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Zambia: Resource-rich but vulnerable to shocks

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Zambia, located in the north of Southern Africa and home to fewer than 18 million people, has built its development model on the abundance of natural, mainly mineral, resources. The country ranks as Africa's second and the world's tenth largest copper producer. In addition, the country has a wealth of water resources – which it exploits to generate over 80% of the country's electricity as hydropower – and high agricultural potential. Although the Zambian economy now rests largely on the tertiary sector, it remains vulnerable to shocks that affect its traditional sectors.[1]

Mining activity still accounts for 70% of export revenue and 10% of gross domestic product (GDP). Since the 1970s, fluctuations in world prices and, more recently, disruptions of the power supply caused by repeated droughts have exacerbated the country's economic difficulties. As a result, growth has experienced a significant slowdown since 2015, standing at 1.5% in 2019, against an average 5.7% between 2011 and 2014. The country is heading into recession in 2020 in the context of the global economic crisis linked to the SARS-CoV-2 pandemic. This pandemic also further exacerbates an already complicated situation with respect to strong pressures on foreign currency liquidity and a high risk of debt distress.

1 This paper was finalised on 23 January 2020. Some data were updated mid-May to integrate various analytical aspects into the current context of the economic crisis linked to the SARS-CoV-2 (Covid-19) epidemic.

In fact, given the still modest levels of government revenues and still high public spending, the strain on public finances has increased and high deficits can be seen as of 2013 (7.3% of GDP on average). As a result, Zambia is facing a rapid rise of its public debt, which reached 86% of GDP in 2019. Coupled with an unfavourable change in its composition (a debt increasingly exposed to exchange rate risk and less concessional), this trajectory has become unsustainable. For lack of sustained inflows of foreign direct investment, debt servicing has further eroded the country's foreign exchange (FX) reserves, which have now dwindled to a very low level representing two months of imports. In 2020, Zambia is due to service US$1.5 billion of external debt, an amount higher than its current level of FX reserves. What's more, the country's financing needs are likely to increase still further in the coming years as redemption of the Eurobonds issued between 2012 and 2015 will fall due as of 2022, for a cumulative amount totalling 12% of GDP in 2017. While Zambia has so far not defaulted on its obligations, the government is now studying the restructuring of its external debt.

Looking further ahead, Zambia also needs to tackle the physical consequences of climate change that threaten its agriculture and energy sector, as shown by the repercussions of several drought episodes since 2015. Finally, in a country with a large young population and where rural poverty is still widespread and inequalities are increasing, heavy investment, especially in the education sector, is crucial to enable the country to pursue its development.

1. Steep social challenges in need of substantial public investment

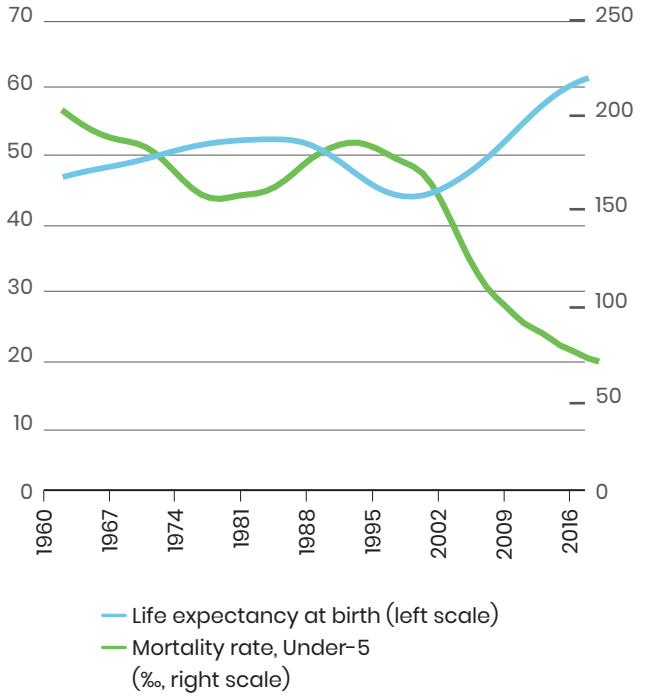
1.1 – A growing population, predominantly young and increasingly urban

Zambia, a landlocked country with a surface area 1.4 times that of mainland France, is located to the north of Southern Africa and home to nearly 18 million inhabitants. However, its population has been growing rapidly by 3% a year uninterruptedly since 1950.

Yet, this dynamic masks demographic indicators that are closely correlated with the economic cycle of the country and particularly the mining sector (cf. Part 2). Although the 1960s and 1970s saw an increase in life expectancy and a declining mortality rate, the 1980s and 1990s were marked by opposite trends. At the end of the 1990s, life expectancy was the same as in 1960 (45 years) and child mortality was comparable to that in the late 1960s. Since the 2000s, Zambia has again experienced a swift reduction of infant mortality, down from an average of over 170 deaths per 1,000 under-5 children between 1970 and 1999 to 60 deaths in 2017, and a steady rise in life expectancy reaching 62.3 years in 2017 (cf. Figure 1). Although on a downtrend since the 1970s, the fertility rate remains very high at 5 children per woman in 2017.

With a median age of 17 years in 2017, the Zambian population is very young and will remain so until 2100. According to World Bank projections, population growth is set to slow (+2% at a rate of 3.5 children per woman) by 2050. The population will remain young with a median age of 22 years by 2050, then 31 years in 2100. The dependency ratio[2] thus remains very high (90% in 2017), although due to decline (-7 percentage points (pp) compared to 2010). This trend should continue with a projection of around 68% by 2050.

Figure 1 - Improvement of demographic data since 2000



Source: World Bank

Substantial investment, particularly in education, is crucial if the country is to fully benefit from the workforce constituted by this young population. In fact, this population participates very little in the economic activities: unemployment is particularly high among young people (17.4% against 12.6% for the whole population in 2017[3]). Despite considerable efforts, focused mainly on primary education, Zambia is struggling to achieve the educational objectives it has set itself. Although the country is close to attaining universal primary education (88% of enrolments in compulsory schooling for 7- to 13-year-olds), regional and gender disparities are to be underlined when it comes to secondary education. Certainly, on the Human Capital Index developed by the World Bank, Zambia ranked 131st out of 157 countries in

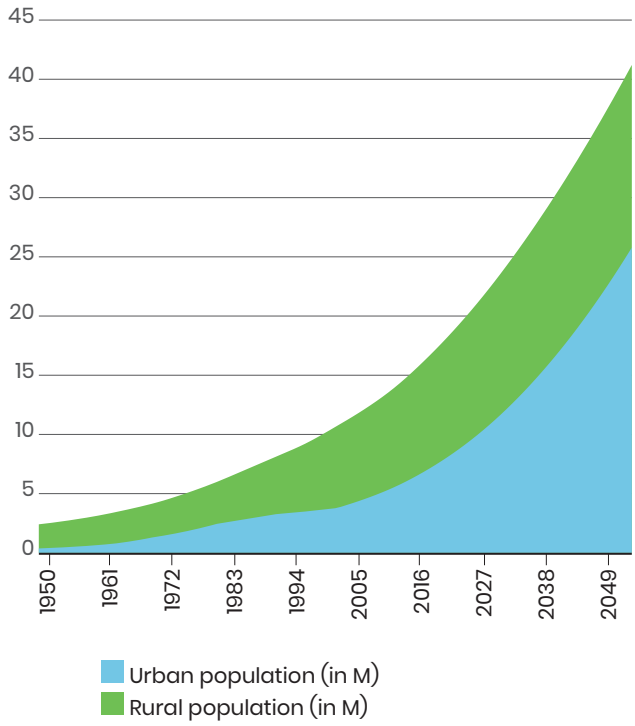
2 The dependency ratio is the ratio of the population outside the workforce (aged -15 and +65) to the working-age population.

3 The combined rate of unemployment (defined as job seekers available) and the potential labour force (job seekers not immediately available or not actively seeking employment but who are available) gives a rate of 41.2% for the total population and 48.6% for young people in 2017 (CSO).

2018.[4] The number of school years that a Zambian child can expect to complete is 9.2 years, but this is equivalent to 5.2 years of quality schooling. The student scores in international tests are 358/600,[5] whereas the average is 375 for countries in the 25th decile. As a result, a child born in 2018 will be only 40% productive compared to a child who had a complete education and full health. Lastly the share of education expenditure in the central government budget – mainly taken up by teachers' salaries – has been decreasing since 2016, with 15.3% in 2019 against over 20% in 2014 and 2015 (ZIPAR, 2018). Yet, according to the IMF, education expenditure shows a slight upward trend in terms of GDP. It represented 3.6% of GDP between 2010 and 2017 against 3.1% over the 2000s and 2.8% in the 1990s.

Zambia experienced high urban growth from the 1950s to the 1970s (an average +8% per year). As a result, 43% of the population were living in towns and cities in 2017, compared to 27% on average in East Africa. Yet, rural areas are not becoming depopulated, with a 2% annual average growth since the 1950s. The United Nations (UN) projects that the urban population will be over 50% by 2030 (cf. Figure 2). While this dynamic represents enormous potential for stimulating construction activities and developing services, it also requires rethinking spatial planning not only in the major cities (Lusaka and Kitwe), but also in the fast expanding secondary cities such as Solwezi, where the country's largest copper mine is located. Substantial investments in infrastructure will be needed: transport, water, sanitation and energy networks and the construction of decent housing.

Figure 2 -
A highly urbanised population



Source: UN (UNDESA)

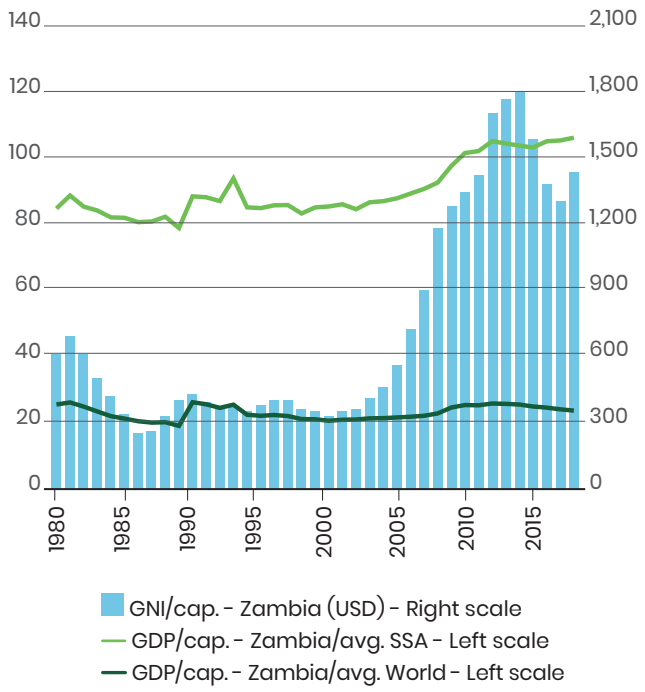
1.2 – Poverty is still widespread in rural areas and inequalities are growing

With a per capita income of US$1,430 in 2018 (Atlas method), Zambia belongs to the group of lower-middle-income countries (LMIC). After ten years of sharp increase between 2003 and 2014, per capita income contracted between 2015 and 2017 due to continuing high demographic growth and a slowdown in economic growth. This trend, however, has not halted the convergence with the rest of sub-Saharan Africa underway since 2005: since 2010, GDP per capita is higher the regional average (cf. Figure 3).

4 This index measures the amount of human capital that a child born in 2018 can expect to attain at the age of 18 in light of the risks relating to education and health prevailing in the country in which (s)he was born (source: World Bank, 2019).

5 By way of comparison, a score of around 400 corresponds to the minimum skill level defined by the Programme for International Student Assessment (PISA).

Figure 3 - After a steep rise as of 2005, income per capita fell significantly



Source: World Bank (WDI)

The social indicators are slowly improving and poverty is retreating but remains widespread in rural areas. According to Zambia's Central Statistical Office (CSO), 54% of the population was living under the national poverty line[6] in 2015 (against 67% in 2000 and 60% in 2010[7]). This is a high level, including within the Southern Africa region. Apart from the high incidence of poverty, its intensity also impacts the Zambian population: three-quarters of poor people live in a situation of what is termed extreme poverty. This poverty chiefly affects rural areas, which in 2015 concentrated 57% of the population but 77% of the country's poor. The equipment-to-household ratio also differs: while 27% of the total population had access to electricity in 2016, this proportion was 62% for the city dwellers compared to 3% in rural areas.

Nevertheless, in terms of human development, Zambia has ranked higher than the average for sub-Saharan Africa since 1990. The country's Human Development Index (HDI) rose faster than in the rest of the region between 2000 and 2010, but this pace has slackened in recent years to reach a comparable level. Zambia's HDI stood at 0.59 in 2018 (against an average 0.54 for sub-Saharan Africa), which positions it 143rd out of 189 countries ahead of East African countries and most of its neighbours, except for Botswana (94th) and Namibia (130th). Yet, if inequalities were factored in, Zambia would lose one-third of its HDI value and drop six places.

In fact, high income inequalities have developed over recent years (Gini[8] coefficient of 0.57 in 2015 against 0.49 in 2000). Today, Zambia is the fourth most unequal country in the world, after South Africa, Namibia and Surinam.[9] To counter the growing inequalities, the government provides subsidies to rural areas. Apart from support to farmers, the country has gradually set up a social cash transfer programme that is now designed to cover the whole country (i.e., 700,000 beneficiary households), with monthly transfers representing the equivalent of a daily meal for a five-person household. The cost of the scheme absorbed 41% of the national budget allocated to social benefits in 2019.

More broadly, the social protection policy introduced in 2014 is designed to strengthen the country's social security system by providing universal coverage, including for informal sector workers (90% of workers) by reforming the pension system and supporting maternity protection. However, the share of budget expenditure earmarked to social protection has trended downwards since 2017, dropping from 4.4% to 2.5% in 2019. The low budget amount allocated to the social sector constitutes a major brake on rolling out this policy, as is the low level of social contributions in a context where the formal sector is greatly underdeveloped.

6 The poverty line was set at ZMW 214.26 a month per adult equivalent in 2015, i.e., US$24.6.

7 Note that the methodology for measuring poverty changed in 2015, which means that the data are not totally comparable.

8 The Gini Index (or coefficient) measures the level of inequality within a population (varying between 0 and 1). The closer the index is to 1, the higher the inequality.

9 Comparison based on the latest available Gini data for each country.

2.
A growth model that has relied on abundant natural resources

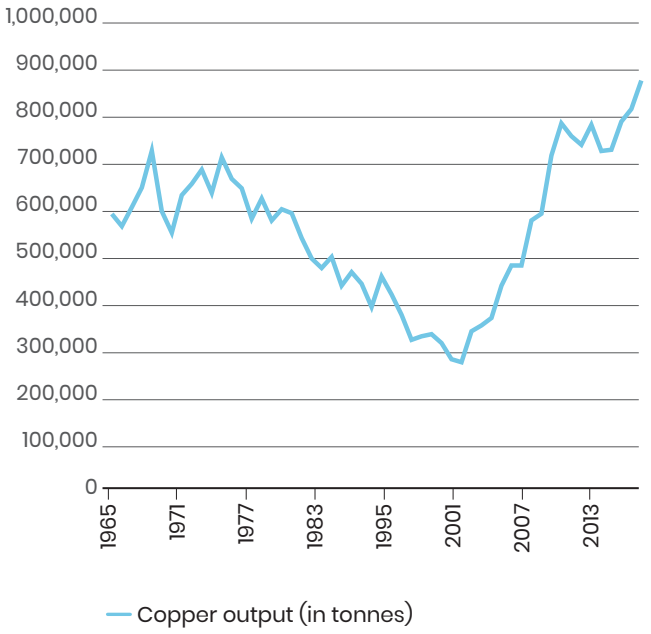
2.1 – A now tertiarised economy still vulnerable to shocks that impact its traditional sectors

2.1.1 – Since the 1970s, upheavals in the mining sector have strongly impacted Zambia's economy

Zambia is endowed with a wealth of mineral resources that the country has been exploiting since the early 20th century. The country has 6% of the world's known copper reserves, as well as abundant cobalt, uranium and manganese, all of which are minerals in fast-growing demand on global markets. This mining activity has historically been concentrated in the Copperbelt region, on the frontier with the Democratic Republic of the Congo (DRC). Today, Zambia is the second largest copper producer in Africa and ranks among the world's ten biggest producers. The country also produces 20% of the world's emeralds, as well as gold and other gemstones.

Copper mining has gradually intensified since 1930, when the country was still a British colony called Northern Rhodesia. Zambia only began to reap hefty profits from its mineral resources after its independence in 1964. At the time, the elected president, Kenneth Kaunda, promoted an ideology mixing socialism and nationalism dubbed "Zambian Humanism". This led to the collectivisation of agricultural structures and a nationalisation programme (the 1968 Mulungushi reforms) which did not spare the mining sector. The mines were nationalised in 1969 (with the state taking a 51% shareholding), mining rights were repurchased and the tax system was revised. Copper then accounted for 95% of Zambian exports (708,500 tonnes produced, cf. Figure 4) and provided 62,000 direct jobs.

Figure 4 -
Upheavals in the mining sector...



Source: CSO

Over the following decades, the country grounded its economic development on the copper sector. Booming copper prices in the late 1960s and early 1970s greatly contributed to improving the population's standard of living. Government revenue from mining activities were invested in major development projects (hydroelectric plants, railways, road infrastructure), but also in health and education.

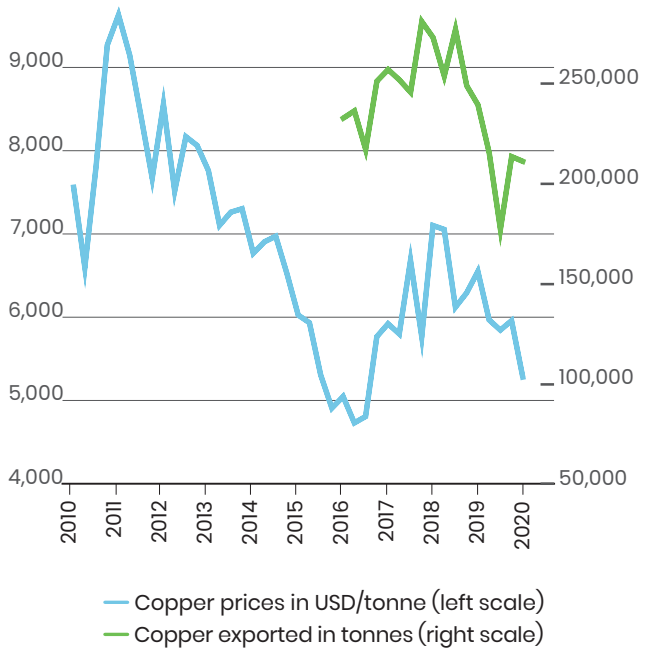
However, Zambia's economy was hard hit by the oil crises of 1973 and 1979, leading to a concomitant and lasting fall in copper prices. The mining sector then went on to face over two difficult decades. Yet, during the 1970s and 1980s, the sector was still contributing 90% of the country's exports and 40% of GDP. This downturn in raw material prices had a detrimental effect on the entire

Zambian economy. The country's average annual growth rate was no more than 1.1% during the 1980s and 0.3% in the 1990s. Between 1975 and 1990, GDP per capita (at constant prices) decreased by 30%. Budget and current account deficits worsened, FX reserves dried up and the level of national debt rapidly became unsustainable, rising from 36% of GDP in 1970 to over 300% of GDP in 1986–1987, before gradually descending to 180% in 1991 (Rakner, 2003).

These significant economic hardships led to frustrations among the population and in 1981 several strikes broke out. Trade union leaders – including future President Frederick Chiluba (1991–2002) – were arrested. Tension again reached a head between 1985 and 1987 against a backdrop of drastic austerity measures and price hikes. Finally, the inflationary shock of 1989 (+123%) and 1990 (+107%) sparked new uprisings. To pacify the country, Kenneth Kaunda was forced to abandon the one-party rule that he had introduced in 1972 and organise multi-party elections. With the return to political pluralism and economic liberalisation, the mining sector was progressively privatised between 1996 and 2000. Production collapsed, reaching a low of 260,000 tonnes in 2000. The sector was then providing direct employment for only 22,000 workers. The upswing in investment that accompanied the privatisation nonetheless helped the sector to recover.

As of 2009, production returned to a level comparable to that reported pre-crisis and continued to increase (averaging 753,550 tonnes between 2009 and 2018), despite erratic fluctuations in international prices. After peaking at nearly US$9,900/t at the beginning of 2011, prices plummeted to US$4,470 early 2016. Although thereafter prices began to rise again, they suffered two dramatic falls, one in 2017 and another in summer 2018 (cf. Figure 5), which impacted the value of exports. This new decrease in prices has been driven by two main factors: *(i)* the continuing U.S.–China trade war; and *(ii)* the economic slowdown of China, one of world's largest copper consumers and a key economic partner for Zambia.

Figure 5 -
...partly due to the volatility of world prices



Sources: LME, CSO

The fluctuation of international prices is not the only difficulty faced by the sector in recent years: episodes of prolonged drought have affected the country's hydraulic power generation, threatening the power supply to production sites (cf. Section 2.2.2).

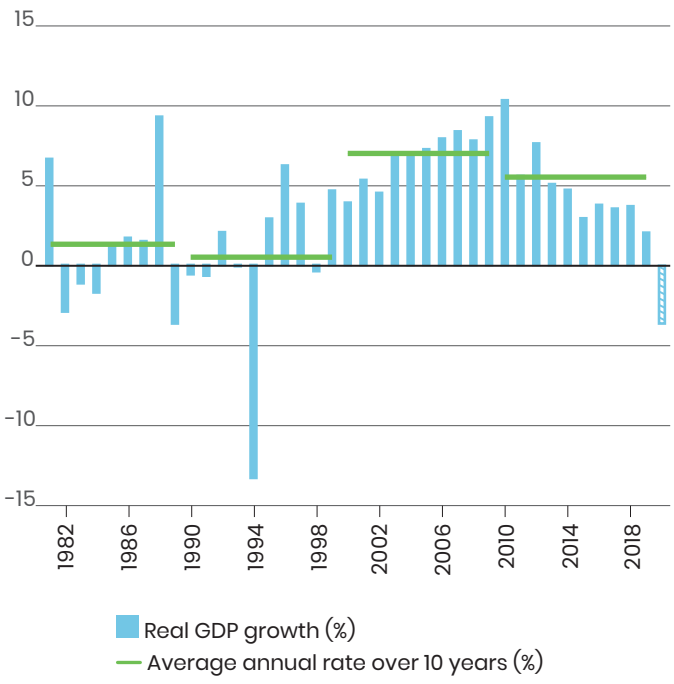
As a result, since the 1970s, disruptions in the mining sector, whether driven by fluctuating global prices, intermittent power supplies or tensions with the Zambian authorities, have amplified, if not directly caused, the country's economic difficulties. Zambia's economy still depends on its mining activity. In recent years, the sector has generated 70% of export earnings and contributes around 10% of GDP. It also provides 10% of formal employment and 25% of private-sector jobs. On the other hand, it make little contribution to growth.

2.1.2 – The tertiary sector: a new growth engine

After three decades of weak and volatile growth, the Zambian economy experienced renewed momentum during the 2000s (cf. Figure 6). Despite a slight slowdown in 2008 linked to the effects of the international financial crisis, the country's growth quickened between 2003 and 2010 (average annual growth rate +8.3%). Although the economy was boosted by the strong performance of the mining and construction sectors, it was the service sector – mainly transport and communications – that emerged as the country's new growth driver (cf. Figure 7). Starting at a 25% share of GDP in 1965, the tertiary sector expanded to reach an average 60% share of GDP as of 2010.

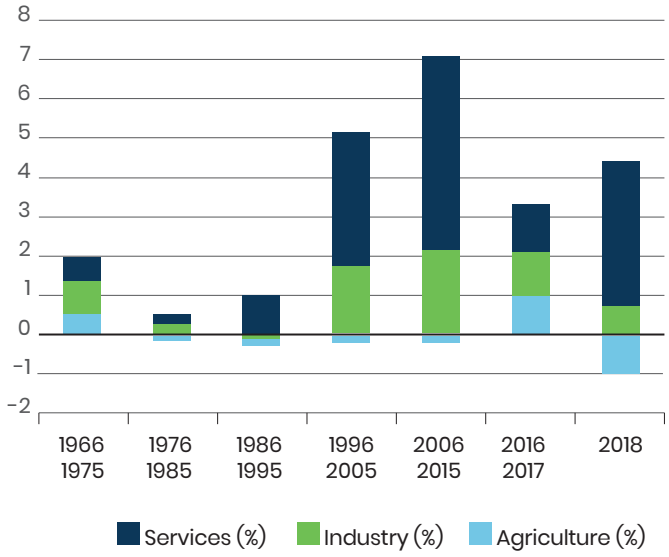
Between 2011 and 2014, the average annual growth rate stood at 5.7%, impacted by the volatile performance of the agricultural and mining sectors. Growth slowed down significantly after 2015 (averaging +3.1%). After sluggish growth in 2019 (+1.5%) due to low copper production, power outages, and the drought-related decrease in agricultural production, the country is set to fall into recession in 2020 amidst the world economic crisis fuelled by the SARS-CoV-2 pandemic (-3.5% according to the IMF's April projections). For the time being, Zambia is only slightly hit by the pandemic (886 confirmed cases and 7 deaths as of 22 May by the Johns Hopkins Coronavirus Resource Center). The authorities quickly introduced measures to contain the spread of the virus: closure of public spaces, targeted lockdown and partial closure of the border with Tanzania. These restrictions have been gradually lifted as of April. On the other hand, the country is highly exposed to the decrease in copper prices – which fell by 22% at end-April year-on-year, reaching their lowest level since mid-2017. Zambia also is highly vulnerable to China's economic slowdown, to the depreciation of the kwacha and the disruption in trade with South Africa. The government has very little fiscal leeway to tackle this crisis in view of the anticipated drop in its already limited government revenues and the difficulties in compressing expenditure (cf. Section 3.1). The cost of the announced economic and health measures represent less that 1% of GDP, of which 0.75% is earmarked to clear the government's arrears to its suppliers. Given the deteriorating economic activity and despite inflation running at 15.7% in April 2020, the central bank lowered its policy rate by 225 basis points to 9.25% on 20 May 2020. Overall, the pandemic is exacerbating an already complex situation with strong pressures on FX liquidity (cf. Section 4.2) and an unsustainable public debt trajectory cf. Section 3.2).

Figure 6 - Slowdown of economic growth since 2015



Source: IMF (WEO, Art. IV)

Figure 7 - The tertiary sector is the main growth engine of Zambia's economy



Source: World Bank (WDI), CSO

2.2 – An economic model vulnerable to climate shocks

2.2.1 – Zambia is exploiting abundant natural resources

Although Zambia has a wealth of mineral reserves, it has no oil or gas. It is, however, richly endowed with widely exploited forestry resources, which constitute abundant coal deposits (45 million tonnes, equivalent to 135 years of domestic consumption in 2016). Biomass thus generates 88% of energy production and represents 78% of primary energy consumption. It is thus a crucial energy source for households given the country's still low but increasing rate of electrification (40% of the population in 2017, but only 14% in rural areas). The use of this resource, however, is leading to deforestation: although forests still cover 65% of the country's surface area, this space has tended to decrease since the 1990s, when 70% of land was forested.

The country also exploits it plentiful surface water resources, extracted mainly from the Zambezi and Luapula rivers, as well as its groundwater resources. However, the availability and access to water is uneven across the country and the quality of infrastructure remains problematic. In addition, competition for water between agricultural, industrial and domestic uses is on the rise. The electricity mix depends almost entirely on hydropower (83% in 2018), with an installed capacity of 2,390 MW, compared to a potential estimated at 6,000 MW.

Located on the Central African plateau 1,000 to 1,600 m above sea level, to the south of the Great Lakes, Zambia's climate is subtropical, with relatively cool temperatures throughout the year and thus favourable to agriculture.With fertile arable land and water resources, Zambia has a high agricultural potential[10] that is relatively unexploited as only 14% of this land is cultivated. Farms are mostly small and depend on rainfall (only 30% of irrigable land is irrigated). The country's main crop is maize – which takes up 49% of cultivated land – but also produces cotton, tobacco, sugarcane and food crops. Animal husbandry accounts for 42% of agricultural production. The rate of food self-sufficiency has improved since the 1990s, particularly as the country has reached self-sufficiency in maize, which enables it to export surplus production (cf. Section 4.1). Although the agricultural sector accounted for only 3% of GDP in 2018 and 26% of employment in 2017 (but 54% in rural areas), it ensures the livelihood of over 70% of the population.

2.2.2 – Water and heat stress regularly weaken agriculture and the energy sector

Zambia is moderately exposed to climate change. Yet among the major physical risks related to climate change by 2030–2040, the country is concerned by rising temperatures[11] and, to a lesser extent, by an increase in days of extreme rainfall coupled with a fall in average precipitation. The country is exposed to high climate variability attributed notably to the El Niño phenomenon.[12] More specifically, in recent decades, Zambia has regularly been affected by floods (12 since 2000) and drought (most recently: 2015, 2017, 2018 and 2019).

Zambia is considered to be vulnerable to physical climate risks, especially as the macroeconomic consequences of these risks will materialise in key sectors of the Zambian economy: agriculture and energy. According to the Index of Physical Vulnerability to Climate Change (PVCCI) developed by FERDI, the country has an average vulnerability score (51/100), comparable to that for Southern Africa (52/100). However, it is particularly sensitive to risks linked to the intensification of recurrent shocks. Zambia ranks 142nd out of 181 countries according to the 2017 ND-GAIN index for vulnerability to climate change.

10 It is estimated that 58% (i.e., 42 million ha) of the country's surface area has average or high agricultural potential.

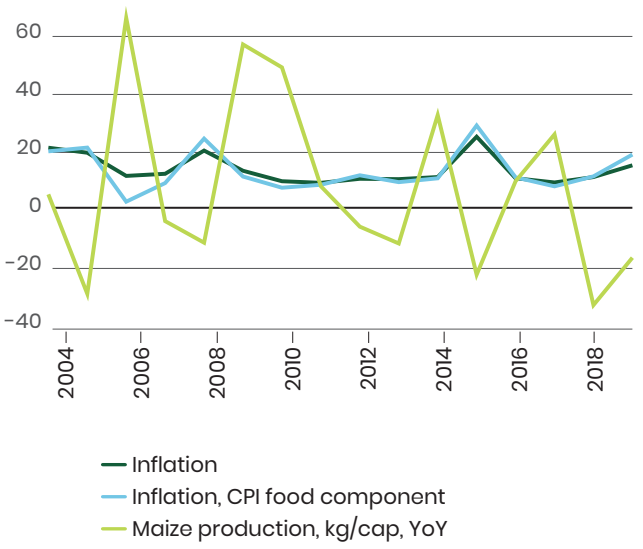
11 The annual mean temperature has risen by 1.3°C since 1960 and could further rise by 1.6– 2.7°C by 2050.

12 El Niño is a large-scale oceanic phenomenon that affects wind patterns, sea temperature and rainfall. It is not directly linked to global warming, but this could affect its frequency and severity.

As agricultural activity is mainly located in the southern regions, which are particularly exposed to drought and where use of irrigation is low, these climate-related shocks have a strong and direct impact on agricultural yields. In 2015, Southern Africa experienced one its driest cropping seasons: the region received only 50–70% of its regular rainfall between October 2015 and February 2016. In Zambia, this dry spell was described as the most severe the country had known over the previous fifty years (ZVAC, 2016). The affected regions recorded a 20% loss in maize yields and a decrease in producer income of up to 37% (FAO, 2019). During the 2017–2018 farming season, a wave of prolonged drought impacted the country – particularly the south –, while some regions in the north experienced high and sometimes excessive rainfall. The 2018–2019 season was again hit by prolonged drought that impacted the Southern and Western Provinces and certain areas in Lusaka and the Central Province between January and March 2019.[13] These weather shocks led to a decrease in production.[14] This was particularly the case for maize production (two-thirds of agricultural production), which fell by 33.6% in 2017–2018 and could further decrease by 16.3% in 2018–2019 (i.e. 30% below the average cropping yields between 2014 to 2018). The next maize harvest will take place in May and June 2020. The changes in climate conditions could lead to a decrease in maize yields of nearly 9% by 2050. Agricultural losses related to climate change could reach US$3.13 billion by 2040 (CIAT, World Bank, 2017).

The decrease of agricultural production has a direct impact on the population's living conditions, firstly because it weighs on the incomes of rural communities – already greatly impacted by poverty – and secondly because maize is the staple food for the entire country. Bad harvests lead to a level of inflation that is untenable for some households (cf. Figure 8) and, when they follow on from one another, can directly threaten the country's food security. In 2015, food prices shot up by 24% in one year. Since March 2019, the rise in food prices (+15.2% in one year end-2019) – particularly for maize meal, which saw prices almost double – have contributed to the rise in inflation (+11.7% in one year) by up to 8 percentage points. To mitigate this risk, the government is accumulating grain reserves by purchasing directly from producers and, in November 2019, signed an agreement limiting the hike in maize meal prices. In December 2019, the Ministry of Agriculture estimated that the country's accumulated grain stocks were sufficient to feed the population until the next harvest. However, recourse to humanitarian aid is still necessary for rural populations. The FAO estimates that 2.3 million people, particularly in the southern and western regions, suffered from severe food insecurity between October 2019 and March 2020, many more than the 954,000 people affected over the same period in 2018/2019.

Figure 8 -
Fluctuation of food prices



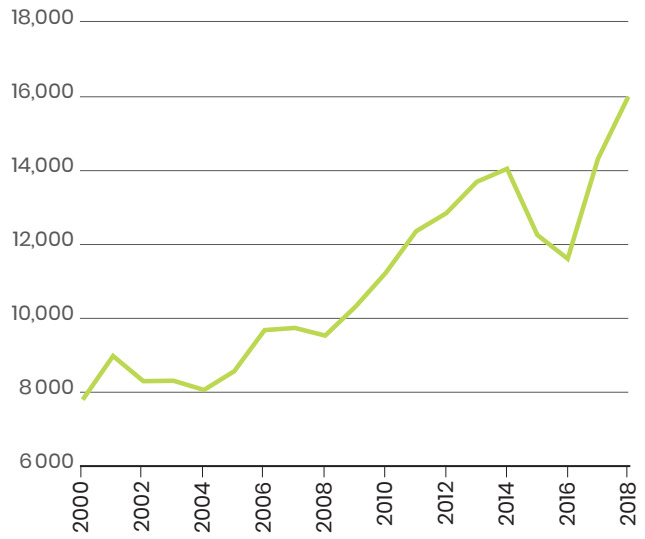
Sources: FAO, UNDESA, CSO

13 El Niño-induced droughts were observed in the centre and western regions of Southern Africa between October 2018 and March 2019. According to the FAO, the most affected areas experienced the lowest seasonal rainfall since 1981.

14 It should be noted that the invasion of army worms (parasites) in 93 of the country's 115 provinces also impacted the sector, affecting 300,000 households and 200,000 hectares of maize during the 2018–2019 farming season.

As hydropower generation is climate-sensitive, episodes of drought are also likely to generate energy crises, as was the case in 2015 (cf. Figure 9): electricity generation decreased significantly (-13% in 2015, then -5% in 2016), power outages occurred and electricity imports[15] were required to alleviate the shortfall in production (only 65% of demand was generated in 2015). As a result, the energy balance worsened significantly, reaching -6.9% of GDP in 2015 (against an average deficit of 3.3% between 2005 and 2014), equivalent to almost half the FX reserves at the time. After the droughts of 2018, power outages again occurred as of the second quarter of 2019 (daily cuts of up to 15 hours). The IMF estimates power shortfalls at an average 13% of the load (the power required to meet demand) over the last three quarters of 2019.

Figure 9 -
Electricity production impacted by episodes of drought (in GWh)



Source: CSO

These disturbances can have a strong impact on the mining sector, which alone accounts for just over half of the country's electricity consumption. Thus, in 2015, the drought was a contributing factor to the 17% drop in copper and cobalt production. In a situation of low FX reserves and high amounts of debt interest, the prospect of energy imports[16] is a vulnerability (cf. Box 1). During these dry spells, the low level of electricity generation is offset by increased consumption of coal, principally for domestic uses.

This issue has been identified by the authorities and integrated into the country's development strategies. The National Development Strategy ("Vision 2030") incorporates the notions of an economy resilient to external shocks, the protection of biological and physical systems and the achievement of development goals at the least cost to the environment, which indicates that the authorities have taken environmental issues on board. The Seventh National Development Plan (2017–2021) integrates the question of climate change and disaster risk reduction by setting objectives in the area of adaptation (improvement of surveillance systems and mobilisation of available climate data) and mitigation (strengthening sustainable forest management and developing renewable, water and sanitation management and low-carbon public transport). The estimated cost of this programme stands at US$426 million. The question of the capacity to finance these strategies is posed, even though the country is receiving donor support on these themes.

15 In 2016, 3,408 GWh had to be imported (i.e. 29% of annual domestic production). The additional cost of these unplanned emergency imports were estimated at over US$340 million for ZESCO in 2016 according to the World Bank.

16 In November 2019, Zambia imported 300 MW of electricity produced by ESKOM, South Africa's state-owned electricity utility, for a cost of US$27 million.

Box 1

Zambia's energy sector contributes to budget and external imbalances

Zambia's economy is particularly energy-intensive due to the scale of the mining and extractive industries, which consume high levels of energy. Although the energy intensity of Zambia's GDP[17] is decreasing (-41% between 2000 and 2016), it remains high: in 2016, only US$2,200 of GDP (constant 2010 US$) were generated per tonne of oil equivalent (toe). Moreover, energy demand is increasing in line with the country's economic growth, possibly reaching 3 GW in 2021 and 3.5 GW by 2030. Electricity generation, however, is struggling to keep apace of this rise in consumption, even though the situation is expected to improve over the next few years, once the Kafue Gorge lower hydroelectric plant has been completed (which will increase the current production capacity by one quarter by end-2020).

In this context, Zambia relies increasingly on foreign sources of energy. Excluding biomass, the country's energy independence stood at 48.8% in 2016, marking a downtrend over the previous decade (57.7% in 2005). Certainly, in a context of growing energy consumption and the vulnerability of power generation to water stress, the country's energy supply poses a risk. The balance of payments is exposed to rises of oil prices and fluctuations in exchange rates. This vulnerability is further heightened as the kwacha was subject to a sharp depreciation against the dollar in 2015, 2018 and 2019 (cf. Section 4.2).

Although energy subsidies still weigh on public finances, they have been significantly reduced since 2017, thanks to the removal of fuel subsidies. Whereas fuel and electricity subsidies averaged 7% of government revenue between 2013 and 2016, they were down to 2% in 2017. In fact, electricity subsidies both for individual consumers and the mining sector are still in place. Although electricity tariffs were gradually adjusted as of 2008, they have been among the lowest in the region in recent years. The situation has since changed with two tariff increases in 2017 (+75% in total) for domestic users and changes in prices negotiated with the mining sector. At the end of 2019, the authorities doubled tariffs for the residential sector and increased them by 49% for the commercial sector.

On the other hand, the financial situation of the vertically integrated[18] national electricity utility, ZESCO, is particularly worrying and represents a risk for the country's public finances. Its financial situation has worsened due to elevated operating costs, high oil prices, poor efficiency and below-cost-recovery tariffs. ZESCO's high debt is partly state-guaranteed. In total the guaranteed debt of public enterprises (including ZESCO's) stood at 4.5% of GDP (US$1.2 billion) end-2018, while ZESCO's non-guaranteed debt amounted to 2.3% of GDP (US$0.7 billion). Reforms are underway to address these difficulties but the process has made little headway.

Sources: Beyond Ratings, Enerdata, AFD (2019); World Bank (2017); IMF (Art. IV 2019); ZESCO; ZIPAR (2018)

17 This is the ratio of primary energy consumption (including electricity) to GDP measured in constant dollars and at market exchange rates.

18 ZESCO's activities include electricity production (80% of electricity generated in the country), transmission and distribution to the residential and industrial sectors (excluding mining).

3.
The risk of elevated debt distress requires fiscal consolidation that is long in coming

3.1 – An increase in fiscal imbalances since 2015

With the slowdown in economic growth, still modest government revenues and a still high level of public spending, the public finances situation is strained, with large deficits reported since 2013 (7.3% of GDP on average).

Government revenue has remained stable but low, averaging 18% of GDP since 2007 (against an average 24% over the period 2000–2006). Income tax and value-added tax (VAT)[19] are the main sources of revenue. As tax evasion on corporate tax is deemed to be high by the authorities and donors, the government is putting measures in place to strengthen the tax base and develop online services to facilitate collection and strengthen tax compliance.

The mining sector now makes a substantial contribution to government revenue, reaching an average 10% over 2016-2018, i.e. 1.9% of GDP. Traditionally, the sector has contributed little to public finances due to various exemptions (revenues represented 0.1% of GDP in the early 2000s). This increase, which has been somewhat volatile, is mainly driven by the many tax regime reforms applied to Zambia's mining sector. Although numerous mining companies declare little or no profit, these revenues come above all from mineral royalties (41% of mining revenue in 2014–2017 according to the Zambian Revenue Authority, ZRA).

Government revenues from the sector should continue to grow following a new tax reform implemented at the beginning of 2019, which increased the mineral royalty rate on copper[20] and cobalt[21] and introduced the non-deductibility of royalties from corporate taxable income. A 15% export duty on precious metals was also introduced. According to IMF projections (Art. IV, 2019), the mining sector could contribute up to 13% of government revenues over the period 2019–2021.

At the same time, public expenditure has remained high: 25.6% of GDP on average between 2013 and 2018, compared to 19.4% in the period 2007–2012 and 24.2% over 2000–2006. This uptrend reflects the government's will to support an economy where growth is slackening and to develop the country's infrastructure. Yet, despite substantive fiscal efforts (5.3% of GDP on average between 2014 and 2017, then 8.6% in 2018), public investment is judged to be relatively ineffective. In fact, Zambia is encountering difficulties in executing this expenditure, with infrastructure and equipment costs deemed too high compared to the services and materials delivered.

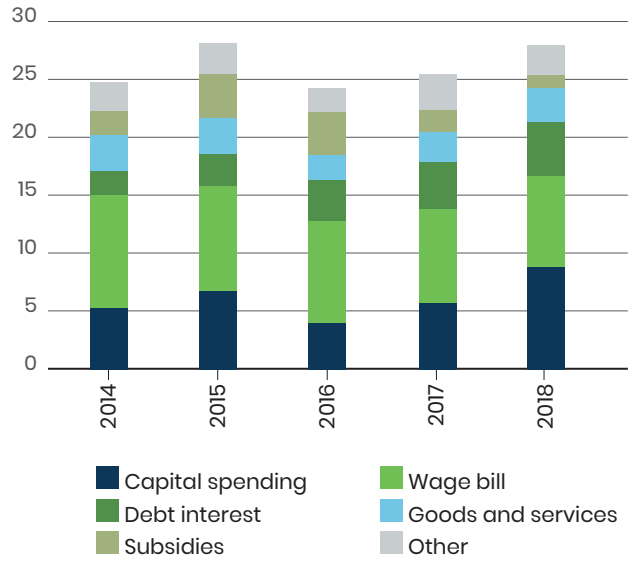
Changes in the composition of expenditure over recent years show a sharp increase in debt servicing (cf. Figure 10). Interest payments amounted to 24.3% of government revenue in 2018 (against 11.8% in 2014), that is, a gradual increase from 2.2% of GDP in 2014 to 4.6% in 2018. In 2018, the almost 25% increase of these amounts can largely be explained by the depreciation of the kwacha against the U.S. dollar, which drove up external debt servicing by half in the space of one year. In parallel, the wage bill gradually shrank but continued to represent a large share of expenditure (around one-third).

19 The government considered abolishing VAT and replacing it with a sales tax, in the hope of increasing government revenues. The introduction of this tax reform – whose rationale was challenged by economic actors – was initially planned for April 2019, but was delayed several times before the suppression of the reform was announced in September 2019 in favour of strengthened compliance control.

20 The royalty tax rates (previously ranging from 4% to 6% depending on the price and quantity) have each increased by 1.5% and two tiers of additional taxation were introduced in the event that copper prices exceed US$7,500/t (and a 10% royalty over US$9,000).

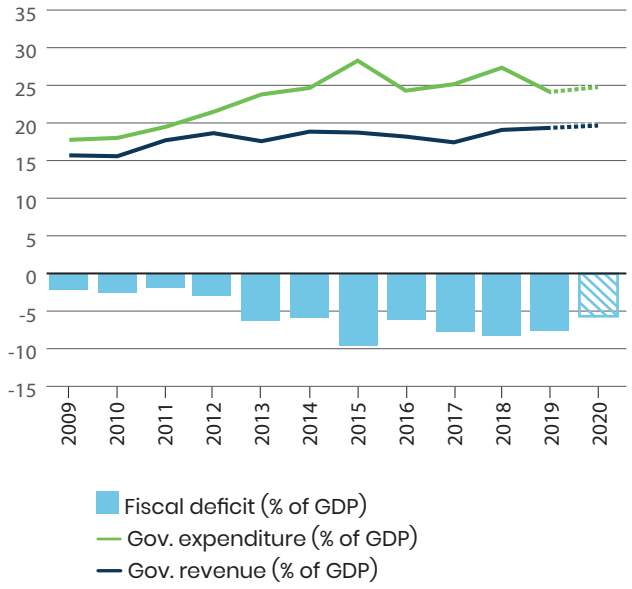
21 From 5% to 8%.

Figure 10 -
Debt servicing places an increasingly heavy burden on public finances (% of GDP)



Source: IMF (Art. IV)

Figure 11 -
Fiscal deficits above 5% of GDP observed since 2013



Source: IMF (WEO, Art. IV)

Public deficits averaged 7.3% of GDP between 2013 and 2018, compared to 1.8% over the six previous years (cf. Figure 11). Alongside those of Mozambique, Zambia's public deficits were the highest in Southern Africa[22] over the period 2014–2017, when the regional average stood at 5%. Against this backdrop, the authorities announced measures to support fiscal consolidation in 2016, and again in 2018 and 2019, but these have only very recently had some effect. In 2019, the government struggled to obtain financing not only on the domestic market – where demand for government securities was waning despite very high interest rates –, but also on the international market for want of an agreement with the IMF on a programme and due to the very high interest rates proposed by commercial creditors. Budget execution was thus particularly constrained in 2019. Efforts focused on the wage bill and social benefits, while interest payments on public debt were ultimately higher than the amount budgeted due to the mounting external debt. Yet, the public debt remained high in 2019, amounting to 7.5% of GDP. The 2020 budget was based on assumptions that lacked credibility even before the outbreak of the SARS-CoV-2 epidemic: projected real growth of 3% and greater mobilisation of domestic revenues reaching 22% of GDP. As a result, the deficit is set to exceed the official projection of 5.5% of GDP.

3.2 – Public debt has reached unsustainable levels and is exposed to exchange rate risks

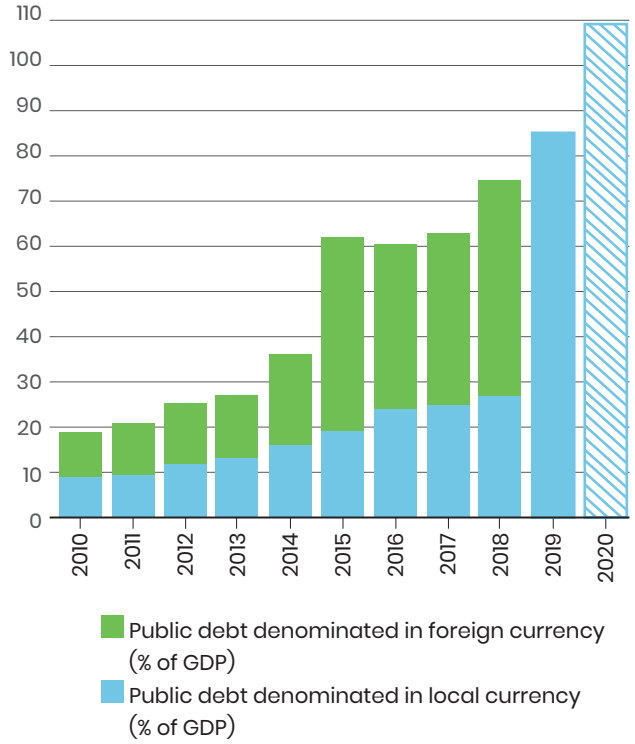
With four Paris Club agreements since 1995, Zambia has an unfavourable track record of default. The sharp decrease in central government's gross debt as of 2005–2006 following the debt relief granted under the HIPC/MDRI initiative was not initially accompanied by a rapid increase in government borrowing. To tackle the slowdown of growth in the 2000s, the Zambian government adopted an expansionary fiscal stance marked by a large increase in capital spending.

22 This region includes South Africa, Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, Zambia and Zimbabwe.

After the country had attained middle-income status in 2011, this policy was largely financed by non-concessional borrowing. As a result, Zambia faced a rapid increase of its public debt and a level of debt servicing that weighed heavily on the country's finances. Moreover, the high interest rates of government bonds along with public sector payment arrears impacted the private sector sphere. Since 2014, public debt has risen sharply. It reached 86% of GDP in 2019[23] (against an average 22% over 2007–2013) or, in other words, a rise of over 10 percentage points per year for two consecutive years (cf. Figure 12). According to IMF projections (WEO April 2020), this could rise to 110% in 2020.

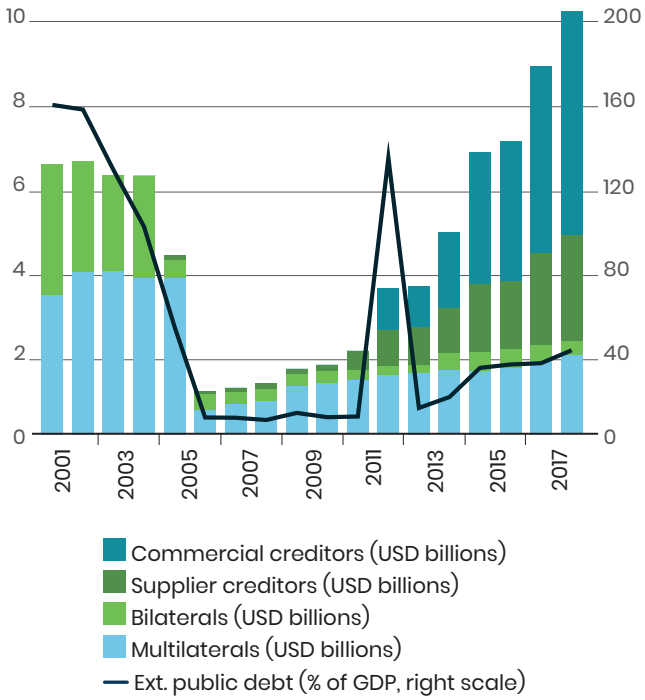
Public deficits are mostly financed by external non-concessional borrowing.[24] Three Eurobond issues were launched between 2012 and 2015 for a cumulative amount of US$3 billion, equivalent to 12% of GDP in 2017. This helped to reduce the share of external debt held by multilateral and bilateral donors from 77% in 2011 to 23% in 2018. The commercial debt primarily consists of these Eurobonds (30% of external debt) and loans contracted with Chinese entities (cf. Figure 13). In total, external debt represented 60% of Zambia's public debt, equivalent to 48% of GDP in 2018. As a result, public finances are particularly exposed to exchange rate risks: the depreciation of the kwacha in 2018 (-16%) propelled a 10 pp increase of the external debt-to-GDP ratio over one year.

Figure 12 - The sharp rise of public debt since 2014...



Sources: World Bank, IMF (WEO, Art. IV)

Figure 13 - ...is driven by external non-concessional borrowing



Sources: MoF, World Bank (WDI), IMF (WEO)

23 Based on a broader debt perimeter that includes the non-guaranteed external debt of public enterprises, the external debt has already reach 80.8% of GDP in (Article IV 2019, IMF).

24 The debt perimeter for external public debt used here is that of the Zambian authorities and the IMF (Art. IV). It includes central government debt and the state-guaranteed debt of public enterprises. Local authorities are not allowed to borrow without central government backing and their outstanding debts are thus included in central government debt. The IMF's 2019 Debt Sustainability Analysis (DSA) takes a broader perimeter for public debt.

Domestic public debt grew by 20.5% in 2018 and by 30% over the first ten months of 2019, mainly in order to secure financing for the drought-affected agricultural sector. The government also accumulated payment arrears to the construction sector and suppliers of goods and services, amounting to some 7% of GDP at end-2018.

The increase in debt, coupled with the unfavourable composition of the government's debt portfolio, led the IMF to reassess Zambia's risk of debt distress as being high in September 2017. The IMF's latest Debt Sustainability Analysis (DSA, August 2019) confirms this diagnostic and points out that the debt sustainability indicators have deteriorated significantly over the last three years, placing public debt on an unsustainable path. The country's borrowing capacity is deemed low and has also decreased, with a steep drop in months of imports covered by FX reserves (cf. Section 4).

The rating agencies' gradual downgrading of Zambia's sovereign risk reflects these developments. Between October 2018 and April 2020, Fitch downgraded the country's sovereign rating three times, down from B to CC. Standard & Poor's rating dropped from B- to CCC with negative outlook, after a downgrading in August 2019 and again in February 2020. Finally, Moody's downgraded its rating from Caa1 to Caa2 in May 2019, then to Ca with stable outlook in April 2020.

In 2020, Zambia is due to pay US$1.5 billion of debt service (interest and principal), an amount exceeding its current level of FX reserves. Although, at this stage, Zambia has not defaulted on its commitment, some payment arrears have been reported. In the face of such an unsustainable situation, the government's short-term margin of manoeuvre is limited. The country can no longer refinance itself on the international markets: the spreads, which were already very high in 2019, reaching up to 1,700 basis points, have rocketed to over 3,500 basis points since April 2020. Access to the local market remains difficult and costly. Although the Zambian authorities have been reticent in recent years to agree on a new programme with the IMF given the somewhat strained relations and the potential political cost of structural reforms and expected budget cuts, the unsustainability of Zambia's debt also rules out this option if no restructuring takes place. In this context, the government is studying a debt restructuring of US$11.2 billion because, while the current situation is particularly worrying, the country's financing needs will likely increase even more over the next few years given that the Eurobonds will mature as of 2022, with a first payment of US$750 million.

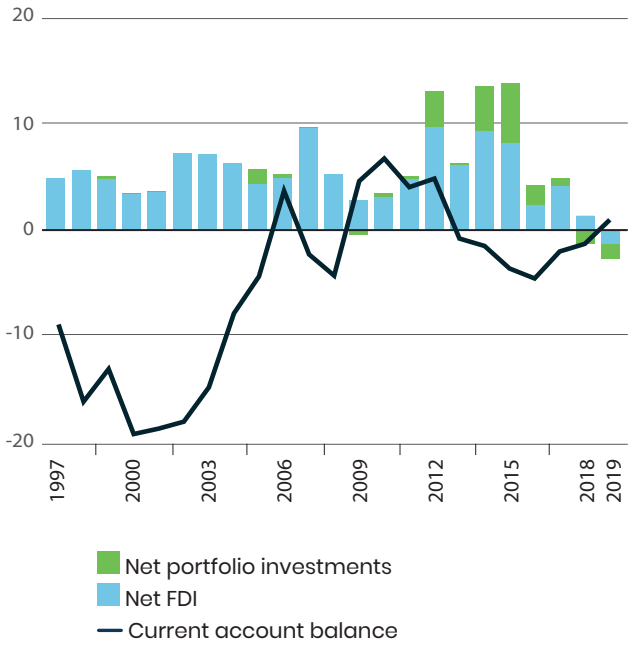
4.
A mounting external financing requirement and strong contraction of FX reserves

4.1 – The current account has again been negative since 2013

Zambia mainly exports mineral products (copper, cobalt) that have accounted for 73% of total export value on average over the last three years. China is likely the main destination for copper exports.[25] The country also exports sulphuric acid,[26] electricity, gold, refined-copper wire, and agricultural and agri-food products (maize, tobacco, sugar cane and cotton), mostly to neighbouring countries (cf. Box 2). Likewise, over half of Zambia's imports (oil, chemical products, machinery and vehicles) are sourced from within the region, principally from South Africa and the DRC.

The trade balance for goods has been structurally positive since 2004, although the amounts of recorded surpluses fluctuate. On the other hand, due to the high import of transport services, the trade balance for services has a structural deficit. After showing positive between 2005 and 2014 (+5.6% of GDP on average), the trade balance for goods and services has recorded contained deficits since 2015 (-1.9% of GDP on average), even tending to decrease (-0.8% of GDP in 2018). The current account deficit reported since 2013 (-2.6% of GDP on average, cf. Figure 14) is thus primarily explained by the negative balance of the primary income account, notably due to interest payments on external public debt. These totalled 1.7% of GDP on average between 2016 and 2018 according to the IMF (Art. IV).

Figure 14 - A current account deficit since 2013 (% of GDP)



Source: IMF (IFS, WEO)

4.2 – Steeply declining foreign exchange reserves

The country's FX reserves have been in steep decline since 2017. They stood at US$1.4 billion at end-March 2020 (against US$3 billion end-2015), which is a very low level covering around 2 months of imports (cf. Figure 15).

This situation has arisen largely because foreign direct investment (FDI) flows are insufficient to cover the country's need for external financing. In fact, although FDI has averaged 5% of GDP each year over the last twenty years, these flows are volatile (cf. Figure 14). Whereas the period 2012–2015 was marked by large FDI flows, these have decreased sharply since 2016, dropping to an average 3% of GDP in the period 2016–2018. Zambia even reported a net outflow of capital in 2019: -0.9% of GDP for FDI and -0.7% for portfolio investments (PIs). Nearly two-thirds of FDI are concentrated in the mining sector.

25 Customs statistics do not allow tracking of the final destination of these products, which means that the flows to China are underestimated as they are artificially funnelled through metal trading companies in Switzerland.

26 Copper extraction requires injecting sulphuric acid into the subsoil. This acid is produced locally and the surplus is exported to the Copperbelt and neighbouring regions.

Box 2

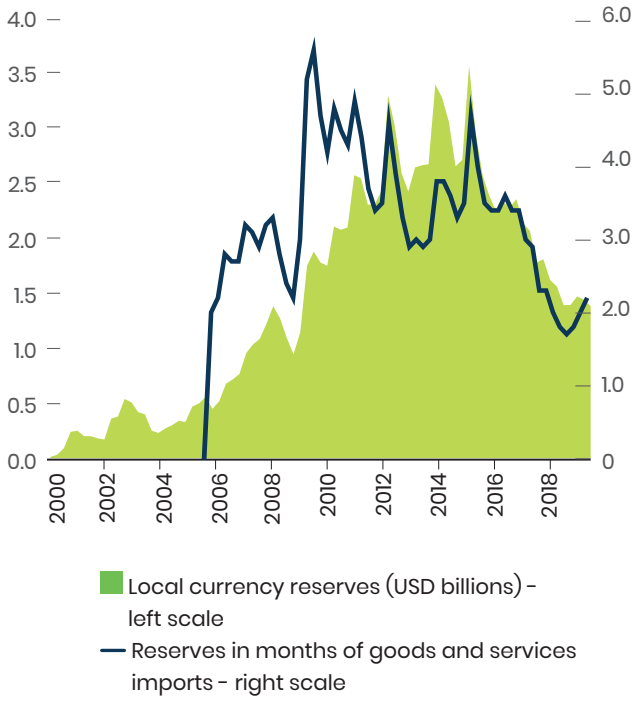
A strengthened regional integration, from which Zambia is not yet fully benefiting

Zambia is a landlocked country but the markets of eight bordering countries (Angola, DRC, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia) could offer outlets for Zambian exports, especially agricultural products. In this perspective, the country has signed several regional trade agreements. Zambia is a member of the Common Market for Eastern and Southern Africa (COMESA), the Southern Africa Development Community (SADC) and the tripartite Free Trade Area (COMESA-EAC-SADC). In February 2019, Zambia signed an agreement with the African Continental Free Trade Area (AfCFTA). China and India nonetheless remain key trading and economic partners for Zambia.

Over half of Zambia's imports (comprising oil, chemical products, machinery and vehicles) come from sub-Saharan Africa and one-third from SADC. On the other hand, exports to the rest of the continent are more modest: an average 23% of exports since 2005, 30% of which go to DRC. This imbalance can be explained by the weak diversification of Zambia's production base, which for the moment does not enable the country to fully benefit from these agreements. Copper, the main export, is in low demand on the continent and the other export products are similar to those produced in neighbouring countries. For example, thanks to its self-sufficiency in maize, reached in 2006, Zambia can export its harvest surplus to neighbouring countries in need – although it does restrict maize exports during episodes of drought. Yet, in a region that grows abundant quantities of maize (80% of cereal production), Zambia's production is relatively low. Between 2010 and 2016, South Africa and Tanzania together produced over 50% of the region's cereals, compared to Zambia's 7%, a level similar to those of Malawi and the DRC.

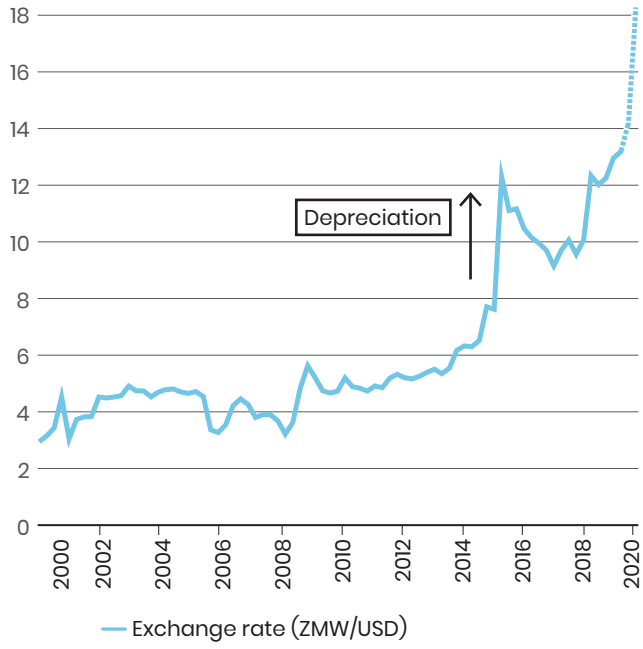
Sources: Bank of Zambia (2019), SADC, FEWS NET (2018)

Figure 15 -
The drop in FX reserves



Source: IMF (IFS)

Figure 16 -
A new currency depreciation



Source: Macrobond

Portfolio investments are limited, except for the large flows reported in 2012, 2014 and 2015 linked to the Eurobond issuances. As a result, external public debt servicing (interest and principal) has made it necessary to draw on foreign exchange reserves. This servicing should amount to US$1.5 billion in 2020, which exceeds the level of reserves. Zambia is thus facing a shortage of foreign currency liquidity. The situation is particularly worrisome as a total of US$4.9 billion (interest and principal) is due to foreign creditors over the period 2019–2021.

Furthermore, various past interventions of the central bank (Bank of Zambia) aimed at defending the kwacha have further diminished the country's FX reserves. In the context of a *de facto* administered floating exchange rate system (cf. Box 3), the foreign exchange market is under pressure. After a first crisis in 2015, a year in which the currency lost 41% of its value against the U.S. dollar, the kwacha again depreciated by 16% in 2018, then by 15% in 2019 (Figure 16). The low level of reserves now constrains the central bank's capacity to intervene on the foreign exchange market, which leaves the currency vulnerable. Yet, the real effective exchange rate was in line with its equilibrium level at end-2018 according to the IMF and, currently Zambia has no parallel foreign exchange market.

4.3 – Total external debt on a steep rise

External debt, over half of which resides with the public sector (53.7% of GDP), has risen sharply and in 2018 stood at 87.9% of GDP, compared to 22% in 2011. Private-sector external debt comprises over 80% of long-term loans and 63% is concentrated in the extractive industries.

Box 3

Capital controls introduced in the past could be re-established if external balances deteriorate

Since its independence in 1964, Zambia has applied seven exchange rate regimes and introduced varying degrees of control on exchange rates and movement of capital. *(i)* First of all, a fixed exchange rate system was introduced and maintained until 1976, but not without various modifications (and devaluations). The local currency was initially linked to the pound sterling until end-1971, then to the U.S. dollar until 1976 (to maintain the country's competitiveness). *(ii)* Following the appreciation of the dollar, the exchange rate was pegged to the SDR[27] and the currency was devalued twice during this period (-10% in March 1978, then -20% in January 1983). *(iii)* In 1983, a crawling peg based on a basket of currencies of the country's major trading partners was brought in but *(iv)* the authorities, dissatisfied by the depreciation of the kwacha and the increase in inflation set up an FX auction system in October 1985 (concomitant with trade liberalisation). However, the exchange rate continued to decline and the kwacha lost 86% of its value (end-November 1986). *(v)* In May 1987, a fixed exchange rate system was again introduced, with control over the allocation of foreign exchange and export earnings. The country underwent two devaluations in 1989. *(vi)* In 1990, a dual exchange rate was adopted (an official rate and an administered floating rate), but in 1991 the two rates were unified. Throughout this period, a parallel exchange market coexisted with the official exchange rate system, with black market premiums averaging 100% between 1970 and 1988, and as much as 400% in the early 1990s. *(vii)* Since then, a *de jure* floating exchange rate system has been in place and in March 1993, most exchange rate controls were removed. An interbank FX market was also introduced. Lastly, controls on current account transactions and capital were suspended in 1994.

Even though Zambia has had a Chinn-Ito[28] score of 1 since 2000 (last available data from 2017), restrictive measures were taken in 2012 to limit the purchase of goods and services in U.S. dollars (instrument 33), then in 2013 to repatriate foreign currency export earnings (instrument 55). These regulations were removed in March 2014. However, restrictions on the foreign exchange market were still in place in 2015 according to the IMF (Art. IV, 2015). These involved a restriction on access to foreign currency for making payments and transfers for current international transactions, which is evidenced by the external payments arrears. Today, controls and restrictions appear to be limited, even though foreign currency loans are reserved to exporting sectors and real estate, generating foreign currency revenue. However, in a context of extremely elevated and still rising external debt, a still volatile kwacha and insufficient FX reserves, a return to controls on capital cannot be ruled out.

Sources: IMF (2015); K. O. Mungule (2004)

27 The Special Drawing Right (SDR) is an IMF accounting unit. Its valued is based on a basket of five major currencies: the U.S. dollar, the euro, the Chinese renminbi (RMB), the Japanese yen and the pound sterling.

28 This is a normalised index (0 to 1) measuring a country's degree of capital account openness.

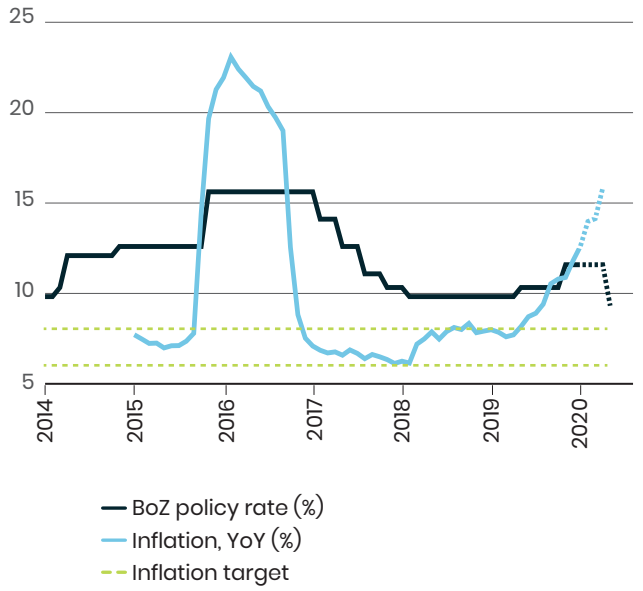
5.
A banking sector exposed to sovereign risk and which barely helps to finance the economy

5.1 – High interest rates on the banking market…

5.1.1 – Further tightening of monetary policy in the face of inflationary pressures

The main goal of Zambia's monetary policy is price stability, with a medium-term inflation target ranging from 6 to 8%. Following the 2015 depreciation of the kwacha, which had pushed inflation up to 18% in 2016, the central bank had dramatically tightened its monetary policy (increase in its policy rate and in the statutory reserve ratio for commercial banks, as well as interventions on the FX market to check depreciation). The drop in inflation in 2017 and 2018 had led the central bank to ease its monetary stance, thereby increasing liquidity. However, given the economic situation, the state of public finances and low level of reserves, the central bank raised the policy rate twice in 2019:

Figure 17 -
Monetary tightening in 2019
to check the return of inflation



Source: Bank of Zambia

first, by 50 bp at end-May, then by 125 bp, pushing the rate up to 11.50% (Figure 17). However, given the deteriorating economic activity in the context of the SARS-CoV-2 pandemic, the Bank of Zambia lowered its policy rate by 225 bp, to 9.25%, on 20 May 2020. This decision intervened in a situation that will likely see inflation running well above target (+15.7% YoY in April 2020, IMF projection of +13% in December) – despite the drop in international energy prices – due to the almost continuous currency depreciation and the rise in food prices.

5.1.2 – High yields on government securities on the domestic market

Given the country's mounting needs for financing, the outstanding government issues have significantly increased since 2016. This rise has mainly involved bonds, for which outstanding amounts have doubled over three years. After reaching high levels in 2015 and 2016, yields trended downwards in 2017 then rose again as of mid-2018 given a lesser demand for these securities. This reflected tighter liquidity conditions (cf. Section 5.3), and an elevated risk premium given the deterioration of Zambia's sovereign rating. The weighted average composite yield on Treasury bills stood at 23.4% end-2019 while the bond yield attained 31.5%.

The commercial banks hold three-quarters of Treasury bills while pension funds, which are also among the main domestic institutional investors, hold most of the bonds. As a result, monetary transmission has been weakened not only due to the high public debt contracted with the domestic financial market, which crowds out credit to the private sector, but also the high yields on government securities, which contributes to keeping interest rates high on the banking market (cf. Section 5.2).

5.2 – ...strongly constrain the private sector's access to credit

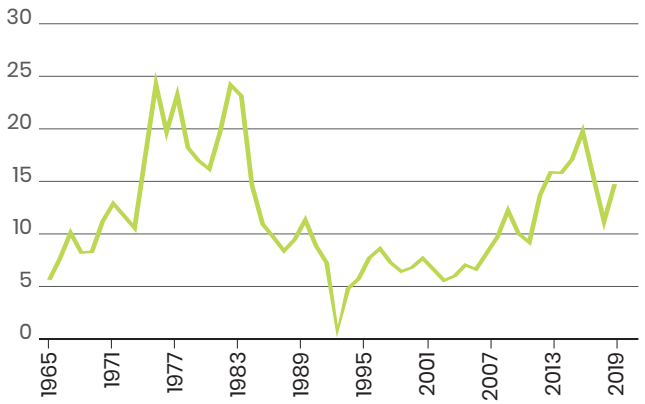
5.2.1 – Access to banking services for individuals is making headway

A FinScope survey in 2015 showed that 59% of adults (i.e., nearly 5 million people) use formal (38%) or informal, financial services compared to 37% in 2009. While these figures indicate significant progress, Zambia nonetheless lags behind other countries in the region.[29] This low rate of financial inclusion is largely explained by the limited access to these services in rural areas, due to relatively low population densities (22 inhab./km²) and few access points (7 for 10,000 people, the lowest rate in the region). Moreover, the rise of mobile banking has had only partial success in Zambia due to inadequate investment in communication and power networks, poorly adapted product design and the absence of a specific strategy for low-income populations in isolated areas. However, the distribution of new products in 2018 led to a clear expansion of the sector in the space of one year.

5.2.2 – Companies' access to financial service remains low

Only 9% of Zambian companies use loans or credit lines, a level comparable to Uganda but lower than the other countries in the region. Access is particularly limited for small businesses which, given their informal status, struggle to provide collateral.

Figure 18 - High rates on sovereign issues crowding out the private sector



Source: World Bank (WDI)

Aside from the physical obstacles to access, the high yields on government securities have crowded out credit to the private sector. This represented only 15% of GDP in 2018, against an average 17% between 2012 and 2015 (cf. Figure 18). Moreover, commercial bank lending rates are often extremely high: nominal rates had a weighted average of 26.1% in September 2019 and real rates 15.6%, marking a sharp rise since summer 2018. Private sector demand for loans remains strong, but such high rates are likely to place indebted companies in a vulnerable financial situation in an subdued economic environment.

29 Apart from Mozambique (40%), the proportion of adults with access to financial services is above or equal to 10 pp in the region, and the gap is even more pronounced for access to formal services.

5.3 – A well-capitalised banking sector but which suffers from a lack of liquidity

Zambia's financial sector comprises for the most part 18 commercial banks.[30] In 1994 and 1995, the country saw the creation of many new banks, major defaults (9 until 2000) and scant banking supervision. Since then, supervision has been greatly strengthened and the country had only one banking institution default in 2016, even though the banking sector has been under considerable stress (slowdown of economic activity, sharp depreciation of the kwacha in 2015, rising interest rates and an increase is government arrears affecting the whole economy).

Financial indicators remain broadly satisfactory: the banking sector is well capitalised and profitable (cf. Table 1). Yet, these indicators hide disparities among the banks, as the performance of some banks is viewed as worrisome by the Bank of Zambia. However, the ten banks holding 82% of the sector's assets in 2018 have performance indicators qualified as satisfactory.

The contraction in credit growth, coupled with a slowdown of activity, has nonetheless led to an increase in the rate of non-performing loans (NPLs) since 2015. In mid-2017, when the NPL rate was 12%, the most vulnerable sectors were those with the highest energy needs and which had been impacted by the 2016 power cuts due to prolonged droughts. Since then, the situation has remained poor in the hospitality sector (with a NPL rate of 79% end-2018) and the construction sector (38%). Yet, the banking sector is above all exposed to fluctuations in the primary sector, which accounts for 17% of loans and 32% of NPLs. Since summer 2018, the rate of NPLs has trended downwards and, following some losses in early 2019, it reached 9.4% in September 2019 (below the 10% prudential benchmark).

The sector is also suffering from a lack of liquidity even though the indicators are broadly satisfactory, with a liquid assets-to-short-term liabilities ratio of 57.0% end-2018. Banks seem to be reticent to trade on the inter-bank market. Moreover, foreign banks place a sizeable share of their liquidities abroad (in their parent company).

In 2017, the IMF had already highlighted that internal risks (crowding out private-sector credit, large payment arrears, power outages, high real interest rates) and external risks (primarily copper prices) could weaken the country's financial stability. The Fund found that the banks were resilient to credit stress but vulnerable to liquidity stress.

30 The eight foreign bank subsidiaries dominate the sector both in terms of assets (73% in 2018) and loans and deposits, followed by the three partly state-owned banks (18% of assets), while the seven private local banks account for less than 9% of assets.

Table 1 - Upward trend of non-performing loans since 2013 following the slowdown of economic activity and the credit squeeze (%)

	2013	2014	2015	2016	2017	2018	SEPT-19
Liquidity							
Liquid assets to total assets	38.9	35.8	34.8	39.1	45.5	47.0	43.7
Liquid assets to short-term liabilities	49.2	45.7	42.7	49.0	56.5	57.0	54.3
Solvency ratio							
Ratio of risk-weighted assets	26.8	27.0	21.2	26.2	26.5	22.1	22.6
Efficiency ratio							
Return on assets (ROA)	3.4	3.7	2.8	2.5	3.1	3.0	3.3
Return on equity (ROE)	18.2	17.3	13.1	12.3	15.4	14.7	16.9
Composition and quality of assets							
Rate of non-performing loans (NPL)	7.0	6.1	7.3	9.7	11.5	11.0	9.4
Provisions to NPL	83.2	76.5	70.5	71	69.2	86.4	86.1

Sources: IMF (IFS), Bank of Zambia

Acronyms and abbreviations

AfCFTA	African Continental Free Trade Area
Bn	billion
bp	basis point
CIAT	*Centre international d'agriculture tropicale* (International Center for Tropical Agriculture)
COMESA	Common Market for Eastern and Southern Africa
CPI	Consumer price index
CSO	Central Statistical Office (Zambia)
DSA	Debt Sustainability Analysis
DRC	Democratic Republic of the Congo
EAC	East African Community
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
FERDI	*Fondation pour les études et recherches sur le développement international* (Foundation for Studies and Research on International Development)
FEWS NET	Famine Early Warning Systems Network
GDP	gross domestic product
GNI	gross national income
GWh	gigawatt hour
ha	hectare
HDI	Human Development Index
HIPC	Heavily indebted poor country
IFS	International Financial Statistics (IMF database)
IMF	International Monetary Fund
LME	London Metal Exchange
LMIC	Lower-middle-income country
m	metre
M	million
MDRI	Multilateral Debt Relief Initiative
MIC	middle-income country
MoF	Ministry of Finance (Zambia)

Mt	million tonnes
MW	megawatt
NPL	non-performing loan
P.C.	per capita
PI	portfolio investments
PISA	Programme for International Student Assessment
pp	percentage point
PVCCI	Physical Vulnerability to Climate Change Index
RMB	renminbi (yuan – Chinese currency)
ROA	return on assets
ROE	return on equity
SADC	Southern African Development Community
SDR	Special Drawing Right
SSA	Sub-Saharan Africa
t	tonne
toe	tonnes of oil equivalent
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
USD/US$	United States dollar
VAT	value added tax
WDI	World Development Index (World Bank database on development indicators)
WEO	World Economic Outlook (biannual IMF report on world economy)
YoY	Year on year
ZESCO	Zambia Electricity Supply Corporation (national electricity operator)
ZIPAR	Zambia Institute of Policy Analysis and Research (Zambian think tank)
ZMB	Zambian kwacha (local currency)
ZRA	Zambia Revenue Authority
ZVAC	Zambia Vulnerability Assessment Committee

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