press-releases/rapport-2019-lindice-dintegration-regionale-en-afrique-appelle-le-continent-batir-des-economies-plus-resilientes-grace-lintegration-35751>



Source: AfDB, index score calculated by AfDB

Infrastructure conditions differ according to location and sector. According to the Global Competitiveness Index (GCI) of 2019, Tunisia ranks 87<sup>th</sup> out of 141 countries in infrastructure. It turns out, upon closer scrutiny, that although there is connectivity of road and rail networks, their reliability remains hampered by their capacities. This is the key issue affecting air transport and port logistics. These aspects, considered to be in decline by the GCI of 2019, are, however, essential for attracting investment, securing international commerce, and galvanizing the tourism sector.


Maritime freight transport is facing several difficulties. It is structurally in deficit (costing more in fees than what it generates in revenue) due to “underperforming ports, inadequate infrastructure, and an economy limited in scale”<sup>49</sup>. Tunisia has a smaller and less varied fleet than its peers and has no national container ship. The World Bank’s Logistics Performance Index of 2018 (LPI) ranks Tunisia 104<sup>th</sup> out of 167 countries based on six criteria of performance<sup>50</sup>: Customs, infrastructure, international shipments, logistics competence, and tracking and tracing. Other factors such as lack of storage capacities and costs and delays of export and import freight are also pointed out by the ITCEQ<sup>51</sup>. Maritime transport reform is a matter of priority for improving Tunisia’s international competitiveness.

**Table 16. Infrastructure section of Tunisia’s Global Competitiveness Index, 2019**

<sup>49</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/note%2063-service-du-transport.pdf>

<sup>50</sup><https://lpi.worldbank.org/international/aggregated-ranking>

<sup>51</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/note%2063-service-du-transport.pdf>

 <b>2nd pillar: Infrastructure</b> 0–100	-	62.7 ↑	85	Singapore
<b>Transport infrastructure</b> 0–100	-	41.8 ↑	101	Singapore
2.01 Road connectivity 0–100 (best)	82.7	82.7 ↑	46	Multiple (3)
2.02 Quality of road infrastructure 1–7 (best)	3.6	42.9 ↓	96	Singapore
2.03 Railroad density km/1,000 km <sup>2</sup>	13.9	34.8 ↑	51	Multiple (24)
2.04 Efficiency of train services 1–7 (best)	3.2	37.4 ↑	59	Japan
2.05 Airport connectivity score	34,374.4	46.7 =	71	Multiple (8)
2.06 Efficiency of air transport services 1–7 (best)	3.6	43.1 ↓	118	Singapore
2.07 Liner shipping connectivity 0–100 (best)	6.3	6.3 ↓	101	Multiple (5)
2.08 Efficiency of seaport services 1–7 (best)	3.4	40.5 ↓	95	Singapore
<b>Utility infrastructure</b> 0–100	-	83.7 ↓	74	Iceland
2.09 Electricity access % of population	100.0	100.0 =	2	Multiple (67)
2.10 Electricity supply quality % of output	15.5	88.0 ↑	98	Multiple (10)
2.11 Exposure to unsafe drinking water % of population	20.2	81.4 ↓	80	Multiple (28)
2.12 Reliability of water supply 1–7 (best)	4.9	65.3 ↓	67	Iceland

Source: Global Competitiveness Index 2019

The performance of the air transport sector remains marked by the commercial and financial problems of the national company (Tunisair) and the slow implementation of the Open Sky accord which was announced and postponed numerous times. If this matter is resolved, even against the interests of the national company, it will lead to better connectivity among Tunisian airports and will boost the performance of the tourism sector.

From a budget point of view, government expenses have grown by almost 200 percent between 2010 and 2020 to reach 29.951 billion dinars, while equipment expenditures – an important indicator of public investment in infrastructures – have evolved by only 68 percent during the same period to reach 7.207 billion dinars. In fact, state investments from foreign borrowing – that is, foreign loans dedicated directly to public investment – have risen 14% from 2010 to 2020. This clearly means that Tunisia’s external debt during that period was used essentially to finance recurrent expenses, at the expense of investment in infrastructure. This explains the deterioration in road infrastructure and the difficulties encountered in maintaining a sufficient level of reliability in water and electricity services.

#### **4.2.3. Human capital**

The education sectors received continue to receive considerable attention from the Tunisian state ever since independence. The Ministry of Education employs more than 200,000 of the 600,000 employees of the public sector, with a budget of 6.728 billion dinars in 2021. Higher education employs 36,726 people with an overall budget of 1.828 billion dinars. The number of newly opened primary schools has varied only by 1 percent between 2010 and 2019 while the number of new classes has grown by 7 percent over same period. The number of primary school pupils has grown by 17 percent between 2010 and 2019, according to the INS. However, these numbers hide social and regional issues and disparities, particularly the rise in school

dropouts by 100,000 children per year<sup>52</sup>. UNICEF indicates that only 48.7 percent of adolescents finish secondary education (high schools) and blames it on an underperforming educational system<sup>53</sup>.

The ITCEQ report on the “Knowledge Economy”<sup>54</sup> shows a disparity between the quality of entrants in innovation and the value of output. It says, “this can be explained by the lack of coordination between the different intervening parties (companies, universities, and research institutes), the crippling bureaucracy, and the lack of means to finance projects, etc.”

**Table 17. Top 5 weaknesses of Tunisia, according to the Global Innovation Index**

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.3.1	Ease of starting a business	18	2.1.4	PISA scales in reading, maths and science	74
2.1	Education	8	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
2.1.1	Expenditure on education, % GDP	7	2.3.4	QS university ranking, top 3	74
2.1.2	Government funding/pupil, secondary, % GDP/cap	1	3.2	General infrastructure	128
2.2	Tertiary education	16	3.2.3	Gross capital formation, % GDP	124

Source: GII, 2020

The condition of human capital in Tunisia is paradoxical. On the one hand, international evaluations recognize the country as a strong producer of quality human resources, notably in engineering and medicine. On the other hand, Tunisian public universities are poorly recognized internationally, and unemployment rates of higher education graduates remains higher than the national average. Studies show a mismatch between academic qualifications and the needs of the market, which offers low-quality jobs to those with degrees<sup>55</sup>. Graduates in economics, management, law, and literature and social sciences are in weaker positions for the job market than engineering graduates. Of the total number of employed graduates, the number of those occupying jobs that require average or low qualifications was as much as 20 percent in 2013. They are taken up by agriculture, construction, commerce, and hotels and restaurants<sup>56</sup>. Currently, Tunisia is facing a worrying phenomenon – massive brain drain – which has been accelerating over recent years.

<sup>52</sup><https://www.unige.ch/fapse/erdie/files/4414/6651/2677/Boughzou-EED7.pdf>

<sup>53</sup><https://www.unicef.org/tunisia/la-2%C3%A8me-d%C3%A9cennie-%C3%A9ducation-et-protection>

<sup>54</sup><http://www.itceq.tn/files/innovation-Tic/economie-du-savoir-performance-de-Tunisie.pdf>

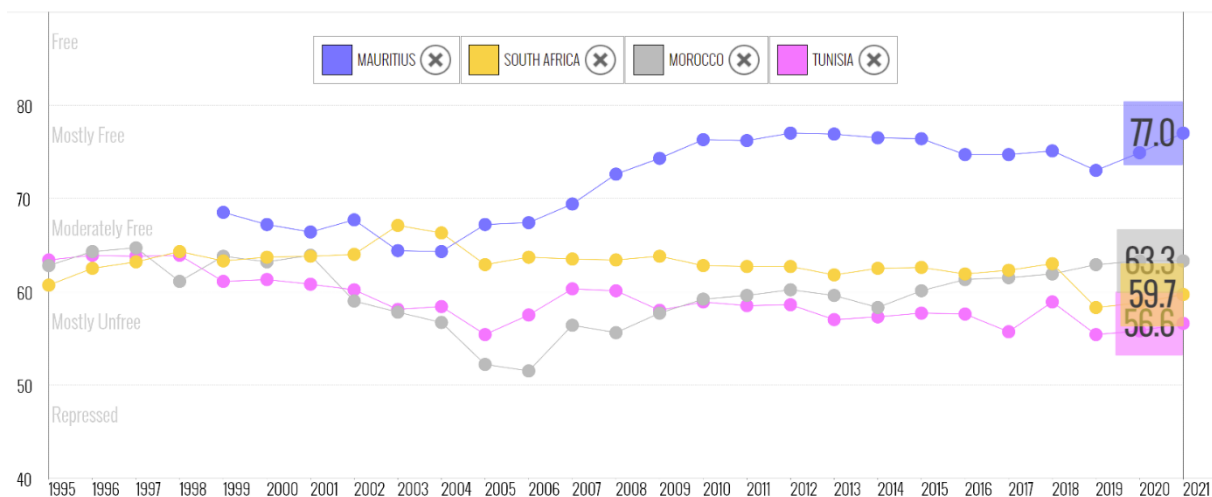
<sup>55</sup><http://www.itceq.tn/files/emploi/inadequation-des-qualifications-en-tunisie.pdf>

<sup>56</sup><http://www.itceq.tn/files/emploi/over-education-tunisian-labor-market.pdf>

#### 4.2.4. Liberalization-related challenges

According to the Economic Freedom Index 2021, published by the Heritage Institute<sup>57</sup>, Tunisia is in the group of countries considered generally not free, with a ranking of 119 of 178 countries and with a score improving very slowly. Its difficulties include vulnerable property rights, a judicial system susceptible to corruption, a tax system with a tendency towards increases due to the continual rise in state expenditure. The other two difficulties the Index pointed out are the complexity of social law and a particularly archaic monetary exchange law which penalizes international transfers.

**Graph 5. Economic Freedom Index, 1995-2020**



Source: The Heritage Institute, Economic Freedom Index 2021

ITCEQ has performed a deep analysis of the results obtained by the Economic Freedom Index in 2020<sup>58</sup> and revealed shortcomings on multiple levels:

- Judicial efficacy
- Government integrity
- Fiscal health
- Freedom of business
- Fiscal burden
- Government expenditures
- Freedom of labor
- Monetary freedom
- Freedom of commerce
- Freedom of investment
- Financial freedom

<sup>57</sup><https://www.heritage.org/index/ranking>

<sup>58</sup><http://www.itceq.tn/files/climat-des-affaires-competitivite/2021/economic-freedom-index-2020.pdf>



Since 2011, political instability has led to very clear directions when it comes to liberalization of the economy. European partners have voiced their concerns on multiple occasions, with Tunisia having taking measures that go against the spirit of the free-exchange accord. The country remains characterized by a hegemonic bureaucracy and an environment less favorable to the liberalization of the economy.

### **4.3. Risk factors and opportunities: Is Tunisia ready for the future?**

While examining the main vulnerabilities of the Tunisian economy, several risk factors crop up repeatedly and consistently and constitute the key to the country's future opportunities.

Bureaucracy is at the heart of all economic difficulties. It is a major obstacle facing international trade and the liberalization of trade, with partially digitalized services and the Customs service viewed by many people as the most corrupt public service<sup>59</sup>. The restrictive monetary exchange Act strictly regulates the possession of foreign currency and assets by fiscally resident citizens. Even though it protects the national currency from fluctuations in the exchange rate, it is seen as archaic, incites fraud and tax evasion of an extent still unknown.

One of the emblematic events related to the anachronistic nature of this exchange law is the inability to legalize PayPal and the criminalization of the possession of cryptocurrency by taxpayers. Some breakthroughs were made via the Tunisian Start-up Act which allows young and innovative companies to be identified and to enjoy some flexibility in operating foreign currency accounts. Yet, even with innovative legislation, the identification process remains reliant on bureaucratic procedures, even when done online – and dependent on paying a commission. There is also the unfortunate criminalization of the possession and use of drones, including for companies innovating in the fields of robotics and IoT.

The bureaucratic approach is also very present in matters as serious as the preservation of the environment. Here too, the administration prides itself on its zeal for “legal texts” while also ignoring its lack of discernment and its fragility in the face of corruption.

The slow transformation of the administration illustrates how difficult it is to change organizational and cultural paradigms. Aborted or incomplete digitalization initiatives by the state do not allow any projections of the country's future, even though massive investment in digitalization helps improve services for citizens, improve project monitoring and evaluation, restrict corruption, better allocate human resources, and retain local talents in the IT field.

Nevertheless, even if there were clear targets for digitalization, the fight against poverty, better adaptation of the education system to the labor market, the preservation of water resources, etc., the lack of material means to finance these ambitions makes them unrealistic.

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<sup>59</sup> Digitalization of Customs services is ongoing via financing provided by the World Bank but the status of the project is unknown: <https://www.webmanagercenter.com/2020/09/26/456334/lutte-contre-la-corruption-la-douane-ne-doit-pas-etre-le-seul-maillon-de-la-chaine-estime-youssef-zouaghi/>

All in all, the persistent question for Tunisia is how to increase public investments while also stabilizing salaries in the public sector and operating costs while avoiding excessive levels of debt. A related question is how to use debt in a manner that does not make it a painkiller that covers the state's inability to cover its expenses with an acceptable level of taxation. Is it possible to increase tax revenue without adding to the burden of individual income tax, and by enlarging the tax pool (rather than level) imposed on companies and professionals?

Responding to these questions is a complex endeavor, as long as political actors and unions avoid thinking about new solutions, let alone a change of paradigm, and also avoid confrontation and opt for consensus in the interests of social peace. Public finances are, therefore, today, at a level of uncertainty that does not allow for ambitions of reform or innovation to become credible.

## 5. Key lessons and policies for economic transformation and resilience

### 5.1. Lessons from what worked well in the past

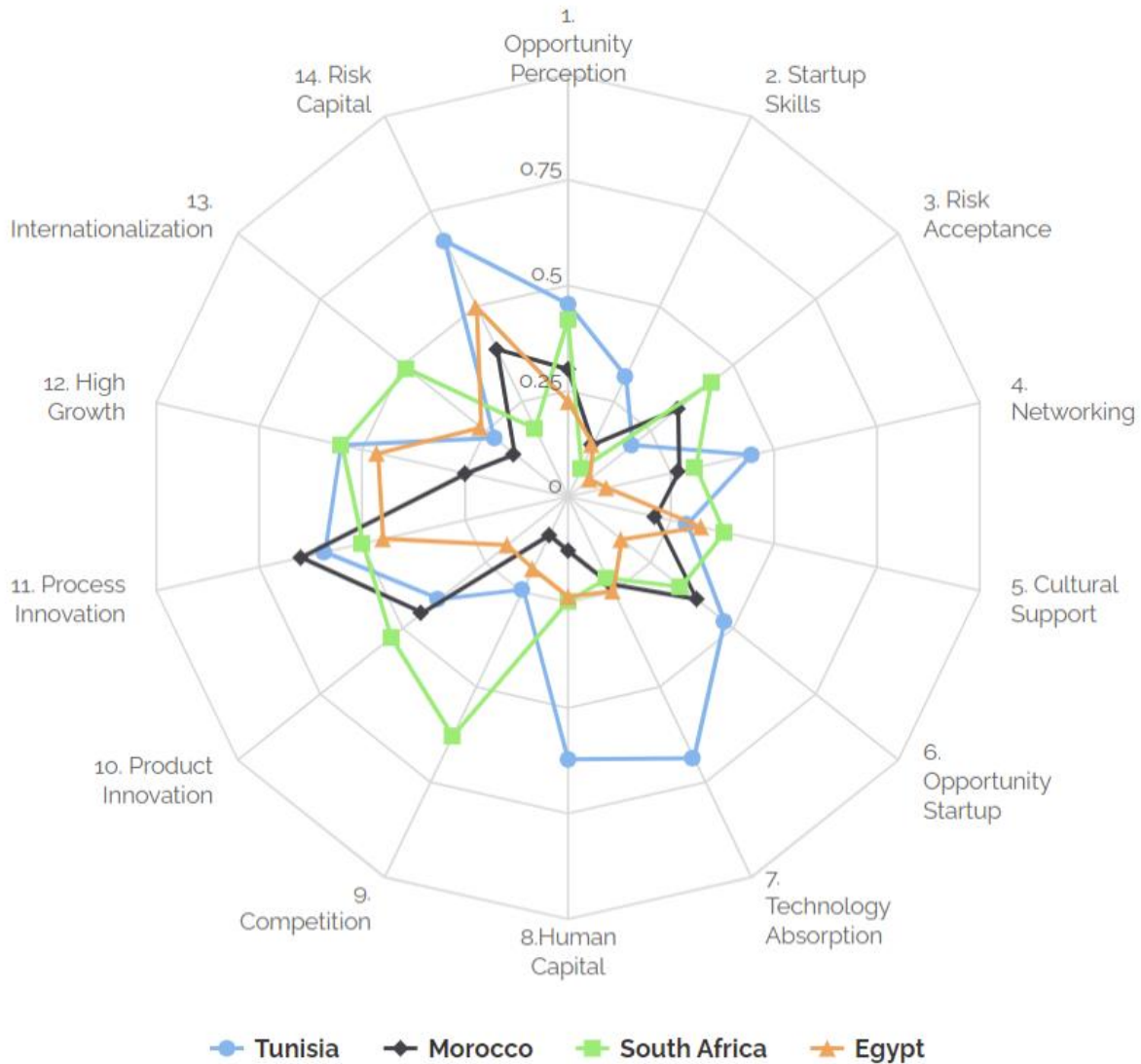
In 2018, Tunisia was ranked 40<sup>th</sup> worldwide according to the Global Entrepreneurship Index<sup>60</sup>. The comparison was also made with “competitor” countries in Africa and showed that Tunisia possesses undeniable assets in human capital and capacity to assimilate technologies. This is not at all surprising considering the long-term investment made in education and higher education. Nevertheless, to stay in the global race for talents, Tunisia needs to improve its ranking in the Programme for International Student Assessment (PISA) index and stem the brain drain, an old, but of late, also an accelerating phenomenon<sup>61</sup>. This ambition is achievable as Tunisia has traditionally had commendable results in the number of scientific publications in respected international journals and has connections with international labs that can allow it to catch up with Morocco or South Africa in terms of innovation and internationalization of economic activities. Consequently, the resilience of Tunisia's assets in terms of technical and scientific competencies is real, and brings the country many competitive advantages.

#### Graph 6. Global Entrepreneurship Index, 2018

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<sup>60</sup><https://thegedi.org/global-entrepreneurship-and-development-index/>

<sup>61</sup><https://journals.openedition.org/hommesmigrations/2891>



Source: 2019 Global Entrepreneurship Index

Furthermore, Tunisia’s control over its demographics is unique feat in Africa and the Arab and Muslim world. With a fertility rate close to that of some developed countries, the country offers women better access to active professional lives and the possibility of strengthening the labor market. For future generations, such a context creates less pressure on public services, notably, education and healthcare. Still, the country may suffer more and more from the aging of the population and the inadequacies of its migratory policies compared to its needs. For example, the Tunisian private higher education system attracts students from multiple African countries but struggles to give them opportunities, including in sectors in need. The demographic variable is truly a factor of resilience which requires public policy action to reach its true potential in economic development.

Lastly, Tunisia can learn valuable lessons from the National Upgrade Program (PMN)<sup>62</sup>. The 8<sup>th</sup> Enquiry into the achievements of the PMN<sup>63</sup> (March 2017) states that the majority of benefiting companies are satisfied with the mentoring provided to reach their objectives. In addition to improving the pertinence of the strategy, commercial performance, especially in export growth, as well as in competitive competencies. A study by ITCEQ<sup>64</sup> in turn confirms that the PMN strongly contributed to the digitalization of manufacturing companies. This digitalization was certainly unequal since it profited offshore companies, medium-sized and big companies, and those based in the coast more than any other firms. Expanding the upgrade rationale to a larger group of companies and targeting SMCs based in the interior regions could have a strong snowball effect as in a more homogeneous distribution of the capacities of economic resilience.

## **5.2. Impact, policy responses, lessons and opportunities from the COVID-19 pandemic**

According to an OECD report<sup>65</sup>, the level of industrial production and exports in Tunisia started growing in the 4<sup>th</sup> quarter of 2021. The return of international economy activity with a strong demand for goods and services opened the door for Tunisian exporters to catch up on what had they lost. Additionally, transactions from the Tunisian diaspora beat the record in 2021. According to the Tunisian Central Bank's data, these transactions reached nearly 6.2 billion dinars by the end of September 2021, compared with 4.4 billion dinars during the same period of 2020 and 3.8 billion dinars in 2019. In dollars, remittances since the beginning of 2021 rose to around US\$2.2 billion or 1.9 billion euros. In percentage of GDP, they reached the historic level of 5.5 percent of GDP, against 2.7 percent in 2010. The diaspora's transfers, therefore, represent more than three times the revenue from tourism, which only reached the sum of 1.8 billion dinars by September 30<sup>th</sup> 2021.

During the international surge in teleworking, new opportunities started to interest more and more emerging countries. Some created specific visas or immigrant status to attract Western talents who were working 100 percent from home (for example, the United Arab Emirates). These statuses stabilize the presence of foreigners in the host country, their financial flow, and local consumption, much better than tourists. The International Organization of Tourism predicts that world tourism levels of 2019 will not be reached again before 2025, at best. With the capital Tunis being ranked as one of the cheapest cities in the world, Tunisia has a considerable asset to reposition itself as a sunny destination and close enough to Europe for long-term expatriation.

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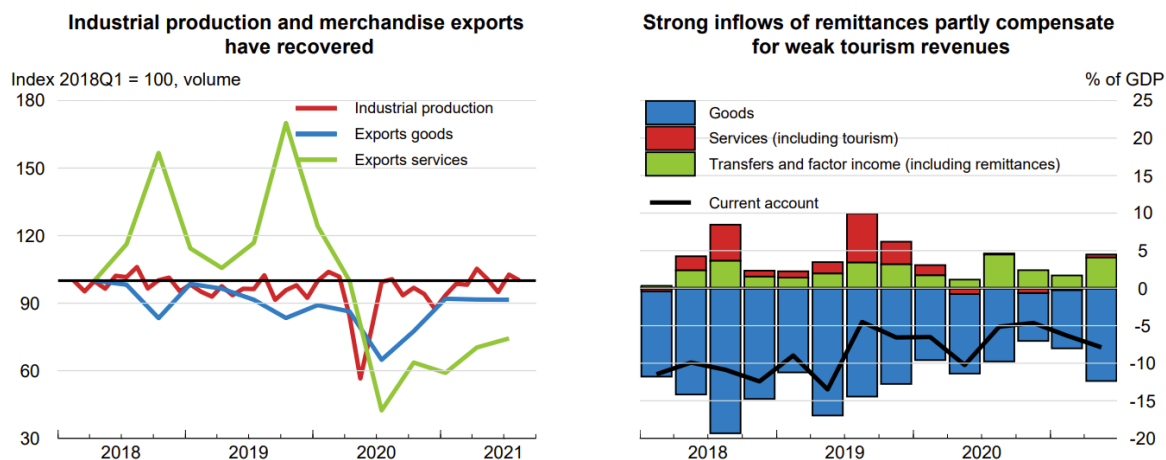
<sup>62</sup> The PMN is a national program of support for the manufacturing industry in Tunisia. It was initiated after the free trade agreement with the European Union : <http://www.pmn.nat.tn/>

<sup>63</sup> [http://www.pmn.nat.tn/wp-content/uploads/2018/01/8\\_Enquete\\_PMN\\_mars\\_2017.pdf](http://www.pmn.nat.tn/wp-content/uploads/2018/01/8_Enquete_PMN_mars_2017.pdf)

<sup>64</sup> <http://www.itceq.tn/files/innovation-Tic/PMN-digitalisation-industrie-tunisienne.pdf>

<sup>65</sup> OECD ECONOMIC OUTLOOK, VOLUME 2021 ISSUE2: PRELIMINARY VERSION : [https://read.oecd-ilibrary.org/view/?ref=1118\\_1118143-uo2kgexebr&title=Country-profile-Tunisia-OECD-Economic-Outlook-Volume-2021-2&\\_ga=2.248069839.99705201.1638657500-1437068969.1635235264](https://read.oecd-ilibrary.org/view/?ref=1118_1118143-uo2kgexebr&title=Country-profile-Tunisia-OECD-Economic-Outlook-Volume-2021-2&_ga=2.248069839.99705201.1638657500-1437068969.1635235264).

**Graph 7. Industrial production, merchandise exports, remittances and tourism revenue, 2018-Q2 2021**



Source: OECD

With the emergence (as this report is being written) of the Omicron variant of COVID-19, it is clear that the pandemic's cycle is not yet over. Nevertheless, Tunisia can profit from the following opportunities:

- **Multiplying the number of jobs in export sectors** – this will help meet the rise in international demand and enable better control over the commercial balance deficit, and replenish foreign currency reserves, which are critical for debt.
- **Increasing remittances and other support from the Tunisian diaspora** – efforts can be made to stimulate a higher volume of remittances and homeward investment from the Tunisian diaspora, addressing the needs of local families, productive investment, and public debt.
- **Sustainable transformation of the tourism sector** – through reestablishing the affordability of preferred destinations to attract new clients, namely senior and other officials, and exiting the category of low-cost destination for short stays by raising the quality of facilities and moving into several months-long periods of stay.

To conclude, exports, the Tunisian diaspora and opportunities for the transformation of the tourism sector can be the new foundations of Tunisia's post-pandemic growth.

According to a strategic study by the ITES<sup>66</sup>, Tunisia could profit from at least two other opportunities linked to the post-pandemic context:

<sup>66</sup>« Etude stratégique : COVID-19, analyse et priorisation d'actions sectorielles », ITES / Fondation Konrad Adenaur, M. Gassab / A. Belhaj, 2020.

- Relocating a part of the value chain, or at least repositioning them close to production and consumption centers. In fact, logistic difficulties linked to the rebound in economic activity at the end of 2020 and during all of 2021 pushed buyers to seek solutions in proximity, in place of seeking supplies from China, for example.
- The decarbonization of processes in the value chains, arising from the desire of Europeans industrialists to relocate their production where certain commitments regarding consumption and green energy, the reduction in reliance on fossil energy, and recycling capacities are more important.

In taking into account these new needs, Tunisia can be an excellent candidate for proximity-seeking relocation of automobile, aeronautics, and electronics industries. They are, in fact, sectors where robotization and digitalization are very advanced, which would have a positive effect on technological value addition as well as productivity of Tunisia's manufacturing sector.

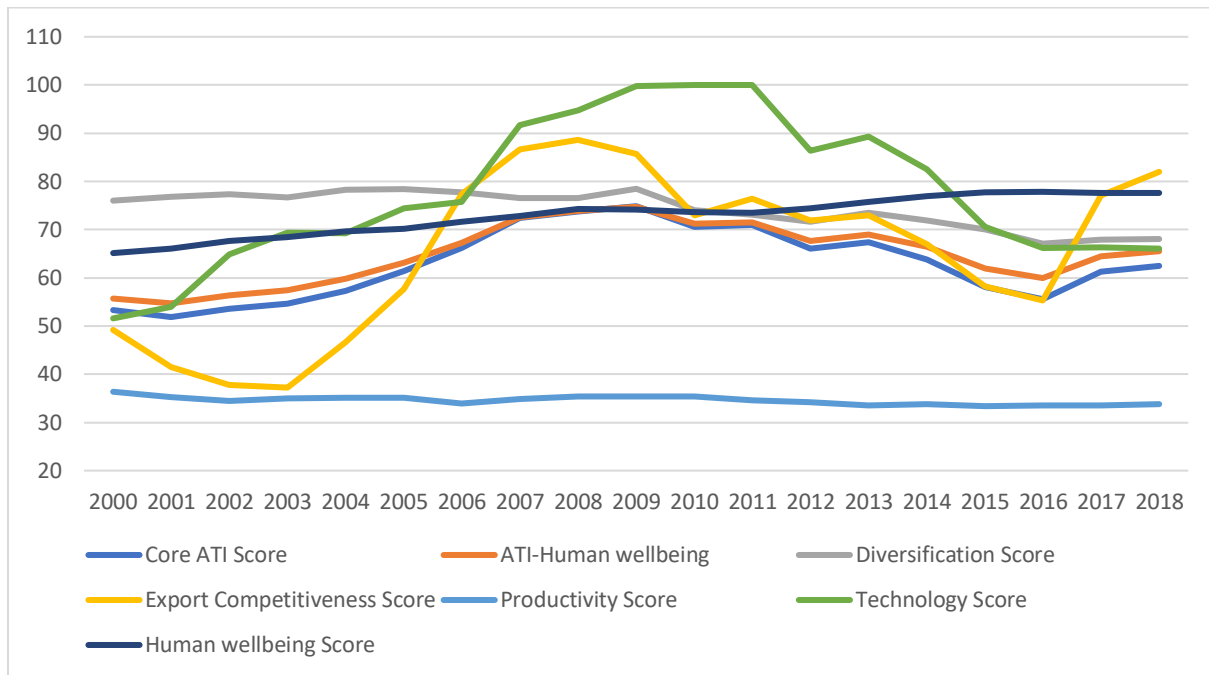
### **5.3. Policies, strategy and specific interventions to enhance economic transformation**

A study of the ATI dimensions and the indicators of structural transformation between 2010 and 2018 show the contrasting evolution in the foundations of Tunisia (see Graph 8). Hence, the ATI indicator of exports (moving average of the value of manufactured exports in relation to GDP compared with the worldwide value of manufactured exports compared with world GDP) has improved by 13 percent in 10 years. This supports the idea that the resilience of manufactured product exports remains a key asset for the Tunisian economy. On the other hand, the rolling average of the added value of manufacturing by asset eroded by 34 percent between 2010 and 2018 and that of added value of manufacturing from GDP regressed by 10 percent over this same period. Manufacturing shows strong signals of weakness while its export potential is very strong.

Other notable changes include those of the technology indicators, which saw a 34 percent decline in value in 10 years, particularly due to a decrease in the share of technology in overall production activities, while the technological part in exports grew. These elements confirm a deindustrialization of Tunisia despite its strong capacity to export a growing part of technological content.

From a structural point of view, the ATI productivity indicator's minor decline of 5 percent in 10 years emanates essentially from the underperformance of the added value by asset in the manufacturing sector, where even the indicators for the agricultural and services sectors are improving. All these elements indicate that exporting manufacturing industries are an important key to exiting the crisis for Tunisia through not only improving the factors of productivity, but also the technological content.

**Graph 8. Evolution of the ATI and ACET indicators from 2000 to 2018**



Source: ACET

#### 5.4. Policies to ensure a rapid, inclusive and resilient economy

The challenge facing Tunisia during the 2002-2010 decade was mainly the unequal distribution of wealth and economic opportunity between regions and social classes. Even if the quinquennial development plan was a good instrument for planification, no real structural changes prepared the economy to face the consequences of the 2008 global, financial crisis. For long time, local investors gave priority to profitable businesses in the short term, with low focus on innovation and R&D. Corruption and bureaucratic obstacles inhibited long-term investment. The state also poorly managed relations with labor unions, concentrating negotiations at the highest level of the political system and preventing entrepreneurs, investors and even general managers of state companies from adapting them to their own context. Nevertheless, the Tunisian economy was quite resilient, with public debt at less than 40 percent of GDP, a public deficit of around 3 percent, Tunisia joined the WTO, then signed off on a free trade agreement with the EU.

But with 600,000 companies, mainly micro-sized with 1 or 2 employees, job creation was not enough to respond to a growing and youthful workforce. A poor employment market, growing social tensions and multiple demands for more freedom of speech led to the revolution of 2011.

At this moment in the history of Tunisia, the overall governance of the country (state organization, industrial relationships, investment levels, etc.) was poor and unable to face social challenges. The post-2011 period was mainly dedicated to rebuilding severely weakened political institutions that aggravated already existing governance issues. Implementing balanced governance respecting economic rights enshrined in the Constitution and the necessary sources of revenues needed to support them, is an important first step. It means that the Constitution of 2014 needed amendments to be aligned with a realistic economic ambition.<sup>67</sup>

The modernization of governance of economic policies has suffered from political infighting, differences in point of view between the government and the central bank, the fiscal administration and corporations (not to mention accountants, doctors, lawyers, etc.) and the absence of an Economic and Social Council. A new organization of public powers in economic matters is, then, necessary to make concrete any of the propositions of an economic or sectoral nature<sup>68</sup>.

The return to active sectorial policies, where the state retakes its role of strategic planning to put the country on the path of innovation, emerging industries, repositioning manufacturing, agriculture, and tourism within the international value chains. These elements are key since the state cannot commit instead of private economic actors and must prepare for them a modern and dynamic framework and then allow for them margins of maneuver in execution<sup>69</sup>. This will bear fruit in growth, employment, and tax revenue.

Mastering the imports and trade balance, including time-to-market issues related to maritime logistics and bureaucratic Customs procedures are important. In addition, an intelligent commercial policy, with an activation of the safeguards and anti-dumping clauses with respect to the international commitments of Tunisia within WTO and EU are key to solving the trade deficit.

Because of their impact on the agriculture sector and the food security, climate change and environmental issues are major threats for Tunisia. Disruption of agriculture seasons have an impact on rural incomes, and they could inflame social distress and accelerate population disequilibrium between regions. Billions are needed to finance greenhouse gas reduction for the next decade. However, this period of trade and budgetary deficits and the rising external

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<sup>67</sup>Confirmed by Dr. Achraf AYADI, economic expert and banker during February 25<sup>th</sup> High-level Validation Workshop for this Tunisia country report.

<sup>68</sup>Madam LobnaJ ERIBI, former Minister in charge of Major Projects, stated during the validation workshop the need to reorganize public administration and to rethink the government's role and improve its efficiency, and therefore accelerate the country's economic transformation. She insisted on the crucial role the National Social Dialogue Council (NSDC-CNDS) – created in 2018 – could play in facilitating the social negotiations and contributing to socioeconomic stabilization. In addition, M. Habib KARAOU LI, Chairman & CEO of CAP Bank, elucidated that reforming the public administration is senseless. He also stressed on the importance of limiting and shrinking its scope instead

<sup>69</sup>M. Ali KOOLI, former Minister of Economy, pointed out during the validation workshop that long-term vision is required for every sector and that 3-5 year plans are no longer viable.



debt are limiting the ability to manage the pressure on resources (especially water scarcity) and to develop renewable energy capabilities (to cover the energy deficit). This is a voluntary policy that political stakeholders need to set as a long-term commitment of the country, whatever the government is.

Despite the significant progress of Tunisia in several fields related to technology adoption and share of technology in manufacturing exports, many difficulties and obstacles persist. E-commerce is progressing slowly, and electronic payments need wider adoption by the population. Local startups are performing well but the local market is too tight to ensure sufficient revenue and growth perspectives. The ability of the innovation ecosystem to attract foreign investors and to benefit from foreign money inflows needs deep reforms, particularly related to the exchange rate and the liberalization of current accounts in foreign currencies by individuals and small businesses<sup>70</sup>.

To collect the necessary resources, the Tunisian state needs to deal with a very tight fiscal space. Activating policies of relaunching growth and public investment (especially in transport infrastructure), attracting foreign direct investment, and accelerating state enterprise reforms will permit, among other things, boosting revenues of economic agents and lowering the financial burden on public finances.

At the heart of any national project, human capital remains a key challenge. The rising empowerment of women in a conservative society like Tunisia, with a significant presence at all levels of the education system, needs to be supported carefully. Investment in human capital and innovation, with a special focus on linking R&D activities with companies, improving their competitiveness through more structured transfer of technologies, and the implementation of a national innovation governance system which has to be operational (and not bureaucratic).

Lastly, there cannot be structural economic reforms in such a complex historic moment for Tunisia without a social mobilization that puts education at the heart of the project, saving the retirement system, and giving hope to unemployed graduates. It is a social project that needs a broad consensus, which should give energy and the necessary support to reforms that may not be always popular or immediately operational.

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70M. Bilel SAHNOUN, CEO of Tunis Stock Exchange (BVMT) said during the validation workshop that Tunisia missed many opportunities in its transformation process such as digitalization of public administration and the inability of Tunisia to reposition itself and benefit from its geographic and economic proximity to Europe in the redistribution of global value chains.

## References

- African Development Bank (2020), Report of 2019: Africa Regional Integration Index underlines integration as key to building more resilient economies (in French), May 2020.
- Alaya, Hachemi (2018) : *Le modèle Tunisien : refonder l'économie pour consolider la démocratie*. Editions ARABESQUES.
- Anadolu Agency (2021), Brain drain: The Tunisian elite destined for export (in French), by H. Cherni, July 15<sup>th</sup>, 2021, <https://www.aa.com.tr/fr/afrique/exode-des-cerveaux-l%C3%A9lite-tunisienne-destin%C3%A9e-%C3%A0-l'exportation-/2305365#>.
- BDO Tunisia (2018), Decree 417-2018, a Sesame for improving the business environment (in French), May 30<sup>th</sup>, 2018, <https://www.bdo.tn/fr-fr/publications/le-decret-417-2018,-un-sesame-pour-l%E2%80%99amelioration-de-l%E2%80%99environnement-des-affaires>.
- Ben Jelili, Riadh (2016) : *Les réformes économiques en Tunisie ; une urgence en quête de leadership*, SUD Editions, Tunis, Tunisie, avril.
- Boughzou, K. (2016), School Dropout in Tunisia: Status, characteristics and perspectives (in French), in *L'éducation en débats: analyses comparées*, Vol. 7, pp. 47-58
- CUA/OCDE (2019), *Africa's Development Dynamics 2019 : Achieving Productive Transformation*, Editions OCDE, Paris/CUA, Addis Ababa.
- EMNES (2019), Over-Education in the Tunisian Labor Market: Characteristics and Determinants, Euro-Mediterranean Network For Economic Studies, W. Kthiri, April.
- European Union Commission (2021), Joint Report of the sub-committee European Union-Tunisia on commerce, industry and services and of the sub-committee on internal market (in French), European Commission, March 3<sup>rd</sup>, 2021, [https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc\\_159602.pdf](https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc_159602.pdf).
- Econ4Tunisia (2019), Blue Book: Saving the economy, for a successful democratic transition. Directed by H. Ben Hammouda, A. Zouari and E. Jouini.
- GEDI (2019), 2019 Global Entrepreneurship Index, <https://thegedi.org/global-entrepreneurship-and-development-index/>.
- IEMed (2017) : *Transformation in Tunisia: The First Five Years*. Join Policy Study.
- IRENA (2018), Avoided Emissions Calculator, <https://www.irena.org/Statistics/View-Data-by-Topic/Climate-Change/Avoided-Emissions-Calculator>.
- ILO (2013), Orientation Note n° 3: Creating a fiscal space for the Labor Public Program, [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_565523.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_565523.pdf).
- IMF (2021), Tunisia: Staff Report for the 2021 Article IV Consultation, February 2<sup>nd</sup>, 2021.

Inkyfada (2021a), Living on less than 5 dinars per day: cartography of poverty in Tunisia (in French), August 18<sup>th</sup>, 2021, <https://inkyfada.com/fr/2021/08/18/vivre-moins-5-dinars-jours-carte-pauvrete-tunisie/>.

Inkyfada (2021b), Why do women perform better at school than in the labor market in Tunisia? (in French), by S. Hanachi, September 10<sup>th</sup>, 2021, <https://inkyfada.com/fr/2021/09/10/inegalites-hommes-femmes-ecole-travail-tunisie/>.

ITCEQ (2016), Notes and analyses n°44: Evolution of the labor market in Tunisia 2006-2015 (in French), by W. Kthiri.

ITCEQ (2017), Notes and analyses n°55: Energy Policy of Tunisia (in French), by F. Chebil, May.

ITCEQ (2019a), Notes and analyses n°01: Qualification mismatch in Tunisia and determinants of under-employment (in French), by W. Kthiri.

ITCEQ (2019b), Working Paper n°57: Contribution of informal economy (in Arabic), by S. Boussida, December.

ITCEQ (2020a), Notes and analyses n°61: Fiscal pressure on salaried labor in Tunisia (in French), by B. Jebali, January 2020.

ITCEQ (2020b), A worrying public debt: What to do?, Presentation in collaboration with the Association of Tunisian Economists, by M. Haddar and Z. EL Kadhi, March 4<sup>th</sup>, 2020.

ITCEQ (2020c), Report: External competitiveness of the Tunisian economy (in French), by R. Hadhri, December.

ITCEQ (2020d), Productivity Report n°4: Retrospective 1961-2020 (in French), by M. B. Chaaben, November

ITCEQ (2020e), Report: Knowledge economy – Positioning of Tunisia in international rankings (in French), by M. Nasri, N. Koubaa and R. Ben Salhine, December.

ITCEQ (2021a), Report: Tunisia, the e-Gov in digital era (in French), by N. Koubaa, April 2021.

ITCEQ (2021b), Economic Freedom Index 2020: Main results analysis (in French), by H. Mehouchi, October 2020.

ITCEQ (2021c), Notes and analyses n°63: Role of maritime transport sector in international trade in Tunisia (in French), H. Ayari, December.

ITCEQ (2021d), Notes and analyses n°64: Sectorial behavior of Tunisian imports (in French), by S. Chaabani, December 2020.

ITCEQ (2021e), Notes and analyses n°66: Evaluation of the PMN-industry upgrade and digitalization level of the Tunisian industry (in French), by A. Ben Khalifa.

ITES (2020), Strategic study: COVID-19, analysis and prioritization of sectoral actions, ITES and Konrad Adenauer Foundation, by M. Gassaband A. Belhaj, 2020.

ITU (2017), Information and Communications Technology Development Index, ITU, <https://www.itu.int/net4/ITU-D/idi/2017/index.html#idi2017economycard-tab&TUN>.

Maghreb Economic Forum and Konrad-Adenauer-Stiftung (2017): *Smart Development Strategy for the Maghreb Structural Reform, a New Role for the State, Regional Integration*.

Ministry of Environment of Tunisia (2020), Climate evolution and climate projections in Tunisia (in French), May 25<sup>th</sup>, 2020, <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/evolution-du-climat-et-projections-climatiques-en-tunisie>

Ministry of Environment of Tunisia (2020), Synthesis of the vulnerabilities and priority measures to adapt to climate change in Tunisia (in French), May 25<sup>th</sup>, 2020, <http://www.environnement.gov.tn/index.php/fr/environnement-en-tunisie/les-changements-climatiques/synthese-des-vulnerabilites-et-des-mesures-prioritaires-pour-l-adaptation-aux-changements-climatiques-en-tunisie>.

Ministry of Equipment and Housing of Tunisia (2021), <http://www.mehat.gov.tn/>.

Ministry of Finance of Tunisia (2021), Public finance database, <http://www.finances.gov.tn/fr/les-indicateurs/ressources>.

OECD (2019), Africa's Development Dynamics 2019: Achieving Productive Transformation, November 5<sup>th</sup>, 2019.

OECD (2021), OECD Economic Outlook: Tunisia, Vol. 2021, Issue 2, Preliminary version.

Open Knowledge Foundation (2016), Global Open Data Index: Tunisia, <https://index.okfn.org/place/tn/>.

Oxford Insights (2020), Government Artificial Intelligence Readiness Index: Tunisia, <https://www.oxfordinsights.com/government-ai-readiness-index-2020>.

PôleDjerid (2021), Energie cluster, [https://www.poledjerid.com/specialites-du-pole.php#Cluster\\_energie](https://www.poledjerid.com/specialites-du-pole.php#Cluster_energie).

PMN (2017), PMN: Assessment, achievements and prospects, Results of the 8<sup>th</sup> enquiry, March 2017, [http://www.pmn.nat.tn/wp-content/uploads/2018/01/8\\_Enquete\\_PMN\\_mars\\_2017.pdf](http://www.pmn.nat.tn/wp-content/uploads/2018/01/8_Enquete_PMN_mars_2017.pdf).

Presidence of the Government of Tunisia (2018), Synthesis report on the reform of state-owned companies (in French).

Reuters (2021), COVID-19 Tracker, <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/fr/countries-and-territories/tunisia/>.

Samet K. (2014), The brain drain in Tunisia: Evolution and effects on the Tunisian economy (in French), in *Hommes & Migrations*, Vol. 1307, pp. 123-128.

Speedtest (2021), Speed test Global Index 2021: Tunisia, November 2021, <https://www.speedtest.net/global-index>.

The Heritage Foundation (2021), 2021 Index of Economic Freedom: Country rankings, <https://www.heritage.org/index/ranking>.

- The Big Deal (2021), Total funding raised by start-ups in Africa in 2021, December 10<sup>th</sup>, <https://thebigdeal.substack.com/>.
- TWB (2018), Logistics Performance Index, World Bank, 2018, <https://lpi.worldbank.org/international/aggregated-ranking>
- UN (2020), E-Government-wide and E-Participation index, Department of Economic and Social Affairs, Division for Public and Digital Government, <https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/175-Tunisia>.
- UNCTAD (2020), The UNCTAD B2C E-Commerce Index 2020 – Technical Notes on ICT for Development n°17, [https://unctad.org/system/files/official-document/tn\\_unctad\\_ict4d17\\_en.pdf](https://unctad.org/system/files/official-document/tn_unctad_ict4d17_en.pdf).
- UNDP (2019), NAMA: Support to the solar plan of Tunisia (in French), UNDP Tunisia, [https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d\\_appui-au-plan-solaire-tunisien/](https://www.tn.undp.org/content/tunisia/fr/home/projects/nama-d_appui-au-plan-solaire-tunisien/).
- UNDP (2021), National workshop for the presentation of the determined national contribution of Tunisia (in French), October 19<sup>th</sup>, UNDP Tunisia, 2021, <https://www.tn.undp.org/content/tunisia/fr/home/presscenter/articles/2021/atelier-national-pour-la-presentation-de-la-contribution-determi.html>.
- UNFCC (2021), Accelerating the decarbonization of the supply chain, June 2<sup>nd</sup>, 2021, <https://unfccc.int/fr/news/accelerer-la-decarbonisation-de-la-chaine-d-appvisionnement>.
- UNICEF (2015), National report on out-of-school children and dropout rates in Tunisia (in French), by F. Jarray and M.L. Fornara, UNICEF Tunisia, April.
- WEF (2019), The Global Competitiveness Report 2019, by K. Schwab, World Economic Forum, [https://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf).
- WIPO (2021), Global Innovation Index 2021: Tunisia, [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021/tn.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021/tn.pdf).
- WRI (2018), These 20 Water-Stressed Countries Have the Most Solar and Wind Potential, by T. Luo, May 10<sup>th</sup>, 2018, <https://www.wri.org/insights/these-20-water-stressed-countries-have-most-solar-and-wind-potential>.

# **A New Policy Agenda To Build Resilient Economies in Africa in the Post-COVID-19 Era**

Country case study:  
**ZAMBIA**

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**DRAFT REPORT**

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## 1. Introduction

Sub-Saharan Africa entered the 21<sup>st</sup> century with most economies experiencing accelerated growth. Overall, real GDP growth in the sub-region averaged rates of 4.9 percent per year over the 2000-2004 period, up from 3.4 percent in the last five years of the 1990s (World Bank, 2022). The growth trajectory remained buoyant during the subsequent decade up to 2015. However, from 2016 onward, sub-Saharan Africa faced increasing growth deficits in many economies and as populations continued to grow steadily, per capita incomes started to gradually decline. Economies in the sub-region now faced not only an intermittent growth challenge, but also serious deficits of in-built resilience and economic transformation (ACET, 2014). Therefore, taking the case of Zambia, this report explores various aspects of the success and failure factors in economic growth, transformation and resilience. A key lesson from the Zambian case is that the macroeconomic stabilization and structural adjustment policies coupled with business environment reforms and private sector development efforts that started in the 1990s and carried on during 2001-2010 were important for establishing macroeconomic stability and positive economic growth.

However, the policies and reforms were neither sufficient for locking in the growth rates experienced in the past or building resilience nor did they achieve the envisaged poverty and inequality reduction outcomes. Instead, new economic growth challenges emerged including from exogenous shocks like COVID-19, while outstanding issues persisted, such as limited inclusive and equitable growth, weak poverty and inequality reduction outcomes and overall limited traction on economic transformation and resilience. This report therefore ultimately postulates a new policy agenda towards re-establishing growth and building resiliency in the Zambian economy in the post-COVID-19 era. This introductory section offers a summary of recent trends in Zambia's economic development over the 2000-2020 period.

### 1.1. Overall and per capita growth

Zambia's economic growth over the two decades to 2019 averaged 5.9 percent per year, although this was not uniform over time. While the COVID-19 pandemic brought a contraction not experienced since 1994 (during the post-1991 liberalization, privatization and public sector reform era), the recent downturn occurred in a context where the economy was already showing serious growth weaknesses.

Initially, growth had accelerated from an annual average of 5.5 percent in 2000-2004 to 8.1 percent over the subsequent five years, 2005-2009 (Table 1.1) as the country reaped the benefits of the macroeconomic stabilization and structural adjustment policy measures implemented during the 1990s. The sustained growth episode between 2000-2010 was



therefore in the context of persistent application of prudent and conservative macroeconomic (fiscal and monetary) policies coupled with deep-rooted structural adjustments (including public sector reforms, economic liberalization and privatization) as well as business environment and competitiveness reforms and private sector development programs from the early 1990s under the Movement for Multi-party Democracy (MMD) government.

**Table 1.1. Summary economic development indicators, 2000-2020**

	2000-2004	2005-2009	2010-2014	2015-2019	2020
<b>Growth</b>					
Real GDP growth rate (annual avg. % change)	5.5%	8.1%	6.6%	3.1%	-2.8%
Real GDP per capita growth rate (annual avg. % change)	2.8%	5.2%	3.4%	0.1%	-5.6%
<b>Consumption</b>					
Household consumption expenditure (incl. NPISH) (% of GDP)	78.5%	58.2%	54.0%	47.8%	n.a.
General government final consumption expenditure (% of GDP)	6.8%	9.5%	11.8%	14.2%	n.a.
<b>Savings and investment</b>					
Total investment (% of GDP)	35.1%	31.9%	32.7%	40.3%	34.5%
Gross national savings (% of GDP)	24.3%	32.5%	36.5%	38.7%	36.0%
<b>Fiscal and debt situation</b>					
Govt. revenue (% of GDP)	22.1%	22.0%	17.7%	18.9%	20.0%
Govt. expenditure (% of GDP)	25.5%	19.9%	21.5%	27.2%	34.0%
Primary net lending/borrowing (also referred as primary fiscal balance) (% of GDP)	-1.5%	3.8%	-2.3%	-3.7%	-7.3%
Net lending/borrowing (also referred as overall fiscal balance) (% of GDP)	-4.6%	2.2%	-3.8%	-8.1%	-12.9%
Govt. gross debt (% of GDP)	188.2%	32.5%	25.7%	72.2%	117.8%
<b>External economy</b>					
Goods exports (% of GDP)	24.1%	29.5%	37.7%	32.4%	41.3%
Goods imports (% of GDP)	28.4%	24.0%	29.3%	30.2%	24.7%
Services exports (% of GDP)	6.3%	4.5%	3.1%	3.9%	2.9%
Services imports (% of GDP)	8.2%	4.8%	5.4%	6.3%	5.4%
Current account balance (% of GDP)	-12.0%	-0.5%	3.4%	-1.7%	12.6%
FDI inward flow (% of GDP)	5.4%	5.7%	6.6%	3.5%	-0.9%
Note: n.a.. = not available					

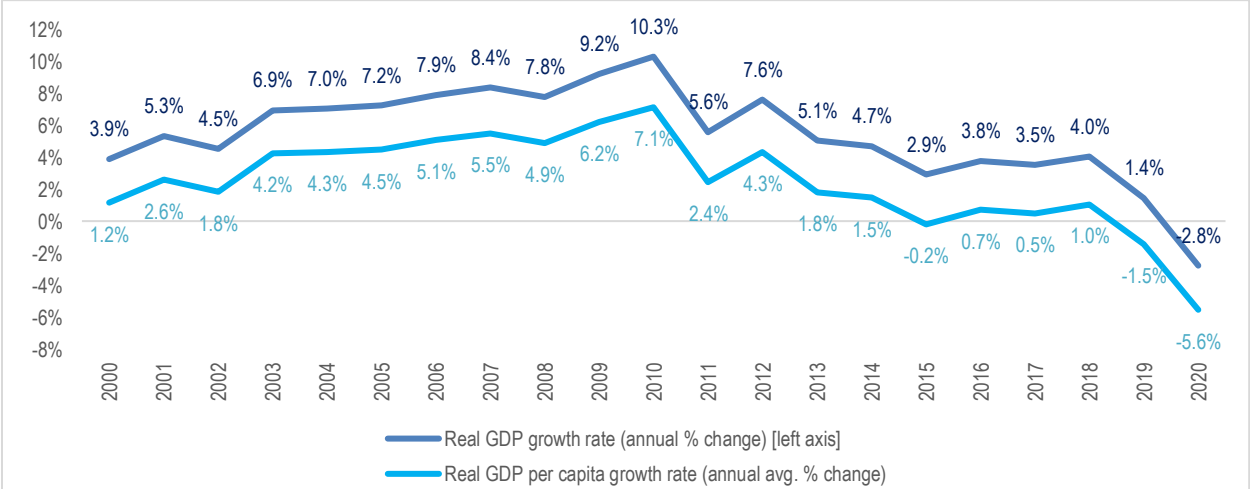
Source: Constructed from Zamstats, Bank of Zambia, IMF World Economic Outlook, and UNCTAD databases

However, as the political economy landscape changed with the coming into office of the Patriotic Front (PF) government in September 2011, the economic development paradigm and policy space changed. Under the PF, Zambia took on a more statist slant to economic governance, policy making and conducting business, with, concomitantly, the emergence of an increasingly authoritarian political system (Fraser, 2017; Brosché et al., 2020). The ideology of private sector-led growth and the government taking a back seat started to fade; subsequently, growth rates began to decline under the new paradigm.

The new economic paradigm under the PF government assumed that Zambia’s prospects for growth and poverty reduction could best be achieved through an aggressive infrastructure development drive and through the public sector getting substantively involved in business and economic activities in the country. The period 2011-2020 was thus generally underpinned by prolonged fiscal expansion and fiscal laxity, debt accumulation, irrational expenditures and limited attention to private sector development and business environment reforms (Resnick and Thurlow, 2014).

These domestic policy misalignments and failures were exacerbated by occasional exogenous shocks such as a partial drought in 2014/2015, which resulted in food and hydroelectric power shortages in 2015 and knock-on inflationary and exchange rate instabilities in 2016. Figure 1.1 illustrates the steady real growth and per capita real growth decline, which set in post 2011. Real GDP growth in 2015 slowed to a low of 2.9 percent and per capita real GDP contracted by 0.2 percent. With the exogenous shock of the COVID-19 pandemic in 2020 (combined with domestic policy failures), real GDP growth contracted by 2.8 percent and per capita real GDP contracted by 5.6 percent (Figure 1.1).

**Figure 1.1. Growth in real GDP and real GDP per capita, 2000-2020**

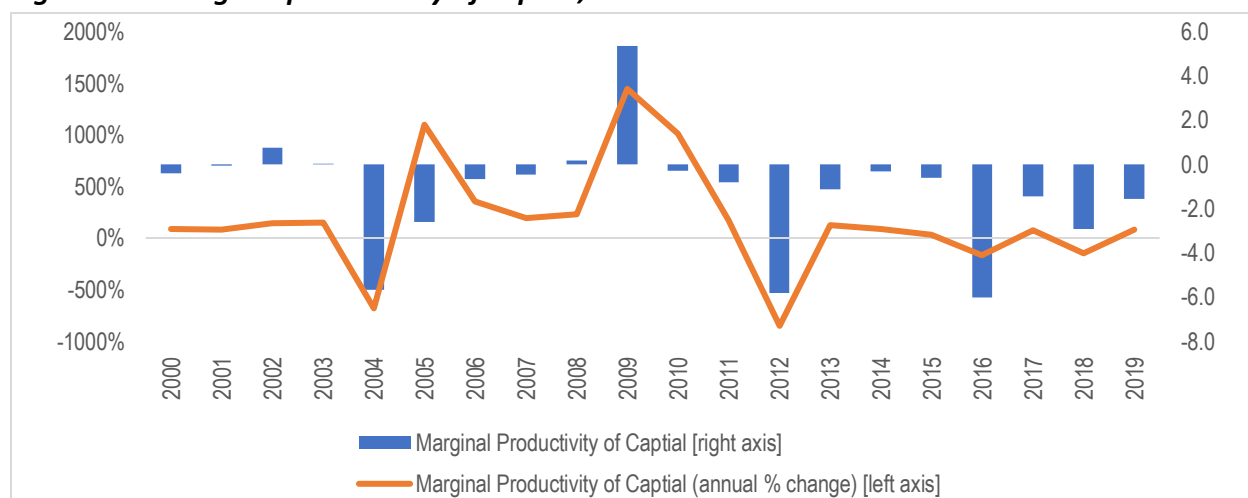


Source: Constructed from Zamstat and IMF WEO data

## 1.2. Savings and investment trends

As presented in Table 1.1, both savings and investment remained relatively high over the entire reference period. Savings remained above 30 percent of GDP per year on average throughout the reference period, except during 2000-2004 when it averaged 24.3 percent of GDP. On average, investments were also above 30 percent of GDP per year over the reference period, reaching 40.3 percent of GDP per year on average during 2015-2019. The period 2015-2019 is also when real GDP growth was lowest, suggesting that the heightened total (public and private, including foreign direct) investments in that period were not growth enhancing. In fact, the change in the marginal productivity of capital – where capital is measured as gross fixed capital formation – declined from 664.9 percent per year on average over 2005-2009 to 108.6 percent per annum on average in 2010-2014; in the 2015-2019 sub-period, the marginal productivity of capital contracted by 24.4 percent per year on average (Figure 1.2).

**Figure 1.2. Marginal productivity of capital, 2000-2019**



*Note: the Marginal Productivity of Capital ( $MP_K$ ) was calculated as the annual change in national output (proxied by current GDP in US\$) per unit change in capital (proxied by current Gross Fixed Capital Formation in US\$).  $MP_K$  shows by how much GDP changes when capital changes by one unit; annual changes in the  $MP_K$  were calculated as:  $[(MP_{Kt} - MP_{Kt-1})/MP_{Kt-1}] \times 100$ .*

*Source: Constructed from UNCTADStats data*

Investments usually take time to pay off, but as seen in Figure 1.2, the changes in the marginal productivity of capital were low, flat and in many instances negative during 2011-2019. This is corroborated by the analysis of the Zambia Institute for Policy Analysis and Research (ZIPAR, 2018) who said of Zambia's Incremental Capital-Output Ratio (ICOR) that during 2005-2010, Zambia made efficiency gains in generating GDP based a total investment and that in a reversal of fortunes, from 2011, the economy made efficiency losses in capital per unit of GDP;. ZIPAR

concluded that “investments of the recent past delivered relatively less growth-enhancing capital formation. As production efficiencies declined, so did GDP growth”. Thus, the quality of investments may have been poor over the latter part of the reference period. In particular, public investments in infrastructure (roads, airports, energy installations, schools and health facilities, public administration buildings, etc.) during most of 2011-2020 were typically made without project appraisals, feasibility studies, economic impact assessments and so on and were made in the absence of any public investment plan or strategy (ZIPAR, 2018; Cheelo and Liebenthal, 2018; Dolphin and Saasa, 2018). This severely compromised the quality of projects selected as well as the focus on value-for-money in terms of anticipated investment returns. It is, therefore, not surprising that public investments were not growth enhancing.

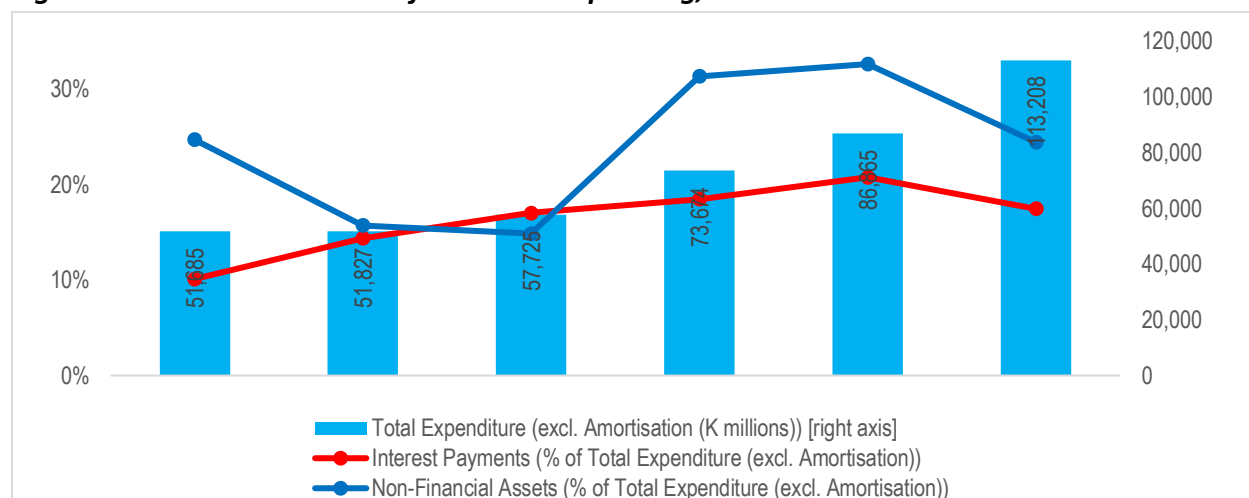
Private investment, which is split into domestic investment and foreign direct investment (FDI), is anecdotally known to be dominated by the latter in Zambia. Data on domestic investment trends was unavailable so that determining the quality of this form of investment and its nexus with growth was not possible. The trends, sources and results of FDI are discussed further below in Sub-section 1.4.

### **1.3. Fiscal performance**

Fiscal or budget balances as a percentage of GDP improved from an annual average deficit of 3.4 percent of GDP over 2000-2004 to a surplus of 2.2 percent in 2005-2009 (Table 1.1.) The surpluses were soon eroded and by 2015-2019, an annual average deficit of 8.3 percent of GDP was recorded. With the advent of COVID-19, a budget deficit of 13.9 percent of GDP was recorded in 2020. As a result, Zambia’s public debt, at 117.8 percent of GDP, was rapidly approach pre-HIPC levels (188.2 percent of GDP over 2000-2004). As of 2020, 52 percent of total public debt was external debt while 48 percent was domestic debt and arrears.

The debt service burden worsened as a significant portion of debt stock became commercial debt owed to private creditors. In 2020, about 49 percent of external debt stock was commercial debt, with bondholders holding 27 percent and other private commercial creditors holding 22 percent (World Bank, 2022). Figure 1.3 shows that debt service interest payments as a proportion of approved public expenditure (excluding amortization) rose from 10.1 percent in 2015 to 17.5 percent in 2020. While the share of debt service interest payments in public expenditure, at 16 percent over 2015-2020, was generally below that of non-financial assets (mainly infrastructure development) expenditure (of 24 percent over the same period), the debt service share was sizable and likely placed significant constraints on infrastructure development expenditure.

**Figure 1.3. Debt service and infrastructure spending, 2015-2022**



Source: Constructed from Annual Economic Reports (MOFNP)

#### 1.4. External economy: trade and foreign investment

Zambia’s trade surpluses were underpinned by robust copper exports (70 percent-74 percent of total exports) over most of the period 2000-2020. Services trade was smaller than goods trade and in deficit throughout the reference period. The current account balance experienced various levels of deficit over the period, except for 2010-2014 and 2020 which saw annual average surpluses of 3.4 percent and 12.6 percent of GDP, respectively. The exceptions were mainly due to strong goods export performance relative to goods imports in the 2010-2014 period and then a weakening of import demand greater than export supply reductions during the pandemic in 2020.

Foreign direct investment (FDI) inward flows were relatively strong during 2000-2004, 2005-2009 and 2010-2014, averaging 5.4 percent, 5.7 percent and 6.6 percent of GDP per year, respectively. There was a marked decline in inflows to 3.5 percent of GDP per annum over 2015-2019. Furthermore, with the COVID-19 pandemic in 2020, FDI flows experienced a contraction of 0.9 percent of GDP. Thus, the inward flows, which had performed quite favorably, growing in nominal terms by averages of 37 percent, 29 percent and 32 percent per year respectively, during 2000-2004, 2005-2009 and 2010-2014, slowed down markedly, contracting by 5 percent per year on average during 2015-2019 (UNCTAD, 2022).

**Table 1.2. Inward flows of FDI to Zambia, 2009-2017**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2009-2017 (avg)
	% of total (unless otherwise stated)									
Agriculture, forestry & fishing	2.0%	0.8%	3.0%	1.6%	4.1%	2.6%	2.9%	7.2%	-1.2%	2.5%
Mining & Quarrying	50.8%	66.0%	91.3%	53.9%	65.5%	66.7%	24.9%	6.3%	25.5%	50.1%
Manufacturing	39.5%	21.6%	-17.1%	27.1%	21.2%	13.4%	46.3%	52.2%	31.1%	26.2%
Electricity, gas, etc.	0.0%	0.0%	1.3%	0.4%	-2.2%	-1.6%	1.3%	-2.5%	5.4%	0.2%
Construction	6.1%	1.0%	3.7%	3.2%	0.0%	6.1%	-3.0%	6.1%	1.2%	2.7%
Accommodation & Food	5.7%	0.2%	1.3%	0.0%	-0.2%	0.0%	0.4%	0.8%	-1.8%	0.7%
Information & Communication	0.0%	8.6%	4.0%	-1.1%	-0.1%	-5.2%	4.4%	11.8%	4.2%	3.0%
Finance & Insurance	-	-0.6%	6.7%	11.2%	9.4%	8.6%	5.9%	9.3%	18.3%	6.4%
	11.6%									
Wholesale, retail, etc.	9.0%	-0.1%	7.3%	2.2%	1.5%	15.1%	5.9%	11.3%	19.6%	8.0%
Other Tertiary services	-1.5%	2.5%	-1.6%	1.5%	1.0%	-5.6%	11.0%	-2.4%	-2.4%	0.3%
<b>Total (US\$ million)</b>	<b>722.50</b>	<b>1,729.30</b>	<b>1,046.20</b>	<b>1,731.20</b>	<b>2,099.92</b>	<b>1,490.60</b>	<b>1,304.91</b>	<b>662.82</b>	<b>1,107.51</b>	<b>1,321.66</b>
<b>Total (% change)</b>		<b>139.3%</b>	<b>-39.5%</b>	<b>65.5%</b>	<b>21.3%</b>	<b>-29.0%</b>	<b>-12.5%</b>	<b>-</b>	<b>67.1%</b>	<b>20.4%</b>
								<b>49.2%</b>		

Source: Constructed from International Trade Centre (ITC, 2022) data

In 2020, inward flows of FDI contracted dramatically by 57 percent. The top beneficiary sectors were mining and quarrying, manufacturing and wholesale and retail trade, respectively accounting for annual averages of 50.1 percent, 26.2 percent and 8.0 percent over the period 2009-2017 (Table 1.2). Of these top FDI beneficiary sectors, wholesale and retail trade and mining and quarrying ranked highest and third as the main drivers of real GDP growth, respectively (see Sub-Section 4.1, on real GDP growth drivers).

Mwale (2014) empirically established that Zambia's investment climate relative to other countries, the country's governance, quality of infrastructure development, resource availability (and natural resource endowment), trade openness, and macroeconomic fundamentals (e.g., real effective exchange rate and inflation) were key determinants of FDI inward flows over the period 1994-2011. These determinants most likely continued to be important over this study's reference period, up to 2020. It is therefore plausible that the downturn in FDI inflows over 2014-2019 had a significant relationship with the deteriorating investment and business climate, weakening governance, poor quality of infrastructure development, and macroeconomic instabilities, particularly on the fiscal front as earlier seen.

## 1.5. Demographic trends and issues

Zambia has not held a national census since 2010 and relies on 2011-2035 projections from the 2010 figures. According to the Central Statistical Office (2013), the population was expected to grow at an average annual rate of around 2.8 percent during the projection period, 2011-2035, from 13.7 million persons in 2011 to 26.9 million in 2035. The total fertility rate (TFR) was projected to drop by 1.4 children per woman over the 25-year period, from 5.9 in 2011 to 4.5 by 2035. However, the young age structure of the population was expected to keep Zambia on a growth trajectory despite projected fertility decline. A gradual increase in life expectancy at birth was anticipated over the projection period, with overall life expectancy at birth projected to rise by 8.6 years, from 52.6 years in 2011 to 61.2 years by 2035. This increase in life expectancy at birth was assumed to result from overall declines in both childhood and adult mortality, coupled with the positive impact of health interventions aimed at reducing morbidity and the disease burden from major killers of children and adults such as malaria, HIV/AIDS, diarrhea, and malnutrition.

Zambia is going through a demographic transition where the population is increasingly more youthful. According to UNDESA (2019) data, 79 percent of Zambia's population was 34 years old or below in 2020, with children aged 0-14 years accounting for 43 percent of the total and the youth (15-34 years old) accounting for 35 percent. Projections suggest that by 2050, 69 percent of the country's population will be 34 years old or below, indicating that the population will remain youthful over the long term. This particular type of demographic transition will require Zambia to make critical social sector investments in health and nutrition, water and sanitation, education, skills and entrepreneurial development for children and the youth now and build a productive workforce for the future.

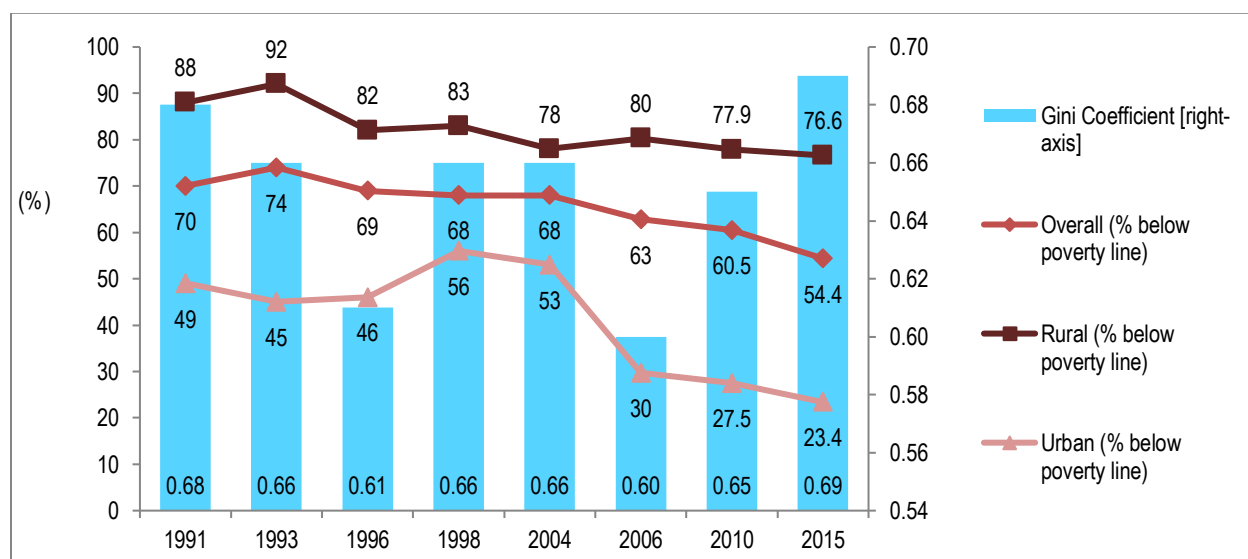
The Consolidated 2016 Enrolment Database for Home-Growth School-Feeding (HGSF) districts, covers enrolment the school feeding program in all early child education schools, primary schools and basic schools (up to grade 9) and excludes private schools. The 2020 National Budget or Yellow Book and accompanying Budget Address noted that the HGSF program targeting vulnerable children would continue to be implemented in 2020, to increase learner attendance and retention. As of 2020, supported learners at and primary school levels were 34,123 (or 24 percent of the total of 143,913 learners) and 814,285 (or 25 percent the total of 3,215,723 learners), respectively.

A total of 936,627 learners countrywide were estimated to be benefiting from the Program, which was allocated a total of K34.6 million, implying a per capita allocation of K 36.90 (US\$2.02) per learner for the year. In contrast, in the same year, the one million beneficiaries of the Farmer Input Support Programme (FISP) who were allocated a total of K1.1 billion or K1,112 (US\$60.72) per farmer.

## 1.6. Poverty and inequality

Current poverty and inequality levels in Zambia are difficult to gauge because the most reliable household level assessment, the Living Conditions and Monitoring Survey (LCMS) was last conducted in 2015. In 2015, the overall poverty headcount was at 54.4 percent of the total population, down from 70 percent in 1991 (Figure 1.4). What is worrying is the rural-urban disparity. While urban poverty declined markedly from 49 percent in 1991 to 23.4 percent in 2015, rural poverty declined relatively less, from 88 percent in 1991 to 76.6 percent in 2015. This suggests that the sustained positive growth (and policies behind it) during 2000-2019 worked well for urban dwellers but left the rural population behind in terms of addressing poverty. Inequality remained high throughout the period 1991-2015, with a Gini coefficient that increased marginally from 0.68 in 1991 to 0.69 in 2015, suggesting slightly rising inequalities. Poverty and inequality monitoring is critically lacking in Zambia, limiting the ability to target policies and programs.

**Figure 1.4: Poverty and inequality, 1991-2015**



Source: Constructed from various LCMS (and Priority Survey) reports



## **1.7. Employment and unemployment**

The most reliable employment estimates for Zambia are from periodic Labour Force Surveys (LFS) by the Zambia Statistical Agency (Zamstats). In 2017, Zamstats changed the methodology of the LFS, thus comparability between pre-2017 LFS datasets and the 2017 and post-2017 dataset was not possible.

Overall, the total employed population stood at 2.99 million persons in 2020, a 1 percent increase over total employment in 2017. Formal employment was 26 percent of total employment while informal employment was 74 percent of the total in 2020. Between 2017 and 2020, formal employment declined by 29 percent overall, by 45 percent in rural areas and by 22 percent in urban areas; whereas informal employment increased by 18 percent overall, declined by 4 percent in rural areas and increased by 37 percent in urban areas. Thus, over the period, rural areas lost both formal and informal jobs but with more formal job losses while urban areas informalized in terms of employment. These trends of declining rural employment coupled with increasing urban, informal employment may partially explain the widening poverty gap between rural and urban areas.

Overall, female, youth and female urban youth unemployment rates all rose over the period 2017-2020, respectively from 12.6 percent, 13.5 percent, 17.4 percent and 22.5 percent in 2017 to 13.8 percent, 16.4 percent, 19.9 percent and 24.7 percent in 2020. All four selected groups experienced rising unemployment rates, with the female urban youth bearing the brunt. Thus, over 2017-2020, the joblessness and job loss circumstances among female urban youth was the most critical gender challenge in Zambia. This was compounded by underlying inadequacies and disparities in human capital development – including education, skills, health, and water and sanitation – between boys and girls, men and women.

## **1.8. Technology and digital trade**

The proliferation of information and communications technology (ICT) across the globe ushered in a digital age in which social life and economic activities are both dominated by new ways of consuming and utilizing information and thus assimilating and applying various forms of technology. Technological advancement is almost synonymous with ICT proliferation. In tandem, international trade has been markedly transformed as the world has gone digital. The online sale of consumer products and the supply of online services as well as the flow of data that enables global value chains, services that enable smart manufacturing, and the use of myriad other platforms and applications all define and dictate how trade happens digitally.

Within the global digital transition, Zambia, like most African countries, has lagged behind in terms of a range of indicators of ICT advancement, digital trade readiness and digital trade

performance. Overall, in terms of ICT productive capacities<sup>1</sup>, in 2018 (the latest data year), Zambia ranked 160<sup>th</sup> out of 195 countries with a ICT PCI score of 6.6 (out of a possible 100) compared with a global average score of 13.2 across all countries. In relation to fixed broadband subscriptions (per 100 people) in 2020, WDI data show that Zambia's broadband subscriptions were relatively low at 0.4 per 100 people compared with 0.8 per 100 people, on average, in sub-Saharan Africa and 17.1 per 100 people on average in the world. Similarly, for secure internet servers (per one million people), Zambia had a lower number (40.5 servers per one million people) than the sub-Saharan average (799.5 per one million people) and the world average (11,502.5 per one million people). Zambia fared better than sub-Saharan Africa in mobile cellular subscriptions in 2020, with 103.9 subscriptions per 100 people, compared to 93.6 on average in sub-Saharan Africa; this was comparable with the world average of 107.5.

As a result, Zambia's digital trade record was relatively low: according to WDI data, computer, communications and other services exports and imports in 2020 were only 8.4 percent of commercial service exports and 18.8% of commercial service imports compared with 35.3 percent and 43.6 percent respectively in sub-Saharan Africa and 55.5 percent and 52.7 percent respectively at the global level. ICT service exports (in current prices) in 2016 totaled US\$34.9 million in Zambia while in sub-Saharan Africa and the world, average ICT services exports per country were estimated at US\$51.9 million and US\$2.3 billion respectively. Closing the digital divide for Zambia will require strategic investments in ICT infrastructure and services, among other things.

## **1.9. Summary of key macroeconomic developments**

Against the background of the past 20 years, the key development challenges facing Zambia today include: (i) at the macroeconomic level, prolonged fiscal instability, weak fiscal discipline (characterized by expenditure slippages), irrational spending, and debt unsustainability; (ii) exogenous shocks such as the COVID-19 pandemic, HIV/AIDS, adverse global commodity (copper and oil) price movements, adverse weather conditions (droughts, high temperature, etc.) due to climate change effects; (iii) inadequate investments in human capital development (amidst a demographic transition), resulting in low and low-quality productivity; (iv) limited structural transformation of the economy due to limited attention to business climate reforms, private sector development and export diversification ; and (v) the relatively low digital productive capacity and preparedness hindering digital transformation and performance. The implications of this situation for economic transformation are discussed in greater detail in Sections 3 and 4.

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<sup>1</sup> UNCTADStats (<https://unctadstat.unctad.org/EN/>; accessed 24<sup>th</sup> March 2022)

## 2. Development policies and economic transformation

### 2.1. Overview of development policies

The onset of the 2000s was marked by the re-emergence of national planning in Zambia following nearly two decades of implementing stabilization and adjustment programs. This was after a realization that that even in a liberalized economy, development planning is necessary for guiding prioritization and resource allocation to enable broad-based socio-economic development. The key recognition was that while economic growth was on the rebound compared with the previous decades, poverty remained pervasive such that all indicators of human welfare – life expectancy, educational attainment and income per capita, as measured by the UNDP Human Development Index – were adverse. To improve the situation, Vision 2030 was developed to guide the formulation of medium-term national development plans. The Fifth National Development Plan (FNDP) 2006-2010 (GRZ, 2006) was the first plan under Vision 2030, followed by the Sixth National Development Plan (SNDP) 2011-2015 (GRZ, 2011), Revised Sixth National Development Plan (R-SNDP) 2013-2016 ((GRZ, 2014), and Seventh National Development Plan (7NDP) 2017-2021 (GRZ, 2017).

Starting with the FNDP (2006-2010), the strategic focus was on pro-poor growth-oriented sectors that create employment and income opportunities. The focus areas included rural development, agriculture, and manufacturing, which provide a greater opportunity for creating wealth and jobs, thereby rapidly reducing poverty. The focus on agriculture and agro-processing was premised on the fact that about 60 percent of the total population and 70 percent of the poor live in rural Zambia. Further, most rural and urban households rely on incomes from agriculture and agro-processing. Agriculture and agro-processing tend to be more labor intensive and also have strong linkages with the rest of the economy. Growth in these sectors was therefore viewed as a two-pronged instrument, to generate jobs and create employment opportunities for households, and also to lay the foundation for achieving long-term growth and the development objectives of structural transformation.

The specific strategies adopted to support this stance centered on achieving higher economic growth driven by a stronger performance in agriculture and agro-related manufacturing. To spur this growth, in agriculture, strategies focused on the promotion of modern technologies, development of rural markets, provision of agricultural and financial services, establishment of marketing chains and provision of infrastructure. Such growth in agriculture and agriculture-related manufacturing was to be propelled by the private sector, which in turn critically needs an appropriate enabling environment that supports robust private sector development. This was to be achieved through a stable and conducive macroeconomic environment characterized by low inflation, low interest rates and a stable and competitive exchange rate. Apart from macroeconomic stabilization, more emphasis was to be placed on improving the

competitiveness of the economy, strengthening the investment climate to accelerate investment and improving economic infrastructure. The investment and business climate was to be enhanced through the implementation of the Private Sector Development (PSD) Programme and the Financial Sector Development Plan (FSDP).

The SNDP (2011-2015) shifted the strategic focus and the aim was to accelerate infrastructure development; economic growth and diversification; promote rural investment and accelerate poverty reduction and enhance human development. Priority sectors included agriculture, livestock and fisheries, manufacturing, tourism, commerce and trade. The focus on infrastructure paid particular attention to investment in rural infrastructure such as roads, energy, ICT, etc. The rural development dimension of the FNDP was maintained and expanded.

In the agriculture sector, the focus was on crop diversification while improving marketing systems and harnessing the value chain in production as a way to promote agriculture-related manufacturing. For manufacturing, the strategy was to attract investment that promotes high-value manufacturing and job creation by providing a good regulatory framework and business environment that sought more directly to link FDI to Zambia's resource endowment. A key instrument to attract investment into manufacturing was the facilitation of the development of manufacturing infrastructure in Multi-Facility Economic Zones (MFEZs) and Industrial Parks (See Box 1).

With the transition of the SNDP into the R-SNDP (2013-2016), the focus shifted to public capital investments to guide rural development and job creation for inclusive growth. This revision followed the change of government in 2011. In essence, the new government took a more aggressive role in driving the economy through public infrastructure investment. Related to this active role of government was the shrinking of the private sector as a driver for growth.

## **2.2. Structural change and economic transformation: policies and performance**

The approach of both the FNDP and SNDP was adequate to put the country on the right path towards economic transformation. However, the implementation and direction of sectoral policies in both agriculture and manufacturing were not consistent with the plans. Within agriculture, the plans envisaged reducing dependence on maize production and rain-fed agriculture by supporting other crops, livestock and fisheries production thereby providing a base for the take-off of agriculture-related manufacturing through backward and forward linkages. However, government policies tilted incentives in favour of maize to the disadvantage of other crops and long-term diversification opportunities. Figure 2.1 shows the significance of the proportion of expenditure on the Farmer Input Support Programme (FISP) in total expenditure in agriculture sector. It can be observed that in years where total expenditure in agriculture declined, expenditure on FISP maintained its upward trajectory.

### **Box 1. Multi-Facility Economic Zones and Industrial Parks in Zambia**

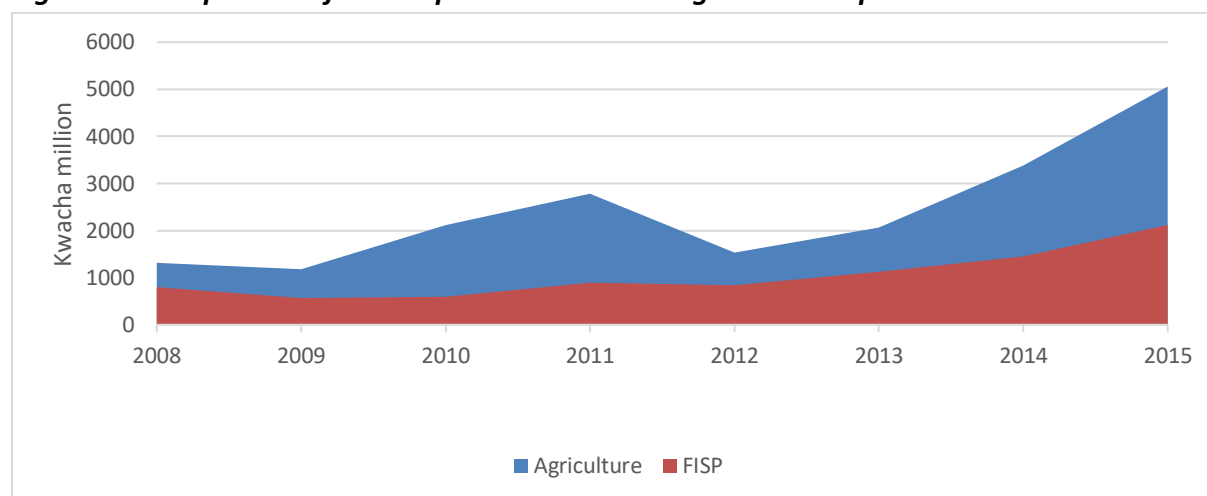
Multi-Facility Economic Zones (MFEZs) were introduced in 2005 to enhance competitiveness through increased manufacturing and trade and therefore drive industrialization. The Zambia Development Agency (ZDA) Act 2006 provide for the establishment and development of MFEZs and industrial parks. The first MFEZ was opened in 2007 under the Zambia-China Economic and Trade Cooperation Zone (ZCCZ), the first China overseas economic and trade cooperation project to be established in Africa. Since then, four MFEZs (of which three are operational) and two industrial parks have been designated as of 2020. The three operational MFEZs – Chambiashi MFEZ (CH-MFEZ), Lusaka East MFEZ (LE-MFEZ) and Lusaka South MFEZ (LS-MFEZ) together have recorded a cumulative investment of US\$4 billion of which US\$3.3 billion is investment in CH-MFEZ. A total of 14,642 jobs have been created, of which 9,500 jobs are in Chambiashi, as of 2020. All the economic zones are multi-use zones and are open to both local and foreign investors. The CH-MFEZ, the biggest of the three, however, is established largely around the mining sector, with activities associated with various stages of the mining value chain.

While some investment and jobs have been created in the zones, this remain below projected targets. This is due to significant challenges (Zeng, 2016) and (Phiri, 2020). The challenges can be grouped into three key ones: 1) weak institutional capacity and inefficient services of the public sector; 2) inadequate infrastructure; and 3) weak linkages between the zones and local firms. As a result of weak institutional capacity and inefficient services of the public sector, three issues stand out in terms of adversely affecting economic zones in achieving their potential as drivers of industrialization and therefore economic transformation.

First, there has been a lack of clear positioning of the economic zones to leverage Zambia’s comparative advantages vis-à-vis both domestic and global value chains. With the exception of the CH-MFEZ, each MFEZ is not strongly anchored on a particular priority sector in order to unlock and develop its value chain. As a result, benefits from agglomeration economies which would have arisen in terms of cost reduction and efficiency have not been fully realized thereby slowing down development of value-addition activities and expansion of manufacturing. Second, Zambia has not established a real automated one-stop-shop service center thereby making the process of setting up business in the Zones long and laborious and therefore increasing transaction costs for investors. Lastly, the fiscal investment incentives framework has not been stable but instead susceptible to change without prior consultation with the private sector. An example is the introduction of VAT Rule 18 in 2013 which placed burdensome requirements for proof of export to enable claims for VAT refund. VAT Rule 18 was amended in 2015 due to outcries from the private sector. In 2018, the government streamlined the fiscal incentives investment package for MFEZs and industrial parks by removing a zero percent corporate income tax rate for the first five years of operation in an MFEZ, making the incentive package less competitive relative than those of countries in the region. In 2022, however, with rekindled interest in MFEZs and industrial parks, the government has re-introduced zero percent corporate income tax rate with a variation that this be for first 10 years of commencement of operations and on profits made from exports. For years 11 to 13, only 50 percent of profits made on exports by companies operating in the MFEZs and industrial parks are to be taxed and 75 percent of profits for years 14 and 15.

In terms of infrastructure, the MFEZs suffer from poor roads into the zones, and weak sewage, and water supply. In the government’s Lusaka-South MFEZ, infrastructure only a bare minimum is provided; meanwhile, land is leased out to investors. None of the MFEZs have been spared from the country-wide electricity power rationing, too. Weak linkages between the Zones and local firms has been exacerbated by the lack of clustering of Zone activities around a particular value chain, resulting in increased logistics and transaction costs.

**Figure 2.1. Proportion of FISP expenditure in total agriculture expenditure**



First, from budgetary allocation patterns in the sector, while the highest ranked priorities in agriculture were irrigation development, agriculture infrastructure, land development, livestock development and agriculture technology, the dominant government function in the sector was to provide inputs to subsistence farmers under the Fertilizer Support Programme (FSP), which was later renamed the Farmer Input Support Programme (FISP), and maize price and income support to smallholder producers and consumers under the Food Reserve Agency (FRA). Spending on input and output subsidies between 2000 and 2008 averaged 58 percent of total average value of expenditure in agriculture (World Bank, 2010). This trend continued throughout the R-SNDP and 7NDP and has undermined the vision of an agriculture-driven growth and economic transformation.

The introduction of the e-voucher system in 2015 as a model of administering the FISP was meant to re-align the bias away from maize and allow for a flexibility of choice in agriculture inputs. However, the government has not been able to fully migrate all FISP recipients to the E-voucher system due to challenges ranging from limited telecommunications connectivity and financial services provision and limited information technology (GRZ, 2018). Therefore, a large proportion of the FISP still remains under the direct input supply model which confines the support to maize inputs and therefore limits diversification within the sector<sup>2</sup> (See Box 2 for the evolution of FISP).

<sup>2</sup> For the 2019/2020 farming season, only 40 percent of the beneficiaries of FISP were targeted to receive inputs under the E-voucher system, according to the 2020 Budget Address.

## **Box 2. The evolution of the Farmer Input Support Programme in Zambia**

The Farmer Input Support Programme (FISP) was first introduced in 2001 as the Fertiliser Support Programme (FSP). The overall objective was to improve the supply and delivery of agricultural inputs to small-scale farmers through sustainable private sector participation at affordable cost, to increase production and productivity, thereby enhancing household food security and incomes. For the agriculture season 2002/2003-2008/2009, the FSP package consisted of 400 kg of fertilizer and 20 kg of maize seed distributed to selected beneficiaries through farmer cooperatives. Although the intention was to distribute these inputs through private sector participation, this was not achieved during this period and the government continued to be only player.

In 2009, the FSP was renamed FISP so that it could be more diversified to include non-maize-related inputs. It largely retained the same features except that the package was now halved to 200 kg of fertilizer and 10 kg of maize seed in order to accommodate more beneficiaries. In the 2012/2013 agriculture season, a small quantity of seeds for rice, groundnuts, and sorghum was included to help diversify crops. However, this was restrictive as each farmer was only entitled to inputs for one crop only. Consequently, it remained biased towards maize-related inputs. Furthermore, the administration of the FISP continued to be dominated by the government, leading to the crowding out of the private sector. Given the growing fiscal constraints, the programme became expensive for the government and was plagued with delays in delivery of inputs. Actual FISP expenditure continuously outstripped budgeted allocations. In 2009, FISP expenditure was over budget by 30 percent, rising to 86 percent in 2011 and jumping to 191 percent in 2014 (Ministry of Finance).

Consequently, between 2015 and 2017 the government partly departed from the traditional FISP to pilot a flexible FISP which utilized an e-voucher system. Under the e-voucher system, inputs were to be delivered through a Visa debit card redeemable at registered, private sector agro-dealers. The e-voucher was worth K2,100 (approximately US\$210) of which K400 was a contribution from the recipient and K1,700 was from the government. The e-voucher was redeemable for crop, livestock, or fisheries inputs or equipment. In the 2015/2016 agricultural season, the e-voucher 13 out of 106 districts and the number was increased to 39 districts in the 2016/2017 season. A full migration to e-voucher was planned for the 2017/2018 but this could not be achieved due to various logistical challenges. This resulted in rolling back the e-voucher to only 40 percent of intended beneficiaries in the 2018/2019 season.

As to whether the e-voucher pilot achieved its objectives, preliminary results suggest that the 2015/16 FISP e-voucher pilot may have spurred greater crop diversification than the traditional FISP. But impact on access to and use of modern inputs was non-existent, and there was also no change in distance to FISP fertilizer collection points or timely availability. This is largely because late activation of e-vouchers has been a major problem. Some farmers have not been receiving inputs despite contributing their portion, making the program unequitable. The problem of late delivery of inputs that dogged the traditional FISP persisted with e-voucher system due to delayed mobilization of funds arising from fiscal constraints.

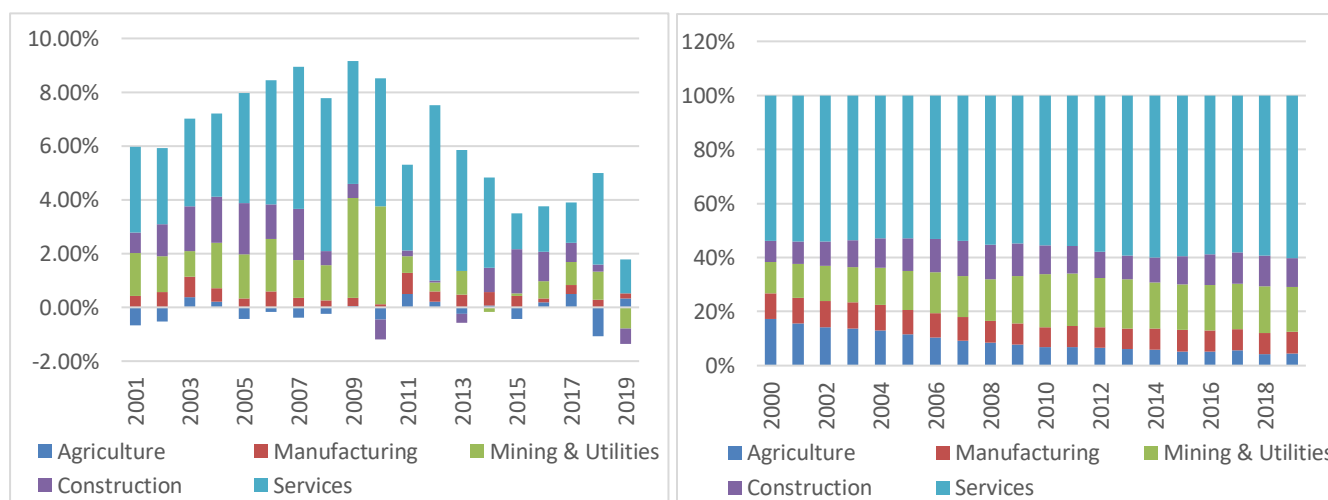
Consequently, in the 2021/2022 season, all beneficiaries were put back onto the traditional FISP. This points to the fact that the FISP, as currently implemented, is not sustainable. By 2020, FISP expenditure was nine times above budgeted allocation. While expenditure on FISP has continued to rise, both the number of beneficiaries and the inputs packages have remained unchanged. Given the foregoing, the government has proposed to implement a new comprehensive agriculture support program commencing in the 2022/2023 season. This program is expected to be cost effective, better targeted and equitable across beneficiaries. It will also support the supply of quality inputs, attain diversification of crops as well as increase production and productivity.

### 2.2.1. Manufacturing

With regard to manufacturing, the Commercial, Trade and Industrial Policy (CTI) 2010 and the National Industrial Policy (NIP) 2018 recognize MFEZs and industrial parks as an instrument to boost investment in manufacturing and anchor industrialization. Strategies to support this included a generous package of both fiscal and non-fiscal incentives to investors in both MFEZs and industrial parks.

Despite this, the performance of the zones and industrial parks has been poor (GRZ, 2021). Few investors have been attracted due to the lack of high-quality infrastructure in the zones and parks (Phiri, 2020). Where investment has been attracted into the zones and parks, there has been weak agglomeration and spillover effects to the broader economy. Therefore, the backward and forward linkages between the firms in the zones and parks with the broader economy, and specifically with small and medium enterprises (SMEs) as envisaged in the 2008 MSME Policy (GRZ, 2008) have not been harnessed. This is partly due to the failure to spur agriculture-related manufacturing as well as due to weaknesses in agriculture such as low productivity and poor yields, inadequate infrastructure and technology, which have persisted because of expenditure biases mentioned earlier.

**Figure 2.2a. Sectoral contribution to GDP growth**    **Figure 2.2b. Sectoral contribution to total value added**



Source: Constructed using WDI and UNCTADstat

Thus, the envisioned agriculture-driven manufacturing growth has not been realized. This is evident from Figure 2.2a which shows growth rates of major sectors. Throughout the period under review, growth rates in agriculture have fluctuated, but negative more than half the time.



This is because agriculture remains largely rain-fed and, therefore, vulnerable to rain patterns. This underscores the importance of the priorities for agriculture that were relegated in favor of input and output subsidies. Meanwhile, the manufacturing sector's ability to add value to local raw materials remains extremely low. Most raw materials extracted are exported in raw form, therefore breaking the value chain at the first level.

Therefore, as Figure 2.2a shows, manufacturing sector contribution to economic growth rate has been positive but minimal, averaging 0.4 percent throughout the period 2001-2019. Growth in manufacturing has been buoyed by growth in non-metallic mineral products (in particular, cement) and to a lesser extent, growth in basic metal industries (in particular gemstones and light engineering). Both these sectors have maintained a positive rate for most of the period under consideration. Given the minimal growth rates, manufacturing shares in value added have trended downwards, as shown in Figure 2.2b. Therefore, the reduction in the share of agriculture in value addition observed throughout the period was not accompanied by the anticipated shift to manufacturing.

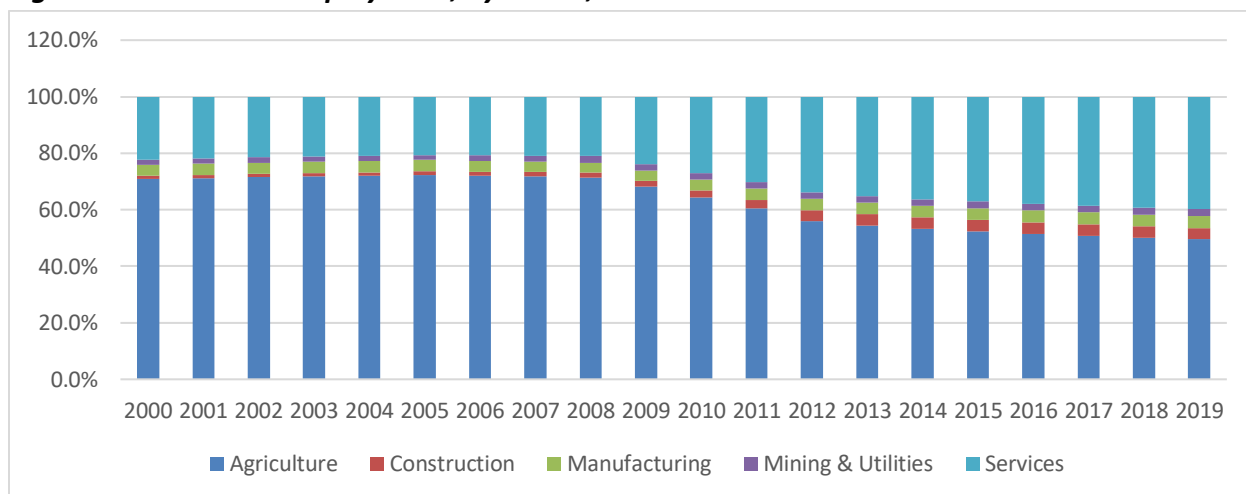
### **2.2.2. Services**

The services sector compensated for the reduction in the share of agriculture as it contributed the highest growth rates, averaging 4 percent between 2001 and 2010 and tapering off slightly to 3 percent between 2011 and 2019. This has been driven by growth in wholesale and retail trade, information and communications technology (ICT) and financial services. A stable macroeconomic environment and improved business environment owing to the implementation of the PSD program and the FSDP during the period 2001 to 2010 supported the flourishing of these sectors. The wholesale and retail trade sector saw a number of international chain stores set up in Zambia as well as a flourishing small traders' sub-sector, albeit largely informal. In the ICT sector the expansion of mobile telecommunication services was the driver of the positive performance. Thus, the combined services sector contributed more than half of total value added throughout 2001-2019.

### **2.2.3. Construction**

The construction sector grew rapidly between 2001 and 2007 but thereafter recorded mixed results which deteriorated significantly towards end-2007 due to mounting fiscal constraints as most of the construction was driven by public works. A similar trend occurred in the mining and utilities sector. The waning performance, notwithstanding rising in metal prices towards the end of the period, has been fueled largely by challenges in the mining sector arising from an unstable fiscal regime. From 2007 to 2021, the tax structure and rates for the mining sector changed 11 times, as reported in the national budget addresses during this period.

**Figure 2.3: Trends in employment, by sector, 2000-2019**



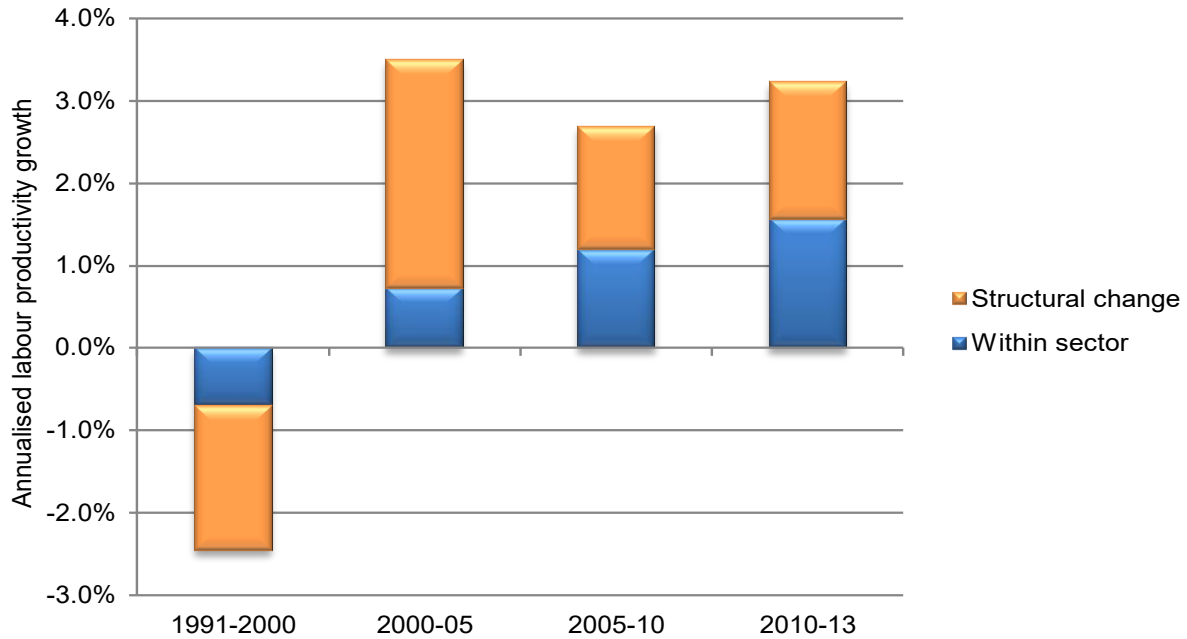
Source: ILOSTAT

#### **2.2.4. Sector employment**

Concomitant with the changes in sectoral contributions to value added and economic growth have been changes in employment shares. As Figure 2.3 indicates, the agricultural sector contributed over 70 percent to total employment in 2000. This share fell to 50 percent by 2019. The beneficiaries of this decline over the same period have been the services sector and, to a small extent, the construction sector. Services doubled its share of total employment from 20 percent in 2000 to 40 percent over the same period while the construction sector increased its share from 1 percent to 4 percent. Both manufacturing and mining experienced no significant shifts in employment shares and maintained their shares between 3 percent and 4 percent each. From the foregoing, what is evident is the shift in the structure of the economy from a largely agriculture-dominated one towards services. While policies for transformation focused largely on agriculture in relation to manufacturing, the direction of transformation moved towards the services sector, which showed significant growth.

Assessment of the structural change requires looking at how value-added per worker changed based on a decomposition of economy-wide labor productivity into within-sector change and structural change (McMillan, M., 2014). With a shift in workers from low- to high-productivity sectors, the structural change is said to have contributed positively to national productivity.

**Figure 2.4. Aggregate labor productivity decomposition**



Source: Constructed using UN and ILO WESO databases

The period 1991-2000 was characterized by a decline in labor productivity by 2.5 percent due to largely negative structural change, which accounted for 1.75 percent compared with a decline in within-sector productivity of 0.7 percent. According to Resnick and Thurlow (2016), this was due to workers moving out of industry and services into low-productivity agriculture in the wake of de-urbanization prompted by the structural adjustment policies which saw the privatization of several parastatal companies. The negative structural change was exacerbated by falling productivity within all the sectors except manufacturing.

Between 2000 and 2005, as the economy began to recover productivity increased sharply by 3.5 percent driven largely by structural change (2.8 percentage points) and to a small extent a within-sector productivity increase of 0.74 percentage points. This increase was driven by employment growth in services as shown above in Figure 2.3 while employment in low-productivity agriculture declined. Both structural change and within-sector productivity continued to contribute to positive labor productivity growth from 2005-2013, with both components making nearly equal contributions in the period 2010-2013 as employment numbers in agriculture continuously declined, thereby raising labor productivity within the sector in the process.

Table 2.1 shows the two components disaggregated into various sectors. Of notable importance is that while the manufacturing sector recorded positive within-sector productivity growth and positive structural change throughout 1991-2013, its contribution to economic growth has been minimal, averaging 0.4% during 2000-2019 and with a declining share in GDP as earlier discussed. It also appears that as more labor exited agriculture, its productivity improved and the opposite happened for the services sector which received more labor. Granted that the services sector contributed more to GDP growth, this has been with declining productivity. This is because within the services sector labor moved to the relatively low-productivity but more labor-absorbing retail and informal trade compared to the higher productivity but less labor absorbing such as financial and ICT services. This phenomenon has been observed in other African countries and explains why growth has not been inclusive (de Vries, 2014).

**Table 2.1. Sectoral decomposition of labor productivity**

<b>Change components</b>	<b>1991-2000</b>	<b>2000-2005</b>	<b>2005-2010</b>	<b>2010-2013</b>
<b>Within sector</b>				
Agriculture	-1.10	-0.35	1.68	3.13
Manufacturing	0.90	0.12	0.04	0.07
Mining and Utilities	-0.31	0.29	0.02	-0.11
Construction	-0.05	0.12	-0.06	-0.14
Services	-0.13	0.57	-0.48	-1.38
<b>Structural change</b>				
Agriculture	-0.6	-0.13	0.65	1.65
Manufacturing	8.0	2.98	0.88	1.72
Mining and Utilities	-10.99	12.86	0.98	-4.37
Construction	-5.08	11.22	-4.94	-5.62
Services	-1.97	7.79	0.52	-10.07

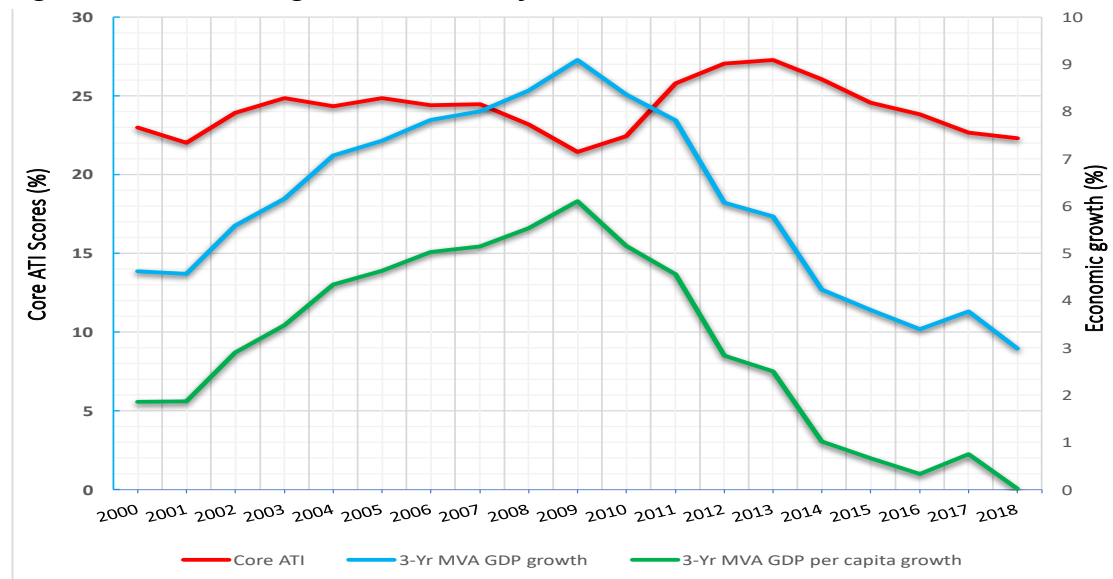
*Source: Constructed from UN and ILO WES databases*

### **2.3. Performance in economic transformation**

Given the foregoing discussion, Zambia has not made significant progress towards economic transformation largely because the accelerated growth was not driven by the sectors where the transformative process was to come from. The country recorded a deterioration in economic transformation from a score of 22.1 between 1999-2001 to 20.7 between 2009 and 2011. This low score in transformation coincided with the highest growth rate attained during the period 1999-2019. When growth started to decline thereafter, economic transformation picked up until 2012-2013 and thereafter deteriorating to a score lower than recorded in 2000.

The policy focus discussed above was to unleash a transformative process driven by agriculture-related manufacturing with linkages to other sectors. However, the sector floundered due to heavy bias towards a single crop and failure to create the envisaged linkages to manufacturing.

**Figure 2.5. Economic growth and transformation, 2000-2018**

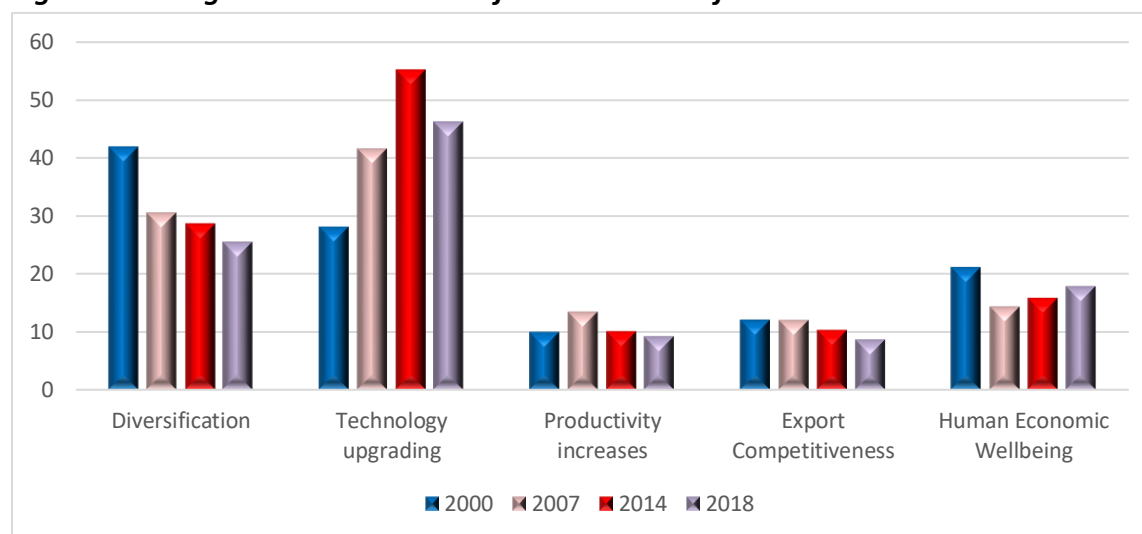


Source: ATI2021 Database

After 2010, growth slowed down due in significant part to the slowdown in mining activity. This coincided with an improvement on the transformation index as other sectors such as construction and services were holding up. However, as growth deteriorated further due to weakening economic fundamentals, transformation declined too. Therefore, what appears to have been progress in transformation could not be sustained during further deterioration in the economy. This deterioration was largely fueled by lack of improvements in most of the individual indices of the ATI, as discussed in the following sections.

As shown in Figure 2.6, the country slid down on the diversification index from a score of 42 in 2000 to 25 in 2018. This was driven by a decline in the contribution of manufacturing to GDP from 10.3 percent to 8.4 percent while the services share in GDP remained largely constant (ACET, 2021b). The share of both manufacturing and services in total exports almost halved in 2018 from their level in 2000. Further insights from ATI2021 show that exports became less diversified as the top five exports increased their share in total commodity exports with the remainder of exports accounting for a declining share. Key policies that Zambia pursued to diversify production and exports include maintaining a stable macroeconomic environment, attracting quality investment into manufacturing through FDI and PPPs by providing a good regulatory framework and facilitating the development of Multi-Facility Economic Zones (MFEZs), and providing fiscal and non-fiscal incentives.

**Figure 2.6. Progress on dimensions of economic transformation**



Source: ATI2021 Database

Macroeconomic instability driven by an increasingly unsustainable debt contributed to weak performance in terms of diversification of the economy. Based on various Annual Economic Reports of the Ministry of Finance (MOF), it is estimated that Zambia’s external debt stock rose from US\$1.9 billion in 2011 to US\$6.7 billion in 2015 and closed at US\$11.7 billion in 2019. This resulted in increased debt service and debt repayments exerting pressure on the exchange rate, inflation rate and interest rates among other macroeconomic indicators.

The unfavorable macroeconomic environment also adversely impacted FDI inflows into the various sectors of the economy. This is notwithstanding the improvement in the business environment resulting from implementation of the PSD and FSD programs, as evidenced by the Ease of Doing Business which ranked Zambia among the top five in SSA as an attractive investment destination.

The development of Multi-Facility Economic Zones (MFEZs) as a key strategy for expansion of manufacturing and exports, as attempted in most African countries, has not yet yielded significant results. Poor infrastructure and weak anchoring and clustering of business in MFEZs around priority sector value-chains has resulted in slow pace of development of value-addition activities and therefore exports (Phiri, 2020). In tandem with a poor record in diversification, Zambia recorded a poor ranking for export competitiveness, which deteriorated from a score of 12.1 in 2000 to 8.6 in 2018. This due to a decline in the proportion of exports in GDP relative to world averages.

The weakening macroeconomic environment, as stated earlier, resulted in increased production costs. First, costs of borrowing for the private sector were rising due to increased

government borrowing from the domestic financial market due to failure to undertake fiscal consolidation amidst rising vulnerabilities. Average lending rates rose from 12.5 percent in 2015 to 26.5 percent in 2020, as reported by the Bank of Zambia online Selected Macroeconomic Indicators database (Bank of Zambia)

In addition, despite progress in most of the measures on the Ease of Doing Business, Zambia lagged in the dimension of trading across borders thereby making exports less competitive. In 2019, Zambia scored 56.9 out of 100 and ranked 155<sup>th</sup> out of 190 countries due to high costs to export (World Bank, 2020). Furthermore, policy inconsistency and unfavorable policies overall in relation to exporting have contributed significantly to exports becoming less competitive. Key to exports was the issue of the administration of VAT refunds.

Due to government revenue shortfalls and weaknesses in commitment control systems, the accumulation of arrears in VAT refunds was ignited. This came on top of arrears owed to domestic suppliers of goods and services, therefore further constraining the liquidity of firms and affecting production. The stock of domestic arrears rose from ZMW641.2 million (approximately US\$28.5 million) at end-2014 to ZMW27.7 billion (approximately US\$1.2 billion) at end-2019 (Ministry of Finance, 2021). The single biggest portion of the arrears is ZMW6.9 million (approximately US\$306 million) relates to VAT refunds owed to export producers.

Against this backdrop, over the period 2011-2021 the government's will to advance reforms that support business and private sector weakened substantially thereby eroding some of the gains achieved earlier regarding private sector reforms. As the government took on a more significant role in driving the economy through its massive public infrastructure investment drive, public institutions assumed a defensive stance with regard to policy, regulatory and institutional reforms that favor economic transformation. For instance, in agricultural sector, the writing was already on wall with by the beginning of the 2010 decade with FISP administration through direct input support no longer achieving its intended effect and therefore becoming unsustainable.

Nevertheless, the FISP continued to be defended and allocated increased amounts of funding in the national budget every year. Trade policy for instance also became defensive over time, with *ad hoc* bans of both imports and exports of agricultural commodities signaling a more inward orientation. Therefore, a return to export promotion tenets, debates/consultations and evidence-based policy making is required. Zambia needs an outward (export) orientation through more robust and consultative export promotion strategies.

Notably, Zambia made progress in technology upgrading with a score of 28.1 in 2000 rising to 46.1 in 2018. This was driven largely by an increase in the share of medium- and high-technology products in total production due to technology and increased FDI inflows in manufacturing. Manufacturing was the second recipient of FDI inflows after mining and

averaged 16 percent of total inflows between 2010 and 2014. This share increased to an average of 45 percent between 2015 and 2018 as inflows into mining tapered off (Bank of Zambia, ,2015, 2016, 2017, 2018).

In addition, the country made appreciable progress in utilization of ICT, particularly digital technology and most notably, digital infrastructure, digital financial services and digital platforms (World Bank, 2020). However, the country still lags behind in digital skills, which affects the use of digital technologies as well as the development of digital entrepreneurship. This is largely due to skills gaps related to science, technology, engineering, and mathematics (STEM). Consequently, firms face challenges in developing new products, implementing new technology or maintaining the required quantity or quality of products (UNIDO, 2020). This has resulted in low sophistication of exports, with the share of medium- and high-technology exports in total commodity exports recorded at a meager 2 percent throughout the two decades (ACET, 2021b).

Between 2000 and 2007, Zambia's score on productivity increased from 10 to 13 but declined thereafter to 9.2 in 2019. This was largely driven by increases in productivity in both manufacturing and services in tandem with high economic growth rates. Productivity scores declined thereafter in both manufacturing and services as the sectors increasingly absorbed more labor relative to other sectors.

Zambia's record on human well-being on the ATI scores shows lackluster performance. The country dropped from 21.2 in 2000 to 14.4 in 2007 and improved to only 17.5 in 2018. The stellar economic growth recorded during most of the period under consideration has firstly been driven by growth in the mining sector, which is relatively low in labor intensity and therefore less inclusive. Growth in services and construction became key drivers as growth in mining waned. As mentioned earlier, because the more labor-absorbing services sub-sectors such as retail and informal trade are also relatively low labor productivity sectors compared with financial and ICT services, which are less labor absorbing, this growth has not been inclusive. Consequently, this exacerbated inequality and thereby weakened the gains from increases in GDP per capita which resulted in Zambia being classified as a lower middle-income country in 2013.

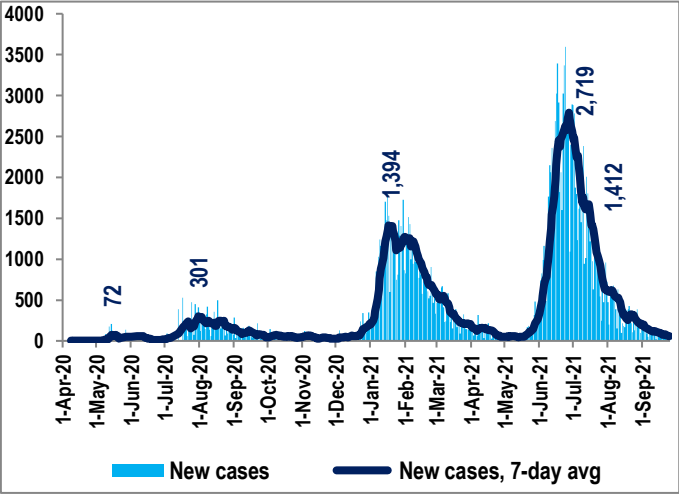
### **3. COVID-19 response and lessons**

The first COVID-19 cases were reported in Zambia in mid-March 2020 and coincided with the declaration by the WHO of the outbreak as a global pandemic. Since then, Zambia has experienced three COVID-19 waves of increasing intensity in terms of both number of cases and deaths (See Figure 3.1a and Figure 3.1b). The third wave took the worst toll with the highest

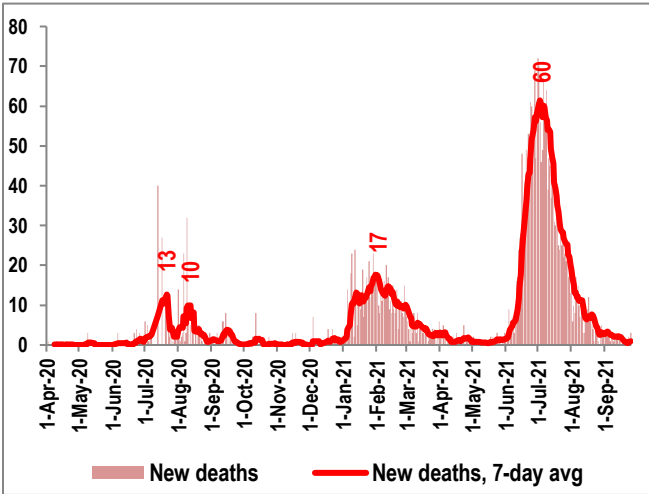


seven-day moving average of daily positive cases at 2,719 in June 2021 and the highest number of daily deaths at 60. The third wave dissipated by the end of August 2021 with the case positivity rate dropping to 1 percent from a high of 26 percent at the peak of the wave. By mid-November 2021, 209,000 cumulative COVID-19 positive cases had been recorded, 3,661 deaths and 206,000 recoveries. This represents 11,700 COVID-19 confirmed cases per million people and 205 COVID-19-related deaths per million.

**Figure 3.1a. COVID-19 cases**



**Figure 3.1b. COVID-19 deaths**



Source: Constructed from COVID-19 Daily Reports, MoH

**3.1. Measures to mitigate the spread of the pandemic**

After the first cases of the COVID-19 were reported, the government put in place containment measures to stem the pandemic. The first act was the announcement of public health guidelines which promoted mass utilization of masks, social distancing, regular handwashing and sanitization. A restriction or shutdown of some sectors of the economy which could be hotspots and avenues for spreading the virus was implemented intermittently as the daily number of cases evolved. Specific measures to counter the pandemic included: suspension of non-essential foreign travel to hotspot countries; quarantine of travelers entering the country and exhibiting symptoms; restriction of public gatherings to a small number subject to them complying with public health guidelines; restriction of restaurants to operate on a take-away or delivery basis; closure of bars, night clubs, cinemas, gyms and casinos; closure of airports except the Kenneth Kaunda International Airport to ensure efficient and effective screening of travelers. These measures were successful in keeping infections and deaths during the first two waves relatively low.

With the onset of more vicious COVID-19 variants in April 2021, the government launched a vaccination program after receiving an initial consignment of 228,000 doses of AstraZeneca from the COVAX facility. The aim was to vaccinate a total of 8.4 million people above the age of 18 years. Since the vaccination program launch, the country has received more doses under COVAX<sup>3</sup> as well as from the People's Republic of China.

However, the vaccination pace has remained slow mainly partly due to vaccination hesitancy and misinformation. By mid-November 2021, a total of 985,456 people had been vaccinated, of whom 602,599 were fully vaccinated, putting the national vaccination rate at 3.3 percent. This is far below the global goal set by the World Health Assembly of each country vaccinating 10 percent of their target population by September 2021. Due to this slow pace, the government re-launched the vaccination campaign in October 2021 to encourage more people to get vaccinated. This was done in the wake of anticipating a fourth wave of COVID-19 by December 2021. The re-launch of the vaccination campaign saw the national vaccination rate rise to 7 percent of the target population by the beginning of December 2021.

### **3.2. Economic impact of COVID-19**

At macro-economic level, output contracted by 2.8 percent in 2020 but is projected to rebound by 3.3% in 2021 (GRZ, 2021). While Zambia has not implemented any country-wide lockdowns, lockdowns in major supply source countries (for example, China and South Africa), tighter border controls and travel bans resulted in supply chain disruptions, delays and increased production costs. Consequently in 2020, copper export earnings declined by 14.8 percent compared with 2019 earning (Siwale, 2021), despite a 16.5 percent increase in copper export volumes. Overall export earnings also declined by 15.8 percent over the first half of 2020 with non-traditional exports, an important sub-sector, declining by 17.9 percent.

In addition, businesses have been confronted with low demand as consumers were encouraged to stay home and therefore required fewer goods and services deemed non-essential. Equally, imports declined in the first half of 2020 by 30 percent compared to the corresponding period in 2019. The result of all this was that some businesses were forced to close permanently, lay off workers or temporarily require some non-essential workers to stay at home. A World Bank survey found that small (5 to 20 employees) and medium (21 to 99 employees) enterprises were far more likely to have closed than large companies (Finn, A., 2021). Casualties at sectoral level included tourism, wholesale and retail trade, construction and manufacturing, where economic output contracted considerably in 2020. At the same time, some sub-sectors survived,

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<sup>3</sup> This includes the Johnson & Johnson single-shot vaccine, Sinopharm and Moderna in addition to AstraZeneca.

some even profiting from the pandemic. These included information and communications technologies (ICT), agriculture, financial and insurance services, and to a lesser extent, mining.

According to a business survey on the impact of COVID-19 on Zambian enterprises, 71 percent of businesses interviewed had partially closed their operations while 14 percent had completely shut down operations (GRZ, 2020). A considerable number of firms (77.3 percent) also indicated having lost customers while 37.7 percent reported supply chain disruptions. Employees in tourism and the transport and storage sectors were most vulnerable to job cuts. In the tourism sector, the most hard hit, the survey showed that during the first quarter of 2019, the sector had an average of 19,541 workers and this dropped to 12,328 in the second quarter of 2020. The survey indicated that overall, 44.3 percent of enterprises interviewed had laid off workers temporarily.

In recovery too, small- and medium-sized business have been bearing the brunt – the survey shows that they were less likely to increase permanent workforce compared to large firms. The impact of the pandemic on jobs has had a social dimension in that female workers were most likely to have been laid off in the manufacturing and retail sectors. The extent of the impact of COVID-19 on the economy has been significant given that SMEs are estimated to account for 97 percent of total businesses in Zambia.

### **3.3. Measures to mitigate COVID-19 impact on the economy**

The outbreak of the COVID-19 pandemic found a very weak economy and a government unable to mount an extraordinarily strong response to mitigate the adverse economic impact. Nevertheless, through the central bank, the government established a Targeted Medium-Term Refinancing Facility (TMTRF) worth K10 billion (approximately US\$500 million) to provide liquidity to financial service providers (FSPs). This is a three-to five-year facility to enable FSPs to restructure or refinance qualifying facilities or on-lend to eligible clients. At the same time, the central bank scaled up open-market operations to provide short-term liquidity support to commercial banks on more flexible terms than before the COVID-19 outbreak.

As of June 2021, a total of 32 FSPs had applied to access funds from the TMTRF to the tune of K10.5 billion (105 percent of the total facility) (Bank of Zambia, 2021). Out of the 32 applications, 30 were approved at the value of K9.1 billion (87 percent of total value of applications). From the total value of approved advances, FSPs have disbursed K6.4 billion to corporate businesses and households, which is 70% of the funds they were sitting on. Of the disbursed amount, nearly three-quarters was disbursed by banks and the rest was disbursed by non-bank FSPs. However, while banks disbursed more funds in absolute terms, non-bank FSPs handled 98 percent of total beneficiaries. This indicates the greater ease in accessing funds from non-bank FSPs compared with banks.

The government issued a K8 billion (US\$400 million) COVID-19 bond as an additional economic stimulus. The proceeds of the issuance were aimed at dismantling domestic arrears owed to retirees and VAT refunds arrears owed to firms. At the time of preparing this paper, information was not yet publicly available on how much has been raised and how much has been channeled towards eliminating arrears. The above measures were aimed at injecting liquidity in the economy to stimulate economic activity.

On the fiscal side, the biggest challenge has been external debt and the mounting pressure from debt-servicing and repayments. By 2019, debt servicing accounted for 45 percent of total government revenue, surpassing the proportion of public wage bill which stood at 42 percent (GRZ, 2018). Therefore, following the endorsement of the Debt Service Suspension Initiative (DSSI) by the G20 in April 2020, Zambia applied for and was granted debt suspension for the period May-December 2020, which was later extended to June 2021. To get the full benefits of the DSSI, it became necessary to request eurobond holders for a six-month suspension of debt service so that all categories of creditors received similar treatment.

Consequently, a consent solicitation memorandum was issued on 15<sup>th</sup> September 2020 requesting a six-month coupon payment standstill on eurobonds due in 2022, 2024 and 2025-2027. On 13<sup>th</sup> November 2020, the eurobond holders rejected the government's request, citing lack of transparency in the treatment of all creditors, particularly Chinese creditors. With this rejection, the government defaulted on a US\$42.5 million coupon payment on the 2024 eurobond that was due on 13<sup>th</sup> October 2020, making Zambia the first and only sovereign defaulter in COVID-19 times. Essentially, Zambia initiated a "forced" debt service standstill with eurobond holders. The government also made efforts to get some debt service relief from Chinese creditors to mitigate the impact of the COVID-19 pandemic. This included a deal with China Development Bank (CDB) to defer interest and principal due on 25<sup>th</sup> October 20 20 to 25<sup>th</sup> April 2021 and an agreement with China Exim Bank to suspend interest and principal payments worth US\$110 million that had been due between May 1<sup>st</sup> and December 31<sup>st</sup> 2020<sup>4</sup>.

The government provided tax relief across the board through a waiver of tax penalties and interest on outstanding tax liabilities resulting from the impact of COVID-19. Specific tax relief and non-tax relief measures were also instituted for the tourism sector to ease cashflow and pressure on businesses (GRZ, 2020). Specific reliefs included: a one-year reduction of corporate income tax rate to 15 percent from 35 percent on income earned by hotels and lodges; suspension of annual license renewal fees paid by hotels and lodges for an initial period of one year, to be reviewed in line with COVID-19 developments; a one-year suspension of retention fees paid by tourism enterprises and hotel manager registration fees; and a one-year

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<sup>4</sup> <https://www.reuters.com/article/zambia-debt-china-exim-idUSL8N2I258D>

suspension of customs duty on the importation of Safari motor vehicles with seating capacity of at least eight people (GRZ, 2021).

In addition to measures to cushion the various economic sectors, the government, in collaboration with its social partners, the Zambia Federation of Employers and the labor movement, instituted some measures to ensure that jobs were not lost and at the same time that employers survived and remained viable. The key measures include: (1) Placing of employees on paid leave for all employers adversely affected by COVID-19. Employees on paid leave would only be paid a basic salary; (2) Placing employees on forced leave for all employers in the tourism sector. During forced leave employees would not be paid any salary. Any sector other than tourism deemed as disproportionately affected would qualify for forced leave for their employees upon assessment by the labor ministry.

The foregoing measures have only been effective in mitigating the adverse effects on livelihoods so long as the businesses do not shut down permanently. In some cases, businesses have shut down and jobs have been lost. To provide relief to workers that lost jobs due to the impact of COVID-19, in July 2020 the government launched the COVID-19 Emergency Cash Transfer (C-ECT). The C-ECT was to target 200,000 households with an amount of K400 (approximately US\$20) per month per household for six months from August 2020 in 22 priority districts. The 22 priority districts were selected based on objective criteria that incorporates factors such as COVID-19 prevalence, level of urbanization, border town and tourist destination.

### **3.4. Key post-pandemic recovery challenges for the government, households and businesses**

While the economy rebounded significantly in 2021, the country still faces some post-pandemic recovery challenges. The country needs to get back to a higher growth trajectory that is consistent with achieving economic transformation, reducing poverty levels and building a more resilient economy. This requires creating fiscal space for the government to channel resources to developmental needs in spite of a debilitating debt overhang. This will require restructuring of external debt with Zambia's major creditors using a combination of both maturity extension and interest rate reductions thereby creating some breathing space. It will also require continuous implementation of revenue administration reforms. The government has to continue ramping up the campaign to get more people vaccinated as well as secure more vaccines to reach the target required to achieve herd immunity. The government has also provided additional measures and concessions to various sectors in the 2022 national budget to reinvigorate growth.

The high cost of living as a result of high inflation amidst high unemployment levels is the challenge households continue to face. The government has therefore committed to reducing

inflation to single digit by the end of 2022 through the consistent and balanced application of prudent monetary policies. This will call for the Bank of Zambia to take necessary action through its implementation of monetary policy based on the forward-looking framework anchored on the monetary policy rate (GRZ, 2021). Cognizant of the need to invigorate growth by making access to credit cheaper, implementation of the monetary policy will thus call for a balancing act between keeping inflation low and supporting growth.

Social protection measures have been enhanced by increasing the number of beneficiaries and transfer value for the Social Cash Transfer (SCT) Programme even after the end of the C-ECT which was launched to mitigate pandemic effects. The number of beneficiaries under the program is targeted to increase from 880,539 as of August 2021 to over 1 million in 2022. The transfer value will be increased from K150 to K200 per month. The government will also disburse all outstanding arrears owed to retired public service workers and curtail their accumulation henceforth.

The health system remains one of the critical needs to ensure that the country stands prepared to tackle future epidemics and pandemics. The pressure on the health system from the onslaught of COVID-19 was significant due to limited health personnel, hospital beds and drugs and medical supplies. This need must be met. In 2022 the government has committed to increasing financing towards epidemic and pandemic management. As a start, over 11,000 health personnel will be recruited and deployed in 2022. Further budgetary allocations for drugs and medical supplies will also cover supplies for COVID-19. The government will also continue expansion of health facilities.

## **4. Economic resilience**

This section assesses the key vulnerabilities and risks faced by Zambia, from domestic drivers to global drivers of change. It also discusses aspects of economic growth, productivity capacity constraints, trade challenges, macroeconomic and sectoral policies, climate and environmental change risks, natural resource stresses, population dynamics (urbanization, and demographic age transition), social inequality, and technological changes.

### **4.1. Growth risks and challenges**

In order to appreciate the risks and challenges to real GDP growth in Zambia, Table 4.1 presents a further decomposition of sectoral contributions to real GDP. In Table 4.1 a decomposition of sectoral contributions to real GDP is presented in five-year intervals over the period 2000-2020. Over the entire period, the top three contributors to annual average real GDP growth rates were wholesale and retail trade, all other services (including education, health, professional,

community, etc. services) and mining, in that order. The key underlying growth drivers included economic liberalization and business reform policies as well as private sector development programs, which were propagated during much of the MMD era, particularly during 2002-2010 when real GDP grew at 6.4 percent per year on average and population growth slowed to 2.3 percent per year (Resnick and Thurlow, 2016). At the same time, the bottom three sectors with the lowest contributions to annual average real GDP growth rates were agriculture, electricity, gas, water and sanitation, and financial and insurance.

Interestingly, the sectors of the economy that had made among the biggest consistent contributions to real GDP growth over the period – specifically wholesale and retail trade and all other services – made the most significant negative contributions to growth during COVID-19 in 2020. Similarly, agriculture, which performed relatively poorly over the period, made among the most significant contributions to growth during the pandemic. This is partially explained in that the spatial distribution of COVID-19 incidence was relatively higher in urban areas, and had limited spread in rural areas, thus limiting the disruptions to rural economic activities such as agriculture. Thus, building resilient economic growth will require a critical understanding of the key drivers of growth and using that understanding to insulate them from adverse exogenous shocks, through appropriate policy, regulatory and reform measures.

**Table 4.1. Sectoral contributions to real GDP growth rates**

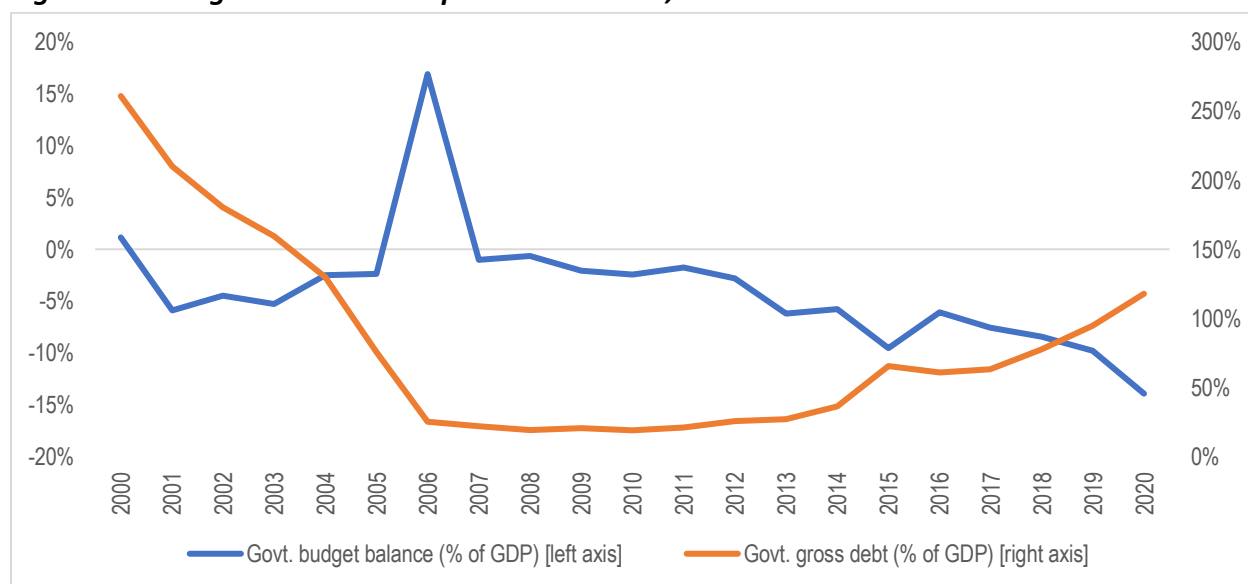
	2000-2004	2005-2009	2010-2014	2015-2019	2020	Avg. (2000-2020)	Rank (avg. (2000-2020))
Agriculture	-0.17%	-0.35%	0.03%	-0.17%	1.07%	-0.10%	12
Mining	0.89%	1.57%	0.65%	0.24%	0.80%	0.83%	3
Manufacturing	0.57%	0.40%	0.46%	0.29%	0.08%	0.41%	6
Electricity, gas, water, sanitation	0.02%	0.07%	0.14%	0.02%	0.05%	0.06%	11
Construction	1.15%	1.23%	0.02%	0.61%	-0.55%	0.69%	4
Wholesale and retail trade	1.37%	1.21%	2.32%	0.25%	-2.65%	1.10%	1
Transport, storage, info, comms	0.27%	1.08%	0.56%	0.54%	1.21%	0.64%	5
Accommodation, food	0.19%	0.10%	0.17%	0.04%	-0.42%	0.10%	9
Financial, insurance	-0.01%	0.01%	0.01%	0.25%	0.55%	0.09%	10
Real estate	0.68%	0.59%	-0.60%	0.11%	0.12%	0.19%	8
All other services	0.46%	1.80%	1.86%	0.77%	-2.35%	1.05%	2
Taxes less subsidies	0.17%	0.33%	0.41%	0.19%	-0.70%	0.23%	7
Total growth rates	5.5%	8.1%	6.6%	3.1%	-2.8%	5.4%	
PRIMARY SECTOR	0.7%	1.2%	0.7%	0.1%	1.9%	0.73%	3
SECONDARY SECTOR	1.7%	1.7%	0.6%	0.9%	-0.4%	1.16%	2
TERTIARY SECTOR	3.0%	4.8%	4.3%	2.0%	-3.5%	3.18%	1
Taxes less subsidies	0.2%	0.3%	0.4%	0.2%	-0.7%	0.23%	4
Total growth rates	5.5%	8.1%	6.6%	3.1%	-2.8%	5.4%	

Source: Constructed from Zamstats National Accounts data

## 4.2. Macroeconomic policy risks

As noted earlier, a key policy driver of economic growth and resilience is the macroeconomic policy stance, particularly the coherence, rationality and consistency of fiscal and public debt policies. Zambia built strong public institutions and systems for sound fiscal governance and debt management during 1993-1998, which ultimately led to fiscal discipline and prudence, fiscal stability and debt sustainability and contributed immensely to sustained GDP growth. However, these public institutions and systems were largely based on discretionary policy positions without equally strong legal and regulatory frameworks. Thus, once political shifts took place and changed fiscal and debt policies, the policy stance of the strong institutions and systems changed dramatically. Ultimately, after a new government came to power in 2011, deficits escalated, public debt (also called government gross debt) mounted (Figure 4.1), debt-service costs rose and eventually, economic growth started to decline.

**Figure 4.1. Budget balances and public debt stock, 2000-2020**



Source: Constructed from IMF WEO database

There is a clear need, going forward, for stronger and more robust legal frameworks for fiscal and debt management, which impose non-discretionary rules for restraining the fiscus and instilling discipline. Some legislative fiscal reforms have been attempted in the past five years, including the enactment of the Public Financial Management Act (2018), the Planning and Budgeting Act (2020) and the Public Procurement Act (2020). However, other required legislative reforms include repeal and replacement of the Loans and Guarantees Act (1994) and the incorporation into the Planning and Budgeting Act of legally binding fiscal restrictions that serve as a form of legal restraint on fiscal and debt accumulation variables.



### 4.3. Productive capacity constraints and trade limitations

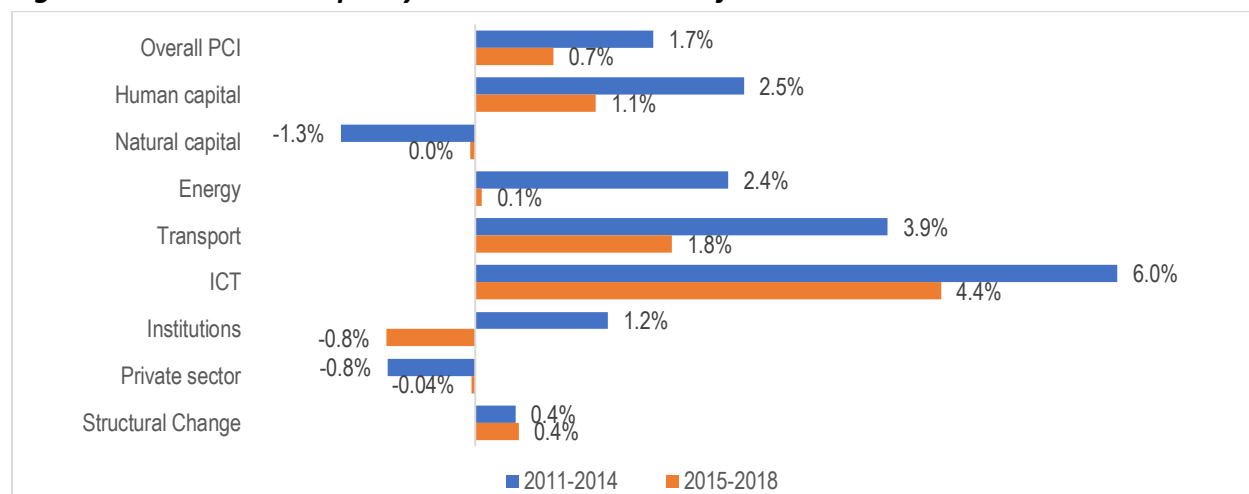
There are risks and challenges inherent in an economy's condition in terms of productive capacity and the knock-on positive effects on export diversification and export sophistication. Thus, what do Zambia's productive capacities look like? UNCTAD publishes a composite productive capacity index (PCI), which comprises of eight sub-indices, namely: human capital, natural capital; energy, transport; ICT; institutions; private sector; and structural change.

Figure 4.2 presents the annual average changes in the PCI and sub-indices for Zambia over the period 2010-2018, which is split into two sub-periods. The country's overall PCI improved by 0.7 percent per year on average over 2015-2018, suggesting smaller improvements in overall productive capacities compared with the period 2011-2014 (when the PCI annual average change was 1.7 percent). A fundamental concern for economic and export diversification and sophistication relates to the sub-indices on (public) institutions and the private sector. Over 2011-2014, productive capacity in public institutions improved by 1.2 percent per year on average, but in a reversal of fortunes, declined by 0.8 percent per year on average in the subsequent period (2015-2018). Essentially, public institutional capacity was eroded during 2015-2018. For private sector capacity, both periods saw erosion, with private sector productive capacity declining by 0.8 percent and 0.04 percent per annum on average during 2011-2014 and 2015-2018, respectively.

This is significance in that without appropriate investments in building public institutional and private sector productive capacities, all the improvements in human capital, energy, transport and ICT had limited influence on economic growth, economic diversification and export diversification and sophistication. Strong public institutions are crucial for supporting the private sector with the right policy, regulatory and business environment. At the same time, a strong and capable private sector is the main engine for economic growth and enhanced trade performance.

Because Zambia did not pay sufficient attention to productive capacity building in the private sector and public institutions over 2010-2018, economic diversification and domestic productivity remained critical challenges. Unsurprisingly, the record of formal job creation was relatively weak, as seen in Sections 1 and 2 and in Table 4.2. Over the 2012-2020 period, Zambia lost 4 percent of formal jobs per year on average. This was largely due to the job-creation limitations of public institutions and private sector productive capacity. Arguably, the private sector overall still needs considerable support in terms of business reform policies and strategies to fix the business environment and establish well-targeted programs to rebuild the private sector's productive capacity.

**Figure 4.2. Productive capacity index and sub-indices for Zambia**



Source: Constructed from UNCTADStats database

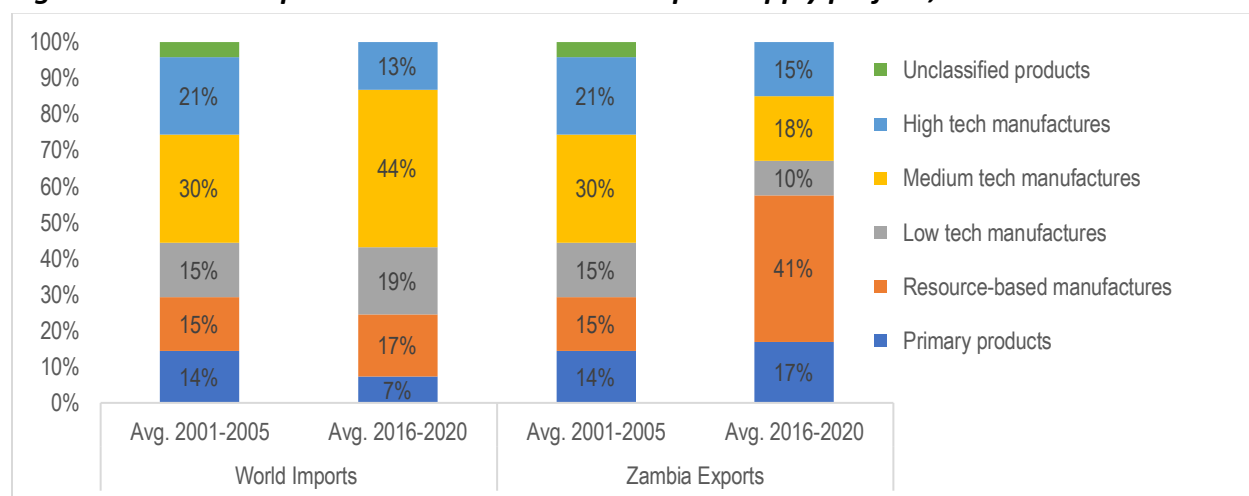
Moreover, exports remain highly concentrated in two commodities – copper and cobalt – which jointly accounted for 72 percent of total exports per year on average over the 2000-2020 period. With relatively low productive capacity, the private sector was unable to see, let alone capitalize on the increasing global import demand for sophisticated, medium technological content goods. The world has been gravitating towards sophisticated medium-technology imports, and their share of total world imports increase from 30 percent per annum on average over 2001-2005 to 44 percent per year on average over 2016-2020. However, over these same two periods, Zambia’s export profile became increasingly dominated by resource-based goods, with their share increasing from 15 percent per year on average during 2001-2005 to 41 percent per year over 2016-2020 (Figure 4.3).

**Table 4.2. Total formal employment, 2012-2020**

	2012	2014	2017	2018	2019	2020	Avg. 2012-2020
<b>Total formal employment</b>	847,420	629,626	1,192,712	931,906	941,292	783,422	887,730
<b>Total formal employment (annual avg. % change)</b>		-13%	30%	-22%	1%	-17%	-4%

Source: constructed from Labour Force Survey reports (various)

**Figure 4.3. World import demand and Zambian export supply profiles, 2001-2010**



Source: Constructed from UNCTADStats database

#### 4.4. Susceptibility to exogenous commodity price shocks

With this export profile of resource-based goods (mainly copper), Zambia remains highly vulnerable to exogenous commodity shocks. As seen in Figure 4.4, annual average changes in Zambia’s copper exports over 2000-2020 were very closely associated with changes in global copper prices, with a correlation coefficient of 0.93 between the two. Bearing in mind that mining was one of the top three contributors to the overall real GDP growth rate over the same period, adverse international copper price movements were anticipated to have significant negative effects on mining sector production through reduced export supply potential.

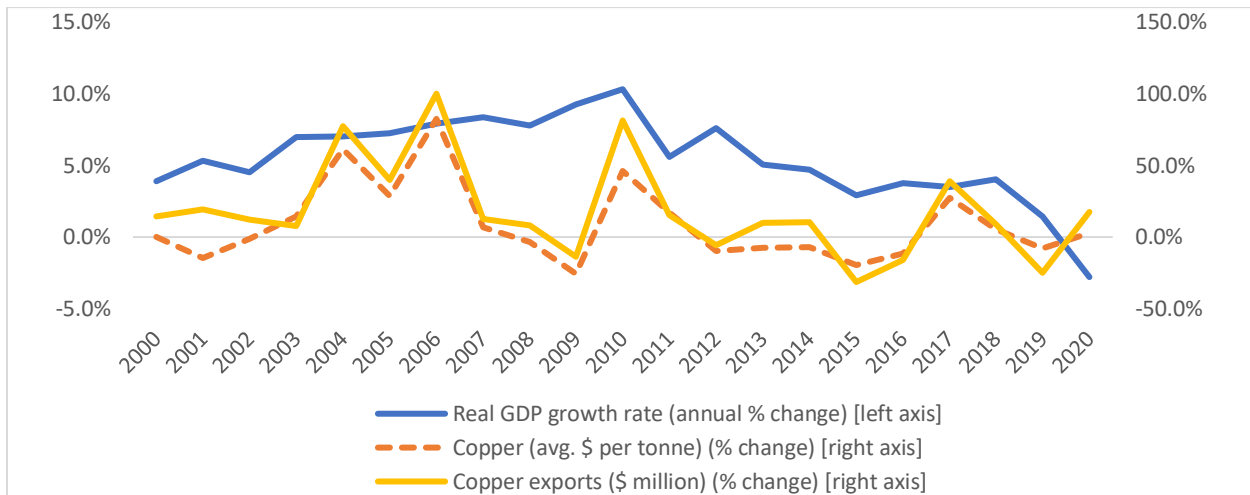
#### 4.5. Threats regarding the demographic transition

According to the Zambia Statistical Agency (ZSA), as of 2020, Zambia’s population was estimated at 18.4 million, with an annual population growth rate of 2.8 percent. Zambia is said to be in its second stage of demographic transition with a high fertility rate estimated at 5.3 children per woman despite the high use (45 percent) of modern contraception among married women. Consequently, Zambia’s population is relatively young, with 44 percent being under age 15 and 82 percent under age 35 (Zambia Statistical Agency - Zamstats).

UNDESA (2019) projects that by 2065, Zambia will have a total population of 51.8 million people, of which 17.3 million (or 33.4 percent) will be in the 15–34-year age bracket and 15.3 million (29.5 percent) will be in the 35-64 year age group (Figure 4.5). This implies that the country will have to plan for the training and skills development of an average of 1.2 million youth (15-34

years old) per year entering the labor market. In tandem, 1.3 million persons per year on average will graduate from the youth group to the 35-64-year group.

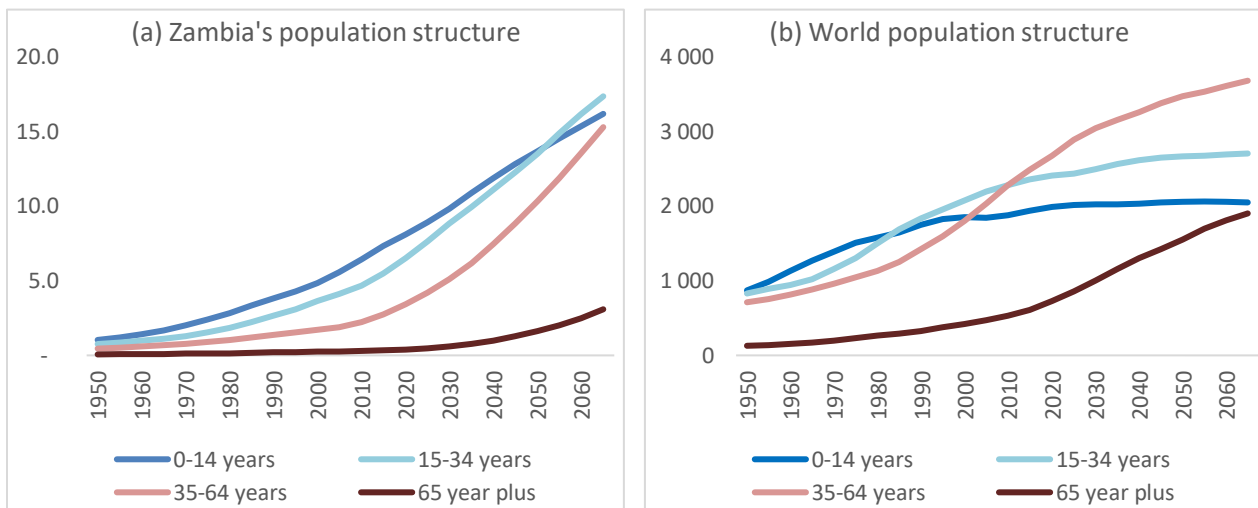
**Figure 4.4. Global copper prices, Zambian copper exports and growth, 2000-2020**



Source: constructed from BOZ BOP and Fortnightly Statistics databases, and Zamstats data

Zambia's short-, medium- and long-term investments (public and private) in education, skills development and gainful employment creation will be crucial for harnessing the demographic transition anticipated in Figure 4.5 and turn it into a dividend — not a debt. Furthermore, for the country to realize such a dividend, the fertility rate needs to decline significantly. Combined with the right investments in health, education, housing and other social services as well as job creation, a decline in fertility could open a window of opportunity for economic growth.

**Figure 4.5. Zambia and world overall population structure by age group**



Source: Constructed from UNDESA (2019) database

Under the 7NDP, the provision for sexual and reproductive health services and access to comprehensive sexuality education (especially for young girls) was one of the measures expected to improve knowledge and skills aimed at reducing teenage pregnancy, HIV/STIs infection and child marriages. The government was also to focus on improving the access to and quality of education for young people to ensure they acquire the requisite skills and knowledge relevant to the current economy and job market.

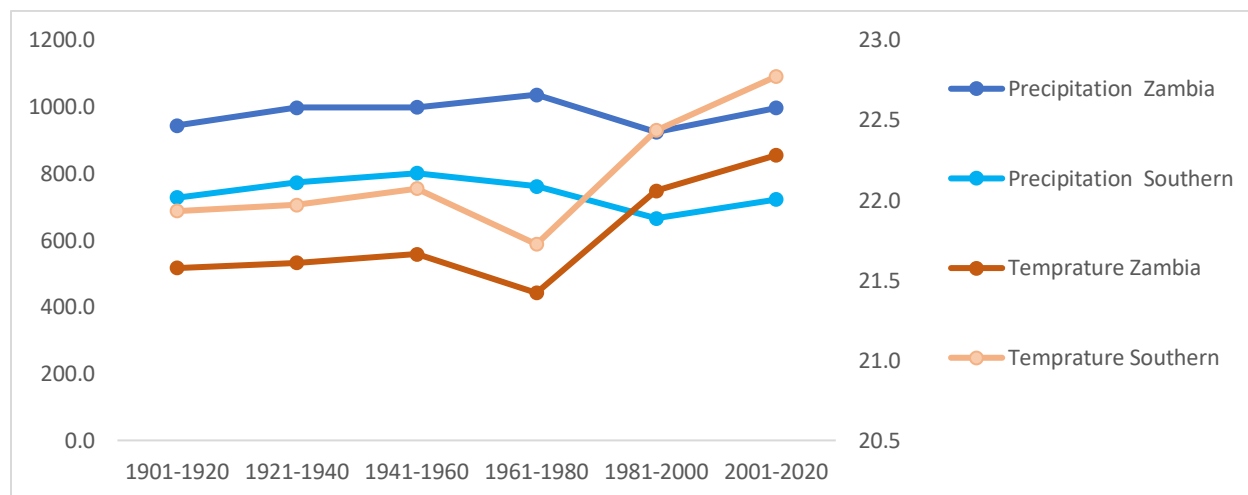
However, while the government has invested quite substantially in infrastructure in both the health and education sector through the ambitious infrastructure program mentioned in earlier sections, investment in complementary human resources, equipment, supplies and services has lagged due to diminishing fiscal space. For instance, an employment freeze for the public service which includes a freeze on hiring teachers and health personnel has been in place for some time now. As of 2021, over 55,000 trained teachers and an undisclosed number of health personnel were not yet deployed despite schools and health facilities having a limited number of personnel (GRZ, 2021). This has resulted in an erosion of both education and health access and quality threatening the demographic dividend that could be reaped from Zambia's youthful population.

Zambia also anticipates an increasingly urbanized population. According to UNDESA (2019), in 2020, 45 percent of the total population was in urban areas (compared with 42 percent on average in sub-Saharan Africa). By 2050, it is projected to be 62 percent urbanized (compared with 58 percent on average in sub-Saharan Africa). This implies that Zambia will either have to cater for increasing social services and infrastructure in urban areas relative to rural areas or take measures to stem the high and increasing urbanization rates. The former option could further marginalize already marginalized rural areas that bear the brunt of poverty and inequality (as seen in Section 1). The latter option could mean revamping rural areas, particularly if the policies and strategies for human and commercial spatial settlement incorporate rural fiscal and non-fiscal incentives to economic actors.

#### **4.6. Shocks related to climate change**

Climate change constitutes a significant threat to Zambia's sustainable development. Climate change shocks in Zambia have included drought and dry spells, seasonal and flash floods and extreme temperatures. The long-range annual average precipitation and temperatures for Zambia overall and for the Southern province in particular, the country's agricultural and food hub, are shown in 20-year intervals in Figure 4.6. While the climate change effects on precipitation are not obvious, temperatures clearly increased markedly, by over 1 degree Celsius (°c), over the period. Temperatures were significantly higher in the Southern province – Zambia's agricultural hub – than the national average while precipitation was consistently lower in Southern province than in the rest of the country.

**Figure 4.6. Annual average temperatures (°c) and precipitation (mm), 1901-2020**



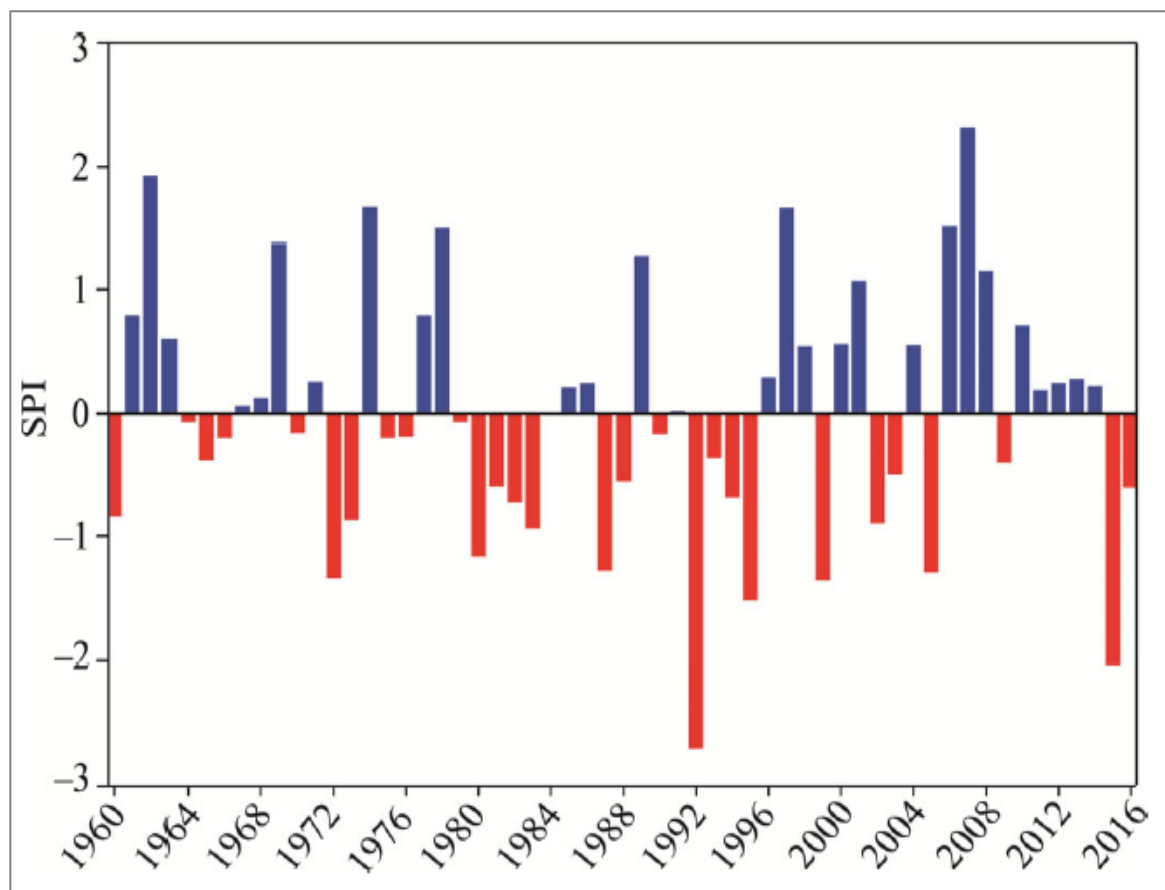
Source: Constructed from World Bank WDI database

Moreover, Libanda et al. (2019) calculate a Standardized Precipitation Index (SPI) for Zambia for the period 1960-2016 and find that based on a gamma distribution, SPI successfully categorized 1992 and 2015 as extremely dry years (with an SPI value less than or equal to -2.0) for Zambia; 1995 as a severely dry year (-1.9 to -1.5), 1972, 1980, 1987, 1999 and 2005 as moderately dry years (-1.4 to -1.0), and 26 years as near normal years (-0.9 to 0.9). As seen in Figure 4.7, the intensity of dry spells or droughts in Zambia increased markedly after 1992.

Thus, overall, episodes of these shocks, especially droughts and floods have increased in frequency and intensity over the past few decades and have adversely impacted on the food and water security, water quality, energy and sustainable livelihoods. Temperatures also show a rising trend (Figure 4.6) with potential for increased heat stress, land degradation and desertification. These climate change-related impacts are likely to compound the daunting challenges of economic transformation and improving human well-being that the country already faces.

Cognizant of this, in 2016 the government put in place a National Policy on Climate Change (NPCC) (GRZ, 2016). The 2016 NPCC has been developed to support and facilitate a coordinated response to climate change issues in the country. It aims to enable Zambia to re-align its climate-sensitive sectors and its society to meet its development goals through adaptation and mitigation interventions. At the same time, it will contribute to the achievement of the overall objectives of the United Nations Framework Convention on Climate Change (UNFCCC) which Zambia signed and ratified on 11 June 1992 and 28 May 1993 respectively. Going hand-in-hand with the NPCC was Zambia's signing and ratification of the Paris Agreement on 20 September 2016 and 9 December 2016 respectively.

**Figure 4.7. Estimated standardized precipitation for Zambia, 1960-2016**



*Note: Standardized precipitation index (SPI) results over Zambia for the period 1960-2016 based on GPCP data. The values were averaged over longitudes 21°30'E–34°00'E and latitudes 18°00'S–08°00'S. Source: Adapted from Libanda et al. (2019).*

However, in order to make an impactful contribution to addressing climate change shocks, adequate and sustainable financing is required to shift from a carbon-intensive development path to a low-carbon green economy and to support technologies and capacity building for the country to adapt and mitigate shocks. With the constrained fiscal space, however, this implies an additional layer to the challenges, leaving the country highly vulnerable to climate change shocks. Thus, at the COP-26 Summit held in Scotland in November 2021, Zambia submitted that it was ready to reduce emissions by 47 percent if supported by global partners (GRZ, 2021). In this regard Zambia will expedite implementation of activities through the development of bankable project proposals to enable the country to access the necessary financing.

#### **4.7 Institutional weaknesses and compromised resilience to shocks**

A number of observers and commentators (Hinfelaar and Cheelo, 2021; Cheelo et al., 2021; Brosché et al., 2020, Cheelo and Liebenthal, 2018; Dolphin and Saasa, 2018; Fraser, 2017) have covered various aspect of weaknesses in public institutions in Zambia. The sources of the

weaknesses range from excessive political interference and elite state capture to social and cultural habits (tribalism, nepotism, religiosity, etc.) and vices like public financial misappropriation (fraud, corruption, rent seeking, etc.). As these and other factors have permeated the public sector, the professional conduct and efficient operations of some apex public policy-making economic institutions has been severely compromised.

Annual audit reports published by the Auditor-General and annual Trends Reports by the Financial Intelligence Centre (FIC) reveal widespread practices of public sector financial misappropriation and suspected illicit financial transactions. The endemic nature of these malpractices, especially over the 2011-2021 period, resulted in weak institutions and poor public policy making and implementation. Ultimately, the emerging policy environment is clouded by lack of professionalism, transparency and accountability in public workplaces, high propensities for self-preservation on the job, and complicity in corruption and other vices as well as a battery of other adverse factors that have severely eroded economic management and overall governance. This has been one of the most significant realized core risks to economic resilience, recovery and transformation for Zambia over the past decade. By the end of 2021, the country's public institutions needed deep-rooted institutional reforms.

#### **4.8. Summary of economic resilience to exogenous shocks**

From the foregoing, among the main challenges in addressing the key vulnerabilities to shocks and achieving economic resilience are:

- The lack of knowledge-driven, evidence-based inputs into priority setting during short-medium and long-term planning and budgeting of public resources.
- The misalignment between public expenditure policy choices and the needs and priorities of private sector investment and development.
- Weak legal, legislative and regulatory frameworks to constrain macroeconomic policy slippages, misalignments and failures and more broadly to insulate public institutions.
- The weakened state of both public institutions and the private sector in terms of productive capacity, which renders the private sector ineffective at creating formal jobs and taking advantage of infrastructure development.
- An adverse business and competitiveness environment in the domestic economy, which has received little attention in terms of business and competitiveness reforms.



## 5. Economic transformation and resilience: key lessons and policies

Among the key lessons from the past 20 years is the fact the structural adjustment policies along with business environment reform and private sector development efforts that were implemented in the years prior to 2000 and broadly over the 2001-2010 period were significant for establishing macroeconomic stability and ultimately sustained positive economic growth.

However, the sustained growth did not yield satisfactory poverty and inequality reduction outcomes. These policies gave way in 2011 to more populist and expansionary policies that were not founded in evidence. The post-2011 economic development paradigm hurt economic growth over time and did not address outstanding issues of inclusive growth, poverty and inequality reduction and overall economic transformation and resilience. Among the key shortfalls of the post-2011 policies were: the massive accumulation of debt, which readily became unsustainable over time; disparities between monetary and fiscal policies, which, over time, contributed to weakening economic growth performance; the disconnect between macroeconomic and sectoral policies coupled with a severe lack of attention to private sector development policies and strategies, which ultimately eroded private sector productive capacity; the limited insulation of public institutions, which weakened public sector capacity to formulate sound policies and implement them; and the defensive attitudes of public institutions that hindered public sector reforms and institutional capacity building.

A new policy agenda is both relevant and necessary for Zambia to restore macroeconomic stability, achieve robust real economic growth and over time, achieve the structural transformation required for a resilient economy. The following policies, strategies, and specific interventions are recommended in order to promote economic transformation:

- Given past weaknesses in the processes of formulating national development plans, annual budgets and related macroeconomic and sectoral policies, a return to knowledge-driven, evidence-based priority setting and public investment choices is recommended during planning and budgeting for the short, medium and long term.
- Renewed attention should be given to coherence, credibility and consistency in the implementation of policies, plans and strategies, both macroeconomic (especially fiscal) and within key sectors such as agriculture, agro-processing and other manufacturing, mining, and selected services. Appropriate criteria for assessing coherence, credibility and consistency of policy, strategy and plan formulation and implementation should be established and integrated into public sector monitoring and evaluation as well as in independent assessment systems and procedures.

- Establishment of government-led private sector development programs that identify and prioritize key growth-driver sectors and promote economic diversification. Stronger export orientation, diversification and sophistication will be critical for rebuilding weakened private sector productive capacity and sectoral economic resilience.
- Strengthening key legal and regulatory frameworks will be important for insulating public institutions from undue influences, particularly in macroeconomic policymaking. This will limit the erosion of productive capacity in key economic governance institutions.
- Returning to business and competitiveness reforms (similar to those pursued during most parts of the MMD political era) will be vital for enhancing business, competitiveness and trade readiness.
- Building overall economic resilience, especially in the wake of the COVID-19 pandemic through prioritization and focus on:
  - Enhancing food security and value addition based on effective shifts in policy attention from basic agriculture to agro-processing.
  - Improving ICT and other technologies to foster transformation and resilience.
  - Implementing climate change mitigation and adaptation policy measures, to help cope with the vagaries of climate change; and
  - Harnessing the demographic transitions (youthful population and urbanization) through targeted public investments in related areas such as education, training and skills development, and provision of other critical services such as water and sanitation, health, addressing the particular needs of rural and urban area.
- Given general weaknesses in ICT capacity, it will be vital to establish data, information and knowledge systems that support capacity building in public institutions as well as in the private sector.

## References

- ACET (2014). 2014 African Transformation Report: Growth with Depth. African Center for Economic Transformation(ACET), <https://acetforafrica.org/publications/african-transformation-report-2014/2014-african-transformation-report/>.
- ACET (2021a). Request for Proposals: Country Study on New Policies to Build a Resilient Economy in the Post COVID19 Era, African Center for Economic Transformation; Date of issue: 15 October, 2021.
- ACET (2021b). African Transformation Index (ATI) Database 2021. African Center for Economic Transformation, November 2021 version.
- Bank of Zambia. (2021). Targeted Medium Term Financing Facility Report. Bank of Zambia. Retrieved November 29, 2021, from <https://www.boz.zm/covid-19-interventions.htm>.
- Bank of Zambia. (n.d.). Selected Macroeconomic Indicators. Retrieved December 19, 2021.
- Bank of Zambia Statistics. (2021). Private Capital Flows.
- Brosché J., H. Fjelde and K. Höglund (2020). Electoral violence and the legacy of authoritarian rule in Kenya and Zambia. *Journal of Peace Research*. 57(1):111-125. doi:10.1177/0022343319884983
- Central Statistical Office. (2013). 2010 Census of Population and Housing – Population and Demographic Projections 2011-2035. Lusaka: Government of the Republic of Zambia. July.
- Cheelo, C., M. Hinfelaar and M. Ndulo (Eds.). (2021). The Developmental State in Zambia; Plausibility, Challenges, and Lessons from South Korea. Southern African Institute for Policy and Research (SAIPAR), Zambia – Country Case Study 5: Zambia, African Economy Development Policy In Practice – Lessons From South Korea’s Development Experience. Abidjan: African Development Bank. ([https://www.afdb.org/sites/default/files/zambia\\_20180\\_doc2\\_v11\\_hq.pdf](https://www.afdb.org/sites/default/files/zambia_20180_doc2_v11_hq.pdf))
- Cheelo, C. and R. Liebenthal. (2018). The role of the construction sector in influencing natural resource use, structural change, and industrial development in Zambia. WIDER Working Paper 2018/172. © UNU-WIDER 2018. December.
- Dolphin, T. and O. Saasa (2018). How to Avoid Zambia’s Public Debt Toppling the Economy into Crisis. Report. 24 August
- Finn, A., G.A. Ayana, and R. Kanagavel. (2021). Monitoring the Impact of COVID-19 in Zambia: Results from Two Rounds of World Bank Enterprise Survey, Follow-ups on COVID-19. World Bank. Retrieved December 21, 2021, from <https://openknowledge.worldbank.org/bitstream/handle/10986/35553/Results-from-Two-Rounds-of-World-Bank-Enterprise-Survey-Follow-ups-on-COVID-19.pdf?sequence=1&isAllowed=y>
- Fraser, A. (2017). Postsocialisms-populism in Zambia: Michael Sata’s rise, demise and legacy. *International Political Science Review / Revue Internationale de Science Politique*, 38(4), 456-472. <https://www.jstor.org/stable/26940304>.

- Government of the Republic of Zambia. (2006). Fifth National Development Plan 2006-2010. Lusaka: GRZ. Retrieved November 17, 2021, from <https://www.thegef.org/sites/default/files/nca-documents/ZAMBIA-FNDP.pdf>.
- GRZ. (2008). The Micro, Small and Medium Enterprise Development Policy. Ministry of Commerce Trade and Industry. Retrieved December 18, 2021, from <https://www.boz.zm/Micro-Small-and-Medium-Enterprise-Development-Policy-2008.pdf>
- GRZ. (2011). The Sixth National Development Plan 2011-2015. Government of the Republic of Zambia. Retrieved November 17, 2021, from <https://zm.one.un.org/commerce/wp-content/uploads/2018/01/6th-National-Development-Plan.pdf>
- GRZ. (2014). Revised Sixth National Development Plan 2013-2016. Government of the Republic of Zambia. Retrieved November 17, 2021, from <https://www.gwp.org/globalassets/global/activities/impact-stories/supporting-documents/revised-sixth-national-development-plan.pdf>.
- GRZ. (2016). National Policy for Climate Change. Ministry of National Development Planning. Retrieved December 27, 2021, from [https://www.mlnc.gov.zm/?wpfb\\_dl=74](https://www.mlnc.gov.zm/?wpfb_dl=74)
- GRZ. (2017). *Seventh National Development Plan 2017-2021*. Government of the Republic of Zambia. Retrieved November 17, 2021, from <https://zm.one.un.org/commerce/wp-content/uploads/2018/07/7th-National-Development-Plan.pdf>.
- GRZ. (2018). 2019 Budget Address. Ministry of Finance.
- GRZ. (2019). 2020 Budget Address. Ministry of Finance.
- GRZ. (2020). 2021 Budget Address. Ministry of Finance.
- GRZ. (2020). Business Survey Report on the Impact of Covid-19 on Zambian Enterprises. Lusaka: UNDP Zambia.
- GRZ. (2021). 2022 Budget Address. Ministry of Finance.
- GRZ. (2021). President Hakainde Hichilema's Opening Remarks to COP-26 Summit, Glasgow Scotland. 2 November 2021. Accessed 27 December 2021 from: <https://www.youtube.com/watch?v=Ci6PRaNoZpc&t=33s>
- Hinfelaar, M. and C. Cheelo. (2021) State capacity building in Zambia amidst shifting political coalitions and ideologies. ESID Working Paper No.171. Manchester, UK
- ITC. (2022). Investment Maps (database). ©International Trade Centre (ITC). <https://www.investmentmap.org/investment/time-series-by-reporting-country>.
- Libanda, B., M. Zheng and C. Ngonga (2019) Spatial and temporal patterns of drought in Zambia. *Journal of Arid Land*, <https://doi.org/10.1007/s40333-019-0053-2>
- McMillan M., R. D.-G. (2014). Globalization, Structural Change, Productivity Growth, with an Update on Africa. *World Development*, 63, 11-32. Retrieved December 18, 2021, from

[https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/globalization\\_structural\\_change\\_productivity\\_growth\\_with\\_africa\\_update.pdf](https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/globalization_structural_change_productivity_growth_with_africa_update.pdf).

Ministry of Finance, Annual Economic Reports, various.

Ministry of Finance (2021) 2020 Annual Economic Report. Lusaka: Ministry of Finance and National Planning.

Mwale, T. (2014). The Determinants of Foreign Direct Investment in Zambia (1990-2011). Dissertation, University of Zambia, <http://dspace.unza.zm/handle/123456789/3729>.

Phiri, M. and Shimukunku, M. (2020). Special economic zones in Southern Africa: white elephants or latent drivers of growth and employment? The case of Zambia and South Africa. UNU-WIDER. Retrieved November 2021, from <https://sa-tied.wider.unu.edu/article/special-economic-zones-southern-africa-white-elephants-or-latent-drivers-growth-and-0>.

Resnick, D. and Thurlow, J. (2016). The Political Economy of Zambia's Recovery: Structural Change without Transformation. In R. D. McMillan M. (Ed.), *Structural Change, Fundamentals, and Growth: A Framework and Case Studies* (pp. 260-290). Washington D.C.: International Food Policy Research Institute. Retrieved December 21, 2021, from <https://www.ifpri.org/publication/structural-change-fundamentals-and-growth-framework-and-case-studies>.

Siwale, T. (2021). One year on: Zambian economy during COVID-19. International Growth Centre. Retrieved December 21, 2021, from <https://www.theigc.org/blog/one-year-on-zambian-economy-during-covid-19/>.

UNCTAD (2022). UNCTADstat Database, United Nations Conference on Trade and Development, custom data acquired via website: [https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS\\_ChosenLang=en](https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en).

UNDESA. (2019). World Population Prospects 2019; United Nations, Department of Economic and Social Affairs, Population Division, custom data acquired via website. <https://population.un.org/wpp/DataQuery/>.

UNIDO (2020). PCP Industrial Diagnostic Report Zambia. Geneva: UNIDO.

World Bank. (2010). Zambia Impact Assessment of the Fertilizer Input Support Programme: Analysis of Effectiveness and Efficiency. Washington, DC: World Bank.

World Bank. (2020). Accelerating Digital Transformation In Zambia: Digital Economy Diagnostic Report. Washington, DC: World Bank.

World Bank. (2022). World Development Indicators Databank. © 2022 The World Bank Group, All Rights Reserved, customized data acquired via website. <https://databank.worldbank.org/source/world-development-indicators#>

ZIPAR. (2018). Taking the Road Less Travelled: In Pursuit of Fiscal Consolidation. Analysis of the 2019 National Budget. Zambia Institute for Policy Analysis and Research.



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**Transforming and Building Resilient Economies in Africa:**  
Resetting Priorities for the Policy Agenda  
in the Post-COVID-19 Era

TICAD 8 Side Event  
August 23, 2022

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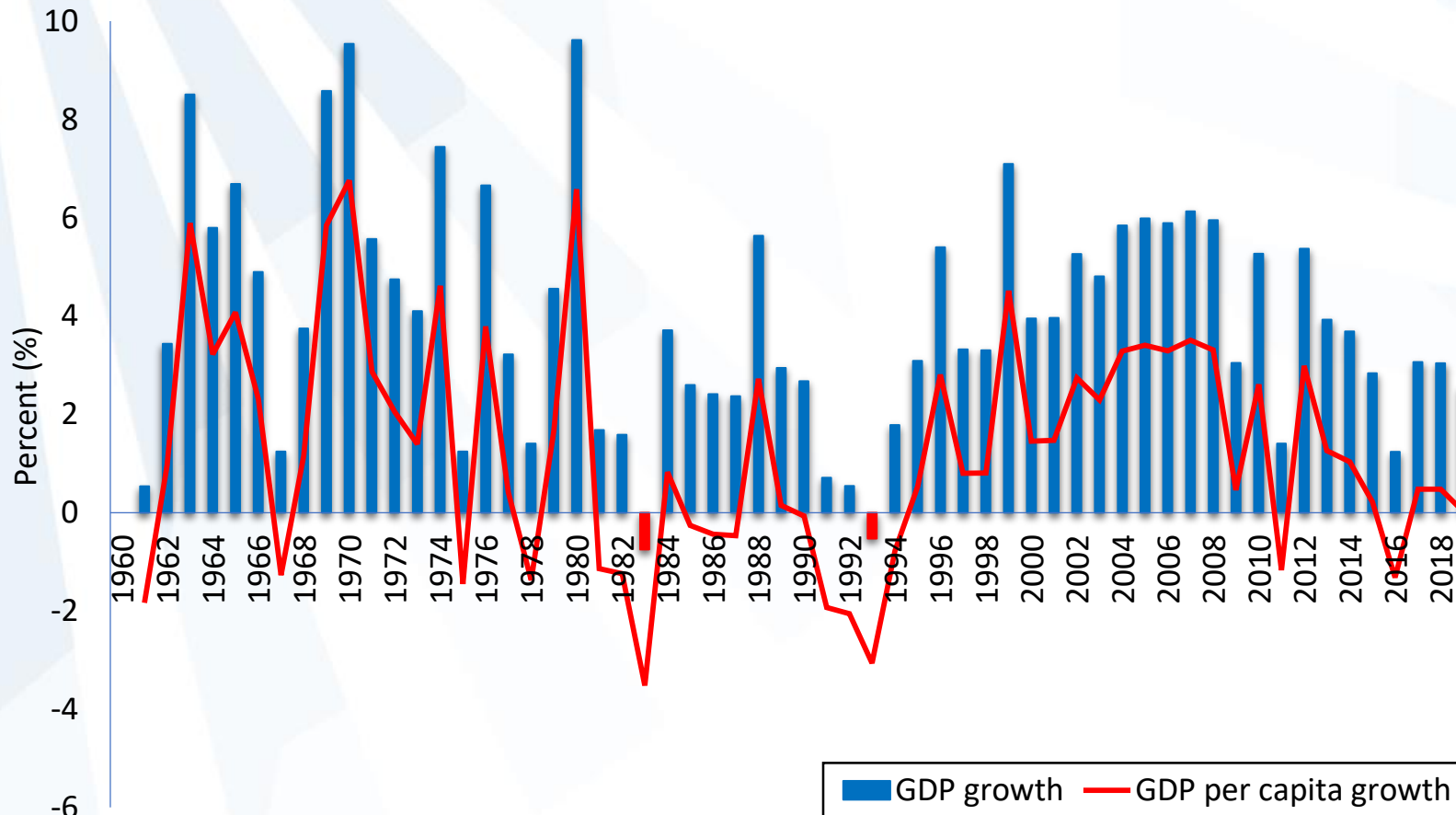
# Contents

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# Background

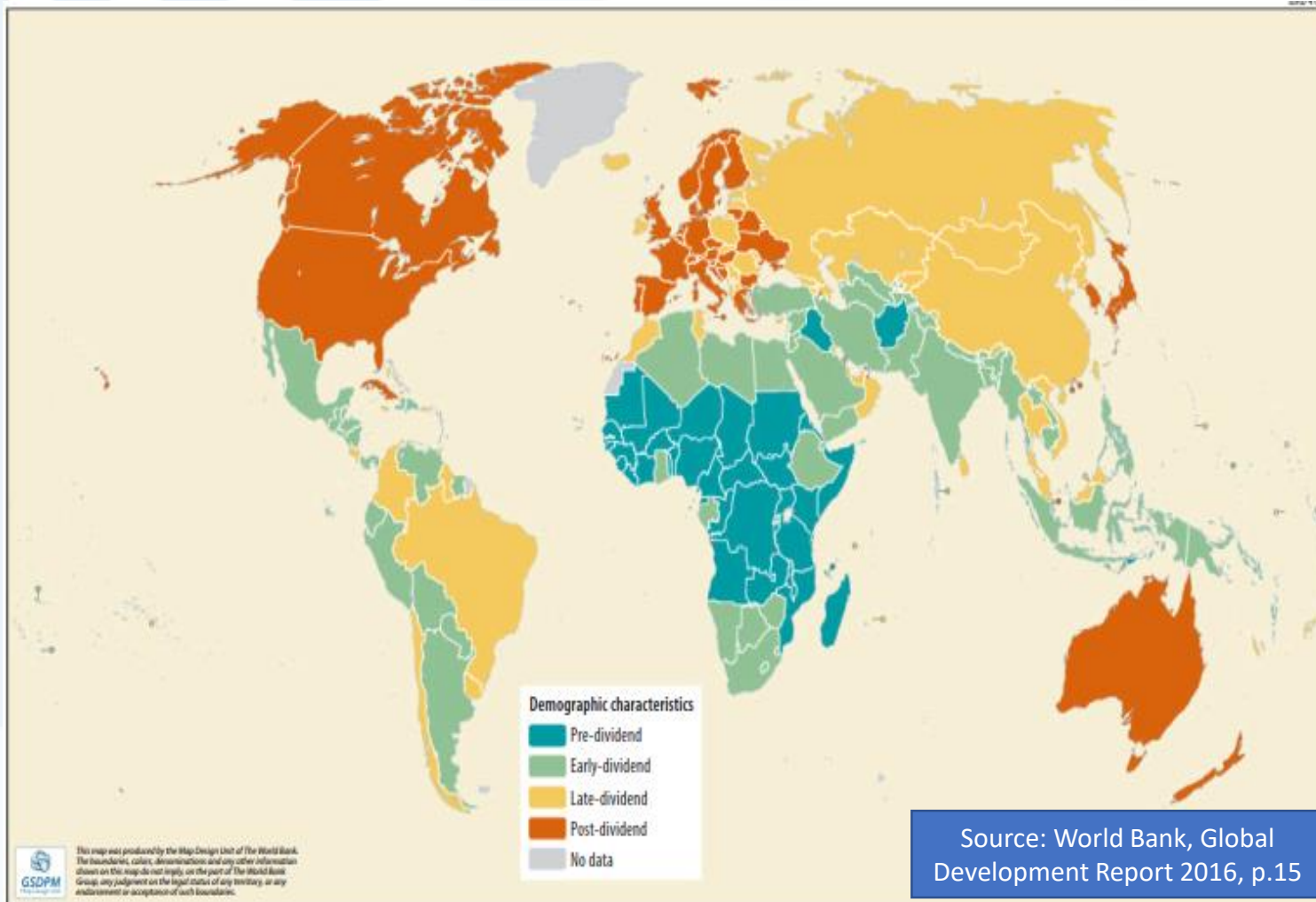


**Africa's most recent growth acceleration period (1994-2008) lasted longer than any previous one. However it ended for similar reasons as in the past.**



- Global business and growth cycles + idiosyncratic market shocks →
  - ↓ Global demand & investment
  - ↓ Terms of trade
- Other factors:
  - Climate change
  - Wars
  - Civil unrest

# Population growth and early demographic transition (dividend) strain African labor markets



- High, volatile, accelerating population growth
- Bulging population age pyramids
  - High dependency ratios
  - Large cohort of young poorly educated youth
  - Youth unemployment and underemployment

**Investments in physical and human capital struggle to outpace the growing population.**

# Framework

# ACET's DEPTH Framework and the ATI

**D**

**E**

**P**

**T**

**H**

**African Transformation Index  
(Growth + DEPTH)**

**Diversification in  
production and export**

- Manufacturing value added (% of GDP)
- Services value added (% of GDP)
- % Share of Manufact & Services in Total Exports of Goods & Service
- Inverse share of % of Top 5 Country's Total Commodity Exports (100-% top 5')

**Export  
Competitiveness**

% of exports in GDP  
relative to world average

**Productivity  
increases**

- MVA per Manufacturing Worker
- Agricultural value added per worker.
- Services value added per worker.

**Technology  
upgrading**

- % Share of Med. & High Tech. in Total Production Activities
- % Share of Medium and High Technology Exports in Total Commodity Exports

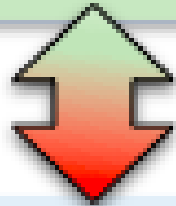
**Human Well-being**

- GDP Per Capita
- Waged and salaried females (% of female employment)
- Inverse of Gini coefficient
- Ratio of Formal Employment in Labor force

# The Growth-Transformation-Resilience Relationship

## Economic transformation

Economic and social outcomes from policies that can reduce or exacerbate vulnerability and weaken or strengthen resilience.



## Economic vulnerability

Natural and man-made conditions that expose a country to shocks.

**Policies**

## Economic resilience

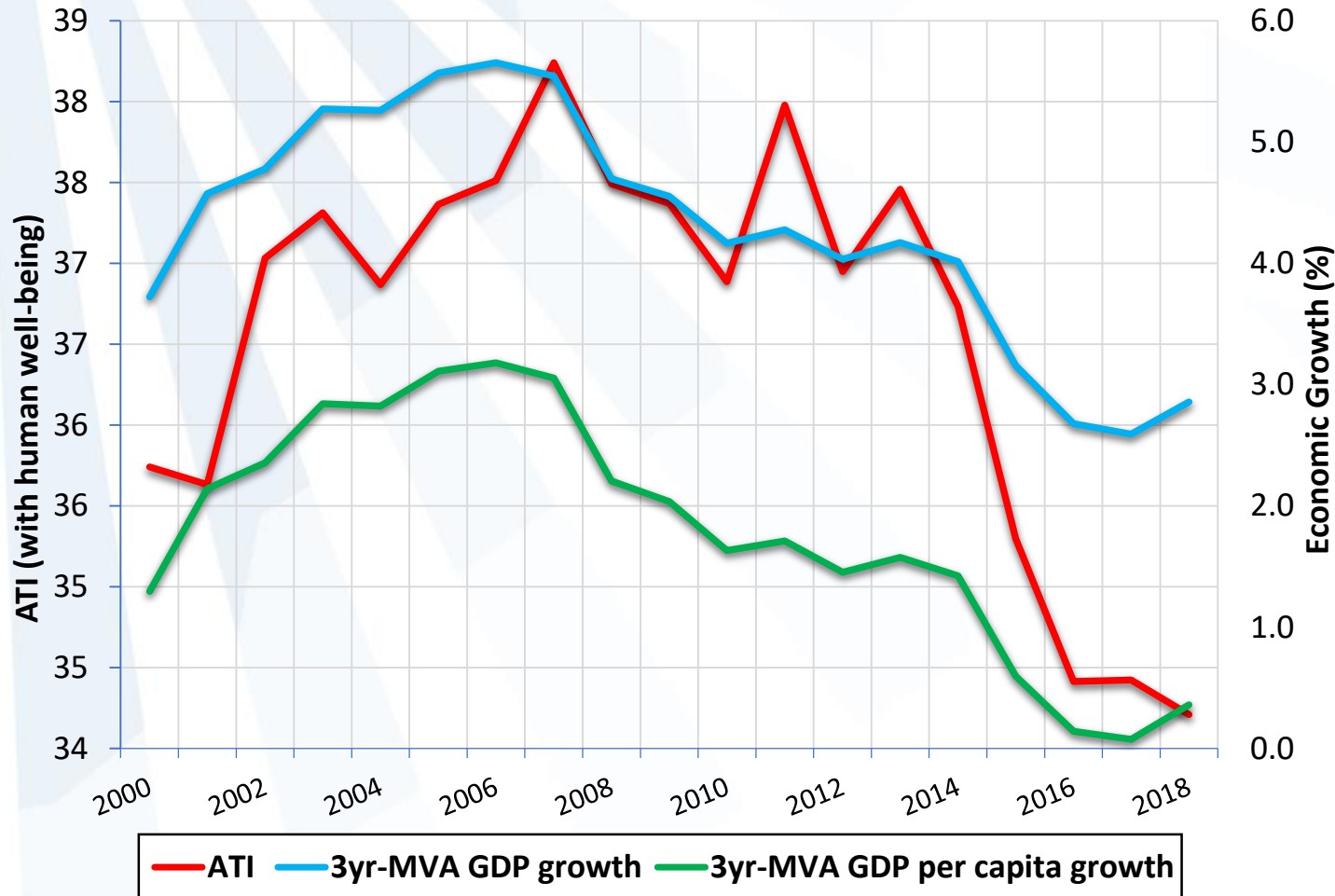
The ability of an economy to withstand, and to quickly and strongly recover from, shocks.

# Key Findings

# **Africa's Growth and Economic Transformation 2000-2019**



## Though growing, African economies were not transforming enough.



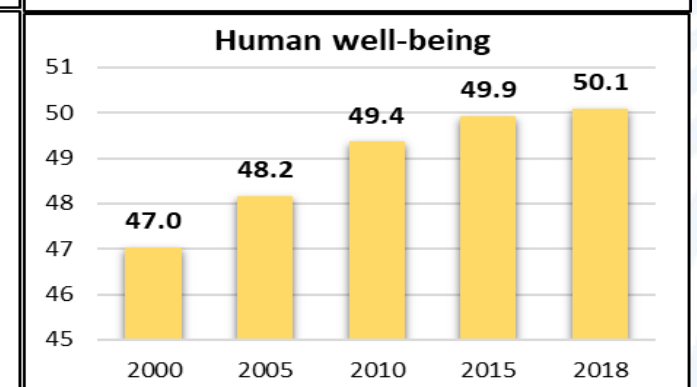
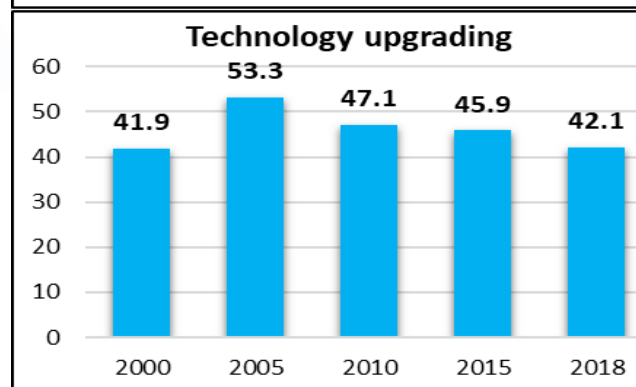
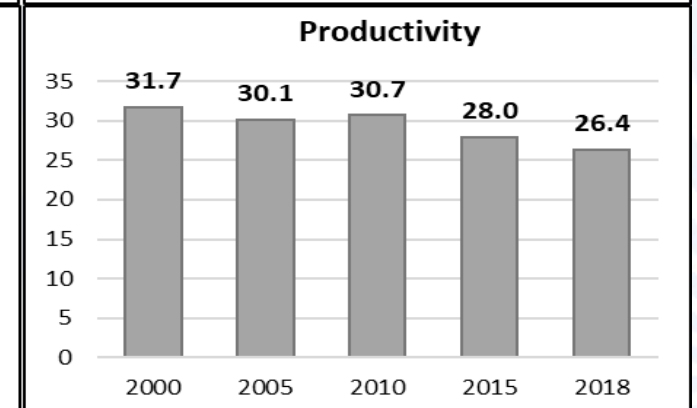
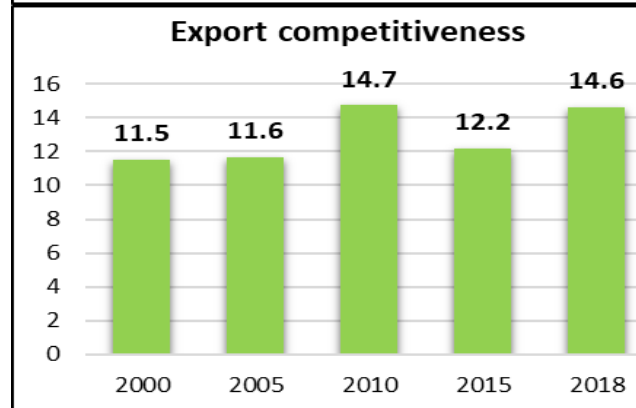
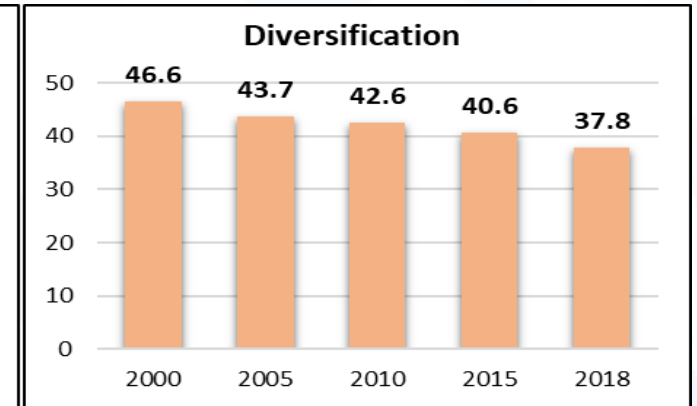
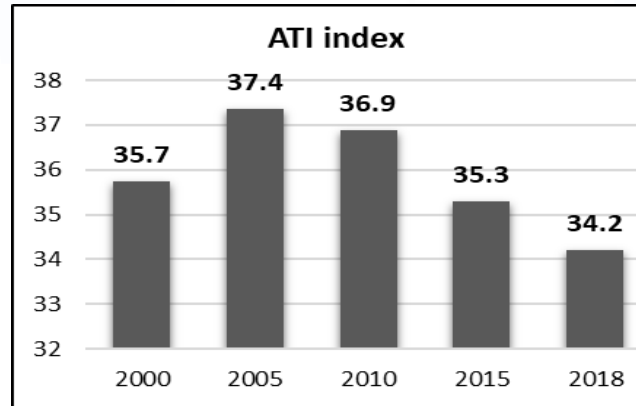
Data sources: WDI, UNIDO, ILO, COMTRADE

- Overall progress of economic transformation in Africa has been weak – below 40 on a scale of 0 to 100.
- The peak performance (2006-2008) was **38.24**.
- The lowest performance (2017-2019) was **34.21**.



## Africa's economic transformation performance on DEPTH dimensions, 2000-2018

- Deteriorating outcomes in product and export diversification **(-8.8)**
- Stagnant export competitiveness after early gains **(+3.1)**
- Steady productivity decline **(-5.3)**
- Declining progress in technological upgrading since 2005 **(-11.2)**
- Steady progress in human well-being **(+3.1)**



## Is Africa's progress on human economic well-being sustainable?

- Progress in the first decade was broad-based across all components, but the second decade saw stagnating income levels and inequality.
- Deteriorating outcomes in other dimensions of economic transformation risk to future human economic well-being.

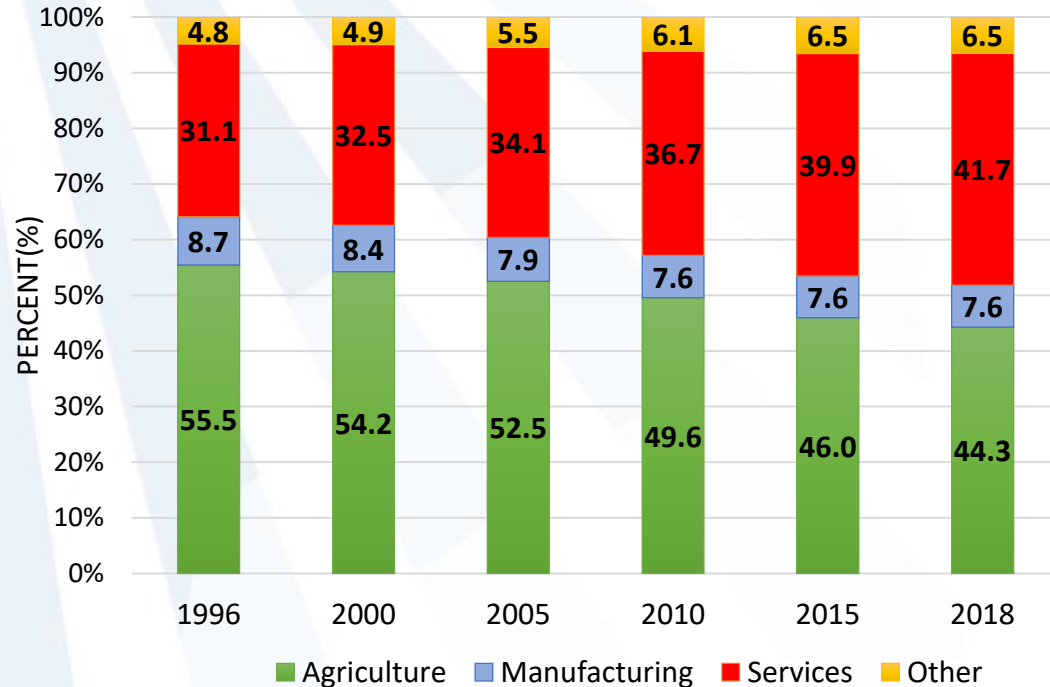


Data source: World Development Indicators

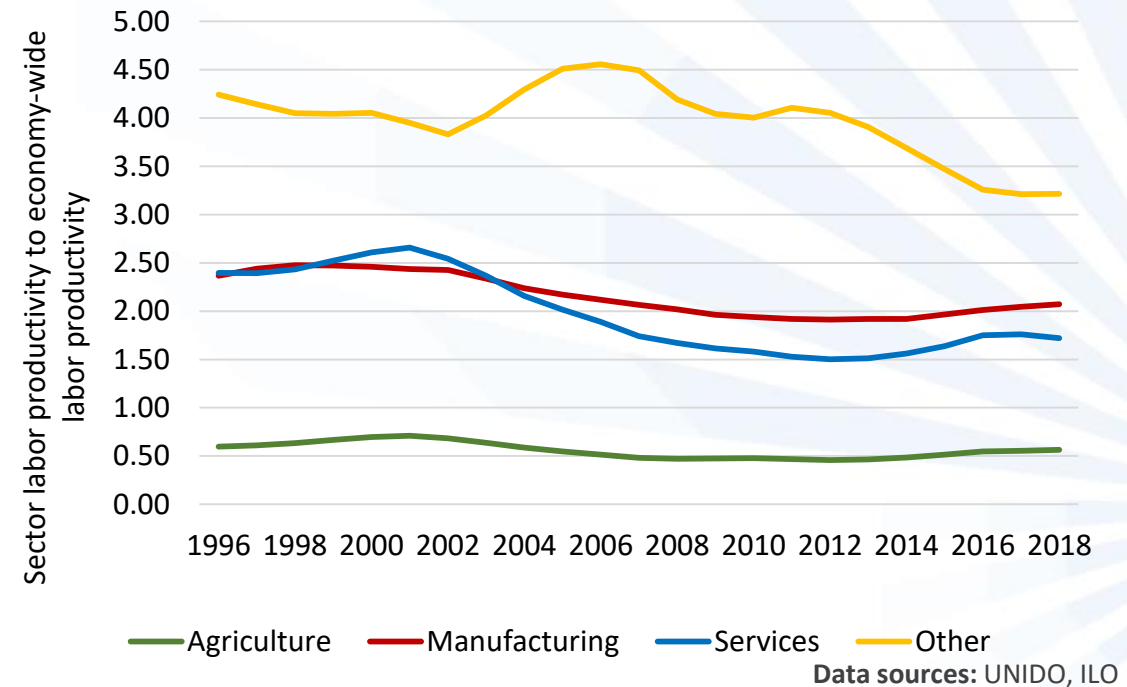
# **Unpacking Africa's Labor Productivity Growth and Technology Challenges**

# In Africa, on average, over the last two decades, sector labor reallocations away from agriculture favored services, and relative labor productivities favored manufacturing

Sector labor shares in Africa, 1996-2018



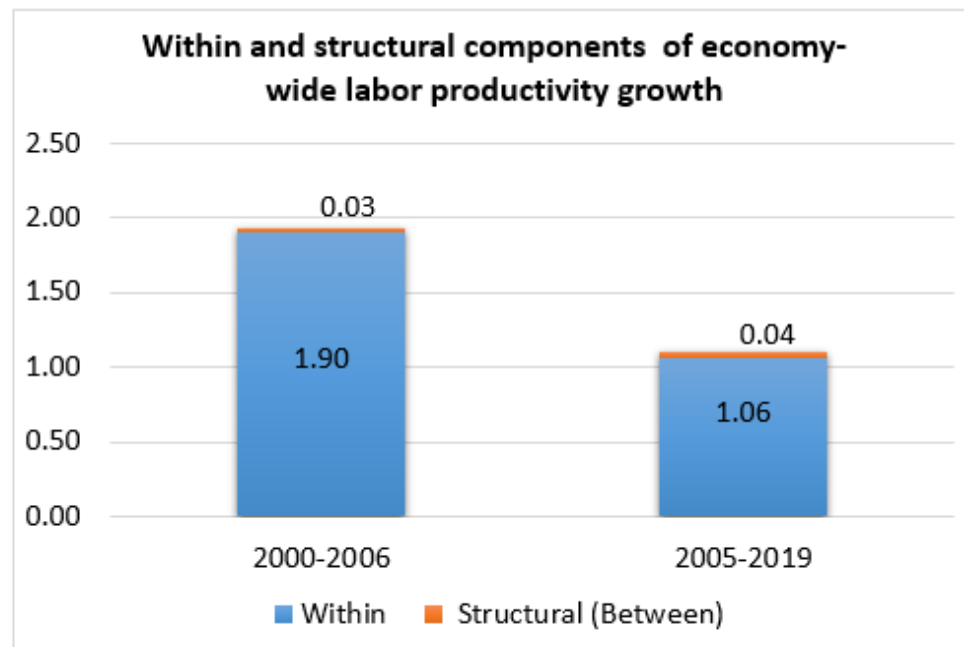
Relative sector labor productivities, 1996-2018



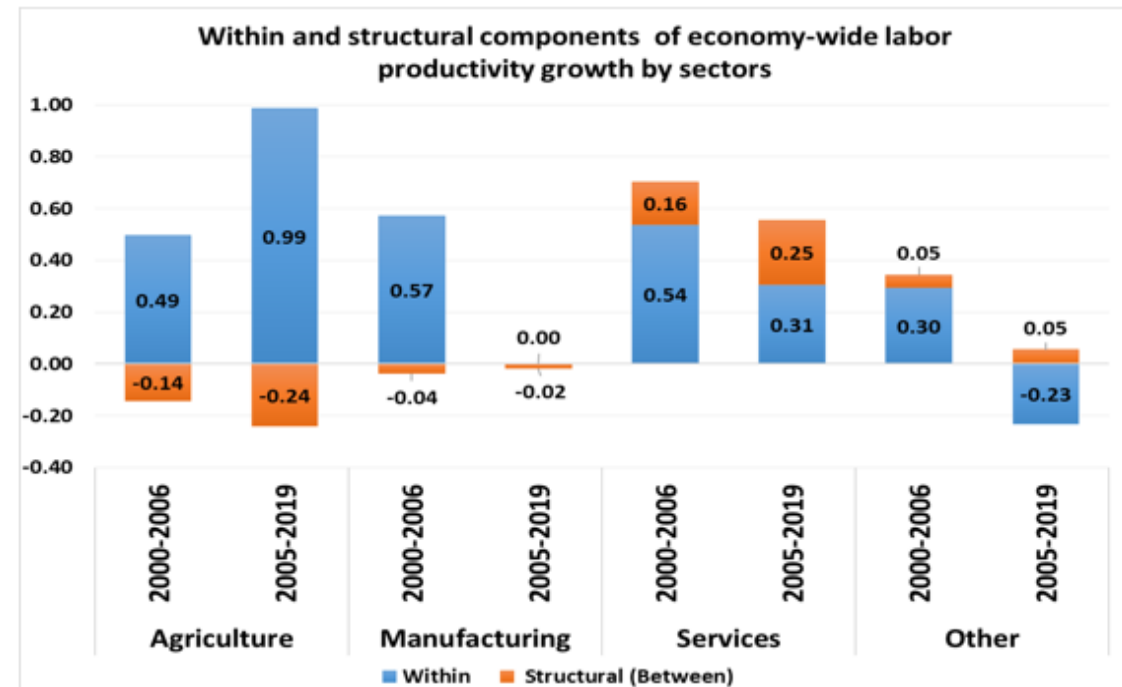
Labor is reallocating from agriculture (-11.2) and manufacturing (-1.1) towards services (+10.6) and other sectors (+1.7), but *relative* labor productivity in services is below manufacturing and other sectors, and it is falling substantially – and unlikely to translate into substantial aggregate labor productivity growth.

## Disaggregation of contributions to economy-wide labor productivity growth

- Within-sector productivity growth remains the predominant overall contributor to economy-wide productivity growth, but it is uneven across sectors
- The structural (“between sectors”) component played a very negligible role in the aggregate. The modest gains in structural component came from services.
- Little (if any) contribution of manufacturing to economy-wide labor productivity growth

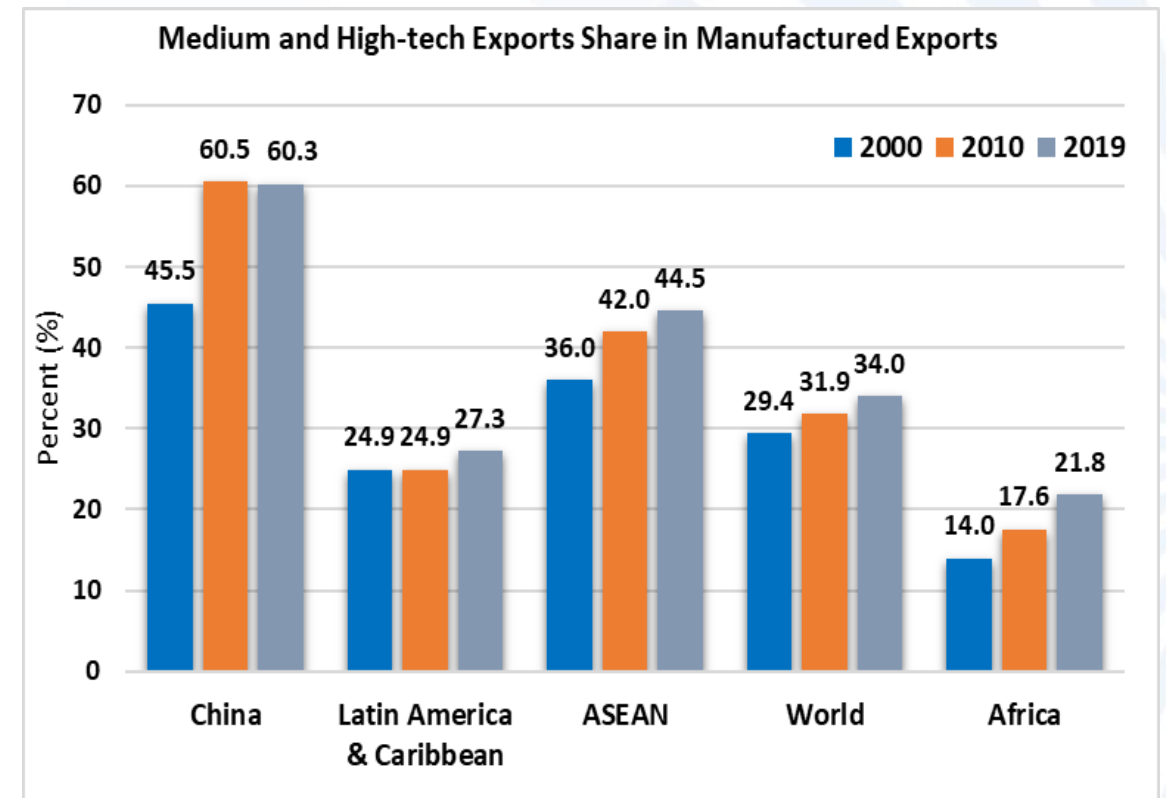
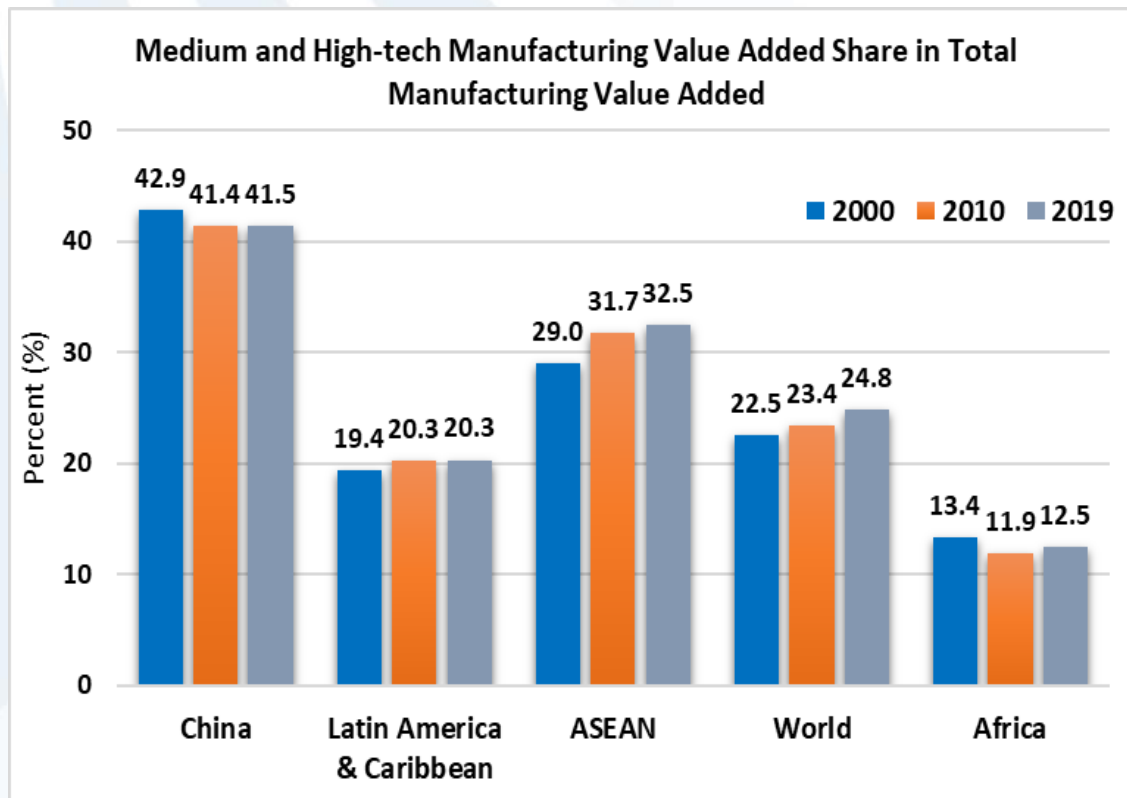


Data sources: UNIDO, ILO



## Africa's technology dilemma

Africa lags behind other developing regions in the technology content of its manufactured and exported value added, but it is making progress on exports.



Data source: UNIDO



# Insights from country classifications

## Country classifications based on ATI DEPTH dimensions

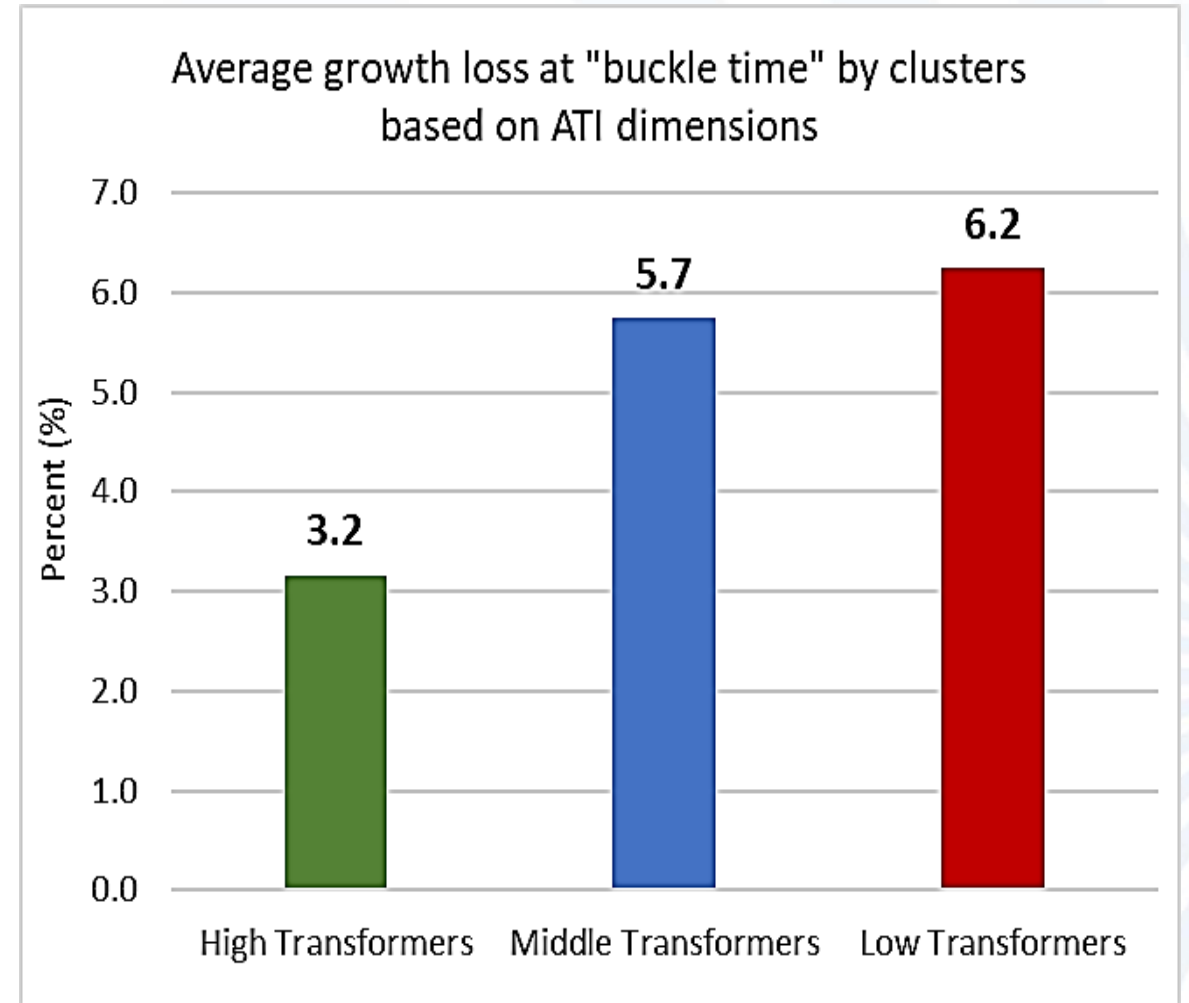
- **High economic transformers:** Tunisia, Eswatini, Morocco, South Africa, Mauritius, Lesotho, Namibia
  - *Perform above average in all DEPTH dimensions except Human well-being*
  
- **Middle economic transformers:** Egypt, Gabon, Botswana, Sudan, Algeria
  - *Perform worse than the other two clusters in Diversification and Export competitiveness*
  - *Technology upgrading is very far below average of the high transformers*
  - *Perform better on Human well-being than the other two clusters*
  
- **Low economic transformers:** Central African Republic, Zambia, Nigeria, Kenya, Côte d'Ivoire, Uganda, Cameroon, Tanzania, Madagascar, Niger, Ghana, Ethiopia, Mozambique, Rwanda, Malawi, Benin, Gambia, Burundi, Burkina Faso
  - *Weaker in Productivity and Export competitiveness*
  - *Score very low on Human well-being*



# Findings on Transformation and Resilience

# Growth Resilience and Economic Transformation

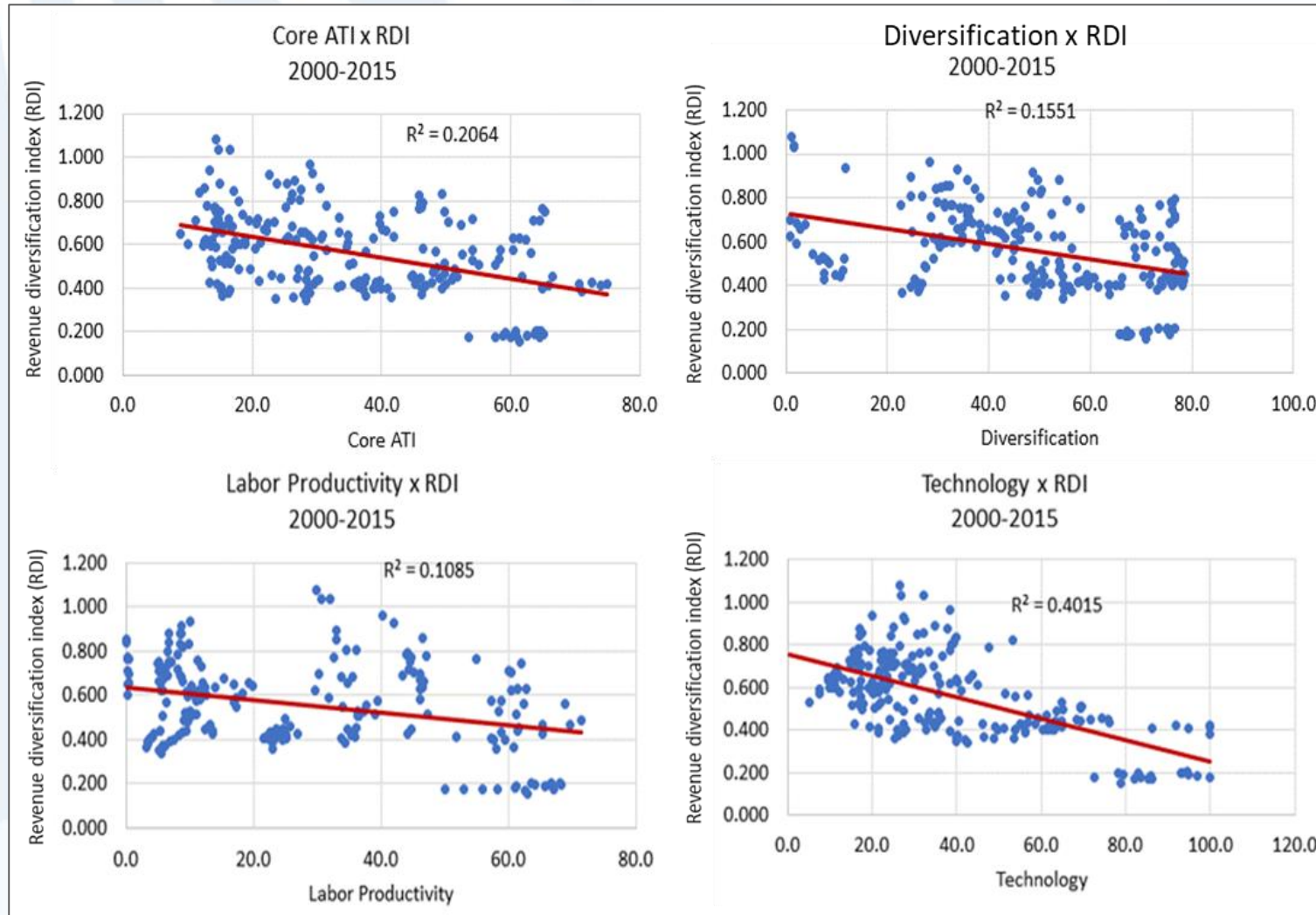
- **The extent of loss in growth that occurs as a result of the shock (Growth Resilience).**
- Global Financial Crisis (2007-2008) used as a “natural” experiment for a non-country-specific negative exogenous shock.
- **High transformer countries suffered less growth loss from the shock of the Global Financial Crisis than low and middle transformers**



Data source: World Development Indicators

## Relationship between good economic transformation outcomes and fiscal resilience

- Countries with better economic transformation outcomes tend to exhibit good fiscal resilience (have lower revenue concentration).
- Such countries typically are less dependent on resource-based revenues.



Data sources: ATI; Ouedraogo, Tapsoba, Sow & Compaoré (2020)

# Policy Priorities for Building Economic Resilience

## General recommendations

---

### 1. Prioritize economic transformation.

- Focus on initiatives to promote economic diversification, productivity increases, export competitiveness, technological upgrading, and human well-being (Growth with DEPTH).
- Invest in skills development, productive jobs creation, and capacity retention.
- Ensure conducive settings for institutional and economic governance.

### 2. Have a coherent industrial policy.

- Cast industrial policy in a modern perspective to promote structural transformation.
- Adopt systematic approaches and methods of policy design and coordination, including learning from other countries.
- Develop industrial policy organizations – such as banks, capacity building groups, training institutions, SME support units, and more – that are well managed and well financed.



### **3. Coordinate with the private sector.**

- Create strong systems to steer government policy implementation in partnership with business, to promote mutual accountability, and to address key market failures.
- Establish apex bodies to foster public-private dialogue and provision of public goods.
- Establish inter-industry bodies to address self-selection externalities and parallel investments.

### **4. Invest more in digital technology and innovation.**

- Develop and implement digital transformation strategies to improve inclusive development.
- Invest in digital skills development, digital entrepreneurship, and digitizing financial services.

### **5. Fix the political economy of development.**

- Commit to leadership that will identify common interests and build coalitions.
- Invest in building competent and less corrupt bureaucracies.
- Set goals for implementing strategies, monitoring processes, and evaluating outcomes.

## Recommendations based on ATI and growth resilience

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### High economic transformers

- Improve human economic well-being and productivity growth by promoting structural shifts to higher productivity sectors.
- Enhance proximity to external markets through regional integration and alignment of national policies to AfCFTA policies to lower trade and nontrade barriers and to enhance competitiveness.
- Promote product diversification within subsectors to improve export competitiveness.

### Middle economic transformers

- Improve economic diversification of production and exports.
- Invest in technology upgrading and skills development for structural change in labor productivity growth.
- Increase nonextractive exports to improve export competitiveness.

### Low economic transformers

- Diversify economies from their narrow production base and promote nonextractive and nontraditional exports to improve competitiveness and build growth resilience.
- Improve human economic well-being by expanding formal sector employment, increasing female labor market participation in paid employment, and increasing shared economic prosperity.
- Reduce the vulnerabilities intrinsic to the agriculture sector.



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**Thank you.**



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