

# ZAMBIA ECONOMIC BRIEF

## WEALTH BEYOND MINING: LEVERAGING RENEWABLE NATURAL CAPITAL

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**12<sup>th</sup> ZAMBIA ECONOMIC BRIEF**

**WEALTH BEYOND MINING:  
LEVERAGING RENEWABLE  
NATURAL CAPITAL**



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# ACRONYMS

ANS	Adjusted Net Savings
ASYCUDA	Automated System for Customs Data
BoZ	Bank of Zambia
CEMAC	Central African Economic and Monetary Community
CPI	Consumer Price Index
CORFO	Chilean Economic Development Agency
CPIA	Country Institutional and Policy Assessment
CSO	Central Statistics Office
DeMPA	Debt Management Performance Assessment
DSA	Debt Sustainability Analysis
EITI	Extractive Industry Transparency Initiative
FDI	Foreign Direct Investment
FRA	Food Reserve Agency FI
FDI	Foreign Direct Investments
FX	Foreign Exchange
GDP	Gross Domestic Product
GNI	Gross National Income
GST	Gross Sales Tax
HIPC	Heavily Indebted Poor Country
IAPRI	Indaba for Agricultural Policy Research Institute
IMF	International Monetary Fund
IPP	Independent Power Producers
LCMS	Living Conditions Monitoring Survey
MDRI	Multilateral Debt Relief Initiatives
MEFMI	Macroeconomics and Financial Management Institute of Eastern and Southern Africa
MoF	Ministry of Finance
MOSES	Mineral Output and Statistical Evaluation System
MTDS	Medium-Term Debt Strategy
MNDP	Ministry of National Development Planning
NCA	Natural Capital Accounting
NFA	Net Foreign Asset
NFIS	Nations Financial Inclusion Strategy
NPL	Non-Performing Loans
NTE	Nontraditional Exports
PAYE	Pay As You Earn
PMI	Purchasing Managers' Index
PPG	Public and Publicly Guaranteed
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SME	Small and Medium Enterprises
SNA	System of National Accounts
SSA	Sub-Saharan Africa
SOE	State-Owned Enterprises
TB	Treasury Bill
UNCTAD	United Nations Conference on Trade and Development
UN	United Nations
VAT	Value Added Tax
WAVES	Wealth Accounting and Valuation of Ecosystem Services Global Partnership
WEAMU	West African Economic and Monetary Union
FY	Fiscal Year
ZAFICO	Zambia Forestry and Forest Industries Corporation
ZRA	Zambia Revenue Authority

# FOREWORD

I am pleased to share the twelfth Zambia Economic Brief with a focus on how Zambia can harness its renewable resources to promote sustainable growth. This Brief is part of a series of short economic updates produced twice a year by the World Bank

Each Brief includes two sections: The Bank's assessment of recent economic developments and the outlook in the short to medium term, and its analysis of a specific development topic or theme. Previous Briefs covered opportunities for revenue collection, public expenditure, the power sector, mining, jobs, trade, debt management, and financial inclusion and can be found on the World Bank's Zambia website.

Zambia's economy picked up slightly in 2018, supported by strong performance in the services sector. However, recovery was constrained by a poor agricultural harvest, lower copper prices, and macro-fiscal challenges that affected private sector activity. Bold fiscal and debt management efforts, supported by reforms in key state-owned enterprises, will be critical in rebuilding market confidence and putting Zambia back on a stronger growth trajectory.

Decisively addressing Zambia's macro-fiscal challenges will also ensure that the country's poverty and vulnerability situation does not deteriorate. Fiscal consolidation will help create the needed space for discretionary spending in such areas as public service delivery and social spending, including social transfers. Moreover, complementary measures to dismantle arrears and improve government's conditions to access the financial markets will help strengthen private sector balance sheets and financing conditions, especially for SMEs, with a virtuous impact on job creation and quality.

To reduce poverty and boost shared prosperity, Zambia needs to re-orient its growth model, including through efficient use of renewable natural capital. The high growth that Zambia has experienced in the past decade and a half has been largely extractives-based – with most of its benefits accruing to richer and urban-based segments of the population – and has left a legacy of environmental liability in

mining towns. However, in contrast to non-renewables, sustainable use of renewable capital (e.g. agricultural land, forests, water) can produce benefits in perpetuity and bring benefits to the rural economy. Zambia can therefore harness this potential through targeted investments to improve agricultural yields and sustainable management of water and forest resources.

We hope that the findings of this Economic Brief will stimulate a healthy debate around these issues so that Zambia can shift to a path of more inclusive growth.



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# EXECUTIVE SUMMARY

## *Regional economic developments*

**Economic recovery in Sub-Saharan Africa (SSA) remains subdued.** GDP grew at an estimated 2.3 percent in 2018 from 2.5 percent in 2017, driven by sluggish growth in the region's three largest economies—Angola, Nigeria, and South Africa. Growth is forecast to improve to 2.8 percent in 2019 and 3.3 percent in 2020 on increased agricultural and mining production and diminished policy uncertainty in the three countries. The outlook is subject to external risks, including a sharper than expected decline in commodity prices due to continued trade tensions, faster monetary policy tightening in advanced economies that would tighten financial conditions, and slower growth in China and the Euro area that would reduce export demand and investment. Domestic risks include fiscal slippages, conflicts and adverse weather conditions.

## *The state of the Zambian economy*

**The Zambian economy is estimated to have grown by 3.7 percent in 2018 from 3.5 percent in 2017,** reflecting the strong performance of services (in particular, wholesale and retail, pensions and information and communication). However, faster recovery was undermined by a lower crop harvest and fiscal slippages that led to the accumulation of new public expenditure arrears and government domestic borrowing at high yields and impacted private sector activity. Inflation remained within the authorities' target range of 6-8 percent, averaging 7.5 percent for 2018, but pressures are mounting, leading the central bank to tighten its monetary policy stance in May 2019.

**The FY18 fiscal outturn was more expansionary than budgeted.** Domestic revenue was 7.6 percent higher than budgeted, and 1.8 percent of GDP higher than in 2017, reflecting the Zambia Revenue Authority's (ZRA) efforts to enforce compliance. However, spending overruns in foreign-financed projects (of 2.3 percent of GDP) and interest payments on external debt (of 1.1 percent of GDP) pushed up total spending to 8 percent above the budget. As a result, the fiscal deficit reached 10.0

percent of GDP on commitment basis (compared to 4.3 percent of GDP in 2017) and 7.5 percent of GDP on cash basis (compared to a budgeted 6.1 percent in 2017). The increased deficit was financed by increased external borrowing and an accumulation of domestic payment arrears.

**External sector imbalances persisted in 2018, and reserve coverage declined further.** The current account balance weakened from a deficit of 1.5 percent of GDP in 2017 to 2.6 percent in 2018, reflecting increased deficits in income and services accounts amidst a narrowing trade surplus. With reduced capital inflows, the overall balance of payments was financed by a drawdown in official reserves. Gross official reserves therefore fell to US\$ 1.6 billion (1.8 months of imports) at end-December 2018 from US\$ 2.1 billion at end 2017 and have fallen further to \$1.4 billion (1.7 months of imports) as at end-April 2019.

**Zambia's public debt profile weakened further in 2018.** As at end 2018, external public and publicly guaranteed debt had reached 43 percent of GDP, reflecting large disbursements of external debt amplified by the depreciation of the kwacha. Total public and publicly guaranteed debt is estimated to have increased to 73.1 percent of GDP in 2018 from 63.4 percent in 2017. Debt service rose to 36 percent of domestic revenue in 2018 (from 27 percent in 2017), driven by the increased proportion of external debt in the portfolio, the high concentration of short-term maturities and the depreciation of the kwacha. The debt of state-owned enterprises (in particular ZESCO Limited) has also continued to rise at a brisk pace.

**Indicators of external debt burden have deteriorated since the last debt sustainability analysis (DSA) in 2017.** When compared to the baseline projections of the 2017 DSA, real GDP growth outturn and projections are lower, primary deficits projections/programmed are higher, actual and programmed costs of external debt service are higher, net Foreign Direct Investment (FDI) inflows

are lower, the average cost of external borrowing is higher, estimated and programmed project loans disbursements are higher, and gross international reserves are substantially lower. Similarly, some risks to the debt portfolio materialized during the year, including a large kwacha depreciation in H2 2018; increases in sovereign yield spreads partly arising from tightening global financial conditions; and increasing undersubscription of government securities reflecting weakening investor confidence. As a result, budgetary central government total debt service increased to 36 percent of domestic revenue in 2018 from 12 percent in 2012, while the cost of external debt service accounted for 70 percent of total foreign currency outflows in 2018, from 65 percent in 2017.

**Government has begun implementing some reforms to improve debt reporting and transparency**, with support from the World Bank and other Development Partners. The Ministry of Finance (MoF) now publishes quarterly economic updates that include information on public and publicly guaranteed debt. MoF also intends to start publishing quarterly debt reports, with support from the United Nations Conference on Trade and Development (UNCTAD). The need for enhanced transparency in debt reporting came to the fore following market concerns about Zambia's debt profile, including allegations of a possible securitization of assets. The World Bank, jointly with UNCTAD and the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI), recently conducted a debt management performance assessment (DeMPA) whose results are expected to help inform Government's debt management reform plan going forward.

### **Medium-term outlook**

**GDP growth is forecast to average 2.7 percent over 2019-21, below the 7.0 percent required to achieve Zambia's medium-term development goals.** Agriculture is projected to recover gradually as irrigation projects come on stream. Growth of industry is projected to remain stable, reflecting strong construction activities and high copper production as recently refurbished copper mines scale up production. The baseline projections for industry assume that the government clears its arrears in line with the FY19 budget and the Medium-Term Expenditure Framework, and that reforms are urgently implemented to improve the financial and operational sustainability of ZESCO and safeguard electricity supply in the medium term.

**Zambia's growing macroeconomic imbalances have important poverty and vulnerability implications.** First, with debt service and the compensation of employees now accounting for over 85 percent of Government's domestic revenue, space for discretionary spending is shrinking quickly and affecting social spending. For example, despite the higher than budgeted overall expenditure in Q1

2019, pension and social cash transfers were just 28 percent of what was programmed. Second, rising payment arrears and tighter bank financing conditions could affect private sector job creation and quality. Third, the tightening credit conditions in the banking sector will have a disproportionate impact on SMEs and low-income households that already normally face tight financing conditions. Lastly, pressures on inflation, if materialized, would also disproportionately affect the purchasing power of low-income households, which tend to have low savings rates.

**The outlook is subject to several downside domestic and external risks.** Domestic risks include the possibility of (i) the delayed implementation of fiscal consolidation and structural reforms, which would lead to further tightening of domestic and external financing conditions, failure to clear domestic payment arrears, and rising debt servicing constraints; (ii) the delayed implementation of ZESCO reforms, which would worsen its financial situation and undermine reliable energy supply, with corresponding negative implications on the economy, especially on industrial activity; (iii) the failure to find an amicable resolution to the ongoing dispute over new mining taxes that would affect investment and production in the sector; and (iv) a protracted El Niño that would restrain the recovery of agricultural production.

External risks include possibilities that (i) the terms of trade deteriorate as copper prices remain subdued due to higher global supply and slower growth in China, while oil prices may increase due to production losses arising from geo-political tensions, leading to faster deterioration of the current account and foreign exchange (FX) reserves; and (ii) the USA and other advanced economies tighten monetary policy faster than anticipated, leading to tightened global financing conditions and higher costs of external financing.

**In the near- to medium-term, Zambia should pursue strong macroeconomic and structural adjustment policies to preserve macroeconomic stability, restore business confidence, and improve its growth prospects.** Key areas of focus include (i) front-loading fiscal consolidation to return to a medium risk of debt distress and create fiscal space for inclusive growth; (ii) strengthening debt management to reduce the debt service burden and minimize debt-related vulnerabilities; (iii) rebuilding FX reserves to buttress external stability and (iv) implementing plans to improve the financial and operational sustainability of ZESCO and enhance the transparency of state-owned enterprises (SOEs).

**Over the long term, Zambia needs to harness its natural resource endowment, especially renewable capital, to promote sustainable**

**growth.** Zambia's economy has been dominated by discoveries, expansion, and fluctuations in the minerals sector, with its direct contribution to GDP in recent years increasing from an average of 6.3 percent over 1994-99 to 9.2 percent over 2010-15. Reliance on non-renewable resources like minerals for growth is, by definition, unsustainable. In the case of Zambia, the extractives-based growth in recent years has not significantly contributed to poverty reduction and has left a legacy of environmental liability in mining towns. Similarly, while the contribution of agriculture, forestry and fishing to GDP has declined in recent years, the sector's linkages with the rest of the economy remain significant. However, as argued in Section 2 of this publication, in contrast to non-renewables, renewable capital (e.g. agricultural land, forests) can produce benefits in perpetuity. The special topic for this publication focuses on how Zambia can harness its renewable capital to promote sustainable growth.

### **Leveraging renewable natural capital for a sustainable future**

**Changes in total wealth of a country over time are critical to understanding its sustainable development trajectory.** For Zambia, its total wealth more than doubled between 2000 and 2014 and in 2014 was US\$644 billion. In 2014, the capital base was made up of human capital (43 percent), natural capital (40 percent), produced capital (17 percent), and Net Foreign Assets (-0.1 percent). Future growth will depend on improved productivity and the sustainable management of natural capital, yet its total value has increased very little over the 20-year period. Although total wealth in Zambia has been growing over time, its composition suggests that the country has not sufficiently diversified its asset portfolio to support strong economic growth in the future. A typical trajectory from low-income to middle-income often starts with an abundance of natural capital and using this to invest in education and health (human capital) and at middle-income levels, human capital typically becomes the main asset. While the share of natural capital in total wealth is typically lower in high income countries, the absolute level of natural capital is still higher than in low-income countries. This implies that economic growth has been achieved not only by investing the income of depletable assets into other assets, but also through the efficient use of natural capital and the sustainable management of renewable natural capital.

**The wealth accounts for Zambia indicate slow but steady progress.** They show that the gains in wealth per capita are largely driven by gains in human capital and nonrenewable natural capital, mainly minerals. Renewable natural capital, on the other hand, has decreased as a result of a loss of value to forest lands, protected areas and pastureland within the 20-year period. This loss has been attributed to the expansion of agricultural land and settlements as well as infrastructure development and an increasing demand for charcoal within the country.

The wealth estimates are complemented by the flow measure, the Adjusted Net Savings (ANS), which measures the true rate of savings in an economy, after taking into account investments in human capital, the depletion of natural resources, and the damage caused by pollution. Zambia's ANS was negative between 1990 and 2003 but from 2004 to 2016, the country has been able to achieve positive net savings. The positive ANS shows that the country has been investing in the future through accumulating its assets. This is mainly due to the increasing rate of savings and investments in the economy, reflecting the higher investments and improved external position that the country experienced from 2004. However, the gap between the Gross National Savings and the Adjusted Net Savings has increased slightly rather than decreased, indicating that the depletion of non-renewable resources has not been fully offset by investments in other capital.

**Natural capital makes up a significant share of total wealth for most emerging and developing economies, including Zambia.** In 2014, 40 percent of Zambia's wealth was natural capital. Of this, 73 percent was renewable natural capital – protected areas, pastureland, cropland and forests. Zambia's renewable asset base of US\$ 11,970 per person is much higher than the average for lower-middle countries (US\$ 5,006/person) and the average of Sub-Sahara African countries (US\$ 6,403/person).

**To fully realize the potential of natural capital, traditional measures of economic development need to be supplemented.** In particular, measures of annual economic activity such as GDP per capita need to be complemented with measures of the country's asset base or wealth. Managing and allocating natural resources efficiently and sustainably also require that they are properly accounted for in a consistent way. To this end, Zambia joined the Wealth Accounting and Valuation of Ecosystem Services (WAVES) Global Partnership in 2017. WAVES is a World Bank program aimed at promoting sustainable development by ensuring that natural resources are mainstreamed into development planning and national economic accounts. Zambia has made rapid progress by completing three national capital accounts, for forestry, land and water. The accounts provide information for policy makers to use in evaluating tradeoffs for development.

**There are multiple challenges to Zambia's economy that are related to the management of renewable natural capital.** A key issue is the management and allocation of water supply. Zambia is currently not fully utilizing its abundant water resources. The level of per capita water withdrawal is three times lower than the developing countries' average and lower than the average per capita water withdrawal in Sub-Saharan Africa<sup>1</sup>. The potential for both hydropower generation and agricultural production remains largely underdeveloped.

The decline in crop production due to low rainfall in 2018 highlights the need to increase the share of irrigated agriculture. This development needs to be done with an overall view of water demand within other sectors in the economy, as well as its spatial distribution. Water supply is highly influenced by land use in the catchment area and the protection of key ecosystems to safeguard water yield. This is also important for hydropower, which accounts for 95 percent of Zambia's electricity supply. Having compatible, spatially disaggregated data on water supply, industries and their respective water demand, as provided in the natural capital accounts, is necessary for optimizing land use and production.

Forests play an important role for several key ecosystem services underpinning the economy, among them water regulation, soil retention and carbon sequestration. Due to its forests, Zambia is currently a net carbon sink. The forest sector contribution to the country's GDP, as accounted for in the national accounts, is at 5–6.3 percent and provides formal and informal employment to around 1–1.4 million people. However, the sector contributes more to the economy than is currently captured in GDP, and also contributes significantly to the growth of other economic sectors (i.e. mining, agriculture, construction). Licensing for forestry products (i.e. timber, honey, wax and charcoal) can contribute to government revenue, exports and foreign exchange reserves. Integrating informal production and sales, including exports, will also increase government revenue and contribute to lowering the fiscal deficit.

**The natural capital accounts point to opportunities for Zambia to diversify the economy and increase exports through expanding to currently underexploited markets.** Investments in nontimber products and/or tourism related to natural areas could generate high economic returns for the country without contributing to deforestation or the expansion of forest plantations into key natural forest areas. Protecting natural forest areas is especially important for the possibility to expand the nature-based tourism industry, especially in the unexploited Northern Province. Apiculture (or beekeeping) is another potentially growing sector in the Zambian economy for raising export earnings, employment creation and poverty reduction, that can be further developed. For example, the value of one tonne of bees wax compares relatively well with that of copper on the international market, and could become an important source of export income for the nation. In addition, bees play a currently undervalued and vital role in pollination, which is important for plant reproduction in protected areas as well as agricultural production areas.

**Going forward, Zambia needs to harness its potential for growth by investing in renewable capital.** Zambia's Natural Capital Accounts and the World Bank's Systemic Country Diagnostic have revealed risks in the current use of its natural resources, particularly the increased levels of deforestation from increased agriculture expansion and charcoal production. Substantial investments may be needed to improve agricultural yields, use scarce water resources more efficiently, or switch

to higher-value crops. Increasing productivity may also require managing land for a different mix of goods and services over time. For example, a forest once managed primarily for timber may generate higher value and employment as an ecotourism resource or as a source of clean, sediment-free water for downstream hydroelectric power<sup>2</sup>. Thus, better funding for renewable natural resources-based sectors is essential to guarantee an adequate fiscal base for sustainable economic growth and poverty reduction.

We suggest three options for Zambia to harness renewable natural resources for sustainable economic growth:

***i. Proper valuation and accounting of natural resources is crucial for robust development planning.***

This would enable the untapped potential of renewable natural capital to be recognized and for mechanisms to realize this value to be developed and implemented as well as ensuring that critical natural capital is not damaged by other development activity. Integrating natural capital measurement into the Systems of National Accounts can help to investigate and highlight the potential of sustainably managed renewable resources to achieve economic growth and poverty reduction. Expanding the current NCA program to include additional accounts, in particular ecosystem accounts, will further enhance the country's ability to get the best out of its renewable natural resources for sustainable development.

***ii. Strengthening sector analysis for the renewable resources.***

Natural capital accounts can also be combined with a deep sector analysis to enable a sector diagnosis that may reveal factors limiting the contribution of natural assets and ecosystem services to sustainable economic development. For instance, forest accounts should be combined with a forest sector diagnosis on the driving factors and should provide sustainable options for continuing to convert forested land to other uses. Furthermore, the analysis presented in this Brief from the initial accounts is just a start in understanding the state of the renewable natural capital in the country and their potential contribution to sustainable economic growth. This work should be expanded to cover other aspects of natural capital, like ecosystem services, which will further strengthen its usefulness for planning and management.

***iii. Natural capital for growth requires strong policies and investments.***

Strong institutions and sound policies are important for the sustainable management of natural resources. For countries that depend on natural resources—particularly the non-renewable resources, weak policy has resulted in what is called a resource curse and Zambia is no exception to this phenomenon. Therefore, in moving beyond the non-renewables, the government must invest in consolidating policies that attract investments in renewables and enforce regulations that do not give way to overexploitation, illegality and the degradation of open access natural assets like forest and land. In this context, a deep dive policy review is necessary to ensure consistency in areas of overlap to create synergy.



# SECTION 1 RECENT ECONOMIC DEVELOPMENTS

## A. REGIONAL ECONOMIC DEVELOPMENTS

Economic growth in Sub-Saharan Africa is estimated to have expanded by 2.3 percent in 2018 from 2.5 percent in 2017. The moderate growth reflects weaknesses among large oil producers (Angola and Nigeria) and a broad economic softening among non-resource-intensive economies. Growth is forecast to improve to 2.8 percent in 2019 and 3.3 percent in 2020, buoyed by increased agriculture and mining production, and a steady growth in services. However, the outlook is subject to external risks including a slowdown in major economies, trade policy uncertainties, and a tightening in global financing conditions and escalating trade tensions; as well as domestic risks, including fiscal slippages, conflicts and adverse weather conditions.

*Commodity prices in 2018 did not increase as much as anticipated.*

According to the World Bank's *Africa's Pulse* (April 2019)<sup>3</sup>, economic activity in the SSA region remained below its potential in 2018. Growth moderated from 2.5 percent in 2017 to an estimated 2.3 percent in 2018, much slower than the October 2018 forecast of 2.7 percent. This was on the back of weaker than expected recovery in Angola and Nigeria – two major oil exporters in the region – reflecting stagnant oil production; and a broad softening among non-resource-intensive countries amid rising debt vulnerabilities.

Weaker growth for the SSA region also reflects a difficult external environment for growth, characterized by weaker global trade, tightened global financing conditions, and a strong US\$. In addition, commodity prices did not maintain their anticipated momentum. Crude oil prices rose by 21 percent between February and October 2018 on low global supply but fell by 30 percent between October and December 2018 (Figure 1). After gaining by 3 percent between March and June 2018, metal prices fell 5 percent between mid and end of 2018, on the back of weak global demand. Likewise, having risen from US\$ 5,585 per metric ton (MT) in May 2017 to a peak of US\$ 7,312 in June 2018, copper prices fell successively, reaching US\$ 5,997 at the end of December 2018.

*The region's growth performance continues to be divergent.*

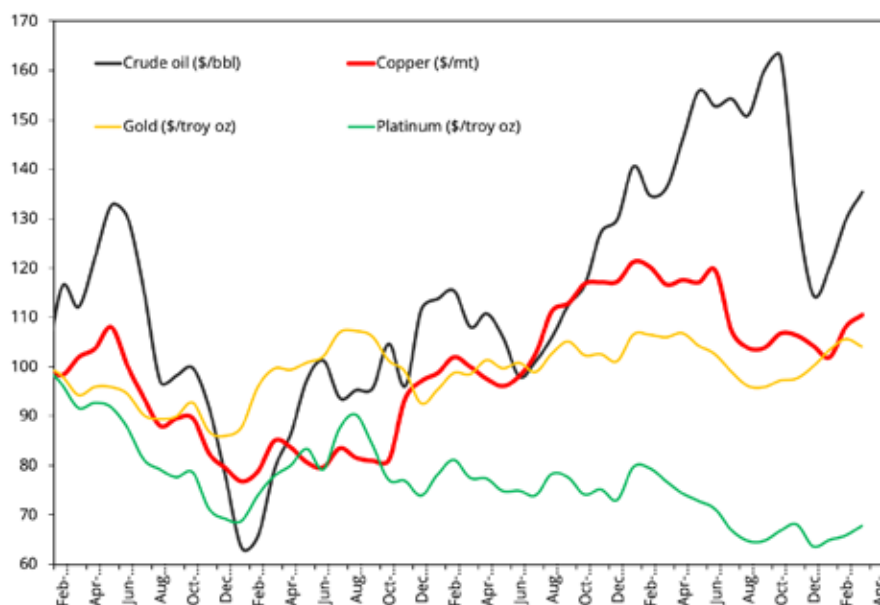
The region's growth performance continues to be divergent. South Africa's economic activity picked up in Q3 and Q4 and buoyed a moderate recovery supported by improved agriculture and manufacturing activities. However, the South African economy remained weak, reflecting mining sector challenges, weak construction activities, low business confidence and policy uncertainty. In Nigeria, growth was undermined by the oil pipeline closure in mid-2018, weak consumer demand and a disruption in agriculture activities caused by land disputes between farmers and cattle herders. In Angola, a sharp fall in oil production due to underinvestment in the sector and key oil fields reaching maturity exerted negative spillovers to non-oil economic activities.

Elsewhere, an increase in mining production, a rebound in agricultural production and public investment in infrastructure supported a pick-up in growth in some resource-intensive countries. Economic activity rebounded in several oil exporters, but remained

**Figure 1** Commodity prices have been volatile

1

Change in prices relative to 2015 (2015=100)



Source: World Bank Commodity Markets Data

*Economic activity rebounded in several oil-exporters but remained subdued in metal-exporters.*

subdued in metal exporters, while remaining robust in non-resource-intensive countries, backed by both supply and demand-side drivers. Increased oil production and higher oil prices in the first ten months of 2018 lifted growth in the Central African Economic and Monetary Community (CEMAC). Most members of the West African Economic and Monetary Union (WEAMU) registered strong growth on the back of higher public investment and consumer demand. In East Africa, a rebound in agriculture following successive droughts bolstered economic activity.

External positions weakened across the region. The median current account deficit widened from 5.8 percent of GDP to 6.1 percent in 2018, largely driven by weak export earnings for metal exporters and high bills associated with oil and capital goods imports for non-resource-rich economies. By contrast, large oil exporters saw their current account balances improve on the back of higher oil prices and weak import demand. Tightened global financing conditions and changes in investor sentiments towards emerging markets undermined the region's ability to finance the balance of payments. Eurobond issuances declined markedly, while FDI inflows remained subdued. The buildup in international reserves moderated in SSA, partly due to a slowdown in capital inflows and low export earnings in metal exports. Reserves have fallen below three months of import cover in several countries in the region.

*Currencies depreciated across the SSA region reflecting a strong US dollar, higher global interest rates and ebbed investor sentiments.*

Currencies depreciated across the SSA region reflecting a strong US dollar, higher global interest rates and weakening investor sentiments. While the pace of depreciations has been modest across the region, Zambia saw a much stronger depreciation on the back of sentiment-enhanced sell-off. While inflation remained relatively stable, inflationary pressures remained in some countries in the region for different reasons, including currency depreciation, high food prices, high fiscal deficits and rapid credit extension.

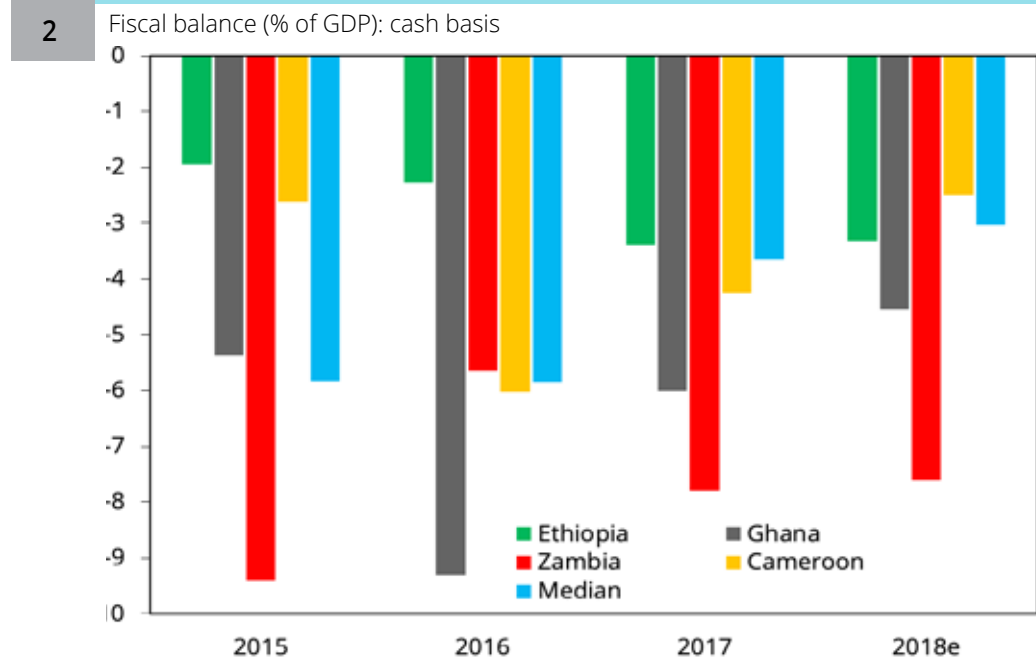
The median fiscal deficit for the region is estimated to have narrowed from 4.2 percent of GDP in 2017 to 3.7 percent in 2018. The fiscal deficit in oil exporters narrowed, reflecting a marked decline in the deficits in Angola (due to higher oil revenue) and the CEMAC countries (due to cuts in capital expenditures). In metal exporters, the median fiscal deficit is estimated to have widened due to elevated spending levels and low revenue. In non-resource-rich countries, the fiscal deficit widened modestly, reflecting continued public investment supported by high revenue efforts.

Large fiscal deficits accumulated over the last few years have raised indebtedness in the region. One-third of the region has had debt-to-GDP ratios of above 60 percent of

*Fiscal policy remained contractionary in many commodity exporters.*

GDP in 2018. Of concern is the tilting of the debt composition towards non-concessional foreign currency-denominated debt. Weak growth and currency depreciation further weakened debt ratios. As at December 2018, the number of countries facing a 'high' risk of external debt distress had increased to 18 compared to 8 in 2016. Some countries in high risk of external debt distress embarked on fiscal consolidation (Figure 2).

**Figure 2** Fiscal deficits in some countries in high risk of external debt distress



Source: World Bank (2018): MFMOD

*The number of countries facing a high risk of debt distress increased to 18 in December 2018 from 8 in 2016.*

**Outlook for Sub-Saharan Africa**

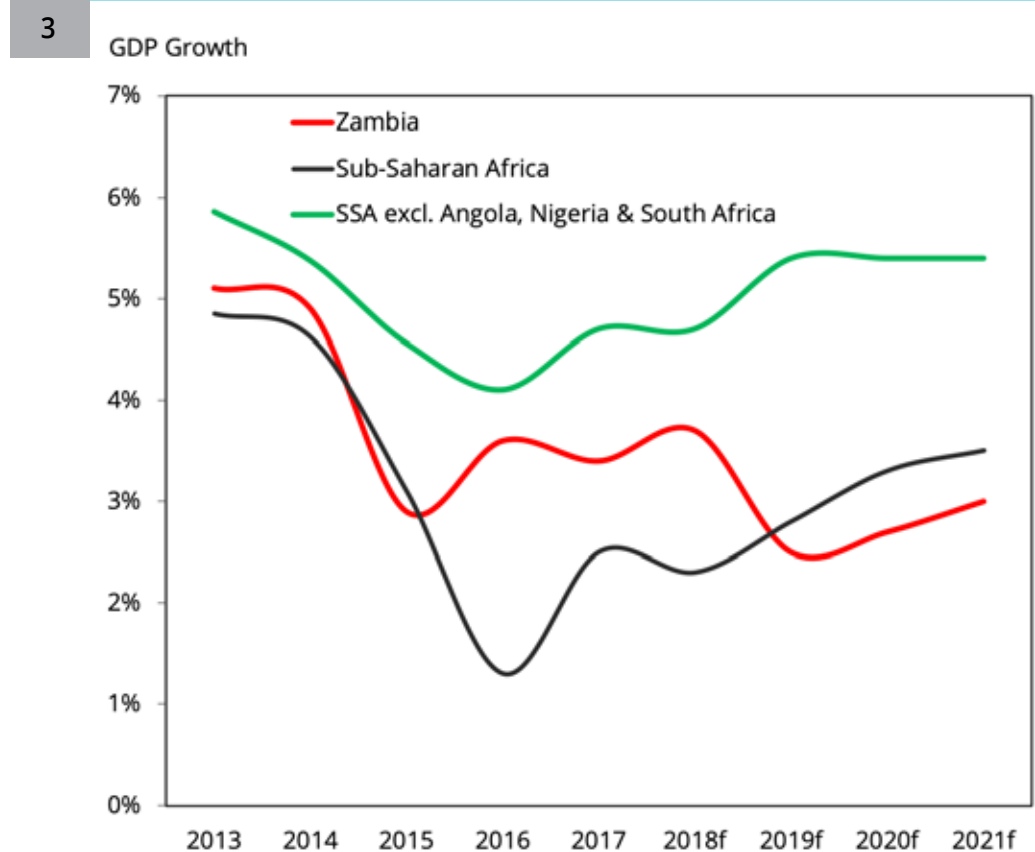
The region's GDP growth is forecast to reach 2.8 percent in 2019, and 3.4 percent in 2020 (Figure 3), buoyed by diminished policy uncertainty, a rebound in agriculture, an increase in mining production, and continued growth in the services sector. The projected recovery is lower than previously estimated, reflecting continued challenges in the oil sector in Nigeria and Angola and subdued business confidence in South Africa. Faster growth is possible if structural reforms are implemented.

*SSA's GDP growth is forecast to reach 2.8% in 2019 and 3.4% over 2020.*

The medium-term outlook is subject to several downside risks. External risks include (i) slower growth in the Euro area and China that would reduce export demand, commodity prices and FDI inflows into SSA, (ii) escalating trade tensions between China and the USA that would fasten the fall in metal prices, and (iii) a faster than expected normalization of monetary tightening in the USA that would result in reduced capital inflows, higher financing costs, and rapid exchange rate depreciations, especially in countries with weaker fundamentals or higher political risks. This would increase debt servicing costs for many SSA countries. Domestic risks include (i) stalled efforts to implement fiscal consolidation and structural reforms, especially in countries that are holding elections in 2019, and (ii) rising insurgencies and conflicts.

*The medium-term outlook is subject to both external and domestic risks.*

**Figure 3** SSA growth has picked up



Source : World Bank Africa's Pulse (2019) Note: f= forecast



## B. THE STATE OF THE ZAMBIAN ECONOMY

The Zambian economy is estimated to have grown by 3.7 percent in 2018, reflecting strong growth in services that offset drags from low crop harvests and fiscal challenges. Fiscal policy for FY18 remained expansionary, driven by overruns in capital spending and interest payments on debt. The accumulation of external public debt continues to be a source of macroeconomic vulnerability – the cost of external debt service continues to rise rapidly, crowding out key spending and gulping up FX reserves.

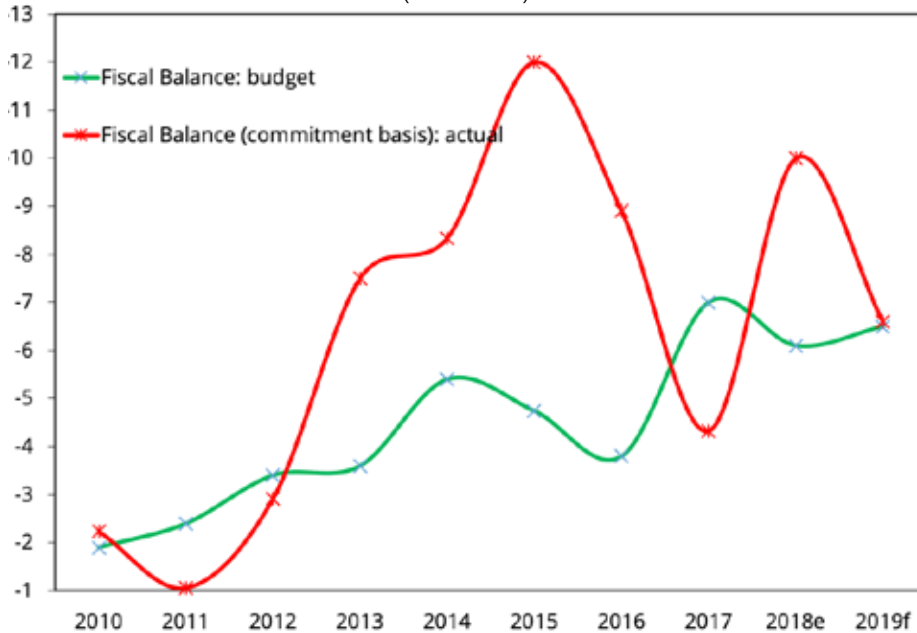
*Three factors have driven fiscal deficits over the past six years.*

### Continuing fiscal challenges

Large fiscal deficits (averaging 8.5 percent of GDP annually on a commitment basis) have been a recurring feature since 2013 (Figure 4), driven by three factors. First was the expansion of public investments (especially roads) and subsidies, leading to an average structural fiscal deficit of 6.9 percent of GDP between 2013 and 2017. Second was lower copper prices and slower GDP growth that led to a fall in revenue, resulting in average cyclical fiscal deficits of 0.3 percent of GDP<sup>4</sup>. Third was expensive external borrowing from non-concessional sources, followed by a currency depreciation in H2 2015, which increased interest payments (from 6 percent of domestic revenue in 2011 to 26 percent in 2018). The fiscal expansion has also been implemented in a challenging public financial management environment, characterized by higher than planned fiscal deficits and the shifting of spending across budget lines.

**Figure 4** Fiscal deficits have widened, and budget credibility deteriorated

4 Fiscal deficit: commitment basis (% of GDP)



Source: Ministry of Finance and World Bank; Note: Inverted scale

*The fiscal deficits have been financed from three main sources.*

Fiscal deficits have been largely financed from three main sources. First was through non-concessional external borrowing (largely from Eurobonds issued in 2012, 2014 and 2015; Chinese lending institutions, syndicated loans and other commercial sources). Second was domestic borrowing, through the issuance of government securities, and borrowing from the central bank (in 2013, 2016, 2018). The implications of financing through borrowing are elaborated later. Third was the accumulation of public expenditure arrears (especially in 2016 and 2018).

Early consequences of the deteriorating fiscal and debt situation became evident beginning in 2015. They were reflected in (i) the elevation of Zambia’s risk of external debt distress to ‘moderate’ by a 2015 joint World Bank and IMF Debt Sustainability Analysis (DSA) from ‘low’ in 2013; (ii) the substantial increase in the cost of external debt service,

and (iii) the accumulation of K 5.2 billion (2.9 percent of GDP) in new domestic public expenditure arrears following government failure to raise sufficient financing.

*Domestic arrears fell to K 12.7 billion at end-2017, from K 19.1 billion at end-2016.*

In response to the deteriorating fiscal and debt situation, the government committed to fiscal consolidation measures following the national elections of August 2016. This commitment was embedded in the medium-term Economic Stabilization and Growth Program<sup>5</sup> (dubbed Zambia Plus) launched in Q4 2016 and a medium-term debt strategy (MTDS) in Q1 2017. These efforts led to a reduction of the fiscal deficit (on a commitment basis) from 8.9 percent in 2016 to 4.3 percent of GDP in 2017 (Table 1), including the reduction of public expenditure arrears to K 12.7 billion from K 19.1 billion, and the implementation of energy and agriculture subsidy reforms. However, fiscal pressures persisted, driven by overruns on public investment projects (21 percent above budget) and interest payments (17 percent).

### **Budget performance in 2018**

Fiscal performance in 2018 was expansionary. The fiscal deficit widened to 10 percent of GDP on a commitment basis (7.5 percent on cash basis), driven by increased interest payments on external debt and capital expenditure overruns. The government accumulated new domestic public expenditure arrears of 2.4 percent of GDP, largely related to the late payment of goods and services, agriculture subsidies, and domestically funded projects. In addition, the government accumulated arrears on VAT refunds of approximately 1.7 percent of GDP. Expenditures were above target by 7.7 percent, on the back of overruns on externally financed public investments and interest payments on external debt. As a result, the actual fiscal deficit (cash basis) is estimated to have been above its programmed 2018 target by 1.4 percent of GDP, while domestic expenditure arrears were further accumulated. The accumulation of external debt remained elevated in 2018 (see the discussion on debt below).

*The fiscal deficit is estimated to have increased to 10 percent of GDP in 2018 from 4.3 percent in 2017.*

<b>Table 1 Fiscal trends</b>		2014	2015	2016	2017	2018	2019
<b>1</b>	% GDP unless stated	Actual	Actual	Actual	Actual	Estimate	Projection
	<b>Revenue and Grants</b>		<b>19.0</b>	<b>18.8</b>	<b>18.1</b>	<b>17.6</b>	<b>19.5</b>
Domestic revenue		18.2	18.6	17.9	17.4	19.1	19.5
Tax revenue		15.5	14.4	12.9	14.9	15.9	16.0
Non-tax revenue		2.7	4.2	5.0	2.5	3.2	3.5
Grants		0.8	0.2	0.2	0.2	0.3	0.3
<b>Expenditure (excl. amortization)</b>		<b>24.4</b>	<b>28.2</b>	<b>23.8</b>	<b>25.4</b>	<b>27.0</b>	<b>24.5</b>
Current expenditure		19.1	21.2	19.9	20.2	18.6	17.7
Wages and Salaries		9.5	8.8	8.7	8.3	8.1	8.1
Goods and Services		3.1	2.9	2.2	2.1	2.0	1.3
Interest Payments		2.2	2.8	3.4	4.0	5.1	5.2
Social Benefits		0.4	0.5	0.2	0.8	0.3	0.5
Subsidies		2.0	3.9	3.5	3.2	1.2	0.6
Intergovernmental transfers		1.9	2.3	1.9	1.8	2.0	1.9
Public investment (includes foreign projects)		5.3	7.0	3.9	5.2	8.3	6.8
Other		0.0	0.0	0.0	0.0	0.1	0.0
Primary balance (cash basis)		-3.2	-6.6	-2.3	-3.8	-2.5	0.6
<b>Fiscal deficit (cash basis)</b>		<b>-5.4</b>	<b>-9.4</b>	<b>-5.7</b>	<b>-7.8</b>	<b>-7.5</b>	<b>-4.6</b>
Fiscal deficit (including change in payment arrears)		-8.3	-12.0	-8.9	-4.3	-10.0	-6.5
<b>Financing</b>		<b>5.5</b>	<b>10.0</b>	<b>5.7</b>	<b>7.8</b>	<b>7.6</b>	<b>6.5</b>
Domestic financing		0.8	1.7	3.8	4.9	2.6	1.3
External financing		4.7	8.3	2.0	2.9	5.1	5.2
Public and Publicly Guaranteed Debt (including arrears)		35.3	61.4	60.5	64.5	73.1	80.3
o/w Central Government Debt (including arrears)		33.1	58.1	56.7	61.6	68.2	74.9
o/w Stock of Domestic Arrears (including VAT refunds)		2.9	5.5	8.7	5.2	7.7	9.7
o/w Publicly Guaranteed Debt		2.2	3.3	3.8	2.9	4.9	5.4
<b>GDP (Current ZMW, millions)</b>		<b>167,053</b>	<b>183,381</b>	<b>216,098</b>	<b>246,252</b>	<b>279,442</b>	<b>306,269</b>

Source: Ministry of Finance and World Bank projections

*The Minister of Finance announced fiscal consolidation measures on June 14, 2018.*

Government's own internal debt sustainability analysis in H1 2018 confirmed the 2017 IMF-World Bank's DSA conclusion that Zambia was at high risk of debt distress (Box 1)<sup>6</sup>. This prompted the government to announce fiscal consolidation measures in June 2018. Expenditure measures included suspending/postponing capital projects which are below 80 percent to completion; reducing wage bill leakages by moving the payroll to the Ministry of Finance; restraining travel and workshops; disposing of some government vehicles; setting up a committee to determine other poor-quality expenditures to be dropped; renegotiating electricity supply contracts with independent power producers; reviewing SOEs with a view to restructure the non-performing ones; and setting up

a committee to assess all capital expenditure projects before they are submitted to Cabinet. Revenue measures include curbing tax evasion by fuel smugglers; improving revenue collection from mobile phone users; introducing a tax on precious metals; introducing electronically verifiable stamps on high risk imports to curb smuggling; and scaling up land titling.

*Foreign-financed investment spending was a key driver of higher-than planned expenditure in 2018.*

There were also efforts to scale up domestic resource mobilization particularly from import VAT, mineral royalties and collections from road tolls, all of which performed much better in the second half of 2018 compared to the first half. Accordingly, domestic revenue was 14 percent above target in H2 of 2018 compared to 1 percent in H1. Even when arrears on VAT refunds are discounted, VAT would show a performance of 2 percent above budget. On the expenditure side, efforts were made to slow disbursements to foreign-debt-financed public investments by 13 percent in H2 compared to H1. However, the foreign-financed public investments were still above the planned target in both H1 and H2, and were on aggregate 131 percent above the programmed target for 2018. In relation to discretionary expenditures, goods and service were slightly above target (by 0.2 percent), while intergovernmental grants, social benefits and subsidies were below target. The accumulation of public expenditure arrears continued in H2, constraining the growth of the private sector.

### **Box 1 An insight into the joint IMF-World Bank Debt Sustainability Analysis (DSA): Interpretations and Processes**

Debt sustainability can be defined as the ‘condition under which a country (or its government) does not, in the future, need to default or renegotiate or restructure its debt, or make implausibly large policy adjustments’. It entails that debt ratios are stable or decline, while also being sufficiently low as to avoid default. The IMF and the World Bank conduct joint DSAs in countries across the global. The DSA for Zambia is conducted using the framework for low income countries (LIC-DSA).

The LIC-DSA has four ratings on risks of debt distress: ‘low’, ‘medium’, ‘high’, and finally ‘in distress’. Ratings of ‘low’ and ‘medium’ risk of debt distress suggest that a country’s debt path is still sustainable, but in the latter case fiscal adjustment would be needed to ensure that debt does not move towards an unsustainable level. A rating of ‘high’ risk is a serious red flag which suggests that the path of debt accumulation has become unsustainable and signals that a country could reach the worst scenario of distress or default over the medium-term if enough fiscal adjustments are not made. However, two countries in ‘high’ risk could have different probabilities of default/distress as they may have different capacities to absorb shocks as reflected by the different levels of their foreign currency reserves, export capacity, and the extent of contingency liabilities, etc. In practical terms, a country experiences a rating of distress if it fails to make debt payment obligations that are due, leading to the accumulation of arrears, debt forgiveness or some other forced debt restructuring. In technical terms, it is possible to declare distress in rare circumstances, for instance if the present value debt ratios do not decline, in addition to judgements suggesting that there are very limited options to avoid a possible and foreseeable default.

The LIC-DSA framework was revised in 2017 to (i) adapt to increased commercial borrowing and heightened liquidity risks in LICs; (ii) reduce false alarms without impairing the ability to correctly flag debt events; (iii) expand the use of relevant country-specific information in risk assessment; (iv) reduce the number of threshold and redundant indicators; (v) provide for more information content of stress tests and risk scenarios; and (vi) enhance transparency and engagement between IMF-World Bank teams and country authorities. The major change is the methodology used for determining the debt carrying capacity. Instead of being solely dependent on the Country Policy and Institutional Assessment (CPIA) in determining the debt carrying capacity (as in the previous DSA framework), the new framework considers CPIA (45 percent weight) and other inputs, including expected GDP growth, remittances and international reserves. Moreover, more tailored stress tests will be conducted for contingent liabilities, natural disasters, commodity price shocks and market-financing shocks. Finally, the new framework will enforce a more consistent application of judgement.

In October 2017, a joint IMF-World Bank DSA elevated Zambia’s risk of debt distress to ‘high’ from ‘medium’. A DSA conducted by the government in H1 2018 confirmed the same results. As at March 2018, Zambia is among 18 Sub-Saharan countries with a high risk of debt distress. Results of the 2019 DSA for Zambia are expected to go to the Boards of the IMF and the Fund in the third quarter of 2019.

*Source: IMF and World Bank (2017). Guidance Note on The Bank-Fund Debt Sustainability Framework for Low Income Countries, Washington DC.*

Overall, the preliminary data suggest that the 2018 revenue target was exceeded by 1.3 percent of GDP. This was due to the above-target performance of VAT, customs and excise duties, mineral royalties and road toll fees in H2 2018. In addition, the Zambia Revenue Authority made substantial progress in combating tax evasion by fuel and alcohol importers. New measures, including the installation of speed cameras, were also behind the increase in non-tax revenue in H2 2018.

*Preliminary data suggest that the 2018 revenue target was exceeded by 1.3% of GDP.*

Primary recurrent expenditure on a cash basis was estimated to be below target by 11 percent in H2 2018, reflecting cuts in goods and services, subsidies and social benefits. Goods and services were 0.7 percent of GDP below their budgeted target, reflecting cuts on travel and conferencing. However, it is still unclear whether the government incurred any unpaid bills in this spending category, as was the case when arrears were accumulated back in 2016. Subsidies were within their programmed level and much lower than their historical trend, reflecting the commitment to maintain the subsidy reforms initiated in Q4 2016. Social benefits were recorded at below 0.3 percent of GDP, which is below the programmed target. This follows the suspension of social cash transfers by key cooperating partners over allegations of corruption in the distribution channel. This prompted the government to initiate investigations in H2 2018, in addition to firing the line Minister and the staff members suspected to be involved. The findings of the investigations are yet to be released.

Overruns of 2.2 percent of GDP were recorded in public investments, driven by foreign-financed projects, which almost doubled compared to what was budgeted. On the contrary, domestically-financed public investments were cut by half. Interest payments on debt were above target by 51 percent (1.1 percent of GDP). This, in part, reflects an increase in external debt service following the depreciation of the kwacha in H2 2018. The consequent large deficit of 10 percent of GDP was partly financed by increased public expenditure arrears, from K 12.7 billion (5.2 percent of GDP) at the end of 2017 to K19.5 billion (7.0 percent of GDP, including VAT refund arrears) in 2018.

*The key driver of expenditures was overruns in public investments and interest payments.*

***The 2019 Budget envisages some fiscal tightening, but this will be constrained by financing and exchange rate pressures, among others.***

The 2019 Budget targets fiscal consolidation, largely premised on increased revenue mobilization, to bring the fiscal deficit to 6.5 percent of GDP. Domestic revenue is programmed to increase by 0.4 percent of GDP from 19.1 percent of GDP to 19.5 percent of GDP. Tax revenue is programmed to account for 82 percent of domestic revenue, and the remainder is non-tax revenue. Total public spending, on a commitment basis, is budgeted at 26.4 percent of GDP.

Domestic revenue mobilization is premised on several tax and non-tax policy changes. First is the change from value added tax (VAT) to a general sales tax (GST) regime, which the government has argued will address the abuse of VAT refund claims and promote value addition. Stakeholders have raised several issues regarding this change. First, it is not clear how much additional revenue this would raise relative to VAT, and how the common challenge of cascading in the design of GST will be addressed. Second, stakeholders raised concerns about insufficient consultation and a lack of enough details to enable short-term and long-term business planning. In light of these concerns, the government shifted the implementation date from April 1 to September 1, 2019 and shared the draft with various stakeholders for comments. The Bill has since been submitted to Parliament for legislation.

*Fiscal consolidation has been premised on increased revenue mobilization.*

Second are changes in mining taxes. The 2019 Budget increased mineral royalties' rates on copper by 1.5 percent at all levels of the sliding scale, and an additional tier is proposed where a mineral royalty rate of 8 percent and 10 percent will be payable if copper prices rise beyond US\$ 7,500 and US\$ 9,000 per metric ton, respectively. Mineral royalty on cobalt will increase from 5 percent to 8 percent. Moreover, mineral royalties will no longer be exempted for income tax purposes. Additional mining tax changes include the introduction of a 5 percent duty on copper and cobalt imports, the introduction of a 15 percent duty on precious metal exports, and an increase in duty on manganese ore and concentrate from 10 percent to 15 percent.

Third, new tax regimes were introduced on casino, lottery, betting and gaming, and the ZRA has been appointed the regulator of the gaming and betting industry. Other di-

rect tax measures include limiting the interest allowable as a deductible for income tax purposes to 30 percent of earnings before interest, tax, depreciation and amortization, while increasing the penalty for non-compliance with transfer pricing regulations, and increasing the tax rate on dividends, interest and profits from 15 percent to 20 percent. Other non-taxes changes included increasing duty on alcoholic beverages, plastics and powdered milk. There have also been tax deductions, including reducing tax from 35 percent to 15 percent for copper companies that add value to cathodes, as well as the suspension of excise duty on LED lights.

Expenditures in the 2019 Budget are largely driven by rising interest payments on debt to 5.4 percent of GDP from 5.1 percent of GDP in the 2018 outturns, and public investments to 6.9 percent of GDP from 5.4 percent of GDP. The continued scale-up in public investments represents a reversal of an initial plan under the 2018-20 medium-term expenditure framework for a much more conservative spending of 4.3 percent of GDP in 2019 to contain the growth of external debt. Primary recurrent expenditures are programmed to decline by 1.3 percent on account of reductions in goods and services and subsidies.

*Expenditures in the 2019 budget are largely driven by rising interest payments on debt and public investments.*

Over Q1 2019, revenue performance has been above the programmed target by 15 percent, reflecting higher than projected collections from VAT (by 20 percent), income tax (by 2 percent) and non-tax revenue (by 67 percent), slightly counterbalanced by a weak performance in customs and excise duties. On a cash-basis, overall expenditures (excluding amortization) were below their Q1 programmed target by 11 percent. This was because of below-target spending on wages and salaries, goods and services, intergovernmental grants, social benefits and domestically-financed public investments, while interest payments were 16 percent above target and foreign-financed public investments were on target. The government has accumulated new arrears on public spending and VAT refunds in Q1, but the numbers are not yet available.

Debt service continues to put pressure on fiscal operations, consuming 56 percent of domestic resources in Q1. Debt service was initially budgeted at 42 percent of domestic revenue. The increase in debt service costs reflect a depreciated kwacha (from K 10.5/US\$ used in the Budget to an average K 12.0/US\$) and an increased rollover risk of domestic debt.

### **Rising public sector debt**

Public external debt continued to rise in 2018 driven by foreign-financed projects, which were double their programmed target. The government has noted that fast debt disbursements are as a result of the completion of projects (especially those linked to Chinese contractors) ahead of their scheduled timeline. External central government debt (including on-lending) is estimated to have reached US\$ 10.05 billion at the end of 2018 from US\$ 8.7 billion at the end of 2017 (Figure 5). Publicly guaranteed external debt also increased from US\$ 0.8 billion at the end of 2017 to US\$ 1.3 billion at the end of 2018<sup>7</sup>. External public and publicly guaranteed (PPG) debt reached US\$ 11.35 billion, or 43 percent of GDP.

The increase in publicly guaranteed debt largely reflects the rising debt of state-owned enterprises. In the main is the power utility ZESCO Limited, whose debt has almost doubled to US\$ 1.2 billion in 2017 from US\$ 693 million in 2012. In addition, ZESCO has also accumulated substantial payment arrears, on the back of power purchase agreements it entered into with independent power producers (IPPs), and expensive power imports in 2015 and 2016. Approximately 70 percent of ZESCO's debt is publicly guaranteed.

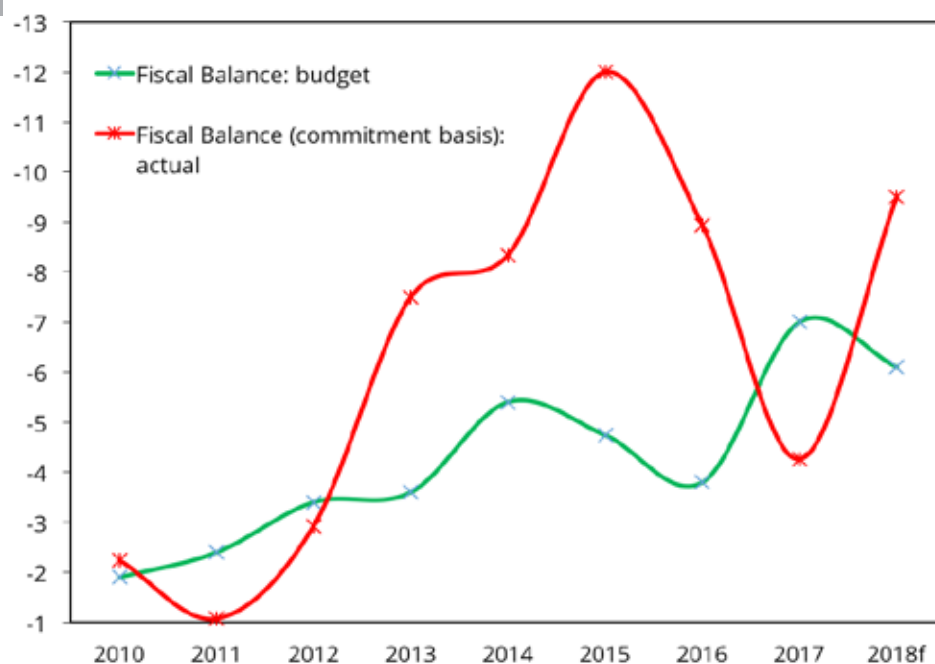
Since 2012, there has also been a significant shift from concessional towards non-concessional and semi-concessional borrowing. The share of external debt from multilateral development banks and bilateral lenders (which are largely concessional) has declined from 77 percent in 2011 to 23 percent in 2018. Non-concessional borrowing has been from EXIM banks (on semi-concessional or commercial terms) and other commercial lenders (which comprise banks from China, Western countries and Middle Eastern countries). Chinese creditors (both official and commercial) now hold over 35 percent of total outstanding external PPG debt, followed by Eurobond holders (26 percent), and foreign banks (13 percent). The rest is largely held by traditional multilaterals and a cluster of plurilaterals and Non-Paris Club bilaterals (excluding China).

*External debt rose to US\$ 10.0 billion at end-2017 from US\$ 8.7 billion at end-2016.*

*The increase in publicly guaranteed debt largely reflects the rising debt of SOEs.*

**Figure 5 External debt has increased sharply since 2012**

5 External public debt: excluding publicly guaranteed and arrears (US\$ millions)



Source: Ministry of Finance, IMF and World Bank

*Since 2012, there has also been a significant shift from concessional towards non-concessional and semi-concessional borrowing.*

Domestic debt consists of government securities, which increased from K 48.4 billion (19.7 percent of GDP) at end-2017 to K 58.3 billion (20.6 percent of GDP) at end-2018; public expenditure arrears, which increased from K 12.7 billion (5.2 percent of GDP) to K 19.5 billion (7 percent of GDP).

#### **Rising debt vulnerabilities and debt service burden**

Indicators of external debt burden have deteriorated since the last debt sustainability analysis (DSA) in 2017. When compared to the baseline projections of the 2017 DSA, real GDP growth outturn and projections are lower, primary deficits projections/programmed are higher, actual and programmed costs of external debt service (both interest payments and amortization) are higher, net FDI inflows are lower, the average cost of external borrowing is higher, estimated/programmed project loans disbursements are higher and gross international reserves are substantially lower (Table 2).

External debt vulnerabilities, as reflected in solvency and liquidity ratios and market financing risks, have also deteriorated substantially. Total debt service (amortization and interest payments) rose to 36 percent of domestic revenue in 2018 from 6 percent in 2011. Interest payments accounted for 26 percent of domestic revenue while amortization accounted for 10 percent. External debt service accounted for 70 percent of total foreign currency outflows in 2018, up from 65 percent in 2017 (Figure 6).<sup>8</sup> The 2019 Budget projects that total debt service will increase further to 42 percent of domestic revenue. The Budget projects that the government will have to honor US\$ 1.5 billion in external debt service obligations. This is against a background of deteriorating gross international reserves, at US\$ 1.4 billion (1.7 month of import cover) as at end-April 2019.

Underlying the rising liquidity risk is the increase in foreign currency-denominated debt and concentrated maturities. Three-quarters of the central government external debt is denominated in US dollars, and as the kwacha depreciated against the US dollar since Q4 2018, the cost of external debt service has been increasing. Given that the 2019 Budget was programmed at a lower exchange rate than the one currently obtaining, the external debt service budgeted for might need to be recalibrated. A quarter of the central government external debt has a variable interest rate and as the global financing conditions tightened, the cost of the short-term maturities has increased. Domestically, treasury bills account for 31 percent of domestic debt and are thus subject to interest rate risk due to the frequent need for rollover.

*Debt vulnerabilities are mounting.*

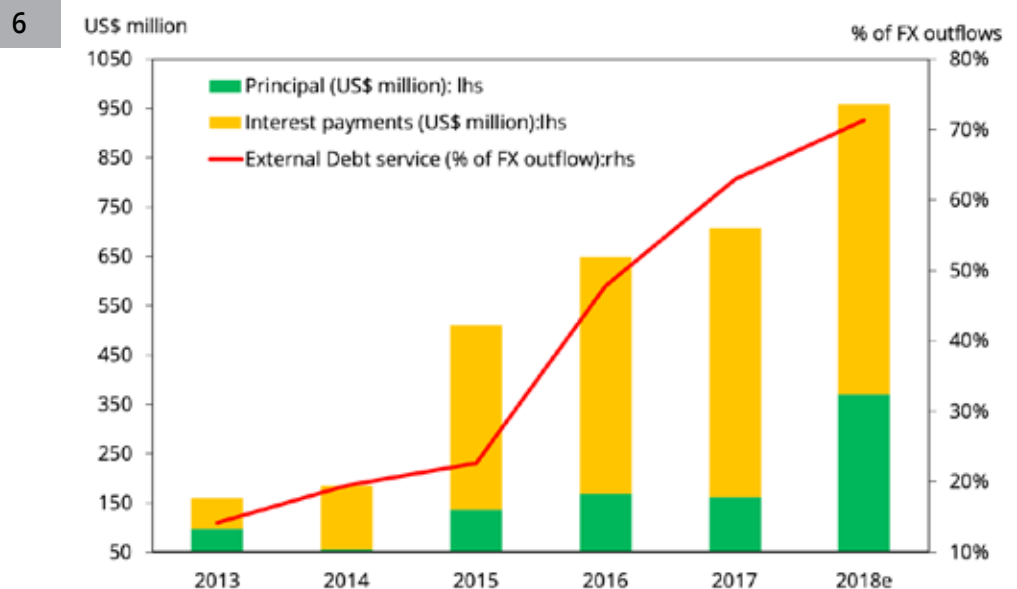
Rollover risks for domestic debt securities have begun to materialize. Government's domestic debt securities have consistently been undersubscribed by significant proportions since 2018: average Treasury Bills (TB) subscription rates fell to 85 percent in Q1 2019 compared to 88 percent in the previous quarter and to 24 percent for bonds. In the most recent issuance (April 2019), TB subscription rates fell further to 33 percent while bonds fell to 21 percent, partly due to the market's worries

Table 2	Key indicators of external debt sustainability		
	2017	2018e	2019f
<b>Real GDP growth</b>	Annual percentage change		
2017 DSA baseline	4.0	4.5	4.5
Actual and WB forecasts	3.4	3.6	2.5
<b>Primary deficit</b>	Percent of GDP		
2017 DSA baseline	4.4	4.0	3.4
Actual and WB forecasts	3.5	4.9	4.2
<b>Net FDI</b>	Percent of GDP		
2017 DSA baseline	6.3	6.1	6.0
Actual and WB forecasts	4.2	2.4	2.8
<b>Average nominal interest rates on external de</b>	Percent		
2017 DSA baseline	4.6	4.5	4.4
Actual and WB forecasts	4.7	5.4	4.9
<b>External debt service (incl. guarantees)</b>	Millions of US\$		
2017 DSA baseline	582	601	626
Actual and WB forecasts	707	971	1,385
<b>Project loan disbursements (incl. guarantees)</b>	Millions of US\$		
2017 DSA baseline	1,269	1,675	1,732
Actual and WB forecasts	1,144	2,139	2,100
<b>Gross international reserves</b>	Millions of US\$		
2017 DSA baseline	2,180	2,629	2,992
Actual and WB forecasts	2,081	1,600	1,200

Source: Ministry of Finance, IMF and World Bank Projections

*Major indicators of Zambia's debt burden have worsened since the 2017 DSA.*

**Figure 6 External debt service has been a major drain on reserves**



Notes: Includes fees and commitment fees linked to external debt  
Source: Bank of Zambia and Ministry of Finance

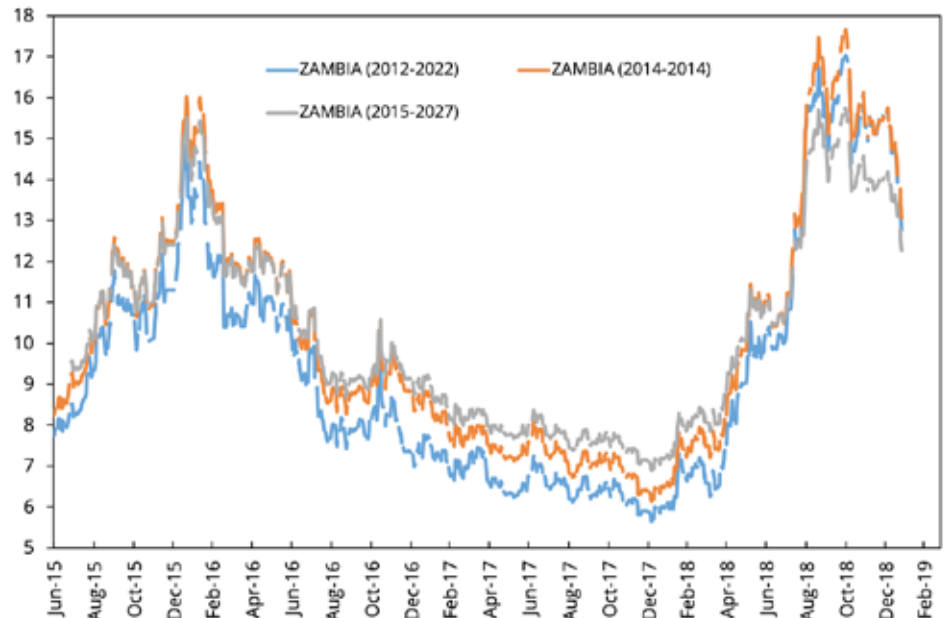
**Rollover and refinancing risks for government securities heightened in 2018.**

regarding the deteriorating macroeconomic environment and increased risk perception on government securities. As a result, the government has not been able to roll over some of its maturing securities and has had to service this debt from domestic revenue, amounting to K1.4 billion, or about 10 percent of domestic revenue raised in Q1. Low demand for government securities has exerted pressure on the cost of government and private sector borrowing. Despite inflation remaining below 10 percent over the past year, yields on government securities have increased markedly, reflecting increased risk perceptions from investors. Average Treasury Bill rates have increased from 17 percent in April 2018 to 23 percent in March 2019, while those on government bonds increased from 19 percent to 25 percent. As a result, nominal lending rates remain elevated above 24 percent while real lending rates remain above 17 percent. Private sector credit has continued to contract on high lending rates, weak economic activity and government payment arrears (Table 5).

Market-financing risks also increased in H2 2018 but eased in Q1 2019. The yields on Zambia's Eurobonds rose substantially. For example, yields for the bond maturing in 2022 reached 15.8 percent in October 2018 (up from 7.2 percent in January 2018) – above that of Mozambique, which was already in default (Figure 7). This coincided with rising gross financing needs due to large fiscal deficits and the maturing of several large external loans (commercial loans with short maturity and bilateral loans with an expiring grace period). The yields only started falling in December 2019, much more sharply towards the end of January reaching 12.3 percent (\$750 million Eurobond), 13.1 (the \$1 billion Eurobond) and 12.3 percent (the \$1.25 billion Eurobond). The recent gains seem to have been driven by (i) the softening of the US dollar since mid-December, (ii) a fall in the yields of the US 10-year securities, and (iii) a general sentiment among investors that the US Federal Reserve Bank will not tighten so much in 2019; and (iv) market correction following a realization by investors that they might have overreacted.

**Figure 7 Yields on Zambia Eurobonds**

7 Zambia Eurobond Yields (%)



Source: Bloomberg (2019)

*Spreads on Zambia's international bonds have increased to around 1500 basis points, effectively excluding the country from markets.*

*Government has embarked on debt management reforms to minimize debt-related vulnerabilities and improve transparency.*

### **Debt management reforms**

Government has begun implementing some reforms to improve debt reporting and transparency, with support from the World Bank and other Development Partners. The Ministry of Finance now publishes Quarterly Economic Updates, which include information on public and publicly guaranteed debt. MoF also intends to start publishing quarterly debt reports beginning FY19 Q1, with support from UNCTAD. The need for enhanced transparency in debt reporting came to the fore following market confusion about Zambia's debt profile, including allegations of a possible securitization of assets. The government repeatedly rejected these allegations.

The World Bank continues to support the government on debt management, including on improving debt transparency, through analytical work and technical assistance. The World Bank, jointly with UNCTAD and MEFMI, recently conducted a debt management performance assessment (DeMPPA) at the invitation of the government. Based on these results, Government intends to develop a debt management reform plan. Priorities under the plan could include strengthening debt recording and reporting, improving debt investor relations, and updating the medium-term debt strategy (MTDS) annually to highlight emerging risks. These reforms would build on past progress, which includes the publication of the MTDS for the first time in 2017; Government conducting its own DSA in H1 2018; as well as reorganizing and increasing capacity in the debt management office; and improving debt records by migrating to the latest Debt Management and Financial Analysis System (DMFAS).<sup>9</sup>

*The current account balance weakened by over 2% of GDP in 2018.*

### **The external sector weakened in 2018**

The current account balance weakened from a deficit of 1.7 percent of GDP in 2017 to 4.1 percent in 2018, reflecting increased deficits in income and services accounts amidst a narrowing trade surplus. Both exports and imports of goods and services increased in 2018 relative to 2017, but imports rose at a much faster pace of 17 percent (to US\$ 10.2 billion from US\$ 8.7 billion) than exports (10 percent from US\$ 9.1 billion to US\$ 10.0 billion). The growth of exports particularly moderated in H2 2018 where copper prices fell by an average of 11 percent below their H1 2018 level. As a result, the balance in goods and services deteriorated from a surplus of US\$ 351 million to a deficit of US\$ 210 million (Table 3). The deficit on primary incomes narrowed from US\$ 1.1 billion to US\$ 407 million, largely on account of a sharp decline in primary income outflows. The balances on secondary incomes declined from US\$ 359 million to US\$ 276 million, reflecting a decline in grants and remittances. Summing up these developments, the deficit on the current account widened to US\$ 1.1 billion in 2018 from US\$ 428 million in 2017.

*Gross foreign currency reserves were at US\$ 1.6 billion in December 2018 from \$2.1 billion in December 2017.*

The capital and financial account inflows were not enough to finance the widened current account deficit. Foreign direct investments declined from US\$ 1,036 million in 2017 to an estimated US\$ 363 million in 2018, while net portfolio inflows were aggravated by less participation of offshore investors in the domestic government debt market. Accordingly, the current account deficit was partly financed by a drawdown on central bank foreign exchange reserves. Gross official reserves fell from US\$ 3.0 billion in December 2015 (4.5 months of import cover) to US\$ 2.1 billion in December 2017 (2.2 month of import cover) and further to US\$ 1.6 billion in December 2018 (1.8 month of import cover). This is despite the fact that the central bank made a net FX purchase of US\$ 311 million from the banking system during 2018. External debt service accounted for 70 percent of the US\$ 1.2 billion total FX outflows between January and October 2018.

*The kwacha depreciated by a cumulative 19% in 2018.*

### **The kwacha continues to depreciate**

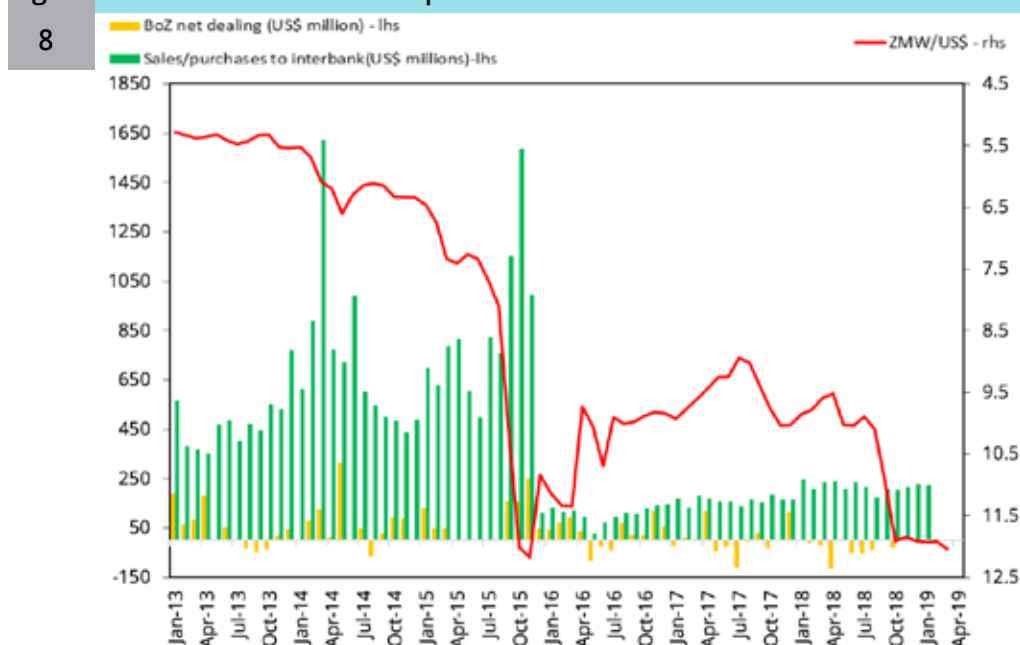
Following a depreciation of 19 percent in 2018, the kwacha has depreciated by a further 7 percent between January and the end of April 2019 (Figure 8). Several drivers underpin the depreciation of the kwacha, including a stronger US\$, a weaker external sector position partly fueled by persistent high fiscal deficits, and weaker terms of trade resulting from relatively higher crude oil prices and lower copper prices. Market sentiments regarding debt transparency, especially related to media reports on the securitization of debt, and the mismanagement of the social cash transfers have also played a role in the kwacha's steep depreciation in H2 of 2018.<sup>10</sup>

Table 3 Balance of payments					
Balance of Payments (US\$, unless stated otherwise)					
	2014	2015	2016	2017	2018e
<b>Current Account</b>	<b>581</b>	<b>-571</b>	<b>-684</b>	<b>-428</b>	<b>-1,102</b>
Balance on goods and services	832	-385	-249	351	-210
Balance on Primary Income	-552	-412	-647	-1,145	-407
o/w Interest on public debt	-134	-204	-314	-545	-589
Balance on Secondary Income	301	227	212	359	276
<b>Capital Account</b>	<b>202</b>	<b>81</b>	<b>55</b>	<b>58</b>	<b>66</b>
<b>Financial Account</b>	<b>512</b>	<b>-25</b>	<b>-348</b>	<b>-364</b>	<b>100</b>
o/w FDI inflows (net)	3,195	1,180	486	1,036	363
Portfolio inflows (net)	1,197	1,222	417	235	-238
Other investments inflows (net)	-4,929	-2,358	-570	-1,118	-257
o/w Amortisation (Public debt)	-128	-188	-169	-162	-370
Errors and Omissions	50	17	25	31	13
Overall Balance	322	-447	-257	18	-388
Financing	-322	447	257	-18	388
o/w Gross reserve change	-315	500	326	55	449
o/w Use of Fund resources	-29	-53	-69	-74	-61
<b>Current account (percent of GDP)</b>	<b>2.1</b>	<b>-2.7</b>	<b>-3.3</b>	<b>-1.7</b>	<b>-4.1</b>
<b>Gross International Reserves</b>	<b>3,078</b>	<b>2,977</b>	<b>2,366</b>	<b>2,081</b>	<b>1,569</b>
<b>Gross International Reserves (import cover)</b>	<b>3.1</b>	<b>2.8</b>	<b>2.6</b>	<b>2.2</b>	<b>1.8</b>
<b>GDP (US\$ million)</b>	<b>27,150</b>	<b>21,243</b>	<b>20,705</b>	<b>25,782</b>	<b>26,571</b>

Note: \* IMF-WB Baseline in the 2017 DSA  
Source: Bank of Zambia, IMF and World Bank

The current account deficit was partly financed by a drawdown in official reserves.

Figure 8 The kwacha came under pressure since H2 2018



Note: inverted scale: a decline is a depreciation  
Source: Bank of Zambia

### **Inflation remains low, but pressures are building up**

Inflation remained relatively stable and within its medium-term target band of 6-8 percent for over one year, but pressures from a weak exchange rate and poor crop harvest have started to build up. Consumer Price Index (CPI) inflation averaged 7.5 percent in 2018 from 6.6 percent in the previous year. Quarterly average inflation declined to 7.7 percent in Q1 2019 from 8.0 percent in the previous quarter. Food inflation declined from 8.3 percent in Q4 2018 to 8.0 percent in Q1 2019, while non-food inflation declined from 7.6 percent to 7.5 percent. However, the price of the staple maize meal has been increasing, reflecting a low harvest in the previous farming season. As a result, inflation has breached the upper limit of the band in recent months, reaching 8.1 percent in May 2019, and increasing further to 8.6 percent in June 2019.

Following one year of keeping the policy rate at 9.75 percent, the Bank of Zambia adjusted its policy rate upward by 50-basis points on May 22, 2019, pointing to a continued build-up in inflationary pressures indicating that inflation would breach the authorities' upper bound of 8 percent over the next few quarters. The BoZ also stated its readiness to tighten its policy stance further should fiscal consolidation be weak and other upside risks to inflation persist.

Year-on-year inflation has remained within the authorities' medium-term target band in 2018.

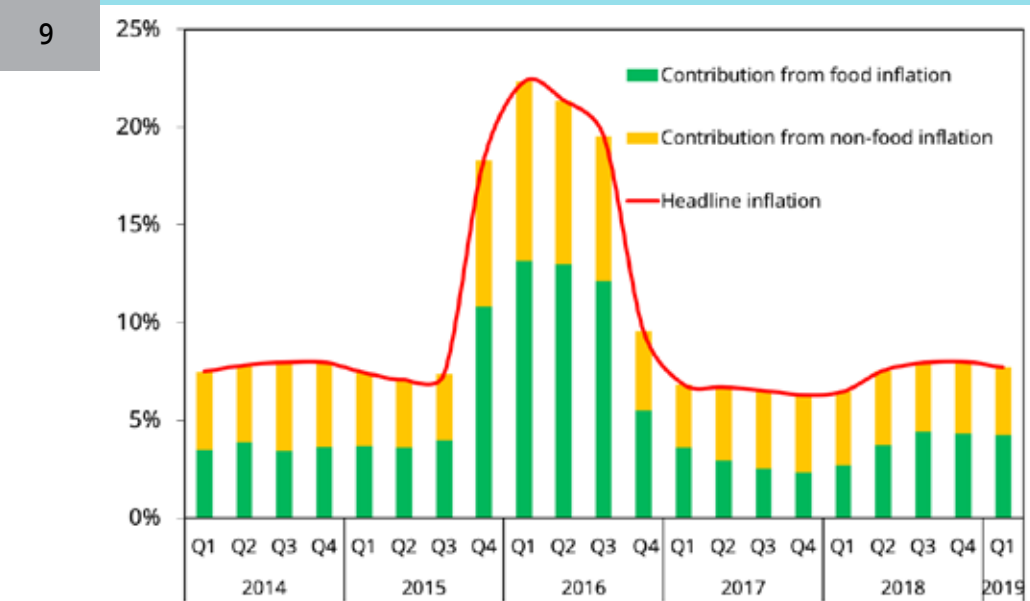
Despite a broadly accommodative monetary policy, nominal lending rates have remained sticky between 23-24 percent (Figure 10). This has been in part due to high yields on government securities and increased non-performing loans (resulting from Government arrears).<sup>11</sup> Structurally, SMEs have faced high lending rates in Zambia due to low collateral and a shallow financial system. High lending rates are also due to low levels of savings. Zambia is largely a cash economy, with an estimated K 6.4 billion circulating outside the banking sector.<sup>12</sup> Interventions are needed to improve national savings, increase financial inclusion, and enhance financial sector competition. The recently launched Nations Financial Inclusion Strategy (NFIS 2017-2022) and the government’s efforts to establish loans guarantees could lead to improved lending to SMEs.<sup>13</sup>

*Government’s efforts to establish loans- guarantees could lead to improved lending to SMEs.*

**Growth remains fragile**

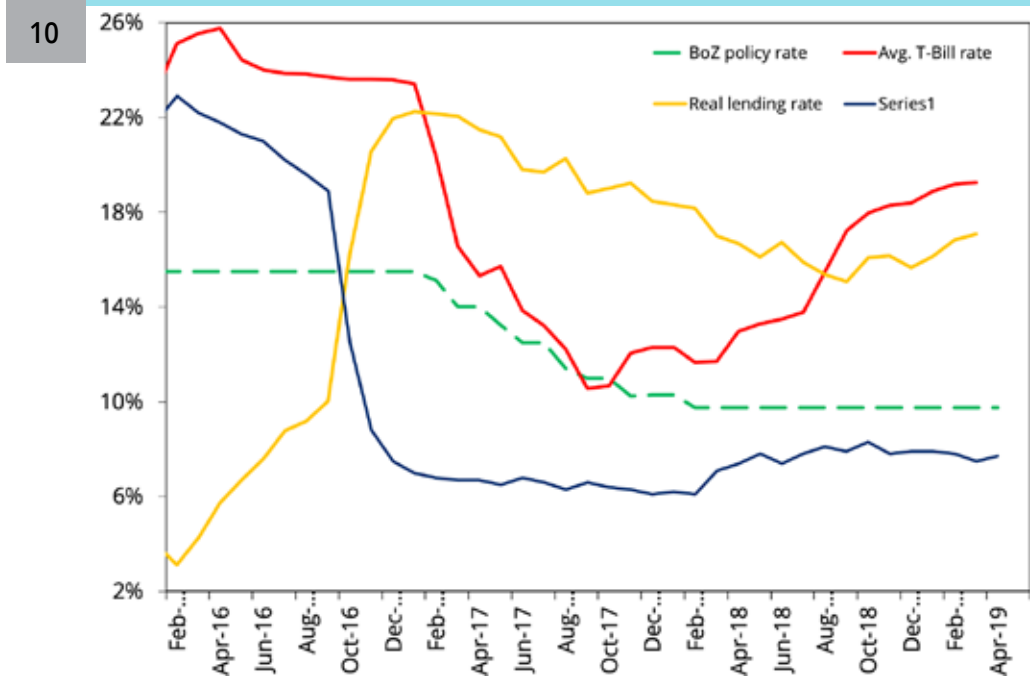
The economy expanded by 3.7 percent in 2018 compared to 3.5 percent in 2017. This was on the back of a strong performance in mining and services (in particular, wholesale and retail trade, information and technology and finance, and insurance and pension funds). However, stronger recovery has been held back by a low agricultural

**Figure 9 Inflation is picking up, but remains within the target (6-8%)**



Source: CSO Zambia

**Figure 10 Commercial bank lending rates remain high**



Source: Bank of Zambia

*Macroeconomic vulnerabilities are undermining stronger economic activity.*

*A low harvest is not expected to compromise food security.*

*Copper prices are projected to stabilize around their current level.*

*There are uncertainties around the contribution of the mining sector to public finances and overall inclusive growth.*

harvest in the 2017-18 season, the accumulation of new public expenditure arrears, and high lending rates emanating from the high yields on Government securities. The private sector has particularly been under strain as reflected in the successive declines in Zambia's purchasing managers index (PMI) since August 2018.<sup>14</sup>

The agriculture, forestry and fisheries sector made a negative contribution to growth in 2018 (Table 4), reflecting poor crop harvests in the 2017-18 farming season, especially in the southern part of the country. The 2018 crop survey suggests that the production of key crops contracted, including maize (by 34 percent), Irish potatoes (by 57 percent), cowpeas (by 45 percent), wheat (by 41 percent), sorghum (by 24 percent), barley (22 percent), soya beans (14 percent) and sweet potatoes (by 11 percent). The sharp contractions in crop production do not reflect a substantial deviation from the five-year production trends but are largely because a bumper harvest was recorded in the previous season. Accordingly, the low harvest, while reducing aggregate economic output growth, did not compromise food security. Preliminary indications suggest the sector contracted further in the 2018-19 season and will put a significant drag on growth in 2019.

Low rains over the past two rainy seasons are also posing a significant risk to electricity generation, given that approximately 95 percent of Zambia's electricity is linked to hydropower generation. The water level at Kariba Dam (the country's largest electricity reservoir) has significantly deteriorated, reaching 34 percent of its full capacity on April 30, 2019, compared to 69 percent on the same date last year. ZESCO's current weak financial situation is expected to aggravate the risk of low energy supply as it is unlikely that it will have the capacity to import power as was the case in 2015 and 2016.

After growing by 6.3 percent in 2018 (compared to 2.9 percent in 2017), the mining sector is expected to slow in 2019. Copper production, which accounts for the bulk of the output of the sector, has been weak in the first quarter of 2019, partly reflecting a seasonal slowdown during the rainy season, lower than expected copper prices, and disputes between the sector and Government on tax policy changes in the 2019 Budget (Figure 11).<sup>15</sup> Industry players have argued that the changes in the mining tax regime would make the sector less viable and lead to cuts in investment, production and employment.

**Table 4 Quarterly GDP growth (year-on-year)**

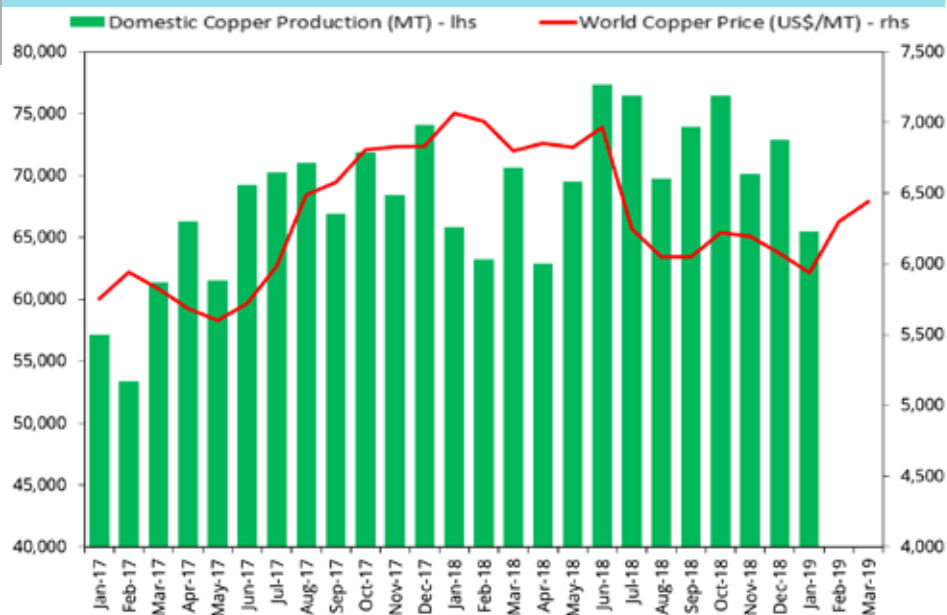
4	% Growth	2015				2016				2017				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Agriculture, forestry and fishing	-8.5	-7.8	-6.1	-7.7	3.1	-1.0	0.7	-4.8	17.6	15.2	15.7	-6.0	-17.3
	Mining and quarrying	-4.7	17.1	-2.0	-6.1	8.0	7.5	5.0	7.8	-5.1	4.2	3.5	9.1	13.9
	Manufacturing	5.1	1.8	8.7	6.2	1.1	4.4	3.7	1.3	1.8	6.6	2.6	6.4	2.1
	Electricity, gas, stream and air con	8.8	7.2	-2.9	-18.9	-15.4	-16.9	-3.2	17.5	25.6	27.1	19.8	22.6	11.4
	Construction	37.4	20.5	3.8	15.4	9.1	11.7	14.8	3.3	2.6	6.6	14.9	2.0	3.3
	Wholesale and retail trade	1.8	-1.2	3.7	1.5	0.8	-1.0	-1.4	2.0	1.9	-1.2	-0.1	2.1	2.0
	Financial and insurance activities	3.7	7.6	21.6	14.9	4.7	4.8	-9.2	-8.2	-11.8	-6.2	-5.4	-0.1	27.1
	<b>GDP at market prices</b>	<b>4.1</b>	<b>2.6</b>	<b>3.8</b>	<b>1.3</b>	<b>3.2</b>	<b>4.7</b>	<b>3.1</b>	<b>2.7</b>	<b>3.1</b>	<b>3.6</b>	<b>4.5</b>	<b>5.0</b>	<b>2.7</b>

Source: CSO Zambia

General sentiments among the majority of Zambians are that mines could contribute more to government revenue and the economic well-being of the average Zambian. However, little information is publicly available on how much the sector pays or on its cost structure compared to other copper-rich countries. Availing this information regularly would enhance informed public debate. Meanwhile, the World Bank and other cooperating partners are supporting initiatives to make the mining sector more transparent and to help reconcile what the mines pay and what the government receives (Box 2). Growth in the non-mining industry (the key of which are manufacturing and construction) was positive in 2018, but subdued compared to 2017, partly reflecting low access to credit, delayed VAT refunds and payment arrears from the government. These same factors and the uncertainty created by the adjustment from VAT to GST remain binding in 2019. Accordingly, the non-mining industry is projected to slow down in 2019.

**Figure** Copper production was ramped up in H1 2018

11



Source: CSO Zambia and World Bank Pink Sheets

The services sector experienced stronger growth in 2018, buoyed by a strong performance in wholesale and retail trade; information and communication; and finance, insurance and pension funds. These three sectors contributed 30 percent to Zambia's total output in 2018, and 76 percent to real GDP growth.

### Box 2 Initiatives to promote transparency in the mining sector

Zambia is a member of the Extractive Industry Transparency Initiative (EITI). The EITI promotes global standards for open and accountable management of oil, gas and mineral resources. The EITI standards require the disclosure of information along the extractive industry value chain from the point of extraction, to how revenues make their way through the government, and finally to how they benefit the public. It requires that there is a reconciliation between what the mining sector pays in public revenue and what the government receives. Since the first time the EITI reconciliation reports were done in 2008, the discrepancy between what the government records as revenue receipts from the mines and what the mines record has declined substantially. Moreover, since 2012, public revenue from the mining sector (including PAYE) has increased to between 26-34 percent of total domestic revenue (5-6 percent of GDP), depending on the level of copper prices. When PAYE is excluded, public revenue from the mining sector accounts for between 21-29 percent of total domestic revenue (4-5 percent of GDP).

Zambia is among the first of African countries to implement the Mineral Value Chain Monitoring Project, which has two modules. The Production Reporting Module of the Mineral Output and Statistical Evaluation System (MOSES) was fully implemented as per the initial target of all the twelve large mines reporting their production data in the system on a full-time basis since December 2017. With the use of MOSES, the mines can submit production data using the electronic platform, while the regulatory authorities are also able to use the systems-based control programs to ensure the accuracy, consistency and timeliness of the production data. In addition, the Central Statistics Office (CSO) is also able to have timely access to mineral production data.

The Mineral Export Permit Module has been fully rolled out for the copper, cobalt and precious metal exports with effect from March 2018. This has simplified the cost of compliance for the mines through the introduction of a paperless transaction process from the online application of the permit, approval of the permit at the Ministry of Mines and Mineral Development, and the transmission of the approved permit into the Automated System for Customs Data (ASYCUDA World), the system used by Customs to monitor the exit of minerals at the country's borders. In addition, the project has facilitated the introduction of a systems-based control through the application of a Quota Management System which enables the matching of the quantity of minerals being exported, regardless of the border used, with the amount allowed on the issued export permit. The interface of MOSES, ASYCUDA World, Tax Online and the export permit system in the Ministry of Mines have been accomplished successfully. From the analysis of the information provided via the systems introduced through the Mineral Value Chain project, the ZRA managed to recover approximately K 13 million in additional revenue from two large mines in 2018. *Source: World Bank (2018)*

Wholesale and retail trade is the single largest sector of the Zambian economy, accounting for 22 percent of GDP. This sector's growth is estimated to have reached 3.3 percent in 2018 from 0.7 percent in the previous year. The expansion was underpinned by increased lending to the sector and increased consumer demand.

The finance, insurance and pension sector grew strongly, averaging 31 percent in 2018 compared to a contraction of 5.9 percent in 2017. This growth was stimulated by the significant growth of insurance and pension funds. However, the banking sector remained vulnerable from the buildup of new public expenditure arrears. Average non-performing loans remained elevated above 11 percent of GDP<sup>16</sup>, as some suppliers owed by the government are finding it difficult to service loans. This has been amplified by tough economic conditions.

*Credit extension to the private sector remains low.*

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total credit growth	-3.8	0.7	4.9	1.1	6.5	6.5	6	4.9	0.3	2.9	9.9	1.3
o/w Government	-12	9	15.7	10	18.1	11.3	8.9	5.3	1.7	1.3	6.2	3.3
Public enterprises	-11	-0.3	-3.1	-9.2	-10	28.9	89.3	-15.6	-18.7	9.7	8.6	22.4
Private sector	3.6	-5.2	-1.3	-4.6	-4.8	1.4	-2.2	8.3	-3.5	4.7	19.2	-4.6
Household	-2.4	-2.1	-0.9	-7.1	-0.3	1.3	7.6	1.3	3.1	5.3	7.5	2.3
<b>Total credit growth (excl. G</b>	<b>1.1</b>	<b>-3.7</b>	<b>-1.7</b>	<b>-5.4</b>	<b>-3.2</b>	<b>1.6</b>	<b>3</b>	<b>4.5</b>	<b>-1.3</b>	<b>5</b>	<b>14.3</b>	<b>-0.9</b>

Source: Bank of Zambia

### **Poverty reduction and shared prosperity**

GDP growth contributed only modestly to poverty reduction in 2018 (Table 6). Both the spatial distribution of rainfall and its timing were not conducive to the maize crop, especially in the southern half of the country. Moreover, a cholera outbreak and the measures implemented to contain its spread have led to a transitory loss of income of some urban poor and rural farmers who depend on urban markets. The proportion of people living under the US\$ 1.90/day poverty line is estimated to have fallen slightly from 56.8 percent in 2017 to 56.2 percent in 2018. Poverty is largely a rural phenomenon, with 77 percent of the poorest households located in rural areas.

*Poverty fell slightly from 56.8% in 2017 to 56.2% in 2018.*

More generally, Zambia's growing macroeconomic imbalances have important poverty and vulnerability implications. First, with debt service and the compensation of employees now accounting for over 85 percent of government's domestic revenue, space for discretionary spending is shrinking quickly and affecting social spending. For example, despite the higher than budgeted overall expenditure in Q1 2019, pension and social cash transfers were just 28 percent of what was programmed, as 90 percent of domestic revenue covered debt service and employee compensation. Second, rising payment arrears and tighter bank financing conditions could affect private sector job creation and quality. Third, the tightening credit conditions in the banking sector will have a disproportionate impact on SMEs and low-income households that already normally face tight financing conditions. Lastly, pressures on inflation, if materialized, would also disproportionately affect the purchasing power of low-income households which tend to have low savings rates.

## C. ECONOMIC OUTLOOK, RISKS AND POLICY CHALLENGES

GDP growth is forecast to slow to 2.5 percent in 2019; and remain below 3.0 percent over the medium-term. This downward revision to our March 2019 projections reflects the impact of a low crop harvest and the deteriorating fiscal environment. The medium-term forecasts assume agriculture will recover; disputes in the mining sector will be resolved amicably; and fiscal consolidation and structural reforms measures will be implemented to unlock private sector growth. In the long term, there is a need to promote inclusive and sustainable growth by boosting the productivity of pro-poor and job-rich sectors and to sustainably manage natural resources.

### Medium-term outlook

GDP growth is projected at 2.5 percent (from 3.3 percent in March 2019), reflecting heightened macro-fiscal challenges and a weaker than expected crop harvest. Over the medium term, agriculture is expected to pick up, as new irrigation projects come on stream and the farm input subsidy program improves with the implementation of the e-voucher distribution system. However, in the absence of strong macroeconomic adjustment, growth is projected to remain under 3.0 percent.

*Macroeconomic vulnerabilities are expected to constrain economic recovery.*

Table 6	Key macroeconomic projections					
	2016	2017	2018 e	2019 f	2020 f	2021 f
<b>Real GDP growth, at constant market prices</b>	3.6	3.4	3.7	2.5	2.8	2.8
Private Consumption	2.0	3.4	3.5	3.1	3.1	3.1
Government Consumption	2.1	-0.3	1.3	0.5	0.2	2.7
Gross Fixed Capital Investment	1.0	-0.3	4.4	-0.1	0.9	-0.4
Exports, Goods and Services	-10.0	9.8	9.9	10.4	10.3	10.4
Imports, Goods and Services	-10.6	8.5	8.8	9.0	9.1	9.1
<b>Real GDP growth, at constant factor prices</b>	3.6	3.4	3.7	2.5	2.8	2.8
Agriculture	3.7	16.5	-6.5	-6.9	3.6	3.5
Industry	5.6	7.7	5.2	4.0	3.9	4.0
Services	2.5	-0.6	4.4	3.0	2.1	2.0
<b>Inflation (Consumer Price Index)</b>	17.9	6.6	7.2	8.9	10.8	11.8
<b>Current Account Balance (% of GDP)</b>	-3.2	-1.7	-2.6	-3.2	-3.0	-3.0
<b>Net Foreign Direct Investment (% of GDP)</b>	7.5	4.1	4.8	4.9	4.8	4.9
<b>Fiscal Balance (% of GDP): cash basis</b>	-5.7	-7.9	-7.5	-4.5	-5.1	-5.0
<b>Fiscal Balance (% of GDP): commitment basis</b>	-8.9	-4.3	-10.0	-6.5	-6.0	-6.9
<b>Debt (% of GDP)</b>	60.5	64.5	73.1	80.3	84.9	86.4
<b>Primary Balance (% of GDP)</b>	-2.2	-4.0	-2.6	-1.3	-0.6	-0.5
<b>International poverty rate (\$1.9 in 2011 PPP)<sup>a,b,c</sup></b>	57.2	57.1	56.8	56.5	56.1	55.9
<b>Lower middle-income poverty rate (\$3.2 in 2011 PI)</b>	74.1	74.0	73.9	73.7	73.5	73.2
<b>Upper middle-income poverty rate (\$5.5 in 2011 PI)</b>	87.1	87.0	86.9	86.7	86.6	86.5

Notes: e = estimate, f = forecast.

(a) Calculations based on 2015-LCMS.

(b) Projection using neutral distribution (2015)

with pass-through = 0.87 based on GDP per capita in constant LCU."

Source: World Bank, Poverty & Equity and Macroeconomics, Trade & Investment Global Practices.

### Risks to the outlook

Risks to the outlook are tilted to the downside. External risks include possibilities that (i) terms of trade deteriorate as copper prices remain subdued due to higher global supply and slower growth in China, while oil prices may increase due to production losses arising from geo-political tensions, leading to faster deterioration of the current account and FX reserves; and (ii) the USA and other advanced economies tighten monetary policy faster than anticipated, leading to tightened global financing conditions and higher costs of external financing.

On the domestic front, the main risks relate to (i) delays in implementing the necessary fiscal consolidation efforts, which would lead to further tightening of domestic and external financing conditions, further build-up of domestic payment arrears, and rising debt servicing constraints; (ii) a delayed implementation of ZESCO reforms, which would worsen its financial situation and undermine reliable energy supply, with corresponding negative implications on the economy, especially on industrial activity; (iii) a failure to find an amicable resolution to the ongoing dispute over new mining taxes that would affect investment and production in the sector; and (iv) a protracted El Niño that would restrain recovery of agricultural production.

External risks include (i) the intensification of the ongoing tariff war between China and the USA,<sup>17</sup> which would lower copper prices, leading to a worse than expected trade deficit and FX position; (ii) the possibility that oil prices will increase due to production

*Domestic risks relate to delayed implementation of fiscal adjustment measures.*

loses arising from political disputes involving the USA with Iran and Venezuela, leading to weakened terms of trade for Zambia; and (iii) a quicker than expected normalization of interest rates in the USA that would tighten global financing conditions, leading to higher costs of external financing.

### **Policy options to support inclusive growth**

Over the near and medium term, Zambia needs to address its unsustainable debt situation. This will unlock private sector growth and create space for the pursuance of macro-fiscal policies which promote inclusive and sustainable growth. Below are some policy options for creating a sustainable macro-fiscal environment that promotes inclusive and sustainable growth.

*Fiscal policy should aim at reducing and stabilizing the debt burden over the medium term.*

- **Front-load fiscal consolidation and structural reforms to bring back the risk of debt sustainability to medium level and create fiscal space for inclusive growth.**

Fiscal outturns in recent years have tended to be weaker than budgeted, partly reflecting the weak implementation of fiscal reform plans. Moreover, the new Medium-Term Expenditure Framework (MTEF) proposes to add 9.6 percent of GDP in new external debt disbursements. Such a fiscal path would be inconsistent with delivering primary fiscal balances that help reduce the debt burden over the medium term. Front-loaded fiscal adjustment efforts that include both revenue mobilization and expenditure streamlining measures, will help ensure domestic and external stability, unlock private sector activity, and uplift growth prospects.

- **Rebuild foreign exchange reserves to buttress external stability.** Foreign exchange reserves have continued to deteriorate, reaching US\$ 1.4 billion as at end-April 2019 (1.7 months of import cover), reflecting heightening external imbalances. At least four months of import cover is needed to cushion Zambia's vulnerability to terms-of-trade or global monetary and financial shocks. Meanwhile, external debt service is programmed to consume US\$ 1.5 billion in FX outflows in 2019. Slowing external debt accumulation and reinforcing the ongoing debt management reforms are key to the broader plan of rebuilding reserves. Given the current macroeconomic imbalances and weak market confidence, an IMF program would lead to the direct disbursement of FX, crowd-in budget support from other development partners, and raise market confidence. In the absence of a Fund program, full and clear implementation of the reforms announced by the Minister of Finance would send an important signal of Government's commitment to strengthen macroeconomic stability and growth.

*Debt management reforms will strengthen fiscal credibility and market confidence.*

- **Strengthen debt management to reduce the debt service burden and minimize debt-related vulnerabilities.** In addition to curtailing the accumulation of new debt (especially foreign currency-denominated), this would reduce the debt service burden and unlock the fiscal space for policies that promote inclusive and sustainable growth. Thus, government's commitment to developing and adhering to a debt management strategy that is in line with a medium-term expenditure framework is critical. The government committed to publishing comprehensive debt reports to enhance transparency and has taken steps to build capacity for this function. It is now critical to publish these reports starting in 2019. Ideally, this should include systematic and timely annual debt reports, quarterly debt statistical bulletins, ad-hoc information on debt and risks, and analytical reports. A website dedicated to debt management and an investor relations unit in the debt management office would be a critical part of this. The World Bank is supporting the government to strengthen various areas of debt management identified in the 2018 DeMPA.

- **Implement plans to improve the financial and operational sustainability of ZESCO and other SOEs.** ZESCO's debt and arrears pose substantial risks to energy supply and fiscal operations. It is critical for Cabinet to move forward with the ZESCO reform plan to unlock financing at favourable terms. Moreover, systems for monitoring and publicly reporting the debt and arrears (both guaranteed and non-guaranteed) of SOEs are required as they will help to reinforce accountability and better stewardship of public entities.

• **Harness Zambia's natural capital, in particular renewable resources, to promote long-term growth and sustainability.** Natural capital (e.g. agricultural land, forests, protected areas, minerals) plays a big role in Zambia's growth dynamics. The World Bank's Systematic Country Diagnostic for Zambia revealed that the high growth episode between 2004-14 was partly driven by the extractive industry, characterized by the copper sector. This contributed to an uneven geographical distribution of growth, a legacy of environmental liabilities, and volatility in macro-fiscal management. On the other hand, there has been only modest improvement in productivity in agriculture, forestry, and fishing, a sector that still employs nearly half of the labor force. The next section discusses how Zambia can best explore its renewable natural capital for inclusive growth.



# SECTION 2 WEALTH BEYOND MINING: LEVERAGING RENEWABLE NATURAL CAPITAL

Reliance on non-renewable resources like minerals for growth is, by definition, unsustainable. In the case of Zambia, the extractives-based growth in recent years has not significantly contributed to poverty reduction and has left a legacy of environmental liability in mining towns. The overreliance on copper mining suggests that the country has not built a balanced portfolio of assets that is likely to support strong economic growth in the future by diversifying the asset base beyond the reliance on natural capital (particularly non-renewables) and specifically investing in human and physical capital. While the contribution of renewable resources like agriculture, forestry and fishing to GDP has declined in recent years, the sector's linkages with the rest of the economy remain significant. In contrast to non-renewables, renewable capital (e.g. agricultural land, forests, water) can produce benefits in perpetuity.

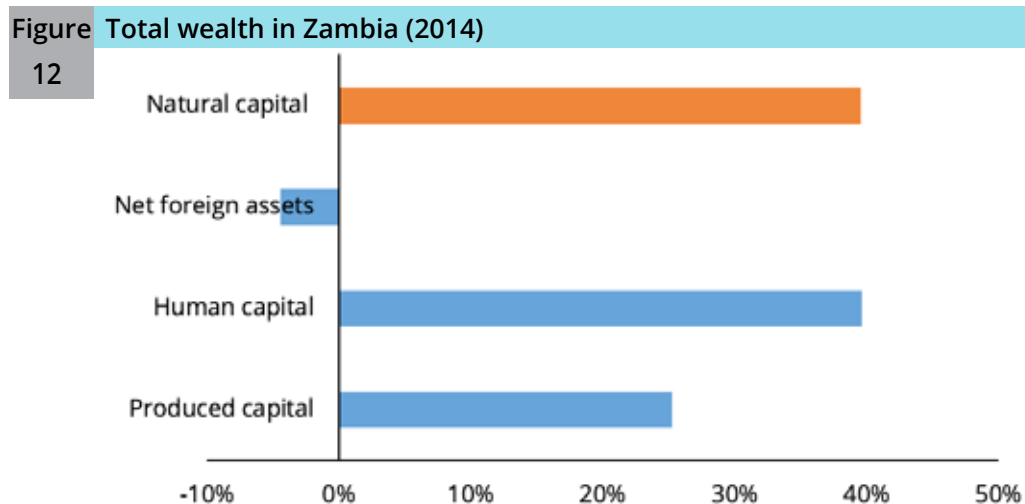
## D. BUILDING A SUSTAINABLE FUTURE: CHANGES IN WEALTH AND NATURAL CAPITAL

Viewed through the lens of wealth, development is a process of building and managing a broad portfolio of assets. Although a macroeconomic indicator such as GDP provides an important measure of Zambia's economic progress, it measures income and production and does not reflect changes in the underlying asset base. Used alone, GDP may provide misleading signals about the health of an economy over the long term. It does not reflect the depreciation and depletion of assets, whether investment and the accumulation of wealth are keeping pace with population growth, or whether the mix of assets is consistent with a country's development goals. National income and well-being are underpinned by a country's assets or wealth—measured comprehensively to include produced capital, natural capital, human capital, and net foreign assets.

*National income and well-being are underpinned by a country's assets or wealth.*

The potential contribution to sustainable development by natural resource sectors, particularly the renewable natural capital, is to a large extent unrealized. Zambia's total wealth, defined as the aggregate of all the country's assets, was US\$644 billion in 2014, of which natural capital represented 40 percent. Given the importance of natural capital in Zambia's economy (Figure 12), recognizing its value and managing it appropriately is extremely important<sup>18</sup>. To fully realize the potential of this sector, the traditional measures of economic development must be supplemented with measures of natural capital.

Wealth accounts provide information about the long-term health of the economy.



Source: (Lange, Wodon, & Carey, 2018)

This section is based on the World Bank 2018 report *The Changing Wealth of Nations: Building a Sustainable Future*<sup>19</sup> combined with results from Zambia’s Natural Capital Accounts for Forests<sup>20</sup>, and Water<sup>21</sup> developed under a World Bank Group program to advance natural capital accounting internationally, the *Wealth Accounting and Valuation of Ecosystem Services Global Partnership*. WAVES aims to promote sustainable development by ensuring that natural resources are mainstreamed into development planning and national economic accounts<sup>22</sup> (Box 3).

**Box 3 Comprehensive wealth accounting**

3 Measuring national wealth and changes in wealth is part of an ongoing effort by the World Bank to monitor the long-term economic wellbeing of nations. The Changing Wealth of Nations 2018 report<sup>23</sup> builds on two previous World Bank reports and provides wealth accounts for 141 countries for the period 1995 to 2014.

The total wealth of a nation is defined as consisting of a diverse portfolio of assets, which together form the productive base of the national economy. These assets include natural capital, produced capital, human capital and net foreign assets. Produced capital consists of manufactured or built assets such as machinery, equipment and physical structures. Natural capital on the other hand is a diverse portfolio of non-renewable and renewable assets provided by the natural environment. These include minerals, water, agricultural land, fossil fuels, protected areas and forests and biodiversity. Human capital refers to the productive capacities of individuals, both inherited and acquired through education, training and work experience. Net foreign assets include the net positions on a portfolio of equity, debt, securities, foreign direct investment and other financial capital held in other countries. Consequently, total wealth is calculated by summing up each component of wealth which supports national income and the potential future prosperity and wellbeing of a country.

Governments, the private sector, international organizations and other stakeholders use the System of National Accounts (SNA) as a basis for measuring national economic progress. Asset accounts for produced capital are an integral part of the SNA. The comprehensive wealth accounting approach includes all types of capital and provides two related sets of information: comprehensive wealth accounts (a stock measure), and adjusted net saving ((ANS), a flow measure). Wealth accounts provide information about the long-term health of the economy, its capacity to sustain growth reflecting the depreciation and depletion of assets and whether investments and the accumulation of assets are keeping pace with population growth. They show development as a process through which countries decide how much to save or consume each year, what assets to invest in and how to make the most efficient use of their assets.

In March 2017, Zambia formally joined the WAVES Global Partnership and became the first core implementing country under WAVES Plus. Zambia initially identified three key areas to prioritize for National Capital Accounting (NCA), namely forestry, land and water. In 2018, the government, through the Ministry of National Development Planning (MNDP), successfully compiled the three accounts and the results are being validated. The evidence presented in these reports will be used to stimulate key policy questions in the country. In addition, NCA can help the government determine the true value of those natural resources, optimize their use, and determine how they can be used to diversify the economy and reduce poverty.

*Development is not only about exploiting natural capital and investing in other assets. It is about a more efficient use of natural capital (in combination with optimal amounts of produced and human capital).*

*How wealth changes over time is critical to understanding a country's prospects for sustainable development.*

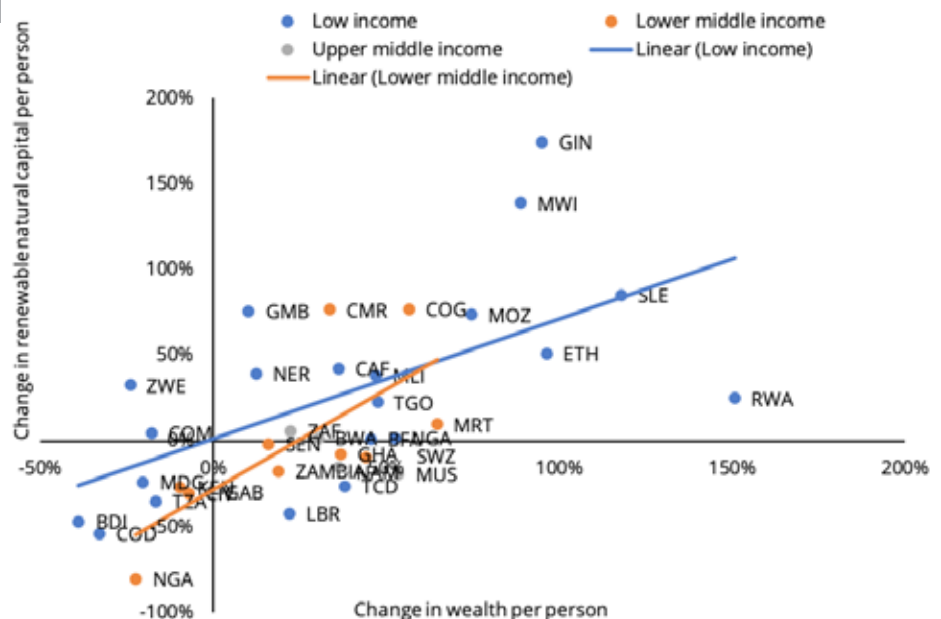
**Natural capital and development**

Natural capital has historically been the most abundant asset available to all countries at one point in their development, although the endowment has varied enormously among countries<sup>24</sup>. This form of capital makes up a significant share of total wealth for most developing countries. In 2014, it accounted for 47 percent of total wealth for low-income countries. The economies in low-income, and some lower-middle-income countries, are largely built around this relatively abundant asset, mainly the renewables, such as forests and agricultural land. In addition, the livelihoods of many citizens in these countries depend on natural capital. Thus, there is an even greater need to manage these resources well to ensure the sustainability of these countries' economic growth.

Thus, development is not only about exploiting natural capital and investing in other assets. It is about a more efficient use of natural capital (in combination with optimal amounts of produced and human capital), ensuring that the management of renewable natural capital is sustainable, and investing proceeds from natural capital in other types of capital. For instance, when Zambia exploits its minerals or cuts down trees, it is depleting its wealth. This is a positive for GDP, but the long-term sustainability of that 'growth' must also be considered. If subsoil assets, like copper, are converted to physical capital (for example, structures, infrastructure, or urban land), social capital, and human capital, then wealth has been maintained. However, if subsoil assets are being depleted faster than other assets are built, then wealth is being depleted<sup>25</sup>.

Moreover, how wealth changes over time is critical to understanding a country's prospects for sustainable development. Figure 13 shows that in Sub-Saharan African countries, as renewable natural capital grows so does the growth of total wealth (and by implication GDP), especially in low-income countries. For instance, Ethiopia, Rwanda, and Mozambique all show this growth of both total wealth and renewables per person, while countries like Burundi, Madagascar and Tanzania show that both total wealth and renewable natural capital declined. However, resource-rich countries like Zambia and Liberia, that depend heavily on nonrenewable resources for economic growth (mostly large energy and mineral resources), achieved growth in wealth not only through these resources but also by depleting renewable resources.

**Figure 13** Change in wealth vs. renewable natural capital per capita in Sub-Saharan Africa (%), 1995 to 2014

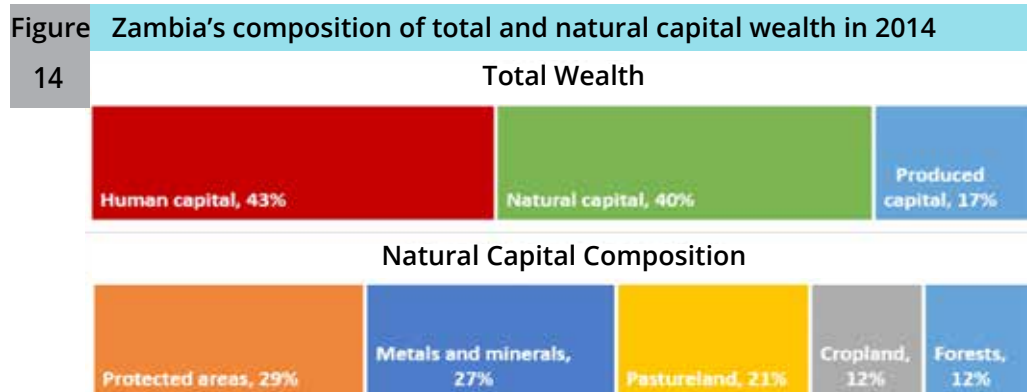


Source: (Lange, Wodon, & Carey, 2018)

*In 2014, almost half of Zambia's wealth was natural capital, of which 73% was renewable natural capital.*

**The composition of wealth in Zambia**

Turning to Zambia specifically, in 2014, almost half of Zambia's wealth was natural capital, of which 73 percent was renewable natural capital. The renewable natural capital composition consists of protected areas and pastureland, including contributions from forests and cropland (Figure 14). The remaining 27 percent of Zambia's natural capital comprises nonrenewable resources, particularly metals and minerals. Like most low- and low-middle-income countries, Zambia relies heavily on natural capital and human capital for income generation.



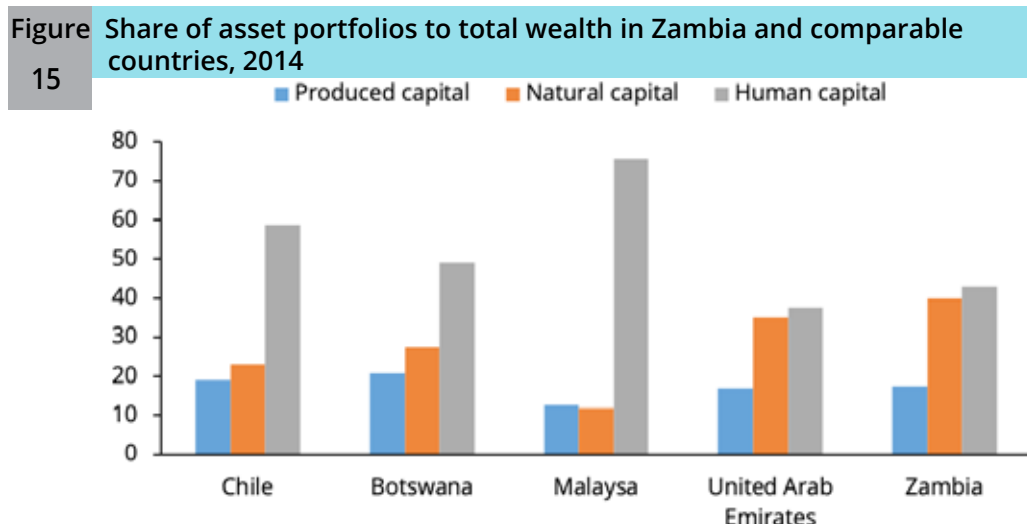
Source: (Lange, Wodon, & Carey, 2018)

*A balanced portfolio of assets implies diversifying the asset base beyond the reliance on natural capital, specifically investing in human and physical capital.*

Total wealth underpins the income that the nation generates. A country's development path depends crucially on how wealth changes over time, both in terms of the total volume and the composition of assets. Zambia's wealth composition from 1995 to 2014 has largely been natural capital, particularly mineral wealth. However, the country has not managed to build a broader set of assets, especially produced capital that can continue to generate income and employment once the revenue from minerals is not there anymore. This suggests that Zambia has not built a balanced portfolio of assets that is likely to support strong economic growth in the future. A balanced portfolio of assets implies diversifying the asset base beyond the reliance on natural capital, specifically investing in human and physical capital.

A few resource-rich countries have managed to break free from the dependence on natural capital, for example Chile, Botswana and Malaysia are successful economies that have developed a balanced portfolio of assets by reducing their dependence on natural capital and using its revenue to invest in human and physical capital. However, they differ in how much they have diversified their asset portfolios. Figure 15 shows that the share of natural capital to total wealth is lower in Chile, Botswana and Malaysia compared to Zambia. Although Chile's share of physical capital is almost the same as that of Zambia, Chile has made more progress in building its human capital compared to Zambia.

*The trajectory from low-income to middle-income often starts with an abundance of natural capital and using this to invest in education and health (human capital). At middle-income levels, human capital typically becomes the main asset.*



Source: World Bank 2018 Changing Wealth of Nations data

*Countries can improve their policy frameworks to manage revenue volatility and embed the principle of converting resource rents into other productive assets so that strategic development paths are enabled, but not dominated, by natural resources.*

Attaining a balanced portfolio of assets for resource-rich countries is linked to institutional capabilities in three critical areas: fiscal policy adapted to the volatility in the flow of rents from natural assets, effective delivery of social services, and an enabling business environment for investment. In other words, countries can improve their policy frameworks to manage revenue volatility and embed the principle of converting resource rents into other productive assets so that strategic development paths are enabled, but not dominated, by natural resources. As an example, the United Arab Emirates has used oil rents for public investments in infrastructure and its human capital, putting it in the high human development category. Botswana has also managed its diamond wealth capably, as evidenced through improved education and health<sup>26</sup>. Thus, the trajectory from low-income to middle-income often starts with an abundance of natural capital and then using it to invest in education and health (human capital). At middle-income levels, human capital typically becomes the main asset.

In 2014, Zambia's per capita wealth was almost double compared to the global average of lower-middle income countries and other Sub-Saharan Africa countries (Table 7). This is driven in part by the increase in the share of its assets compared to the share for the region's averages. Zambia's renewable asset endowment (US\$ 11,970/person) is much higher than the average for lower-middle income countries (US\$ 5,006/person) and the average of Sub-Saharan African countries (US\$ 6,403/person). However, Zambia has a relatively low share of human capital<sup>27</sup> (43 percent), compared to other lower-middle income countries and Sub-Saharan African countries, both at 50 percent. Nonetheless, Zambia saw the highest growth in human capital wealth, surpassing its own wealth per capita and other comparable neighbors.

*Zambia's renewable asset endowment is much higher than the average for lower-middle income countries and the average of Sub-Saharan African countries.*

Additionally, the net foreign asset (NFA) position of Zambia reflects the indebtedness of the country. Indebtedness is calculated as the value of assets that Zambia owns abroad minus the value of domestic assets owned by foreigners. In 2014, Zambia's NFA was low compared to the average for lower-middle income and SSA<sup>28</sup>. This is attributed to the fact that within the 20-year period, Zambia's external liabilities had reduced following the Heavily Indebted Poor Country (HIPC) and the Multilateral Debt Relief Initiative (MDRI) programs in 2005. In addition, its external position improved following a commodity boom in 2004. Globally, Zambia belongs to a group of 28 countries that were at low-income in 1995 but grew to lower-middle income by 2014, in contrast to other 24 countries that remained low-income over the same period.

	Zambia	Lower-middle income	Average of Sub-Saharan Africa countries
<b>Total wealth</b>	\$40,965	\$25,948	\$25,562
<b>Produced capital</b>	7,139	6,531	4,017
<b>Natural capital</b>	16,305	6,949	9,225
Renewables	11,970	5,006	6,403
Nonrenewable	4,335	1,944	2,822
<b>Human capital</b>	17,549	13,117	12,680
<b>Net foreign assets</b>	-27	-650	-360
<b>Population (millions)</b>	15	273	867

Source: (Lange, Wodon, & Carey, 2018)

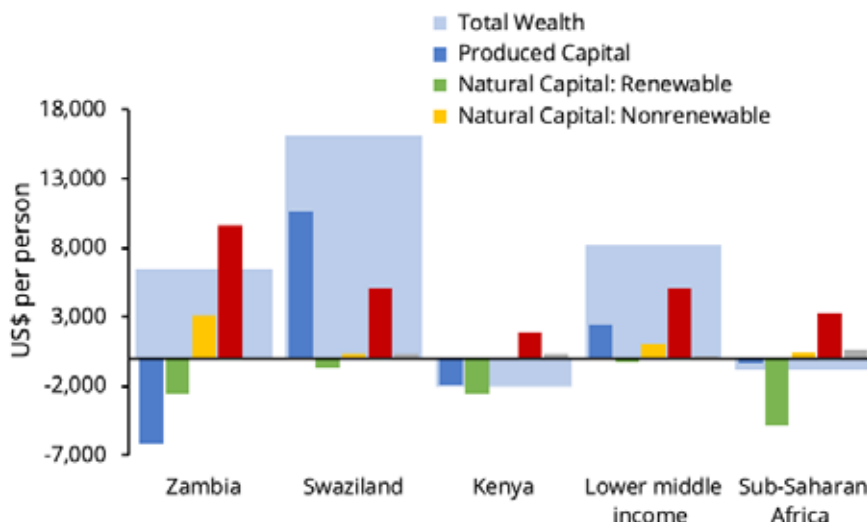
*Zambia's total wealth increased by 102% and total wealth per capita by 19%, within the 20-year period.*

On average, wealth per capita increased in lower-middle income countries but declined in Sub-Saharan Africa overall (Figure 16), partly due to the decline in some of the largest countries, such as Nigeria and Tanzania, where the population was also growing rapidly, and also due to slow growth in other large economies such as South Africa. Like other lower-middle income countries worldwide, Zambia displays an increase in nonrenewable natural capital, but a decrease in renewable natural capital.

Added to declining renewable natural capital, Zambia has had the largest reduction in produced capital within the 20-year period in Sub-Saharan Africa. A decline in produced capital is of concern and is likely an indication of unbalanced growth. There are huge infrastructure needs in all low- and lower-middle-income countries, and some

economic gains can be achieved by improving the productivity of agriculture and other natural capital, as well as investing in human capital. But over the longer term, their contribution to economic growth will be constrained without complementary investments in produced capital such as roads and transport, water and energy supply, and communications.

**Figure 16** Change in wealth per capita in Zambia and selected other countries (1995 to 2014)



Source: (Lange, Wodon, & Carey, 2018)

*A decline in produced capital is of concern and likely an indication of unbalanced growth.*

*While population growth can be a boon to development, substantial investments in health and education are needed to reap the 'demographic dividend.'*

*A negative ANS as a percentage of GNI implies that consumption is more than savings in a country, whereas a positive value means a country is adding more to the future well-being for long-term sustainability.*

However, the country's total wealth increased by 102 percent and total wealth per capita by 19 percent (Figure 17) within the 20-year period of review. This is similar for most middle-income countries in Africa, where wealth growth exceeded the global total wealth growth (66 percent) and total wealth per capita growth (33 percent), with some variations among countries. This occurs because most of Africa's countries invest very rapidly to increase their economic growth, faster than the global average.

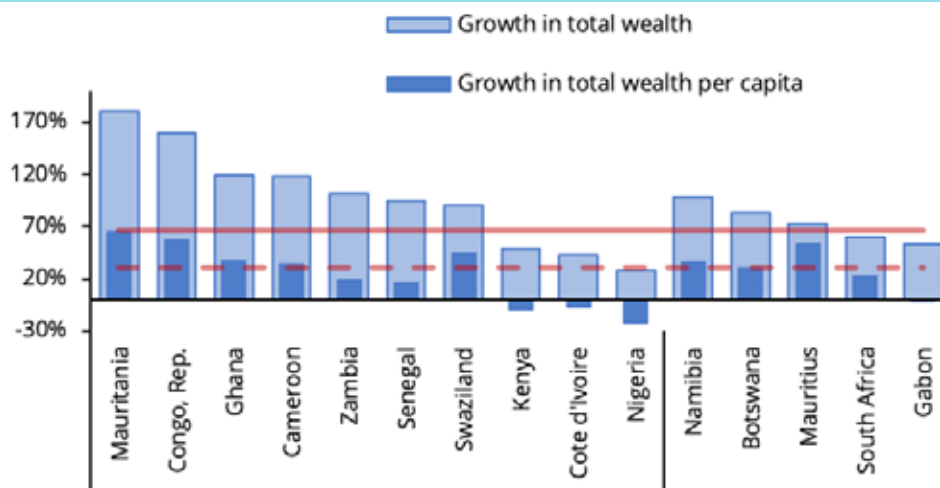
Yet, high population growth in many countries outpaced investments, resulting in a smaller increase in per capita wealth. Even countries like Zambia, with strong gains in wealth, saw a much smaller increase in per capita wealth. This was the case even in Kenya, where its per capita wealth declined by 10 percent between 1995 and 2014 due to slow growth in wealth (50 percent) and high population growth. This simply suggests that while population growth can be a boon to development, substantial investments in health and education are needed to reap the 'demographic dividend'<sup>29</sup>. Without enough capital per capita, productivity declines and growth slows. Having discussed the contribution of natural capital to total wealth and development, we will now look at a measure that assesses whether a country is investing enough today for future development.

### **Adjusted Net Savings and sustainability**

Adjusted Net Savings (ANS) is an important complementary concept for understanding total wealth measurement. It is an indicator to approximate the change in wealth of countries from one period to the next by capturing some of the important policy-induced dynamics. It measures the true rate of savings in an economy, after taking into account investments in human capital, the depletion of natural resources, and damage caused by pollution<sup>30</sup>. A negative ANS as a percentage of Gross National Income (GNI) implies that a country is using income from its assets for consumption rather than savings and investments to build the economy, whereas a positive value means a country is adding more to the future well-being for long-term sustainability. This indicator has been updated annually by the World Bank for more than 20 years.

According to the World Bank 2018 report, Zambia's ANS was negative up to 2003 (Figure 18), mainly due to the low annual gross national saving rate. In addition, the consumption of fixed capital averaged only 15 percent over the period, making the gross

**Figure 17** Growth in total wealth and wealth per capita in low- and upper-middle-income countries



Source: (Lange, Wodon, & Carey, 2018)

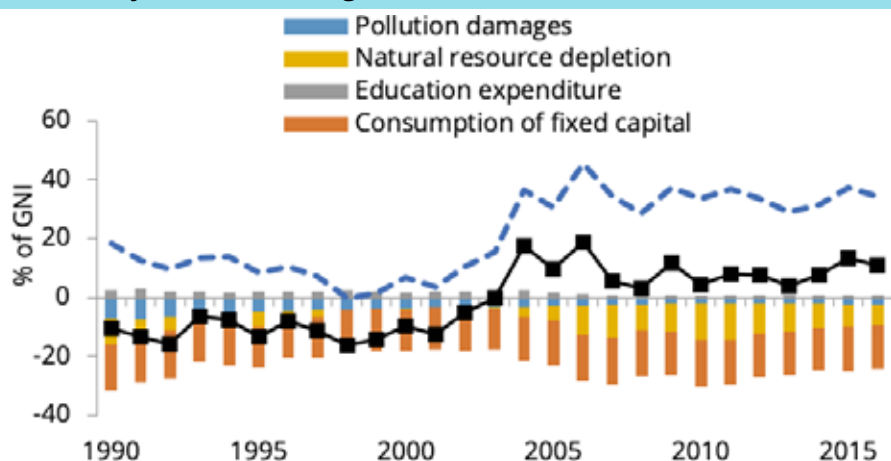
*While recognizing the country's achievement of a positive ANS, it is important to note that strengthening a positive ANS trend will largely depend on Government's strong commitment to fiscal consolidation.*

savings barely enough to maintain produced capital, let alone add to wealth. On the positive side, expenditures for education helped build human capital and added to national savings. This is however only a partial measure of the growth of human capital, so gains may be underestimated.

Zambia's positive ANS from 2004 to 2016 shows that the country has been investing in the future by investing the revenues gained from depleting its non-renewable natural capital assets. The positive ANS is capturing the fact that the discovery and exploitation of new mines supported wealth creation, which offset the associated costs from natural resource depletion. In addition, it also reflects the higher investments and improved external position that the country experienced from 2004.

However, in order for the country to maintain a positive ANS, investments have to be made sustainably. Evidence has shown that Government commitment to fiscal consolidation is also key to maintaining a positive ANS. Thus, while recognizing the country's achievement of a positive ANS, it is important to note that strengthening the positive trend will also largely depend on Government's strong commitment to fiscal consolidation. For instance, Niger managed to shift its ANS from negative to positive through combined efforts towards saving and fiscal restraint, with a strengthening trend in ANS attributed mostly to government commitment to fiscal consolidation<sup>32</sup>.

**Figure 18** Zambia: Adjusted Net Savings, 1990-2016



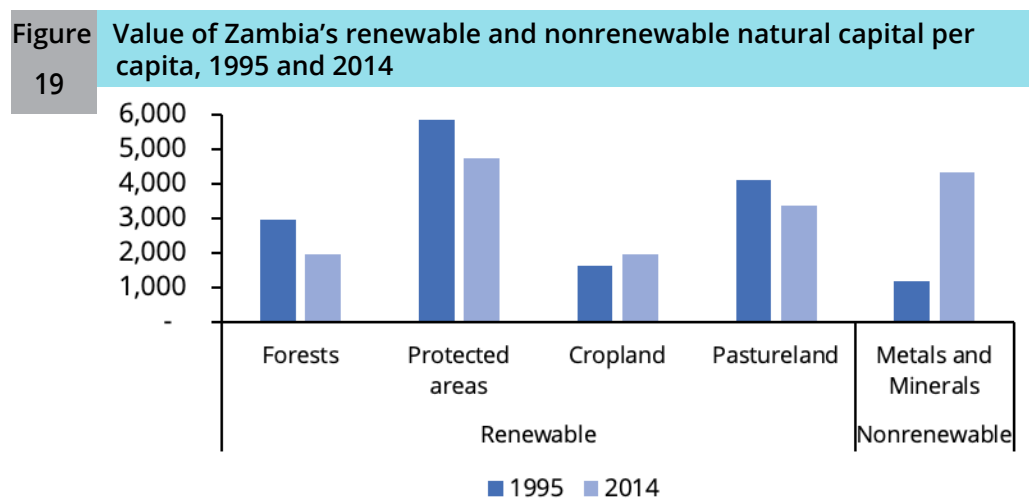
Source: (Lange, Wodon, & Carey, 2018), (IMF, 2018<sup>31</sup>)

*Increases in wealth per capita are largely driven by gains in human capital and nonrenewable natural capital.*

### **Sustainability and investing in natural capital**

Zambia's natural capital includes forests (timber and nontimber resources), protected areas, cropland, pastureland, metals and minerals and many other resources, but excluded the wealth accounting due to lack of data e.g. for water. The increase in wealth per capita is largely driven by gains in human capital and in nonrenewable natural capital<sup>33</sup>. The growth in the value of nonrenewable natural capital is due to metals and minerals, whereas the decrease in renewable natural capital is due to a decrease in asset value of forest lands, protected areas and pastureland within the 20-year period (Figure 19). This loss has been attributed to three major drivers of deforestation: agricultural expansion, settlements expansion, and infrastructure development. Another key contributor to high forest degradation is the increasing demand for charcoal within the country.<sup>34</sup>

The value of natural capital can change as a result of many factors, such as the price or returns to an asset or the physical quantity and quality of an asset or any combination of a number of these. For instance, the value of agricultural land can increase due to an increase in land brought under cultivation or through an increase in the net price of crops produced on a given amount of land<sup>35</sup>.



Source: (Lange, Wodon, & Carey, 2018)

*Zambia's natural capital has increased very little over the 20-year period, mainly due to the change in asset value between 1995 and 2014.*

However, the total value of Zambia's natural capital has increased very little over the 20-year period, mainly due to the change in asset value between 1995 and 2014. This can be examined by looking at the three components of this change (Figure 20) i.e. the change in per capita value, (including change in land area exploited), change in land value per hectare (calculated as land area/land value) and population growth (termed a 'population dilution effect').

The forest value per capita declined by 30 percent due to the population dilution effect, even though the value per square kilometer (sq. km) increased by 19 percent. Losses in forest land (6 percent) also contributed. About 81 percent of Zambia's population rely on biomass for energy needs<sup>36</sup>. It has been argued that increasing forest harvests will increase the value per sq. km, but as overharvesting causes forest degradation, this will eventually lower harvests and thus the value. In addition, the economic losses may be much greater than indicated by the current wealth estimates, as they do not reflect all the ecosystem services provided by forests, such as water supply, soil retention, and livestock grazing.

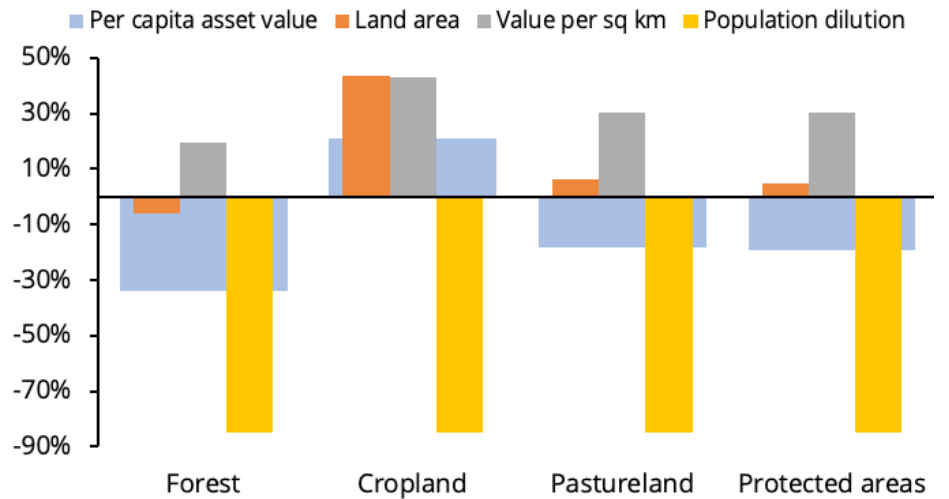
In the case of both pastureland and protected areas, the increase of land area and value per sq. km did not outweigh the population dilution effect, causing the asset value to decrease by 18 percent and 19 percent respectively. Protected areas can provide many economically valuable services from biodiversity and tourism to ecosystem services like watershed protection, an important service in such a water-scarce country<sup>37</sup>.

The land area under cultivation within the 20-year period expanded by 44 percent. Land value increased through a combination of the expansion of land under cultivation

*The land area under cultivation within the 20-year period expanded by 44%. However, such gains will be temporary if the land is not managed sustainably.*

Protected areas can provide many economically valuable services from biodiversity and tourism, a major untapped industry in Zambia.

**Figure 20 Sources of change in natural capital per capita in Zambia (% change between 1995 and 2014)**



Source: (Lange, Wodon, & Carey, 2018)

Note: The broad blue bar represents percent change in asset value while the thinner bars represent the components of change: change in land area, change in value/hectare, and population dilution effect (the population growth rate).

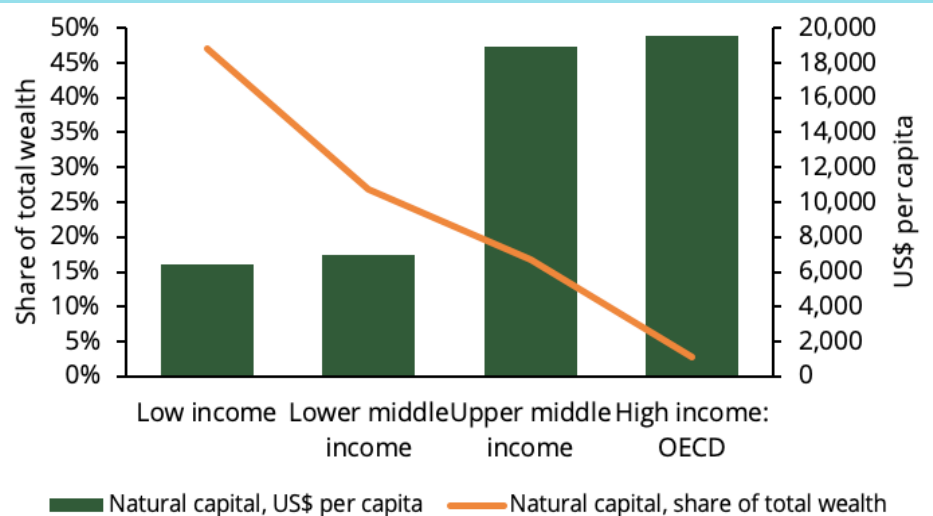
and the increasing value of crops produced per sq. km. The value of cropland per sq. km grew by 43 percent. These gains per sq. km indicate gains in crop productivity from 1995 to 2014, due to a change to higher value crops and/or other improvements. However, such gains will be temporary if the land is not managed sustainably. Currently, the land is effectively being mined for its nutrients and the resulting land degradation is intense.

Zambia has the opportunity to grow by building its renewable resources like forests and the sustainable management of other land, which make up the largest share of its natural capital.

**Leveraging natural capital**

The share of natural capital in total wealth typically decreases with development. This does not imply that countries grow through liquidating their natural assets. Although the share of natural capital typically declines with development, the absolute value per capita grows: natural capital per capita is highest in upper-middle and high-income OECD countries (Figure 21) as evidenced in many high-income countries. Growth is thus accomplished through managing natural capital sustainably so that its value increases for future generations and investing returns from natural capital in other types of capital.

**Figure 21 Natural capital: share vs per capita value (US\$) in 2014**



Source: (Lange, Wodon, & Carey, 2018)

*Future growth will depend on improved productivity and the sustainable management of its natural capital.*

Although the total value of Zambia's natural capital has increased very little over time, its contribution to the country's growth remains huge. Hence, its future growth will depend on improved productivity and the sustainable management of its natural capital. Zambia has the opportunity to grow by building its renewable resources like forests and the sustainable management of other land, which make up the largest share of its natural capital (see Figure 14). Therefore, reversing the depletion trends observed in these assets within the 20-year period will require a combination of policy reforms, incentives and institutional coordination in enforcing regulations. In addition, good management of revenues from non-renewable resources like minerals and metals can mean profits are reinvested in other assets like renewable natural and human capital, which have a long-term contribution to a country's development even after the depletion of the nonrenewable resources.

*Strong institutions and sound policies for managing natural resource revenue are important to turn the proceeds into sustainable development.*

Furthermore, it has been argued that an endowment of natural resources (specifically nonrenewable natural resources) alone may not ensure rapid development, but strong institutions and sound policies for managing the natural resource revenue are important to turn the proceeds into sustainable development. In 2015, the World Bank produced an economic brief focusing on Zambia's nonrenewable copper resource. The brief focused on the Economic, Health, and Environmental Nexus of Zambia's Copper Mining Economy, adding to the literature on how resource-rich countries can get the best out of their nonrenewable resources. The World Bank made a number of recommendations for Zambia in this report (Box 4).

As noted above, Zambia's renewable natural capital, including cropland, forests, protected areas and water can be an important engine of growth for the country. How this can be realized is discussed in the next section which focuses on the evidence presented in Zambia's first natural capital accounts for Forest and Water.

#### **Box 4 Making mining work for Zambia**

Revenue from non-renewable resources can finance investments for sustainable wealth, but this requires careful macroeconomic management and strong institutions, both of which are lacking in some countries. However, countries such as Botswana and Chile have succeeded in using resource wealth for development by recovering the resource rents generated and investing them in other assets.

Similar to many other resource-rich developing countries, Zambia faces several tradeoffs in setting its mining fiscal regime and mitigating the negative environmental and health effects of mining. Some tradeoffs involve the optimal extraction of the nation's finite sub-soil wealth, while others relate to an issue of fiscal receipts today versus tomorrow or creating the incentive for mines to mitigate environmental spillovers today versus paying for clean-up and suffering potential lost incomes in the future. In all cases, the decision boils down to optimizing the social value of mining to Zambians over the long term. Some of this is intuitive, but the tradeoffs and processes for decision making are surprisingly complex—especially when considering that future generations of Zambians do not yet have a voice with which to influence the debate. The government has many fiscal options, but the optimal choice requires a holistic assessment. One must strike a balance between the short-term immediate revenue needs of Zambia against its long-term objectives.

Attracting long-term investment requires policy stability. Investors value stability and are therefore willing to pay for it though higher taxes. There is no guarantee of stability, however. It must be established through a track record and different types of fiscal instruments, such as profits-based taxes, which are better suited to building that record. It is important to undertake the analyses necessary to establish a fiscal regime that will be sustainable in the long run. An ideal review of the fiscal regime should be inclusive and yield unambiguous fiscal policy. It should include consultations, have its basis in robust analytics (financial models), and have production assumptions that mining companies corroborate. Mining companies, on the other hand, must be more transparent. The government should create the legal means necessary to obtain information from companies and to allow its authorities to project fiscal revenues from the mining sector into the future. Furthermore, the authorities should strengthen the financial modeling capacity to utilize the information accessible from the previous recommendation for (i) auditing, (ii) forecasting, and (iii) policy-setting purposes. Unsustainable mining practices have added to Zambia's challenges with poverty, economic growth and human development through increased environmental degradation and the associated health damages and socioeconomic consequences. In accordance with global good practice, mining companies must fully internalize the environmental and social costs of their operations. *Source: World Bank (2015)*<sup>38</sup>

## E. HARNESSING ZAMBIA'S RENEWABLE NATURAL CAPITAL FOR SUSTAINABLE DEVELOPMENT

Renewable resources are unique in that, if managed sustainably, they can produce benefits in perpetuity. Improvements in the productive use of renewables can increase the benefits they generate and, consequently, the value of these assets, even if the land area does not increase, or even if it decreases, which has been the case for a number of countries. By contrast, non-renewable natural capital offers a one-time chance to finance development by investing the resource rents in other assets to replace the depleted natural capital. Some, but not all, countries have made good use of this opportunity. Zambia's economic growth has been underpinned by copper mining. The country is now looking to diversify its economy away from the dependence on copper.

*Renewable resources are unique in that, if managed sustainably, they can produce benefits in perpetuity.*

Emerging data from the WAVES initiative in Zambia confirms that natural capital is a key contributor to the economy<sup>39</sup>. In 2014, natural capital accounted for over 40 percent of the country's total wealth. Renewable natural resources contributed about 73 percent of total natural capital in 2014. The renewable natural capital composition consists of protected areas and pastureland, followed by cropland and forests. The remaining 27 percent of Zambia's natural capital is nonrenewable resources, particularly metals and minerals.

Zambia has made progress in completing the first iteration of water, forest and land accounts. The water accounts will support effective water management in the country. Forest accounts give an insight into the economic value of some forest resources that have not been accounted for in the past and provide information on tradeoffs in managing forest resources. The land accounts provide information to guide policy towards enhancing land productivity and management.

Continued development of natural capital accounting will help to link environmental and economic information in ways that enable an integrated analysis and investigation of different policy options for ensuring the sustainable management and use of renewable natural resources. Natural capital accounts can help to highlight opportunities and barriers to the sustainable use of natural resources and also help increase government revenues through formalizing informal markets within the natural resource sectors.

*Renewable natural resources contributed about 73% of total natural capital in 2014.*

### **Rich forest resources**

The forest sector contribution to the country's GDP is at 5 – 6.3 percent and provides formal and informal employment to about 1 to 1.4 million people<sup>40</sup>. Forests provide both monetary and non-monetized income flows from firewood, timber, nontimber forest products, food from subsistence hunting, and a range of environmental services. Wood biomass is an important energy source in Zambia, with charcoal and firewood providing between 554.5 billion and 1.3 trillion mega-joules (MJ) of energy between 2010–2015. The contribution of charcoal to total energy consumption is estimated to be 79 percent, hydropower generation is at 11 percent, and oils and oil-products is at 8 percent, while coal and firewood contribution to total energy consumption is at 2 percent. Urban household electrification would reduce charcoal consumption between 1.5 to 3 times.

*Despite the country having a large forest cover of around 60%, it has unexploited the significant potential of its forests.*

Despite the country having a large forest cover of around 60 percent, it has unexploited the significant potential of its forests. Most of the commercial activities operate in the informal realm, including charcoal and timber production, resulting in low revenue contributions to government. The forest account indicates the main forest products produced in Zambia as charcoal, fuelwood and industrial roundwood. In 2015, charcoal and fuel wood production encompassed 7.6 million m<sup>3</sup>, industrial roundwood 3.8 million m<sup>3</sup>, indigenous and exotic timber 3.7 million m<sup>3</sup> and poles 1.8 million m<sup>3</sup>. In addition, the exotic timber sharply declined in supply by approximately 65 percent between 2010 and 2011. The trend continues on a very low level of supply until around 2014 when there was a slight increase in the supply stocks, though it was not comparable to 2010. The reduction in supply is largely attributed to the reorganization of the Zambia Forestry and Forest Industries Corporation (ZAFFICO), a state-owned enterprise with the mandate to manage and commercially process and supply timber to the local and foreign markets.

*Zambia has large unexploited potential in forestry—including native forests and commercial plantations.*

However, the trend in the indigenous timber supply increased in 2015 by almost 75 percent from 2014. The increase is attributed to the high demand for the Mukula timber species which fetched high prices on the international (particularly China) market. At the time, however, Mukula was not listed as one of the commercial timber species on the official Forestry Timber Species List. The demand for this species became uncontrollable until it attracted Government's attention and several law enforcement agents were brought on board to curb the illegalities associated with its massive logging and transportation in the country. The increased demand for this particular species opened up the realization that indigenous timber is a huge income earner, and now all other species are increasingly being exploited for selling.

Zambia has large unexploited potential in forestry—including native forests and commercial plantations. Yet, within this potential, what lacks are good policies and incentives to promote a business environment conducive to competition and investment (see Box 5; how Chile managed to promote this sector). In addition, there is also a need for improved enforcement of the regulations to minimize the illegality in the trade of forest products and to promote sustainable production. All this should be informed by a deep dive sector analysis of these products to understand the constraints, challenges, and opportunities, so as to leverage such resources as a source of government revenue.

### **Box 5 The role of policies in realizing the potential of the forest industry**

**5** Much like Zambia, Chile is a resource-rich country. It is the world's biggest copper producer. During the global depression of the early 1930s, the collapse of global commodity markets prompted the government to encourage alternative industries. The Chilean Economic Development Agency (CORFO) was established in 1939 to implement the country's industrial policy.

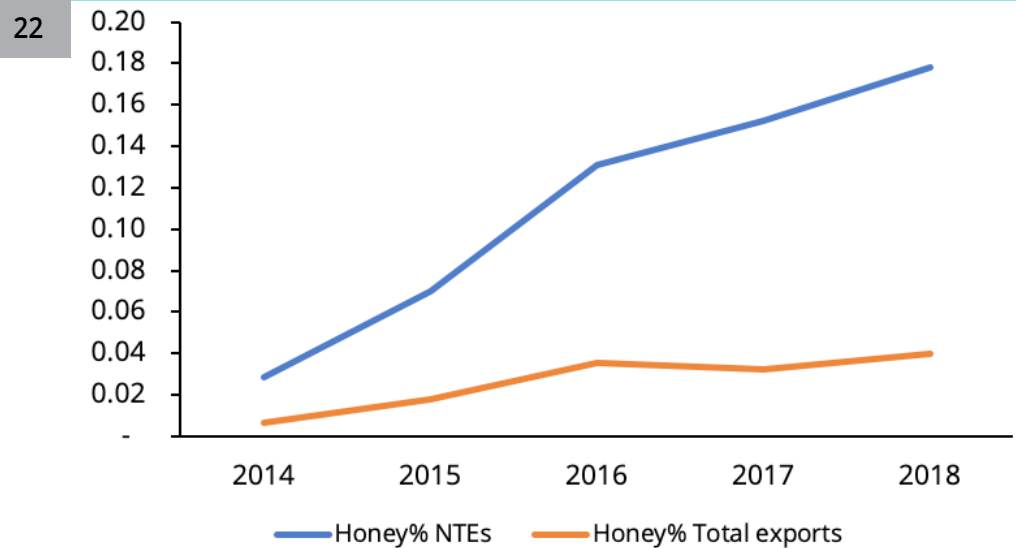
Forestry first gained the policy makers' attention, due to the discovery that Monterey pine thrived with Chile's soil and weather, and grew faster there than in North America or Scandinavia, at the time the dominant exporters in the global timber trade. The government passed several laws in the 1970s providing legal certainty and incentives for planting the trees. The new provisions stated that lands put to this use could not be expropriated, and they were granted cash subsidies of up to 75 percent of start-up costs and given direct credit lines and other subsidies. The country had gone through a period of pursuing an import substitution strategy earlier but, after the military regime took power in 1973 and the subsequent return to democracy, it has adhered to freer market policies, eschewing sector specific industrial policy except for forestry.

However, the special incentive scheme for forestry continued even during the free-market Augusto Pinochet regime, which judged that Chile could not compete with the developed world in manufacturing unless it took advantage of a cheap and reliable supply of raw materials. Plantation forestry is usually within the reach of many tropical and temperate regions with adequate rainfall, if the government decides to make forestry a priority (Clapp 1995). Having assured a critical mass, the government gradually exited the production of wood, while in parallel it created a talent pool of homegrown forestry engineers. Today, wood and wood-derived products are Chile's second-largest exports after copper.

*Source: Gill et al. (2014)*

*A tonne of bees wax costs more compared to a tonne of copper on the international market.*

In addition, Zambia is a traditional beekeeping country and the apiculture (or beekeeping) practices are important to the Zambian economy in terms of raising export earnings, employment creation and poverty reduction. Although honey only represents a very small share of Zambia's total exports, at 0.01 percent in 2014 and 0.04 percent in 2018, its contribution to nontraditional exports (NTEs) has improved from 0.04 percent in 2014 to 0.18 percent in 2018 (Figure 22). It is a sector which is considered to have the potential to grow significantly and is thus one of the untapped renewable resources. Although production is barely meeting domestic demand, it has immense potential to increase production both for the domestic and international markets. There is a high demand for both honey and bees wax on the international market. For instance, the price of one tonne of bees wax compares relatively well with that of copper on the international market and so is an important source of foreign exchange for the nation. Between 2010 and 2015, the country earned a total of US\$ 35 million from the sale of liquid honey and another US\$ 8.4 million<sup>41</sup> from the sale of bees wax in the same period, mainly from the export market (United Kingdom, Germany and South Africa as the main markets). With appropriate investments, these products can become a much larger share of exports in Zambia.

**Figure 22 Honey exports as percentage of total exports**

Source: Zambia Revenue Authority and Bank of Zambia

However, despite the economic value of beekeeping as a source of employment, poverty reduction, and foreign exchange, the country is yet to realize its potential. Until the forest accounts data was compiled, there were poor statistics on the size and structure of the sector, and there are no policies or regulatory frameworks to guide stakeholders in forest resource use, the management of bees, and the handling of bee products.

Ecosystem services are an important aspect of natural capital which show the relationship between the renewable natural capital and growth in other sectors. Ecosystem services are defined as the benefits provided to humans through the transformation of resources including land, water, vegetation and atmosphere into a flow of essential goods and services e.g. clean air, water, and food<sup>42</sup>. Forest ecosystem services include food, water regulation, soil retention, fiber, fuels and climate change mitigation. Such services in Zambia contribute to economic growth, employment, wealth, export revenues, a stable supply of clean water, recreation and tourism opportunities, as well as essential building materials and energy for a wide range of economic sectors<sup>43</sup>.

Maintaining forest cover is not only important for environmental and hydrological services, but also for reducing national carbon emissions, as evidenced by the fact that Zambia is actually a net carbon sink. Additional reductions in carbon emissions, with the accompanying reduction of deforestation, can be an incentive for community involvement in the co-management of natural assets like forests through the Reducing Emissions from Deforestation and Forest Degradation (REDD+) international framework<sup>44</sup>. Zambia has benefited from this initiative through a pilot project in Eastern Province supported by the World Bank, where communities received about US\$ 814,406.49 for carbon reduction through sustainable agriculture practices and forest management, thus becoming an incentive for sustainable natural resource management by communities.

Zambia's unique forest resources and protected areas can be a driver of tourism development. However, the country's tourist assets are underutilized<sup>45</sup>. Deforestation levels are one of the highest in the world, with a potential loss of about 10 million hectares of forest in the next 30 years<sup>46</sup>. Expanding nonconsumptive uses of forests, such as nature-based tourism, will be important for building a sustainable economic growth.

#### **Abundant water resources**

Zambia has abundant water resources with total renewable water resources estimated to be 105 km<sup>3</sup> per year, more than 80 percent of which are produced internally. The per capita water availability in Zambia is estimated at about 8,700 m<sup>3</sup> per year, significantly higher than the average for Sub-Saharan Africa (7,000 m<sup>3</sup> per person per year) and globally (8,210 m<sup>3</sup> per person per year)<sup>47</sup>. Water plays a key role in the economic performance of the country; it is said to be an enabler of economic development especially due to its contribution to energy generation from hydropower, tourism, aquaculture

*Zambia's unique forest resources and protected areas can be a driver of tourism development.*

*Water is an enabler of economic development in Zambia.*

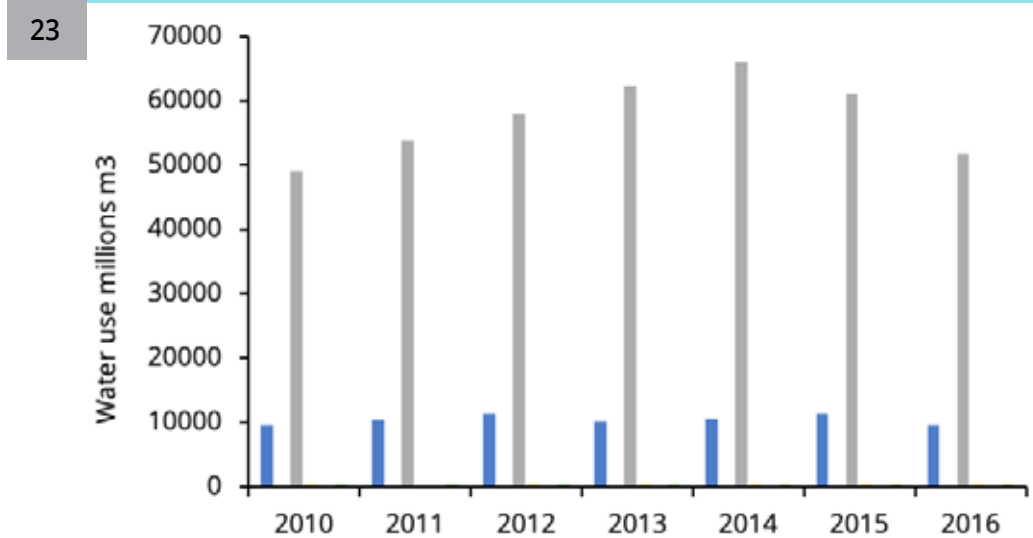
and agricultural development. Consequently, the government strives to prioritize the protection of water resources as a way to achieve sustainable development.

However, Zambia’s economy is vulnerable and increasingly constrained with a number of water-related challenges such as frequent droughts and floods, hydrological variability and seasonal water shortages. This is compounded by growing water demand from the major sectors of the economy. Limited water infrastructure poses a serious constraint on the medium and long-term growth prospects. Therefore, prioritizing investments in water infrastructure, institutions for water resource management and the advancement of policy reforms is key. In addition, improved management of water resources brings more certainty and efficiency in the distribution of water across the various users and economic sectors in the economy. It is vitally important to manage this resource especially in the wake of rising population growth, increasing demand and climate change.

Zambia has not fully utilized its abundant water resources. The level of per capita water withdrawal is three times lower than the developing countries’ average and lower than the average per capita water withdrawal in Sub-Saharan Africa<sup>48</sup>. Agriculture and Energy (hydropower) account for the highest share of water use. Between 2010 and 2016, agriculture used up to 73,558 m<sup>3</sup> and energy about 402,227 m<sup>3</sup>. The potential for both hydropower generation and agricultural production remains largely undeveloped.

*More water revenue was earned from industry than from households.*

**Figure Distribution of water use by sector, 2010 -2016**



Source: Natural Capital Accounts for Water: First results and next steps

*The water accounts for Zambia also provide information on industries that deliver the highest returns to water use.*

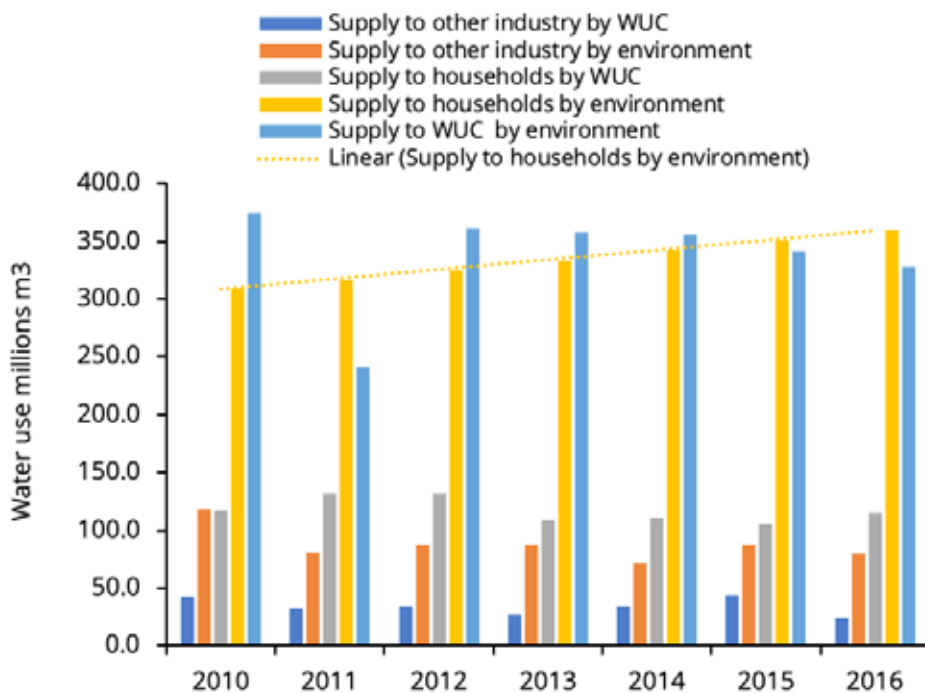
The water accounts for Zambia also provide information on industries that deliver the highest returns to water use. The first results show that “other industries” (all industries except agriculture, mining and energy), which include tourism-based industries, generate higher returns to water use than agriculture.

Another key highlight is that the revenue from water supply to “other industries” is larger than that from households, despite the greater volumes of water supplied to households than to industries by the utility companies. This is due to both the lower prices paid by households to water utility companies as well as the fact that a large share of the water used by households came from their own sources, such as boreholes and shallow wells.

From a water resource management perspective, an increased use of water from boreholes and shallow wells increases the risks of households being exposed to contaminated water, the unsustainable use of groundwater resources, and the waterlogging of land, mostly due to inadequate drainage. Hence, monitoring water quality, abstraction and distribution is key to promoting the sustainable use of water. The insights on the

**Figure 24 Sources of household and other industry water use (in million m<sup>3</sup>)**

24



Source: LCMS 2010 and 2015

*A large share of water used by households came from their own sources, such as boreholes and shallow wells.*

increasing use of borehole water in the country suggest that policy makers need to enhance regulations of water use for sustainable development, particularly with increasing levels of urban developments in the country.



## F. HOW CAN ZAMBIA USE ITS RENEWABLE NATURAL CAPITAL FOR SUSTAINABLE DEVELOPMENT?

Zambia has, over the past 50 years, focused its resources and investments on its nonrenewable resources for economic growth. However, good management of renewable natural resources can contribute to increased income and growth in the country. Renewable natural resources offer a sustainable option for alternative sources of revenue for Zambia, given the rich forest and abundant water resources among others. The analyses and ideas presented in this report are focused on building a sustainable future for Zambia through renewable natural capital, focusing on the forest and water natural capital accounts as tools for management and strategic decision-making. Below are some options for Zambia to get the best out of its renewable natural resources for sustainable economic growth beyond its nonrenewable resources.

### i. Proper valuation and accounting of natural resources is necessary for robust development planning

- All natural resources should be properly valued and accounted for. By fully accounting for a country's natural resources, policy makers are able to make better long-term decisions for sustainable growth with more accurate information on its natural assets. This would enable the untapped potential of renewable natural capital to be recognized as well as ensuring that critical natural capital is not damaged by other development activity. Zambia has abundant natural capital, and there is scope to turn it into an engine of sustained growth and employment creation. Natural capital has been a key driver of growth in the past, mainly the non-renewable resources, e.g. copper and other minerals. The 7th National Development Plan has recognized the country's comparative advantage that lies in its endowment of natural capital and stresses the importance of diversifying the economy through the strategic identification of competitive growth sectors which are not dependent on a single and finite resource, such as copper<sup>49</sup>. Thus, expanding Zambia's natural capital accounts to ecosystem accounting will further enhance the country's ability to get the best out of its renewable natural resources for sustainable development. For instance, in South Africa, the ecosystem accounts are being used as a mainstreaming tool used for managing biodiversity assets and enhancing their contribution to the economy. The need to invest in ecological infrastructure is also recognized<sup>50</sup>.
- In addition, Zambia's forest account has reviewed risks in the current use of its natural resources, particularly the increased levels of deforestation from amplified agriculture expansion and charcoal production in the recent past, which has resulted in forest loss. Therefore, a proper valuation of natural resources provokes the critical need for policy makers to optimize and define a sustainable use for these limited natural resources. With this, the national planning authorities and the Central Statistics Office must ensure the integration of information on natural capital into the Systems of National Accounting, as well as investigating and highlighting the potential of sustainably managed renewable resources to achieve economic growth and poverty reduction. Botswana, for instance, is using data from its water account to inform the implementation of Botswana's Integrated Water Resources Management Plan and investments in non-conventional water resources, keeping the country on a path to sustainable development given that its scarce water resources could become even more uncertain with impacts of climate change.

### ii. Strengthening sector analysis for renewable resources.

Natural capital accounts can also be combined with a deep dive sector analysis to enable sector diagnoses that may reveal factors limiting the contribution of the natural assets and ecosystem services to sustainable economic development. Wealth accounts show that the decrease of renewable natural capital is a result of a decrease in asset value of forest lands, protected areas and pastureland within the 20-year period. The results from the forest account have shown that this is due to the increased demand for charcoal and agriculture expansion. Thus, a forest sector diagnosis on the driving factors should be undertaken and provide sustainable options for continuing to con-

vert forested land to other uses. Furthermore, the analysis presented in this Brief from the initial accounts is just a start in understanding the state of the renewable natural capital in the country and their potential contribution to sustainable economic growth. This work should be expanded to cover other aspects of natural capital, like ecosystem services, which will further strengthen its usefulness for planning and management.

### **iii. Natural capital for growth requires strong policy and investments.**

- Strong institutions and sound policies are important for the sustainable management of natural resources. For countries that depend on natural resources—particularly the non-renewable resources, weak policy has resulted in what is called the resource curse and Zambia is no exception to this phenomenon. Therefore, in moving beyond the non-renewables, Government must invest in consolidating policies that attract investments in renewables and enforce regulations that do not give way to over-exploitation, illegality and degradation of open access natural assets like forests and land.
- Finally, harnessing natural capital for growth requires investment. Sustainable economic growth will depend not only on produced capital, but also on investments in natural capital, human capital, the strength of institutions, and governance and integrity in the management of natural capital. For countries that are highly dependent on renewable assets, long-term growth requires maintaining or improving the productivity of these natural resources and managing them sustainably. Substantial investments may be needed to improve agricultural yields, use scarce water resources more efficiently, or switch to higher-value crops. Increasing productivity may also require managing land for a different mix of goods and services over time. For example, a forest once managed primarily for timber may generate higher value and employment as an ecotourism resource or as a source of clean, sediment-free water for downstream hydroelectric power<sup>51</sup>. Thus, better funding for renewable natural resources-based sectors is essential to guarantee an adequate fiscal base for sustainable economic growth and poverty reduction.

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