

# ZAMBIA ECONOMIC BRIEF

## AN AGRO-LED STRUCTURAL TRANSFORMATION



# **11<sup>th</sup> ZAMBIA ECONOMIC BRIEF**

## **AN AGRO-LED STRUCTURAL TRANSFORMATION**



September 2018

@ 2018 The International Bank for Reconstruction and Development/THE WORLD BANK  
1818 H Street NW  
Washington, DC 20433  
USA

All rights reserved.

This report was prepared by the staff of the Macroeconomic and Fiscal Management Global Practice of the World Bank Group. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the World Bank's Board of Executive Directors or the countries they represent.

Cover design: Katarina Zeravica  
Photos: World Bank, Zambia and stock images

# I CONTENTS

<b>Acronyms</b>	<b>i</b>
<b>Foreword</b>	<b>ii</b>
<b>Acknowledgements</b>	<b>iii</b>
<b>Executive Summary</b>	<b>1</b>
<b>Section 1: Recent Economic Developments</b>	<b>5</b>
A. Regional Economic Developments	5
B. The State of the Zambian Economy	9
C. Economic Outlook, Risks and Policy Challenges	22
<b>Section 2: An Agro-Led Structural Transformation</b>	<b>27</b>
D. Zambia's Experience with Structural Transformation	30
E. Towards a More Effective Structural Transformation in Zambia	37
F. Ideas to Enhance Agro-Led Structural Transformation in Zambia	43
<b>Endnotes</b>	<b>44</b>
<b>Boxes</b>	
1 The government's fiscal consolidation measures	11
2 A new debt sustainability framework for low-income countries	12
3 Ideas for calming the 'hidden debt' noise	14
4 Restructuring debt under difficult market conditions: some lessons from Ghana	15
5 Policy context on industrialization and structural transformation in Zambia	30
6 Labor productivity in agriculture might not be lower than that for non-agricultural sectors in urban areas	31
7 Can farm blocks support rural development and agricultural transformation?	42
<b>Figures</b>	
1 Commodity prices have been volatile	6
2 Eurobond spreads have narrowed in 2017	7
3 Fiscal deficits in some countries are facing a high risk of external debt distress	8
4 SSA growth has picked up	8
5 Fiscal deficits have widened and budget credibility deteriorated	9
6 External debt has increased sharply since 2012	12
7 Public and publicly guaranteed debt as a percent of GDP	13
8 Interest payments have crowded out other spending lines	14
9 The cost of external debt service has increased	15
10 The kwacha has come under pressure in 2018	17
11 Inflation picking up, but remains within the target (6-8%)	18
12 Lending rates remain high despite looser monetary policy	18
13 Economic activity is expected to remain subdued in 2018	19
14 Copper production was ramped up in H1 2018	20
15 Labor reallocation plays a large role in productivity growth	28



16	Agricultural labor productivity	29
17	Reallocation of labor has occurred between 2000 and 2010	32
18	Sector value added per worker and employment: 1996 versus 2015	33
19	Evolution of sectoral employment in primary and secondary cities	35
20	Share of income of bottom 40 percent has fallen despite GDP growth	35
21	Poverty is predominantly a rural phenomenon	36
22	Growth of income groups in share to total population	36

## Tables

1	Fiscal trends	10
2	Balance of payments (US\$ million)	16
3	Quarterly GDP growth (year-on-year)	20
4	Private sector credit growth remains subdued since 2016	21
5	Key Macroeconomic Data	22
6	Poverty and Inequality in Zambia and the Kyrgyz Republic	29
7	Non-mining output growth is sensitive to copper prices	31

## Maps

1	Zambia's new agro-processing firms in 2010	42
---	--	----

# IACRONYMS

BoZ	Bank of Zambia
CEMAC	Central African Economic and Monetary Community
CPIA	Country Institutional and Policy Assessment
DMFAS	Debt Management and Financial Analysis System
DSA	Debt Sustainability Analysis
EPZ	Export Processing Zones
FISP	Farmer Input Support Program
FRA	Food Reserve Agency FI
FDI	Foreign Direct Investments
FQM	First Quantum Minerals
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
HIV	Human Immunodeficiency Virus
IAPRI	Indaba for Agricultural Policy Research Institute
ICT	Information and Communications Technology
IFC	International Finance Corporation
IMF	International Monetary Fund
IPP	Independent Power Producers
INDC	Intended Nationally Determined Contributions
LCMS	Living Conditions Monitoring Survey
LIC	Low Income Countries
MFEZ	Multi-Facility Economic Zones
OPEC	Organization of the Petroleum Exporting Countries
PER	Public Expenditure Review
PFM	Public Financial Management
PV	Present Value
R&D	Research and Development
SME	Small and Medium Enterprises
SSA	Sub-Saharan Africa
SOE	State-Owned Enterprises
TEVETA	Technical Education, Vocational and Entrepreneurship Training Authority
TVET	Technical and Vocational Education and Training
VAT	Value Added Tax
WTO	World Trade Organization
ZAMACE	Zambia Commodity Exchange
ZANACO	Zambia National Commercial Bank Plc
ZIAMIS	Zambia Integrated Agriculture Management Information System
ZRA	Zambia Revenue Authority

# FOREWORD

I am pleased to share the eleventh Zambia Economic Brief with a focus section on agro-led structural transformation for poverty reduction and prosperity. 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 World 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.

Economic growth in 2018 is projected to be below 4 percent, reflecting the poor agricultural harvest, lower copper prices and fiscal-debt challenges that are crowding out private sector growth. Government's own debt sustainability analysis in H1 2018 has now confirmed the conclusion from the 2017 IMF-World Bank debt sustainability analysis that Zambia's risk of external debt distress has increased to 'high' from 'medium' in 2015. In response, the government has announced plans to implement fiscal consolidation measures to return debt towards sustainable levels.

If fully implemented, the fiscal consolidation measures recently announced by the government provide a solid framework to move the debt towards sustainable levels, create fiscal space for pro-poor and productive spending, and unlock private sector lending and growth. An IMF financial program would be instrumental in supporting the measures, by providing an immediate disbursement into reserves, enhancing credibility on the macro-fiscal reforms, facilitating budget support from other development partners, cementing market sentiments, and improving the government's and private sector's access to financing at more favorable terms.

The past decade and a half of growth was not sufficiently pro-poor and the benefits have accrued mainly to the richer segments of the population in urban areas. Poverty remains predominantly a rural phenomenon. Eighty percent of the poor are rural subsistence farmers.

To reduce poverty and boost shared prosperity, it is critical to raise productivity in sectors where most poor people are engaged (in particular, agriculture). Expediting the transition from a maize-centric agricultural policy, investing in agricultural infrastructure, linking farmers to domestic and regional value chains, supporting human capital development and strengthening macro-fiscal management are vital.

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



Ina-Marlene Ruthenberg  
Country Manager for Zambia  
The World Bank

# ACKNOWLEDGEMENTS

The eleventh Zambia Economic Brief has been prepared by Zivanemoyo Chinzara, Sebastien Dessus and Christine Heumesser (World Bank).

Keiko Kubota, Alex Sienaert, Tihomir Stucka, Manohar Sharma, Ashesh Prasann, Erwin De Nys and Willem Janssen (World Bank), and Annelies Raue (DFID) all provided very useful comments. The report was edited, and the layout and front cover designed by Katarina Zeravica.

Paul Nomba, the Zambia Country Director; Ina-Marlene Ruthenberg, the Zambia Country Manager; Mathew Verghis, Practice Manager for the Macroeconomics, Trade and Investments Global Practice; and Sebastien Dessus, Program Leader for Zambia, provided overall guidance. Carlyn Hambuba and Sombo Samunete led the dissemination activities with support from Gebisa Chisanga and Hellen Mungaila.

# EXECUTIVE SUMMARY

## *Regional economic developments*

### **Sub-Saharan Africa's (SSA) economic recovery continued to gain momentum in H1 2018.**

Growth is forecast to improve to 3.1 percent in 2018, from an estimated 2.6 percent in 2017, but remains below its long-term trend. Economic recovery has been underpinned by favorable supply and demand shocks, and an improved environment for growth. However, risks remain, including an abrupt monetary tightening in the United States that would reduce investor appetite for riskier assets in frontier markets and tighten global financing conditions; a slowdown in China (due to escalated tariff wars) that would reduce commodity prices; as well as slower domestic reforms to address macroeconomic imbalances and structural bottlenecks that would undermine private sector recovery.

## *The state of the Zambian economy*

### **Preliminary estimates suggest the Zambian economy expanded by 3.4 percent in 2017 compared to 3.8 percent in 2017.**

Despite higher copper prices, expansive monetary policy and a bumper crop harvest in 2017, revised data suggests that real GDP growth slowed to 3.4 percent in 2017 from 3.8 percent in 2016. Economic activity has faced a drag from a deteriorated fiscal and debt situation. Large domestic public expenditure arrears increased non-performing loans (to 13.4 percent of outstanding loans in May 2018, from 9.7 percent in 2016), leading to lower private sector lending. Private sector lending has been further crowded out by increased government domestic borrowing at high yields. In addition, the non-mining industry and services have been affected by low private investments and consumer demand. Meanwhile, the costs of foreign borrowing have increased for both government and firms due to tighter financing conditions and increased sovereign risk premia. Weak economic activity has constrained job creation, leading to an increase in the unemployment rate from 11.7 percent in Q1 2017 to 12.2 percent in Q1 2018. The unemployment rate is higher among females (14.6 percent) than males (10.6 percent).

### **In 2017, fiscal consolidation was achieved on a commitment basis.**

The fiscal deficit (commitment basis) declined to 4.4 percent of GDP in 2017 from 8.9 percent of GDP in 2016, reflecting the clearance of K 6.4 billion in public expenditure arrears, and below budget spending in subsidies (by 5 percent); goods and services (by 14 percent); and social benefits (by 20 percent). However, spending on roads was scaled up by 37 percent and the cost of debt service was 17 percent above the programmed target. As a result, the cash fiscal deficit rose to 7.8 percent of GDP, from an initial programmed level of 7.0 percent. Over H1 2018, the fiscal deficit (commitment basis) was 1.4 times above its mid-year target as revenue gains from value added tax have been outweighed by large spending overruns on foreign-financed public investments and external debt service.

### **The government announced plans for fiscal consolidation after results from their DSA confirmed that Zambia is at 'high' risk of external debt distress.**

The government's debt sustainability analysis (DSA) in H1 2018 confirmed the conclusion of a joint IMF-World DSA (published in October 2017) that Zambia is at 'high' risk of external debt distress. Under the 'business as usual scenario', the IMF-World DSA found that the present value (PV) of external debt-to-GDP ratio would breach its threshold 'for high risk of external debt distress' (40 percent) in 2019, if external public and publicly guaranteed debt stock increased from US\$ 7.9 billion in 2016 to US\$ 8.4 billion in 2017, US\$ 10.2 billion in 2018 and US\$ 11.4 billion in 2019. Yet, external public and publicly guaranteed debt accumulated faster, reaching US\$ 9.5 billion at end-2017, and US\$ 10.7 billion at mid-2018. Meanwhile, high domestic public borrowing at high yields continues to place upward pressure on lending rates and to crowd-out private sector lending. This could be worsened if new public expenditure arrears are accumulated in 2018.

**Exports improved to support the balance of payments, however, increased costs of external debt service remain a risk to the balance of payments position.**

Although there was a goods trade surplus of 1.6 percent of GDP in 2017 (from a trade deficit of -0.02 percent of GDP in 2016), the current account deficit only narrowed to 4.5 percent of GDP (from 4.6 percent of GDP in 2016). Large primary income outflows in 2017 (of US\$ 1.1 billion compared to US\$ 654 million in 2016), mostly relating to interest payments on external public debt, constrained the narrowing of the current account deficit. Data from the Bank of Zambia (BoZ) suggest that public debt service (including amortization) was US\$ 707 million in 2017, accounting for 63 percent of annual foreign currency outflows. As a result, foreign exchange reserves fell to US\$ 1.8 billion (2.1 months of import cover) in June 2018 from 2.4 billion a year earlier. The current account has been largely financed by the net inflow of foreign direct investments (FDI).

**The kwacha has remained fairly stable – between K 9.3 to K 10.4 – despite low reserves.**

However, interbank foreign currency trade has remained subdued. Inflation has remained low, supported by a stable kwacha, but breached the upper band of its medium-term target range of 6-8 percent in August 2018, reflecting high food prices (due to low harvest), and increased transportation costs.

**The increased interest payments on debt are crowding out fiscal space for other social and economic sectors.**

For example, as the cost of debt service has averaged 21 percent above its budget between 2011 and 2017, the following sectors have seen their actual disbursement below budget allocations: education (by 35 percent), health (by 12 percent), social benefits (by 14 percent), and economic sectors (by 25 percent).

**Medium-term outlook**

**Exogenous shocks from low rains and trade tensions are a concern for the medium-term growth outlook.** On June 14, 2018, the government announced fiscal consolidation measures to calm debt accumulation (box 1). It is critical that these measures are implemented expeditiously to contain the fiscal deficit within the 2018 budget target (6.1 percent of GDP). If the H1 2018 fiscal stance is maintained, the cash fiscal deficit would be higher than planned and public expenditure arrears and the debt burden would increase, undermining medium-term fiscal consolidation and growth.

**Key sectors of the economy face headwinds.**

Agricultural output has contracted in 2018 due to poorly distributed rains and an El Niño is forecast for the 2018-19 season. Copper prices have fallen by 20 percent from their four-year highs that were reached in June 2018 due to weaker demand from China, and could fall further as global supply increas-

es (resulting from trade tensions) following the resolution of a labor dispute at the world's largest mine in Chile. Meanwhile, if new arrears are accumulated and lending rates remain high, this could undermine private sector growth further. Reflecting on these developments and that the 2017 revised growth is now lower than the initial estimate, we have revised Zambia's real GDP growth projection for 2018 to 3.3 percent, down from 4.3 percent in the previous issue of this Economic Brief. Growth is expected to improve slightly in 2019 (3.6 percent) and in 2020 (3.8 percent). The medium-term forecast assumes a recovery in agriculture, that an orderly fiscal consolidation and reforms to strengthen the financial and operational sustainability of ZESCO Limited will be implemented, and a gradual improvement in private sector lending and growth.

**The medium-term outlook is subject to risks.**

The external downside risks include the possibility (i) of a reversal of the recent copper price stabilization, for example due to slower growth in China (which could be triggered by a more severe than currently expected 'trade war' impact) that would weigh on Zambia's exports and reserves, (ii) that oil prices will increase due to production cuts by OPEC and non-OPEC producers leading to import costs and inflation, and (iii) of a quicker than expected normalization of interest rates in the United States that would tighten global financing conditions, and further increase the cost of external financing for Government and the private sector. The main domestic downside risk is the delayed implementation of the fiscal consolidation reforms announced by the government, which would worsen the debt burden and the foreign exchange reserve situation, resulting in a forced and costly macroeconomic adjustment.

**Policy challenges**

**Zambia's multi-year fiscal expansion, financed by expensive borrowing, has increased debt towards an unsustainable levels.'**

Increased costs of debt servicing are constraining space for spending on productive and social services and threatening external balance stability. While strides have been made with some fiscal and structural reforms in Zambia Plus, they need to be cemented by sticking to planned fiscal targets, and passing and implement announced progressive reforms (e.g. the Loans and Guarantee Act and the Procurement Bill) to enhance the credibility of new policy announcements. In addition, challenges at state-owned enterprises (SOE) would expose substantial risks to fiscal positions if they are not addressed urgently. In this regard, we believe the following are of immediate priority: (i) reducing the pace of debt accumulation; (ii) improving debt management; (iii) building foreign currency reserves; and (iv) addressing ZESCO Limited's financial situation.

**Government should consider ways to slow new debt disbursements, in line with its announced fiscal consolidation plans.**

If the trend in foreign-financed projects continues as in H1 2018, the debt burden would worsen further. Evidence from the Eurozone debt crisis and the pre-debt relief period in Zambia shows that an increased debt burden undermines macroeconomic stability and the provision of social services by (i) increasing debt service costs (thus crowding out pro-poor and other productive spending lines); (ii) reducing foreign reserves; (iii) increasing the cost of new financing for the government and private sector, and thus growth and employment, and (iv) increasing the cost of restructuring the existing debt. Failure to address the debt situation urgently would risk a spiral of debts, where new borrowing would be channeled towards paying back pre-existing debt, and not towards financing development and wealth creation. Government would reduce debt accumulation by reprioritizing public spending and focusing limited public resources on investment projects with high economic returns. In this regard, the government needs to urgently implement debt reduction measures announced in the new fiscal consolidation plans, including postponing the contraction of some pipeline debt, cancelling some of the contracted loans that are yet to be disbursed, and ceasing the issuance of guarantees and letters of credit.

**In addition to fiscal consolidation measures, Zambia has also announced plans to renegotiate and restructure some of its debt.**

If the restructuring efforts succeed, Zambia would reduce exposure to rollover risks. Tighter global financing conditions, wider Eurobond spreads, falling copper prices and recent ratings downgrades will be key factors affecting the restructuring. Implementing fiscal consolidation and strengthening policy commitments (in particular, staying within the programmed fiscal deficit) would, in part, improve the conditions for restructuring. Any offers by the private sector to finance the restructuring should be analyzed judiciously, as experiences from other countries show they may be flouted by hidden costs.

**Rebuilding foreign exchange reserves is a macroeconomic policy priority.**

Low foreign exchange reserves make Zambia vulnerable to terms of trade or global monetary policy shocks, which would trigger currency depreciation and increase the cost of external debt service. Slowing external debt accumulation and reinforcing the ongoing debt management reforms are key to the broader plan of rebuilding reserves.

**Development partners could support Zambia's efforts towards rebuilding reserves and debt restructuring.**

For example, an IMF program would support reserves, cement policy commitments and market confidence, and attract additional concessional and private financing at favorable terms.

Global experiences have shown that an IMF program would make it easy to attract direct budget support if fiscal and external imbalances are large; the risk of external debt distress is 'high'; and fiscal deficit overruns are high, as an IMF program can build the needed policy commitments. An IMF program would also allow easy access to concessional financing for restructuring debt. For example, with an IMF Program in place, in 2015, Ghana secured a 15-year tenor Eurobond at a 200 basis points cheaper cost than the market rate, through the support of a policy-based guarantee from the World Bank to restructure its debt (box 4).

**Progress with debt management reforms could be cemented further.**

The role of the Ministry of Finance as the sole contractor of public debt, with the approval of the National Assembly, needs to be strengthened. While the quality of debt recording has improved with the implementation of the new Debt Management and Financial Analysis System (DMFAS) and the development of systems to collect information on debt disbursed directly to foreign contractors timeously, it is now critical to develop and implement a strategy for publishing 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 also be important. In addition to these operations and communications measures, it is critical to update the medium-term debt management strategy annually, in line with the Medium-Term Expenditure Framework (MTEF).

**Systems for monitoring and analyzing risks from SOEs (including ZESCO) to the fiscal position are critical.**

A ZESCO reform plan has been approved but needs to be implemented in order for it to access cheaper financing and address its financial and operational challenges. Moreover, systems for monitoring and publicly reporting debt and arrears (both guaranteed and non-guaranteed) of state-owned enterprises, and for analysing the risks that they pose to fiscal operations, need to be developed.

**An agro-led structural transformation**

**Income inequality in Zambia is high and rapid GDP growth between 2004 and 2014 benefited only better-off segments of the population.**

According to the 2015 Living Conditions Monitoring Survey (LCMS), the top 10 percent of households earned 56 percent of the total income, while the bottom 50 percent of households earned just 7 percent. Real GDP increased by 7.4 percent in the decade to 2014, yet the incidence of poverty increased in rural areas from 73.6 percent in 2010 to 76.7 percent in 2015.

**Effective structural transformation has been the missing link between growth and poverty reduction in Zambia.** Structural transformation is



a fundamental driver of sustained economic development, which typically begins with productivity increases in the key sectors of the economy (particularly agriculture), creating the necessary conditions for other sectors to emerge, and production factors (labor, capital) to be reallocated towards the most productive sectors. Such reallocation is not only critical because it induces an increase in aggregate total factor productivity and per capita income, but also because it can significantly reduce poverty.

**In Zambia, however, pro-poor structural transformation has been elusive** because (i) it was not driven by sufficient reallocation out of agriculture; (ii) it was not preceded by productivity increases in agriculture, where the majority of the population works; (iii) it was led by non-traded sectors, which are characterized by low productivity and have remained highly vulnerable to copper price shocks; and (iv) job growth in the non-agricultural sectors was outpaced by growth in the working age population.

**Agriculture has a high potential to support effective structural transformation**, not only because Zambia has vast fertile lands and water, but also because it is surrounded by seven neighboring countries. Increased regional and urban demand for diversified and processed products provides opportunities to support the development of the manufacturing sector, specifically in agro-processing, which will provide employment and government earnings. Below are ideas on how Zambia can take advantage of these opportunities.

### **Policy recommendations**

**The progressive agricultural reforms that began in the 2015/2016 season should be expedited.** Prior to subsidy and agricultural reforms which started in the 2015/2016 season, maize-centric fiscal policy and agriculture policy inconsistencies have been constraints to agricultural transformation. Other ongoing government reforms to scale up livestock and fisheries production will enhance agricultural diversification. Agriculture reforms should be expedited to facilitate investments in infrastructure, market information, extension services and research and development (R&D).

### **Linking farmers to local and regional value chains.**

The World Bank estimates that SSA's demand for food will increase by 60 percent between 2015-30. In Zambia, food demand is expected to grow more than threefold in the next 15 years, to over US\$25 billion. This offers prospects for agro-led industrialization for Zambia. Linking small farmers to local and regional value chains is key. Infrastructure for such linkages should be developed within the confines of the fiscal space to ensure that debt sustainability will not reverse future progress. Moreover, reforms to tackle policy inconsistency and high costs of cross-border trade are critical.

### **Spatial planning and developing secondary cities.**

Policies and investments can be spatially targeted to areas with high potential to attract agri-business. Spatial diagnostic studies to assess agri-business potential in

and around secondary and tertiary towns, and to justify spatially targeted public and private investments, are a key starting point. This could be followed by targeted incentives for firms to move to these areas. Local councils need to be empowered to drive the spatial development agenda and implement locally relevant policies which further agri-business development and job-creation.

**Strengthening human capital to improve labor productivity and mobility.** Zambia needs to improve education and health outcomes, especially for poor and rural segments of the population. The National Health Insurance Bill is a positive step, but its effective implementation is critical. On education, focus needs to not only be on access, but quality. In addition, the syllabus of Technical and Vocational Education and Training (TVET) institutions could be transformed to promote an agro-led transformation agenda by blending technical courses with entrepreneurship and agri-business courses.

**Strengthening macroeconomic management and public investment management would support structural transformation.** Copper prices are a key source of exchange rate volatility, which creates uncertainty and hurts traded sectors. With elevated external debt levels, exchange rate volatility will likely increase the cost of debt service. Any development plans over the medium-term must ensure that borrowing is kept within sustainable limits, as unsustainable debt levels would undermine spending productive and social spending in the future. In the long run, a stabilization fund or larger external buffers would go a long way in smoothing volatility. In addition, strengthening public investment management would strengthen the link between debt, productive investments and structural transformation.

# SECTION 1 RECENT ECONOMIC DEVELOPMENTS

## A. REGIONAL ECONOMIC DEVELOPMENTS

Sub-Saharan Africa's economic recovery continued to gain momentum in H1 2018. Growth is forecast to improve to 3.1 percent in 2018, from an estimated 2.6 percent in 2017, but remains below its long-term trend. Economic recovery has been underpinned by favorable supply and demand shocks, and an improved environment for growth. However, risks remain, including an abrupt tightening cycle in the United States, a collapse in commodity prices triggered by a slowdown in China, and slow fiscal consolidation.

*Strong global growth, robust global trade and easier financing conditions are expected to drive SSA growth in 2018.*

According to the World Bank's *Africa's Pulse* (April 2018 edition)<sup>1</sup> and *Global Economic Prospects* (June 2018 edition)<sup>2</sup>, favorable external and domestic conditions for growth continued to bolster economic activity in SSA in the first quarter of 2018. The region's growth rebounded to 2.6 percent in 2017, following a slump of 1.5 percent in 2016 (the lowest in two decades), and is expected to firm to 3.1 percent in 2018.

Improved external conditions have been underpinned by strong global growth and robust global trade. Global output is estimated to have expanded by 3.1 percent in 2017 from 2.4 percent in 2016, reflecting increased investment in advanced economies. Meanwhile, global trade volumes expanded by 4.8 percent in 2017 compared to 2.7 percent in 2016 and are expected to remain strong at 4.3 percent in 2018, despite the tariff wars.

*Global trade volumes expanded by 4.7 percent in 2017 compared to 2.7 percent in 2016.*

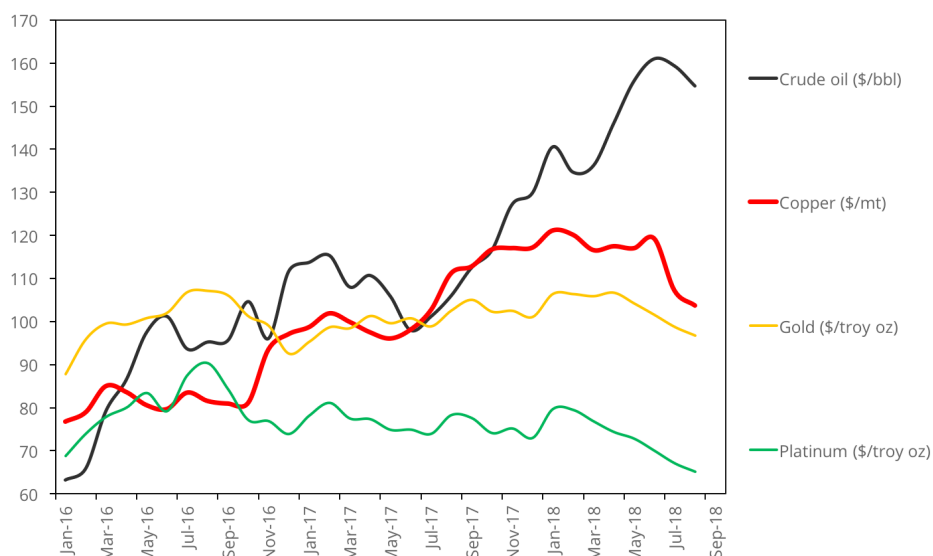
Energy and minerals account for two-thirds of the region's exports. In 2017, metal prices firmed by 22 percent from their 2016 level on strong demand from China (figure 1) and remained relatively high in H1 2018. Oil prices rose by 23.3 percent over their 2016 level, bolstered by robust demand and production cuts by most OPEC and some non-OPEC oil producers. The faster increase in oil prices has been moderated by increased production of shale oil from the United States.

Eased financing conditions are allowing some SSA countries to increase public investments. Portfolio inflows to SSA have continued to increase in early 2018. Côte d'Ivoire, Kenya, Nigeria, and Senegal have issued Eurobonds to finance public investments.

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

**Figure 1** **Commodity prices have been volatile**

Change in prices relative to 2015 (2016=100)



Source: World Bank Commodity Markets Data

Energy and minerals account for two-thirds of the region's exports.

Economic activity is expected to remain subdued in oil-exporting countries.

External pressures are subsiding in commodity exporters supported by improved terms of trade.

Zambia's Eurobonds spreads have widened.

Despite improved current accounts, external buffers have remained low in many countries.

growth fluctuations typically mirror events in Nigeria, South Africa and Angola – the largest economies that account for more than 60 percent of the region's output. Nigeria's improved growth prospects reflect improved oil production, expansion in agriculture and stronger consumer demand. As for South Africa, growth is now projected to be slower than anticipated.

Elsewhere, economic activity is expected to remain subdued in oil-exporting countries, especially within the Central African Economic and Monetary Community (CEMAC), as its member countries continue to be strained by the effects of low revenue from oil. Growth picked up slightly in some metals exporters on the back of a recovery in metal prices. Increased consumer spending (supported by low food prices, increased remittances inflows and looser monetary policy) is also supporting growth in many countries in SSA.

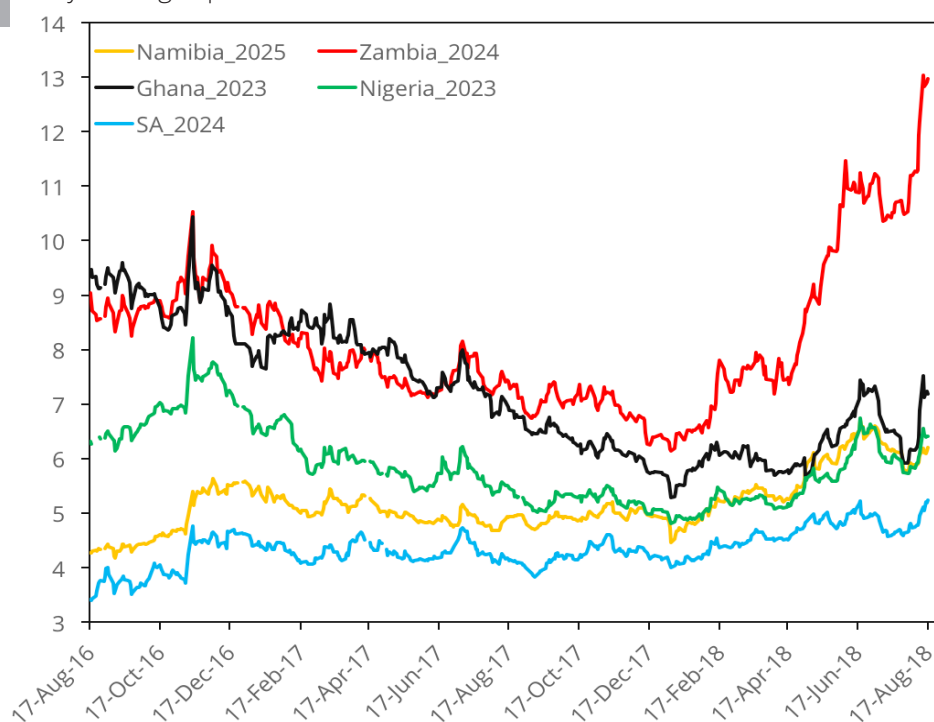
External imbalances have narrowed in commodity exporters supported by improved terms of trade and in some countries a compression in imports. The median current account deficit in oil-exporting economies narrowed to 4.8 percent of GDP in 2017 from 10.3 percent in 2016 and is expected to narrow further in 2018. In mineral exporters, the current account narrowed by more than 4.0 percentage points to reach 11.0 percent of GDP in 2017. However, current account deficits have remained wide in some non-resource countries that have scaled up public investments over the past few years.

Current account deficits have been largely financed by increased inflows of foreign direct investments, portfolio flows and bonds. FDI has largely flowed to non-oil infrastructure projects (e.g. in Ethiopia). Non-resident portfolio flows to Nigeria, South Africa, Ghana and Kenya have increased substantially in search of high yields. Eurobond issuance doubled to 14.4 billion in 2017, and global financing conditions have remained positive in 2018. Sovereign spreads have narrowed in most Eurobond issuers, except in Zambia (figure 2).

Despite improved current account balances, external buffers have remained low in many countries, with the median foreign reserves for the region remaining at three months of import cover in 2017, as in 2016. Some SSA countries have reserves below three months of import cover. Building reserves remains critical for these countries to reduce vulnerability to external shocks.

**Figure 2 Eurobond spreads have narrowed in 2017****2**

Daily sovereign spreads



Source: Bloomberg

*Fiscal policy remained contractionary in many commodity exporters.*

Prices have remained stable in many SSA countries, supported by better agricultural harvests and stable exchange rates. Exchange rate stability reflects high commodity prices, improved trade balances and increased capital inflows. Low inflation has allowed for the easing of monetary policy to support growth.

Fiscal policy has remained contractionary in many commodity exporters, as they attempt to contain deficits accumulated due to falling commodity revenue and high spending in 2015 and 2016. In oil-exporting countries, the median fiscal deficit narrowed from 4.2 percent of GDP in 2016 to 3.4 percent in 2017 and is expected to narrow further to 1.9 percent in 2018. In non-resource rich countries, the fiscal deficit narrowed from 4.7 percent of GDP to 3.9 percent, and is expected to narrow further to 3.7 percent in 2018. However, the fiscal deficit for mineral exporters widened to 5.1 percent of GDP from 4.3 percent.

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

Indebtedness has increased in SSA following large fiscal expansions. As at March 2018, the number of countries facing a 'high' risk of external debt distress had increased to 18 compared to 8 in 2008. The median debt level for the region increased from 47 percent of GDP in 2016 to 53 percent in 2017. Some countries in high risk of external debt distress embarked on fiscal consolidation (figure 3).

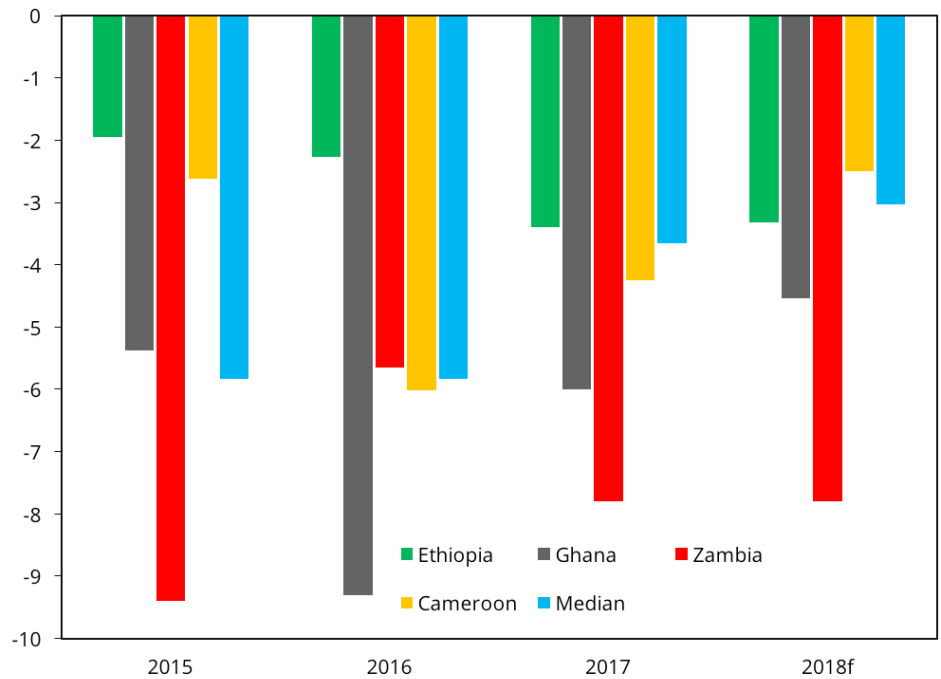
### Outlook for Sub-Saharan Africa

The region's GDP growth is forecast to reach 3.1 percent in 2018, 3.5 percent in 2019, and 3.7 percent in 2020 (figure 4). The medium-term outlook assumes stable oil and metal prices, robust global trade and favourable global financing conditions. Faster growth is possible if structural reforms are implemented.

The medium-term outlook is subject to both downside risks and potential upside developments. On the upside, stronger than expected activity in advanced economies would boost exports demand, investments and remittances. On the downside, externally, (i) an abrupt monetary tightening in the United States

**Figure 3** Fiscal deficits in some countries facing high risk of external debt distress

Fiscal balance (% of GDP): cash basis



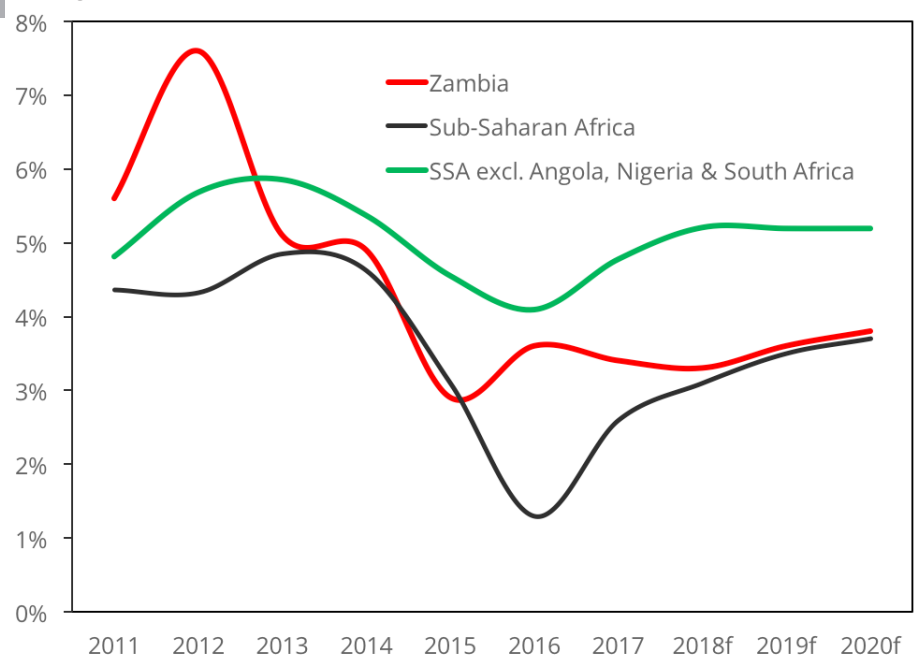
Source: World Bank (2018); MFMOD Note: f= forecast

*Addressing macroeconomic imbalances and structural bottlenecks would improve private sector recovery.*

would reduce investor appetite for riskier assets in SSA and tighten global financing conditions; and (ii) a slowdown in China would reduce commodity prices; while domestically, (iii) slower reforms to address macroeconomic imbalances and structural bottlenecks would undermine private sector recovery.

**Figure 4** SSA growth has picked up

GDP growth (%)

Source: CSO Zambia and Ministry of Finance  
f = forecast

## B. THE STATE OF THE ZAMBIAN ECONOMY

The Zambian economy is estimated to have expanded by 3.4 percent in 2017, compared to 3.8 percent in 2016, despite high copper prices, expansive monetary policy and a bumper crop harvest. Large public expenditure arrears accumulated in 2016 (resulting in non-performing loans) and high public domestic borrowing at high yields constrained the reduction of lending rates, leading to low private sector lending and growth. Public debt has risen sharply over the past few years, and the costs of debt service are crowding out other spending lines and impacting foreign currency reserves. The implementation of government's fiscal consolidation measures is critical for returning debt towards sustainable levels, creating fiscal space for social and productive spending, rebuilding reserves and unlocking private sector economic activity.

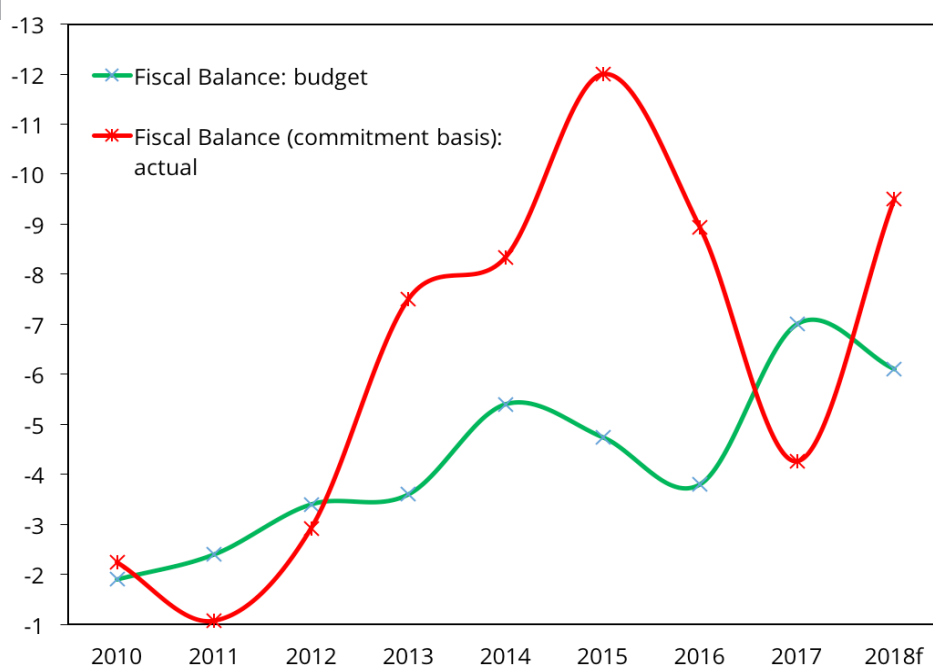
### *Fiscal challenges remain*

Large fiscal deficits have been a recurring feature since 2013 (figure 5). Three factors have driven the fiscal deficit. First is the expansion of public investments and subsidies, leading to an average structural fiscal deficit of 6.9 percent of GDP between 2013 and 2017 (prior to 2017 subsidy reforms). Second is 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>3</sup> Third is expensive external borrowing from non-concessional sources, followed by a currency depreciation in H2 2015, which increased the interest payments (from 9 percent of domestic revenue in 2013 to 23 percent in 2017). Fiscal expansion has put a strain on budget credibility. In 2015 and 2016, revenue mobilization was undermined by lower copper prices while debt service increased following currency depreciation. In addition financing challenges increased ahead of the 2016 elections. Spending was adjusted to meet these new realities leading to an increase in the stock domestic public expenditure arrears rose K 19 billion at end-2016 from K 5 billion at end-2014.

*Fiscal deficits and budget credibility have deteriorated since 2013.*

**Figure 5** Fiscal deficits have widened and budget credibility deteriorated

Fiscal balance (% of GDP): cash basis



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

*To clean up after 2016, the government committed to a well-planned fiscal consolidation.*

To clean up after 2016, the government committed to a well-planned fiscal consolidation – targeting a cash fiscal deficit of 7 percent of GDP in 2017, while clearing payment arrears to boost economic growth. This was to be done along with several structural and debt management reforms and rebuilding foreign currency reserves. These commitments were reinforced when the government launched its Economic Stabilization and Growth Program<sup>4</sup> (dubbed Zambia Plus) in Q4 2016 and subsequently a medium-term debt strategy (MTDS).



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

The fiscal deficit (commitment basis) was reduced to 4.4 percent of GDP from 8.9 percent in the previous year (table 1). This was on account of (i) a 5 percent fall in spending on subsidies following fuel, electricity and agriculture subsidies reforms; (ii) the reduction of spending on goods and services (by 14 percent below budget), and (iii) the reduction of domestic arrears from K 19.1 billion to K 12.7 billion. However, the cash fiscal deficit was still above the target of 7 percent of GDP due to overruns on spending on roads (by 21 percent) and higher than programmed interest payments (by 17 percent). Spending on social cash transfers was 42 percent below target.

*Revenue performance has been in line with expectation in H1 2018.*

Table 1 Fiscal trends		2014	2015	2016	2017	2018f
1	% GDP unless stated	Actual	Actual	Actual	Actual	Forecast
	<b>Revenue and Grants</b>	<b>19.0</b>	<b>18.8</b>	<b>18.1</b>	<b>17.6</b>	<b>18.0</b>
	Domestic revenue	18.2	18.6	17.9	17.4	17.8
	Tax revenue	15.5	14.4	12.9	14.9	14.9
	Non-tax revenue	2.7	4.2	5.0	2.5	2.9
	Grants	0.8	0.2	0.2	0.2	0.2
	<b>Expenditure</b>	<b>24.4</b>	<b>28.2</b>	<b>23.8</b>	<b>25.4</b>	<b>25.5</b>
	Current expenditure	19.1	21.2	19.9	20.2	19.4
	Wages and salaries	9.5	8.8	8.7	8.3	8.3
	Goods and services	3.1	2.9	2.2	2.1	2.0
	Interest payments	2.2	2.8	3.4	4.0	4.7
	Social benefits	0.4	0.5	0.2	0.8	0.6
	Subsidies	2.0	3.9	3.5	3.2	2.6
	Intergovernmental transfers	1.9	2.3	1.9	1.8	1.4
	Public investment (includes foreign projects)	5.3	7.0	3.9	5.2	6.2
	Primary balance	-3.2	-6.6	-2.3	-3.8	-2.9
	<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>
	Fiscal deficit (including change in payment arrears)	-8.3	-12.0	-8.9	-4.3	-7.6
	<b>Financing</b>	<b>5.5</b>	<b>10.0</b>	<b>5.7</b>	<b>7.8</b>	<b>7.5</b>
	Domestic financing	0.8	1.7	3.8	4.9	3.0
	External financing	4.7	8.3	2.0	2.9	4.5
	Public and publicly guaranteed debt (including arrears)	35.3	61.4	60.5	63.8	66.9
	o/w Central government debt (including arrears)	32.9	56.4	56.9	60.7	62.0
	o/w Stock of arrears	2.9	5.5	8.7	5.3	5.4
	o/w Publicly guaranteed debt	2.3	3.9	3.5	3.6	4.9
	<b>GDP (Current ZMW, millions)</b>	<b>167,053</b>	<b>183,381</b>	<b>217,225</b>	<b>244,704</b>	<b>270,384</b>

Source: Ministry of Finance and World Bank projections

### **Budget performance in H1 2018**

In 2018, the government committed to a fiscal deficit (cash) of 6.1 percent of GDP. Revenue (including grants) were programmed to increase to K 52 billion (from K 43 billion in 2017). Public expenditures were programmed to increase to K 71 billion (from K 65 billion in 2017). Allocation to debt service was programmed to increase by 40 percent, while allocations to sectors that are key for diversification were cut by 14 percent.

Between January-May 2018, revenue performance was in line with expectation, but there were variations across key revenue lines. Income tax was below target (by 7 percent) reflecting weak economic activity. This was also the case with customs and excise duties (by 25 percent). Value added tax (VAT) was 30 percent above target on the back of VAT reforms implemented in 2017 and increased VAT-rated imports.

Total expenditures were 20 percent above budget largely due to overruns in foreign debt-financed projects (by 74 percent) and goods and services (by 26 percent). In addition, interest payments were 21 percent above target, prompting the government to allocate an additional K 3 billion towards debt service. This was largely because some public investments projects were completed ahead of time. On the other hand, wages and salaries and social spending have been below target.

If the H1 fiscal stance is maintained, fiscal deficits (cash) would be higher than planned in 2018. With limited appetite for treasury bills in H1 2018, the stock of arrears has increased to K 13.9 billion, from K 12.7 billion in December 2017.

The government has announced fiscal consolidation measures to slow the pace of debt accumulation (box 1). The success of the measures will hinge on bold implementation. Developing and publishing an implementation plan and timelines would be critical.

*If the H1 fiscal stance is maintained, fiscal deficits (cash) would be higher than planned in 2018.*



**Box 1 The government's fiscal consolidation measures**

In a statement on June 14, 2018, the Minister of Finance noted that Zambia is at 'high risk' of debt distress and announced fiscal measures to return debt to 'medium risk'. The expenditure measures include suspending/postponing capital projects which are below 80% to completion; reducing the wage bill by moving the payroll to the Ministry of Finance; restricting travels 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 users; introducing a tax on precious metals; introducing electronically verifiable stamps on high risk imports to curb smuggling; and scaling up land titling. While these measures strike the right tone, most of them are still at policy level, and work is required to turn them into implementable plans, including specifying the timeline for implementation and the fiscal resources that will be saved. This will likely be done in the medium-term expenditure framework (2019-21) and 2019 budget. Meanwhile, the 2018 fiscal deficit is projected to be well above target.

Source: Ministry of Finance (2018).<sup>5</sup>

*External debt rose to US\$ 8.7 billion at end-2017 from US\$ 6.9 billion at end-2016.*

*The share of debt from multilateral development banks and bilateral sources declined to 23 percent in 2018, from 77 percent in 2011.*

*A government DSA in H1 2018 confirmed that Zambia faces a 'high' risk of debt distress.*

**Public debt has increased and has become more non-concessional**

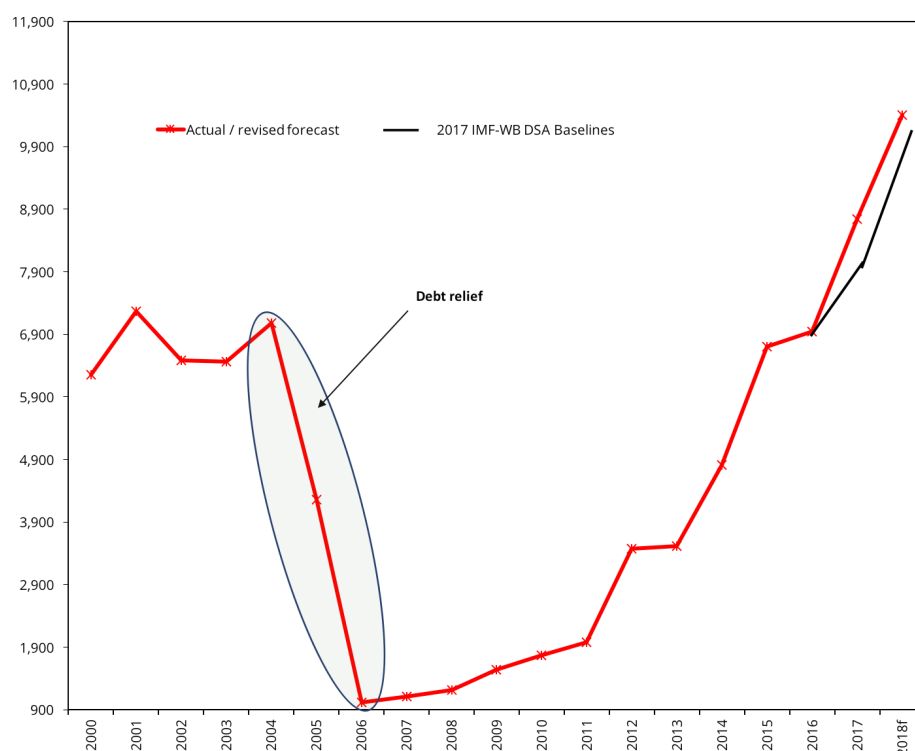
Larger than programmed public spending in 2017 and H1 2018 triggered a faster accumulation of debt than the IMF-World Bank DSA (released in October 2017) had projected under a 'worst-case scenario'. External central government debt rose to US\$ 8.7 billion at end-2017, compared to the DSA's projection of US\$ 8.0 billion and up from US\$ 7.0 billion in 2016. By end-June 2018, external central government debt is estimated to have reached US\$ 9.4 billion.<sup>6</sup> At the end of March 2018, publicly guaranteed debt was estimated at US\$ 1.2 billion, from 131 million at end-2012. Debt has returned to the spotlight just a decade after Zambia benefited from US\$ 6.6 billion debt relief in 2005-06 under the Heavily Indebted Poor Country initiative.

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. Debts from commercial sources (52 percent) and trade credit (25 percent) now dominate the external debt portfolio, and of this, 44 percent are Eurobonds, while 35 percent is from Chinese lending institutions. A small part is comprised of syndicated loans and external arrears converted into debt.

Domestic debt (excluding arrears) has also increased from K 33 billion in 2016 to 48 billion in 2017, and to K 52 billion at the end of June 2018.

A joint IMF-World Bank DSA (released in October 2017) elevated Zambia's risk of external debt distress to 'high' from 'medium' in July 2015 (box 2). This result has been confirmed by the government's own DSA in H1 2018. According to the IMF-World Bank DSA, if the pace of debt accumulation had continued under the 'business as usual scenario', the PV of external debt-to-GDP would breach the 40 percent threshold during 2019-23, while the PV of debt service to revenue ratio would breach its threshold (20 percent) in 2022 and 2024, when amortizations for the first two Eurobonds are due. Yet, debt has continued to increase faster than the 'business as usual scenario'.

Revising the debt limits may help to moderate the pace of debt accumulation. In 2016, the parliament increased the debt limit to US\$ 16 billion from US\$ 6 billion in 2011<sup>7</sup>. It might be critical to revise it down to sustainable and binding levels. This would need to be coupled by strengthening commitment controls to curtail the accumulation of new arrears.

**Figure 6 External debt has increased sharply since 2012****6** External public debt: excluding publicly guaranteed and arrears (US\$ millions)

Source: Ministry of Finance, IMF and World Bank

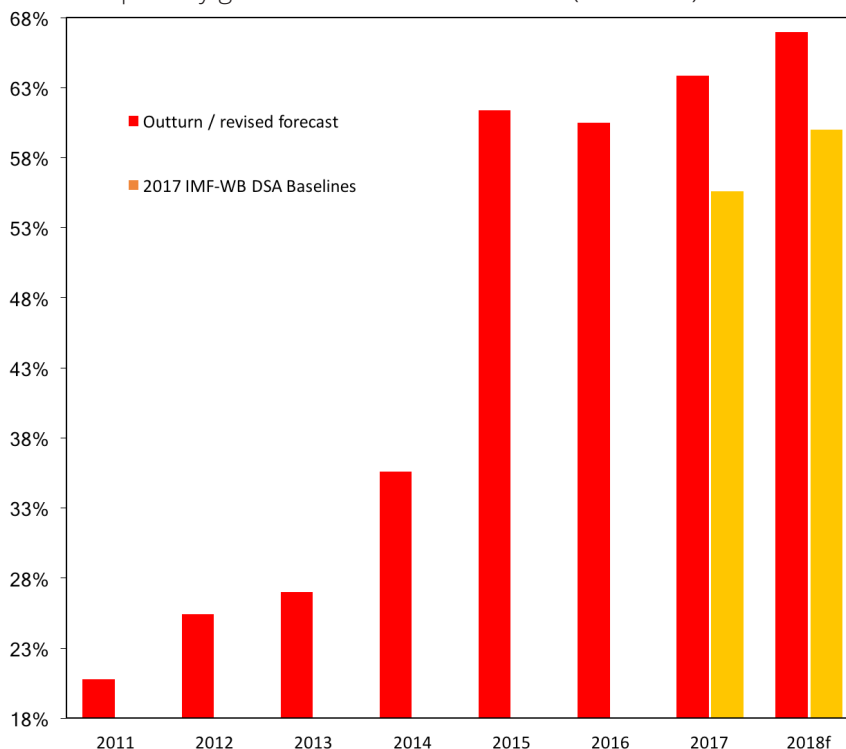
**Box 2 A new debt sustainability framework for low-income countries**

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 confirms the same results. As at March 2018, Zambia is among 18 Sub-Saharan countries with a high risk of debt distress. The IMF-WB DSA is usually conducted annually and a new DSA for Zambia is expected by end-2018. The IMF-World Bank DSA framework for low income countries has been recently revised to (i) adapt to increased commercial borrowing and heightened liquidity risks in low income countries (LICs); (ii) to reduce false alarms without impairing the ability to correctly flag debt events; (iii) to expand the use of relevant country-specific information in risk assessment; (iv) to reduce the number of threshold and redundant indicator; (v) to provide for more information content of stress tests and risk scenarios; and (vi) to enhance transparency and engagement between IMF-World Bank teams and country authorities. The major change is the methodology used for determining debt carrying capacity. Instead of being solely dependent on the Country Policy and Institutional Assessment (CPIA) in determining 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.

Source: IMF and World Bank (2018)

**Figure 7 Public and publicly guaranteed debt as a percent of GDP****7**

Public and publicly guaranteed debt and arrears (% of GDP)



Source: Ministry of Finance, IMF, World Bank

**Debt management reforms are taking shape, but more is needed**

Over the past year, the Ministry of Finance has made progress with debt management reforms. Notable progress includes the publication of the medium-term debt strategy in 2017; conducting a DSA in H1 2018; reorganizing and increasing capacity in the debt management office; and improving debt records by migrating to the latest DMFAS.<sup>8</sup> Systems have also been put in place to get information on disbursements by lenders directly to foreign contractors' accounts in a timely manner. It is critical to build on these reforms and improve on debt reporting, investor relations and managing the costs and risks.

*A strategy for reporting debt numbers is needed.*

**Debt reporting could be strengthened**

It is critical to develop and implement a debt reporting strategy, which includes publishing an annual report and quarterly statistical bulletins, ad-hoc information on debt risks and analytical reports. The Ministry of Finance website could be strengthened by adding a dedicated debt management area; and an investor relations unit could be established in the Investment and Debt Management department. In line with global reporting guidelines and constitutional obligations, sovereign debt guarantees should be published in debt reports. Furthermore, it would be critical to provide information on arrears (by sector) regularly. These improvements would give the Ministry of Finance control over debt information and prevent damaging allegations of 'hidden debt' as has been the case in the past few months (box 3).<sup>9</sup>

*Interest payments accounted for 23 percent of domestic revenues in 2017.*

**Management of costs, risks and maturities could be strengthened**

The cost of debt service has increased substantially. In 2017, interest payments as a percent of domestic revenue rose to 23 percent from 6 percent in 2011. External debt service accounts for 54 percent of total debt service and has become the main source of foreign currency outflows. Foreign currency outflow to service external public debt was US\$ 706 million in 2017, from US\$ 63 million in 2013 (figure 9).<sup>10</sup> In Q1 2018, debt service has already consumed over a third of its annual budget, prompting the government to increase the initial budget allocation to debt service by 26 percent. The cost of debt service has gradually reduced fiscal space for social services and productive spending (figure 8). For example, as the cost of debt service has averaged 22 percent above its budget between 2011 and 2017, the following sectors have seen their actual disbursement below budget allocations: education (by 35 percent), economic sectors (by 25 percent), social benefits (by 14 percent), and health (by 12 percent).

**Box 3 Ideas for calming the 'hidden debt' noise**

Having issued non-concessional debt, Zambia now faces a high demand for timely and comprehensive debt reports. Yet, annual debt reports were last produced in 2012, and quarterly debt reports are not being published. Aggregate debt (for central government and on lending) is only published in monthly economic reports (with a two-month lag), and disaggregated debt (by creditors) is only published in annual reports with a four-month lag. Although global debt reporting guidelines recommend, and the current Loans and Guarantees Act requires that guarantees are reported regularly, they are not recorded along with the debt numbers. However, since July 2018, the Minister of Finance has started announcing guarantees in quarterly statements made on the state of the economy. The omission of guarantees creates discrepancies between government debt numbers and those from other sources. Furthermore, pipeline loans are only reported in the yearly economic report. These gaps in debt reporting have created confusion and room for speculation (by the public, media and analysts) about Zambia's debt level, leading to allegations of 'hidden debt'. These allegations undermine investor sentiments as reflected, in part, by the widening of Eurobond spreads. Global experiences show that lack of adequate debt information opens room for negative speculation. This was the case with some Asian countries in the late 90s, and they responded by publishing comprehensive debt information and timely reports. In Africa, many commercial debt issuers are putting mechanisms in place for transparent and timely debt reporting. For example, Ghana now publishes both quarterly and annual debt reports, all government projects (including PPPs), and information on investor relations on its Ministry of Finance website. Zambia too can build on its recent progress towards debt management by publishing more debt information (annual reports, quarterly statistical bulletins, ad-hoc information on debt risks and analytical reports); by strengthening its website through a dedicated debt management area; and establishing an investor relations unit in the debt management office.

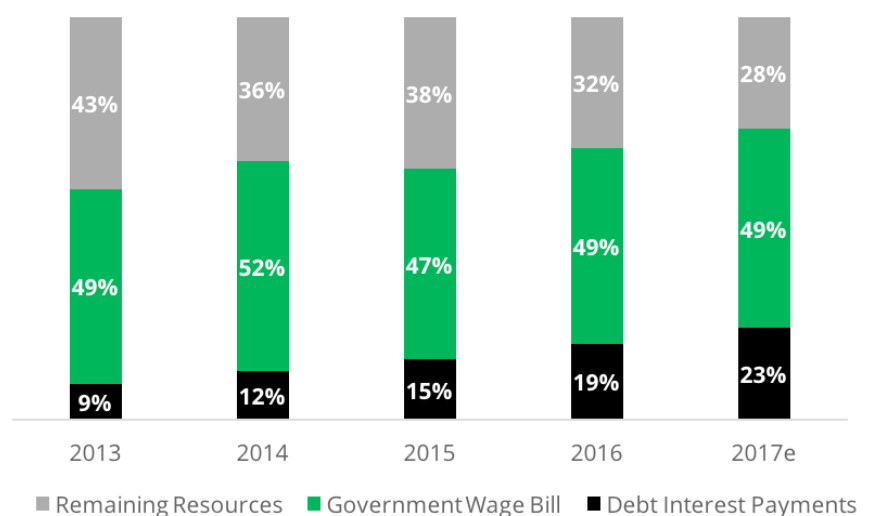
Source: Ministry of Finance, Ghana<sup>11</sup>

*Three factors are behind the fast increase in the costs of debt service.*

Three factors are behind the fast increase in the costs of debt service. First is the successive increase in the cost of external commercial debt issuances. For example, the coupon on Eurobond issuance increased from 5.4 percent in 2012 to 8.5 percent in 2014, and 9.0 percent in 2015. Second is the depreciation of the kwacha in 2015, which led to a substantial increase in the cost of external debt service. Third is the high proportion of Treasury bills (40 percent) in domestic debt, which makes domestic debt vulnerable to changes in interest rates.

**Figure 8 Interest payments have crowded out other spending lines**

Share of Domestic Revenue (%)

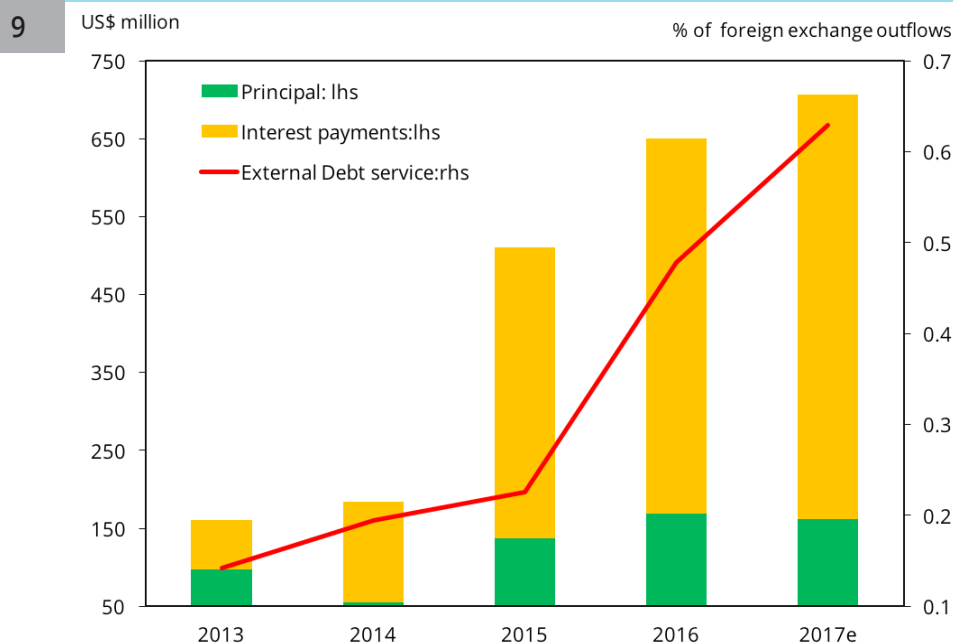


Source: Ministry of Finance

*Zambia's debt maturities are highly concentrated.*

Zambia's debt maturities are highly concentrated. As the redemption date for the 2012 Eurobond approaches, the government has begun discussions on restructuring its debt. It has announced plans to engage China on restructuring some loans and a team has been set up to look at the modalities of dealing with the Eurobond. Factors that will influence the terms of restructuring include high global interest rates, falling copper prices, wider spreads on existing Eurobonds, sovereign downgrades, and the level of debt distress. Of these factors, the government can partly influence the latter three by implementing its fiscal consolidation measures and other structural reforms. Zambia could also learn from the experience of Ghana with debt restructuring (box 4).

**Figure 9 The cost of external debt service has increased**



Note: FX = foreign exchange reserves; lhs = left-hand side; rhs = right-hand side

Source: Bank of Zambia and Ministry of Finance

#### **Box 4 Restructuring debt under difficult market conditions: some lessons from Ghana**

In 2015, Ghana wanted to borrow US\$ 1 billion to meet pressing refinancing deadlines, extend debt maturities to reduce fiscal pressure, and smooth out its debt service profile. Despite having an IMF program, the conditions for market access were not favorable for Ghana due to falling oil and commodity prices, an unstable and depreciating currency, high market volatility for emerging markets, and poor sovereign ratings (due to a high debt burden). Therefore, Ghana requested the World Bank for support with market access. An agreement was reached for a policy-based guarantee and budget support, in which the World Bank guaranteed a maximum exposure of 40 percent (i.e. US\$ 400 million), in addition to US\$ 150 million in-budget support. This enabled Ghana to refinance its existing debt stock at favorable terms. The direct benefits of World Bank's policy-based guarantee included, (i) given World Bank's AAA rating, the rating on Ghana's US\$ 1 billion issuance being revised by two notches: e.g. Moody's revised the rating from B3 to B1; Ghana managing to issue the longest ever Eurobond tenor (15 years) by a Sub-Saharan African country (except South Africa); yields at issuance reducing by 200 basis points compared to the market rate; and the issue being 100 percent over-subscribed with a diversified investor base compared to standalone bonds. Other countries that have accessed commercial borrowing at cheaper costs with the support of a World Bank policy-based guarantee are Albania, Angola, Argentina, Colombia, Macedonia, Montenegro, Pakistan and Serbia. Evidence suggests that the benefits brought from a policy-based guarantee and budget support can only be sustained if the macroeconomic and fiscal framework is robust, for example, (i) fiscal and external imbalances and debt should be at sustainable levels, (ii) there is a track record of meeting fiscal targets and policy commitments, and (iii) commitment controls should be strict to contain the accumulation of arrears. For this reason, the World Bank only uses these instruments in countries where the macroeconomic and fiscal framework is robust, or if there is an IMF program in place to cement policy commitments and support the country in implementing plans to achieve such a framework.

Source: World Bank (2016);<sup>12</sup> Independent Evaluation Group (2017).<sup>13</sup>

*High debt service costs have continued to exert pressure on the current account and foreign exchange reserves.*

*Gross foreign currency reserves were US\$ 1.8 billion in June 2018.*

### **Trade balances are improving, but the current account deficit remains wide**

The current account deficit only narrowed by 0.1 percentage point to 4.5 percent of GDP in 2017 from 4.6 percent of GDP in the previous year (table 2). This was in spite of (i) a narrowed trade deficit (from US\$ 512 million to US\$ 296 million 2017) on a 39 percent increase in copper exports; and (ii) a 69 percent increase in secondary income inflows. The main driver of the wider current account deficit was increased by primary income outflows (from 654 million to US\$ 1.1 billion), largely reflecting interest payments of external government debt. Over H1 2018, the trade deficit has narrowed by 38 percent compared to H2 2018, but the current account has remained under pressure due to external interest payments. The current account has been largely financed by the net inflow of foreign direct investments, which increased from US\$ 486 million to US\$ 1,600 million in 2017. Net portfolio inflows have been much lower than the levels experienced in 2012, 2014 and 2015 when Zambia issued Eurobonds.

High costs of external debt service have led the successive deteriorations of foreign currency reserves since 2015. Gross international reserves fell from US\$ 3.0 billion in December 2015 (4.5 months of import cover) to US\$ 1.8 billion in June 2018 (2.1 month of import cover). External public debt service (including amortization) now accounts for close to 63 percent of foreign currency outflows.

Successive loosening of monetary policy since November 2016, in particular the reduction of the statutory required reserve ratio from 18 percent in November 2016 to 5 percent in February 2018, has led to outflows of foreign currency from the central bank to commercial banks. In addition, reserves have been worsened by the structure of some commercial debts, which involves a one-way outflow of foreign currency. These debts are directly disbursed to foreign contractors overseas, yet they are serviced by an outflow of foreign currency.

Table 2	Balance of payments (US\$ million)						
	2014	2015	2016	2017*	2017 2018f*	2018f	
<b>Current Account</b>	<b>581</b>	<b>-831</b>	<b>-954</b>	<b>-918</b>	<b>-1,006</b>	<b>-776</b>	<b>-1,209</b>
o/w Balance on goods and services	832	-645	-512	-740	-296	-594	-323
Balance on Primary Income	-552	-412	-654	-642	-1,070	-598	-1,253
o/w Interest on public debt	-134	-204	-314	-371	-545	-387	-510
Balance on Secondary Income	301	227	212	464	359	416	367
<b>Capital Account</b>	<b>202</b>	<b>81</b>	<b>55</b>	<b>59</b>	<b>58</b>	<b>65</b>	<b>57</b>
<b>Financial Account</b>	<b>-463</b>	<b>353</b>	<b>783</b>	<b>735</b>	<b>1,011</b>	<b>1,120</b>	<b>1,001</b>
o/w FDI inflows (net)	3,195	1,177	486	1,600	1,072	1,699	1,120
Portfolio inflows (net)	1,197	1,223	417	200	193	100	171
Other investments inflows (net)	-4,879	-2,029	-135	-1,084	-322	-570	-400
o/w Amortisation (Public debt)	-128	-188	-169	-209	-162	-387	-380
Errors and Omissions	1	4	-65	0	22	0	0
<b>Overall Balance</b>	<b>322</b>	<b>-393</b>	<b>-181</b>	<b>-123</b>	<b>86</b>	<b>509</b>	<b>-201</b>
<b>Financing</b>	<b>-322</b>	<b>393</b>	<b>181</b>	<b>123</b>	<b>-86</b>	<b>-509</b>	<b>201</b>
o/w Gross reserve change	-315	446	250	185	-12	-448	261
o/w Use of Fund resources	-29	-53	-69	-62	-74	-61	-60
<b>Current account (percent of GDP)</b>	<b>2.1</b>	<b>-3.9</b>	<b>-4.6</b>	<b>-3.6</b>	<b>-4.5</b>	<b>-2.8</b>	<b>-4.6</b>
<b>Gross International Reserves</b>	<b>3,078</b>	<b>2,977</b>	<b>2,366</b>	<b>2,180</b>	<b>2,081</b>	<b>2,629</b>	<b>1,900</b>

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

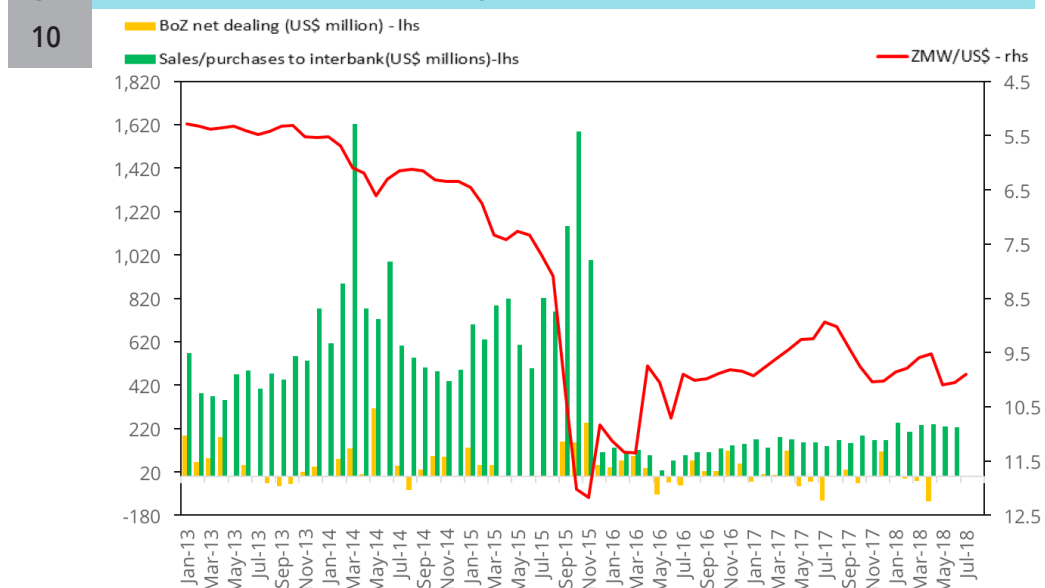


*Lower non-resident participation in Treasury bills auctions in H1 2018 also weighed on the kwacha.*

### **The kwacha remains stable despite low reserves**

The kwacha appreciated slightly, from K 9.86/US\$ in January 2018 to K 9.52/US\$ in April 2018 (figure 10), due to high copper exports, increased portfolio inflows in the domestic public debt market, and foreign currency inflows from a large multinational to settle quarterly tax obligations (between end-February and end-March).<sup>14</sup> However, the kwacha came under pressure from mid-April to mid-June 2018, depreciating by 10 percent. Fundamentally, this depreciation is linked to increased foreign currency outflows to service public external debt and to import fuel, a high fiscal deficit and debt, and tightened global financing conditions. Lower non-resident participation in Treasury bills auctions in H1 2018 also weighed on the kwacha. The foreign currency interbank market has remained subdued, with transactions totaling US\$ 1.4 million in H1 2018 compared to US\$ 3.6 billion in H1 2015.

**Figure 10 The kwacha has come under pressure in 2018**



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

*With low level of reserves, the kwacha is vulnerable to global shocks in commodity prices and monetary policy.*

With a low level of reserves, the kwacha is vulnerable to global shocks in commodity prices and monetary policy. In the event of a depreciation, reserves are too low for BoZ intervention in the foreign exchange market as was the case following the depreciation in H2 2015. At that time, reserves were at a record high (US\$ 3.2 billion) following the issue of a US\$ 1.25 billion Eurobond, and the BoZ was able to sell US\$ 822 million between Q3 2015 and Q1 2016, in order to smooth volatility and prevent further depreciation.

### **Monetary policy remains expansive as inflation is low**

Year-on-year inflation increased to 7.5 percent in Q2 2018 from 6.5 percent in the previous quarter, and breached the upper band of the 6-8 percent target range in August 2018.<sup>15</sup> Food price inflation rose from 4.8 percent in December 2017 to 8.3 percent in May 2018, reflecting low crop harvests (figure 11). Non-food inflation rose from 7.5 percent in December 2017 to 7.8 percent in August 2018, driven by increased transport costs. The risks to medium-term inflation are on the upside, and they include high fiscal deficits and external debt, and a strengthening of the US dollar.

*Inflation has increased slightly.*

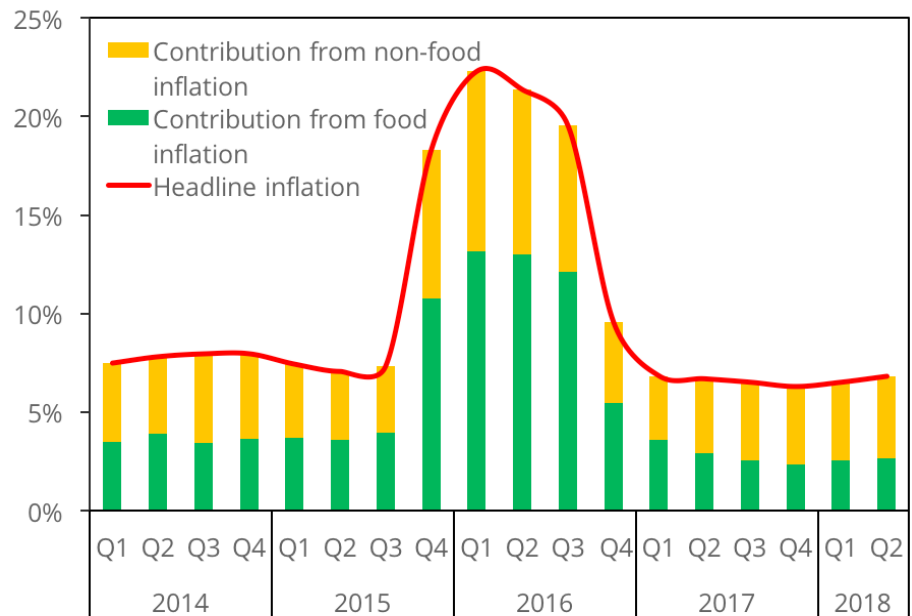
Monetary policy has remained accommodative (figure 12), facilitated by inflation remaining within BoZ's medium-term target range since December 2016. In February 2018, BoZ reduced the policy rate to 9.75 percent, the lowest since January 2014. This followed a cycle of five consecutive rate cuts, since November 2016. In August 2018, the policy rate was left unchanged, reflecting the need to balance private sector lending with containing risks of food inflation. However, BoZ has signaled that monetary policy may be tightened in the future if it breaches the upper bound of the medium-term target range.<sup>16</sup>



*Public domestic borrowing has constrained faster reduction in lending rates.*

As monetary policy became looser since November 2016, average nominal lending rates have declined slowly, reaching 24.0% in May 2018 from a peak of 29.5% in December 2016. Real lending rates have not declined as much, given the deceleration in inflation (figure 12). A slower reduction in lending rates reflects the impact of government domestic borrowing at high yields and increased non-performing loans (resulting from government arrears).<sup>17</sup>

**Figure 11** Inflation picking up but remains within the target (6-8%)

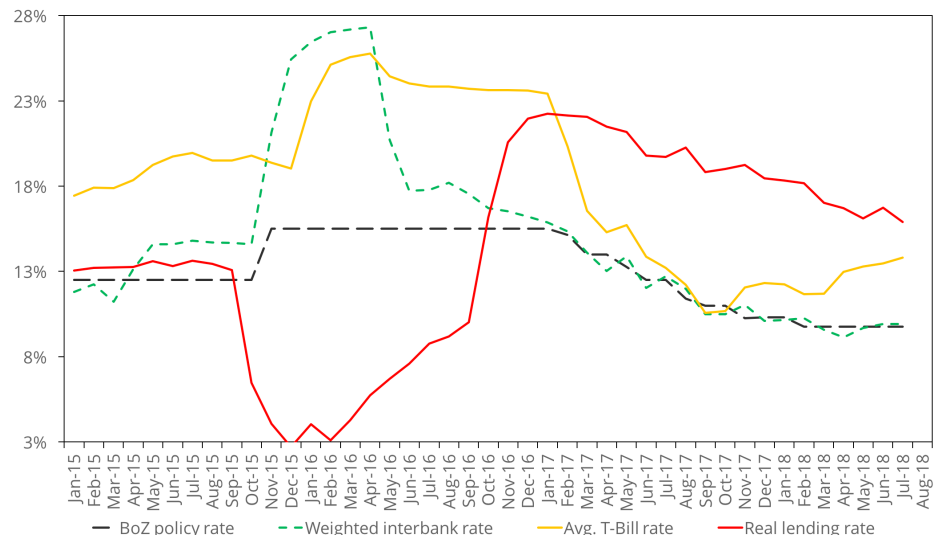


Source: CSO Zambia

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

Historically, small and medium enterprises (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>18</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>19</sup>

**Figure 12** Lending rates remain high despite looser monetary policy



Source: Bank of Zambia

### Macroeconomic challenges have constrained economic activity

The macroeconomic challenges highlighted above and other domestic shocks (in particular low rains in the 2017-18 season) are constraining growth. Over the Q1 2018, growth slowed to 2.6 percent from 3.4 percent in the previous quarter. After slowing to 3.4 percent in 2017, from 3.8 percent in 2016, economic growth is expected to slow further to 3.3 percent in 2018 (figure 13 and table 5).

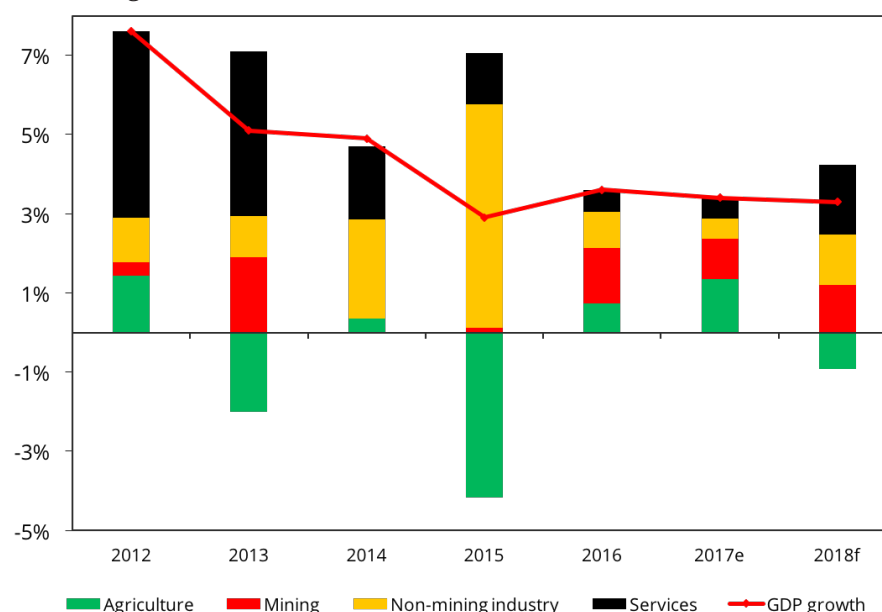
*Macroeconomic vulnerabilities are undermining economic activity.*

Agriculture is expected to make a negative contribution to growth in 2018 (figure 13), reflecting low crop harvests in the 2017-18 farming season, especially in the southern half of the country. A recent 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).<sup>20</sup> Crops account for close to 90 percent of output from the agriculture, forestry and fisheries sector. The sharp contractions in crop production do not reflect a substantial deviation from the five-year production trends, but is largely because a bumper harvest was recorded in the previous season. Accordingly, the low harvest, while reducing aggregate economic output growth, is not expected to compromise food security.

*Low harvest is not expected to compromise food security.*

**Figure 13** Economic activity is expected to remain subdued in 2018

Real GDP growth



Note: f=forecast

Source: CSO Zambia and Ministry of Finance

*ZESCO's financial situation is a key risk to reliable power supply.*

Low rains have not restrained domestic electricity production because the catchment areas of rivers that feed Zambia's main hydro-electricity reservoirs received normal rains. On July 16, 2018, the country's largest electricity reservoir, Kariba Dam, was at 86 percent of full capacity compared to 55 percent on the same date in 2017. Approximately 95 percent of electricity generation in Zambia is linked to hydro, and therefore the high water level in reservoirs is expected to improve power generation. In addition, the coming on stream of other power stations like Maamba has improved the energy mix. However, ZESCO has accumulated substantial arrears to independent power producers, and if Government's plan to deal with these arrears and improve the operational efficiency of ZESCO is not implemented urgently, there will be risks to reliable electricity supply over the medium term.

*Higher tariffs are key for future investments in power generation.*

The mining sector has performed well in Q1 2018 on the back of strong copper production. The sector expanded by 12 percent on the back of a 16 percent increase in copper output (year-on-year). In Q2 2018, copper output increased further, by 6 percent (year-on-year). High copper production in H1 2018 was driven by high copper prices, breaching US\$ 7,000 per metric ton in January and February (figure 14). How-

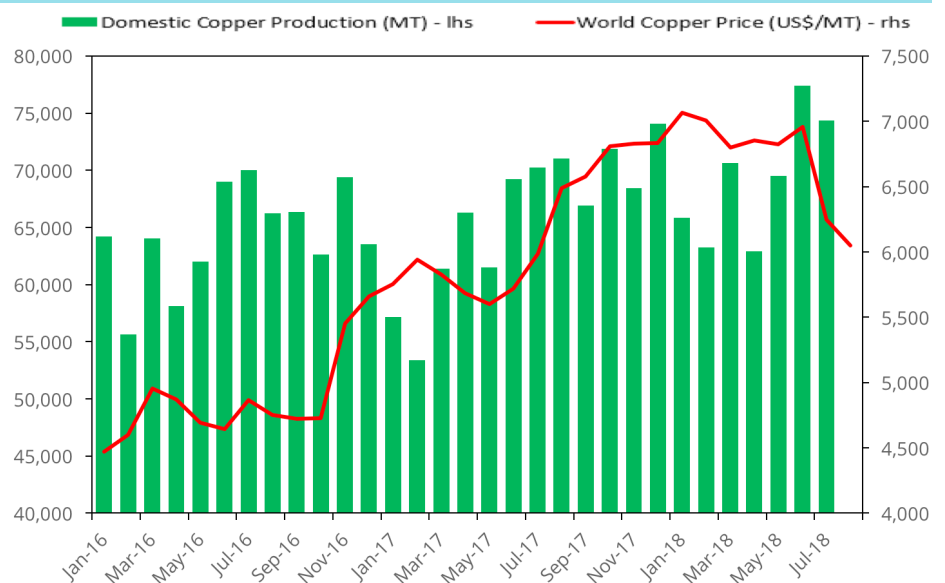
ever, copper prices have softened by 19 percent between June and August 2018 on weak economic data from China, and may decline further as output is ramped up at the world's largest copper mine in Chile following the resolution of a labor dispute.

% Growth	2014				2015				2016e				2017f				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1*
Agriculture, forestry and fishing	1.7	-0.6	-0.2	2.5	-8.5	-7.8	-6.1	-7.7	3.1	-1.0	0.7	-4.8	17.6	15	16	-6	-17.3
Mining and quarrying	3.5	-10.1	-0.7	-2.4	-4.7	17.1	-2.0	-6.1	8.0	7.5	5.0	7.8	-5.1	4.2	3.5	9.1	14.1
Manufacturing	9.7	11.7	0.2	5.1	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	4.1	1.4	0.7	1.7	8.8	7.2	-2.9	-18.9	-15.4	-16.9	-3.2	17.5	25.6	27	20	23	11.4
Construction	-6.5	15.3	10.7	22.2	37.4	20.5	3.8	15.4	9.1	11.7	14.8	3.3	2.6	6.6	15	2	3.3
Wholesale and retail trade	-0.4	6.4	8.8	-0.9	1.8	-1.2	3.7	1.5	0.8	-1.0	-1.4	2	1.9	-1	-0	2.1	2.0
Financial and	7.2	19.4	14.2	19.9	3.7	7.6	21.6	14.9	4.7	4.8	-9.2	-8.2	-0.8	0.3	-6	-1	22.6
<b>GDP at market prices</b>	<b>2.5</b>	<b>5.6</b>	<b>5.5</b>	<b>5.2</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>4.4</b>	<b>3.3</b>	<b>2.6</b>

Source: CSO Zambia

*The non-mining industry is expected to expand faster in 2018 than in 2017.*

**Figure 14** Copper production was ramped up in H1 2018



Source: CSO Zambia and World Bank Pink Sheets

However, there are risks to higher copper production. First is the dispute between the government and a few mines over the higher power tariffs. Higher tariffs are important for ZESCO's financial sustainability and future investments in power generation. Second is a tax dispute between Zambia's largest copper producer, First Quantum Minerals (FQM<sup>21</sup>) and the Zambia Revenue Authority (ZRA).<sup>22</sup> In March 2018, ZRA presented FQM with a US\$ 7.4 billion bill (which includes tax, penalties and interest costs) for alleged tax evasion. Third is delayed VAT returns to the sector, which is affecting decisions on future investments in the sector.

Activity in the non-mining industry has been subdued in Q1 2018 due to a slowdown in construction activities and manufacturing, reflecting low access to credit. Year-on-year growth of the manufacturing sector slowed to 2.1 percent in Q1 2018 from 6.4 percent in the previous quarter. Growth in the construction sector improved to 3.3 percent in Q1 2018 from 2.0 percent in the previous quarter, but is far below the trend of 11.7 percent over the past four years.

The services sector is expected to remain subdued in 2018, due to a slow recovery in wholesale and retail trade and financial services. The two sectors combined account

*Wholesale and retail trade is the largest sector of the Zambian economy.*

*Credit extension to the private sector remains low.*

for a quarter of Zambia's GDP and 44 percent of the services sector output. Wholesale and retail trade is the single largest sector of the Zambian economy, accounting for 22 percent of GDP. The growth of wholesale and retail trade has remained subdued over the past two years, due to weak consumer spending – resulting from lower real incomes and low access to credit. Low real income reflects high costs of goods and services imposed by a high inflationary environment in 2016 and 2017. In Q1 2018, consumer spending grew by only 0.3 percent (year-on-year), and the wholesale and retail sector grew by 2.0 percent compared to 2.1 percent in the previous quarter.

Despite accommodative monetary policy, the financial sector remains fragile. Non-performing loans rose to 13.4 percent of outstanding loans in April 2018, from 12.2 percent in December 2017<sup>23</sup>, as many suppliers owed by the government could not service loans and expand their operations. With high non-performing loans, commercial banks have lost appetite for private sector lending.

*Arrears clearance is key for tackling non-performing loans.*

Meanwhile, increased domestic borrowing by the government at high yields has attracted commercial banks, at the expense of riskier private sector lending. Accordingly, although the total credit extended by the financial sector expanded by 0.3 percent in Q1 2018, it largely went to households and the government, while credit to the private sector contracted by 3.5 percent (table 4). Consolidating the fiscal position and clearing payment arrears are critical for tackling non-performing loans and unlocking private sector lending and growth.

Table 4	Private sector credit growth remains subdued since 2016									
	2016				2017				2018	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
Total credit growth	-3.8	0.7	4.9	1.1	6.5	6.5	6.1	4.9	0.3	
o/w Government	-11.8	9.0	15.7	10.2	18.1	11.3	8.9	5.3	1.7	
Public enterprises	-11.0	-0.3	-3.1	-9.2	-10.0	28.9	89.3	-15.6	-1.7	
Private sector	3.6	-5.2	-1.3	-4.6	-4.8	1.4	-2.2	8.3	-3.5	
Household	-2.4	-2.1	-0.9	-7.1	-0.3	1.3	7.6	1.3	3.1	
Total credit growth (excl. Gov.)	1.1	-3.7	-1.7	-5.4	-3.2	1.6	3.0	4.5	-1.3	

Source: Bank of Zambia

*Poverty is projected to fall slightly from 56.8 percent in 2017 to 56.2 percent in 2018.*

### Poverty and shared prosperity

GDP growth is expected to contribute only modestly to poverty reduction in 2018 (table 5). Both the spatial distribution of rainfall and its timing have not been 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 projected to fall 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.

## C. ECONOMIC OUTLOOK, RISKS AND POLICY CHALLENGES

We forecast GDP growth rates of 3.3 percent in 2018; 3.6 percent in 2019; and 3.8 percent in 2020. Slow growth in 2018 reflects a contraction in agriculture output and the macroeconomic headwinds confronting Zambia. The medium-term forecasts assume agriculture will recover; copper production from new and refurbished mines will remain strong; and the government will prudently implement its fiscal consolidation measures. In the long term, efforts are needed to ensure that growth is not just faster, but is more inclusive by boosting the productivity of sectors and activities within which poor segments of the population are engaged.

*Weather forecasts suggest a 70 percent chance of El Niño in Southern Africa in the 2018-19 season.*

*Pending structural reforms in Zambia Plus need to be implemented to boost the private sector.*

*The domestic risk would relate to delayed implementation of the fiscal adjustment measures announced in June 2018.*

### Medium-term outlook

We revise our GDP forecast for 2018 to 3.3 percent (from 4.3 percent), and for 2019 to 3.6 percent (from 4.7 percent) in our December 2017 issue. The revisions reflect a lower than expected growth outturn for 2017 (3.4 percent, against an initial estimate of 4.1 percent), a lower crop harvest, and heightened macroeconomic headwinds. The medium-term outlook is underpinned by three assumptions:

- i. The recovery of agricultural production will be weak in 2019 due to low rains. Weather forecasts suggest a 70 percent chance of El-Niño in Southern Africa in the 2018-19 season. Over the medium term, new irrigation projects; improved distribution of farming inputs; and policy certainty are expected to improve agriculture output.<sup>24</sup>
- ii. Government's fiscal consolidation measures are implemented, along with measures to improve (i) foreign exchange reserves; (ii) debt management; and (iii) the financial and operational sustainability of ZESCO (including the ZESCO reform plan).
- iii. The pending structural reforms in Zambia Plus will be implemented.

Table 5	Key Macroeconomic Data					
	2015	2016	2017e	2018f	2019f	2020f
<b>Real GDP growth, at constant market prices</b>	2.9	3.8	3.4	3.3	3.6	3.8
Private Consumption	4.9	2.0	3.4	2.1	3.3	3.4
Government Consumption	3.9	2.1	-0.3	0.2	-1.2	-0.5
Gross Fixed Capital Investment	4.9	1.1	-0.2	5.6	3.5	3.9
Exports, Goods and Services	-11.0	-10.0	9.8	10.9	10.6	10.3
Imports, Goods and Services	-7.1	-10.6	8.5	8.8	9.0	9.1
<b>Real GDP growth, at constant factor prices</b>	2.9	3.8	3.4	3.3	3.6	3.8
Agriculture	-7.7	3.7	9.8	-2.1	3.9	4.64
Industry	6.8	5.6	4.9	5.9	5.3	5.3
Services	2.2	2.8	1.8	2.6	2.6	2.8
<b>Inflation (Consumer Price Index)</b>	10.1	17.9	6.6	7.7	8.9	11.9
<b>Current Account Balance (% of GDP)</b>	-3.9	-4.6	-4.5	-4.8	-4.2	-3.4
<b>Fiscal Balance (% of GDP): cash basis</b>	-9.4	-5.7	-7.8	-7.5	-6.0	-5.5
<b>Public and Publicly Guaranteed Debt (% of GDP)</b>	61.4	60.5	63.8	66.9	67.3	67.5
<b>Poverty rate (\$1.9/day PPP terms)</b>	57.5	57.1	56.8	56.2	55.8	55.1

Source: CSO Zambia, Ministry of Finance and World Bank forecasts

### Risks to the Outlook

There are three major external risks to the medium-term outlook. First is the possibility of a reversal of copper price gains; on the back of slower growth in China (due to an ongoing tariff war with the United States) and higher global supply.<sup>25</sup> Copper prices have already fallen by 19 percent since June 2018, reflecting these factors. Lower copper prices would worsen foreign exchange reserves, leading to currency depreciation and tighter monetary policy. Second is the possibility that oil prices will increase (due to production losses arising from geopolitical events and production restraints by OPEC and non-OPEC producers), leading to increased production costs and inflation. Third is a quicker than expected normalization of interest rates in the United States that would tighten global financing conditions, leading to higher costs of external financing.

On the domestic front, the main domestic downside risk would relate to the delayed implementation of the recently announced fiscal consolidation measures. This would worsen debt and foreign exchange reserves further, leading to a kwacha depreciation, high prices, tighter monetary policy, and a strained financial system. In addition, a reversal of the reforms relating to export bans, subsidies, and procurement would increase policy uncertainty and cloud the investment climate. Finally, the delayed implementation of ZESCO reforms would worsen its financial situation and undermine reliable energy supply over the medium term.

### **Policy challenges**

Zambia's immediate challenges relate to addressing the existing macro-fiscal challenges. Below are proposals for addressing these vulnerabilities, and creating a more resilient and inclusive economy.

- **Implement the fiscal consolidation measures.** The fiscal consolidation measures announced by the government in June 2018 set the right tone, but should now be turned into actionable and costed plans, and implemented immediately to move the debt towards sustainable levels. A sustainable debt would enhance macroeconomic stability, create space for social and productive spending, and unlock private sector growth and employment. In addition to the ideas that the government has already outlined, other ideas for cutting less productive spending are available in the seventh Economic Brief, *'Beating the Slowdown: Making Every Kwacha Count'*<sup>26</sup>.

- **Strengthen debt management reforms on debt contraction and reporting.** The implementation of the Loans and Guarantees Act should be strengthened to ensure that only the Ministry of Finance is responsible for debt contraction with the approval of the National Assembly. While progress has been made in improving debt recording by implementing the new DMFAS system and systems to collect information on debt disbursed directly to foreign contractors timeously, the recent rumors of 'hidden debt' suggest that debt reporting needs to be strengthened. It is critical to develop and implement a strategy for publishing annual debt reports, quarterly debt statistical bulletins, ad-hoc information on debt and risks, and analytical reports. Given the increase in commercial lenders, it is also key to establish a website dedicated to debt management and an investor relations unit in the debt management office. The tenth Economic Brief *'How Zambia Can Borrow Without Sorrow'*<sup>27</sup> provides more details on this reform agenda.

- **Rebuild foreign exchange reserves is a macroeconomic policy priority.** Currently, reserves are just 2.1 months of import cover, the lowest since 2008. At least 4 months of import cover is required to reduce Zambia's vulnerability to terms of trade or global monetary policy shocks, especially given high costs of external debt servicing. Slowing external debt accumulation and reinforcing the ongoing debt management reforms are key to the broader plan of rebuilding reserves. An IMF program offers an immediate solution as it entails direct disbursement into the reserves account. Moreover, an IMF program would trigger budget support from other cooperating partners and increased private capital inflows.

- **Improve the transparency and management of SOEs and manage fiscal risks.** ZESCO's debt and arrears pose substantial risks to energy supply and fiscal operations. It is critical for Cabinet to implement the ZESCO reform plan it recently approved as this will unlock financing at favorable terms. Moreover, systems need to be developed for monitoring and publicly reporting the debt and arrears (both guaranteed and non-guaranteed) of SOEs, and for analyzing the risks that they pose to fiscal operations. The publication of such data can reinforce accountability, and thus reduce fiscal risks.

- **Approve key pending bills and legislation.** In 2016, several pieces of legislation that are critical for enforcing fiscal credibility, public finance and debt management, and value for money were promised in the Economic Recovery and Stabilization Plan. Only the Public Financial Management (PFM) Act has been approved so far. The PFM Act would work effectively if it is complemented by the pending bills, including the Loans and Guarantees Act, the Planning and Budgeting Act, and Procurement Bills.

*Annual and quarterly debt reports, and other debt information should be timely.*

*At least 4 months of import cover is required to cushion Zambia's vulnerability to global shocks.*

*Systems for monitoring and publicly reporting debt of SOEs are required.*



*A strong public investment management system would enhance the link between borrowing and structural transformation.*

- ***Strengthen macroeconomic management and public investment management to support structural transformation and diversification.*** Copper prices are a key source of exchange rate volatility, which creates uncertainty and hurts traded sectors, and with elevated external debt levels, exchange rate volatility will likely increase the cost of debt service. Any development plans over the medium term must ensure that borrowing is kept within sustainable limits, as unsustainable debt levels would undermine productive and social spending for structural transformation. In the long run, a stabilization fund or larger external buffers would go a long way in smoothing volatility. In addition, strengthening public investment management would strengthen the link between borrowing, productive investments and structural transformation.









# SECTION 2 AN AGRO-LED STRUCTURAL TRANSFORMATION

Structural transformation is a fundamental driver of long-term growth and development. Typically, it begins with productivity increases in the key sectors of the economy, agriculture in particular, creating the necessary conditions for other sectors to emerge and production factors (labor, capital) to be reallocated towards more productive sectors. Such reallocation is not only critical because it induces an increase in aggregate total factor productivity and per capita income, but also because it can significantly reduce poverty. In many countries, structural transformation occurred alongside industrialization and urbanization.

*Structural transformation involves the reallocation of labor and capital from low-productivity sectors such as agriculture to more productive sectors.*

*Structural transformation typically starts with agricultural productivity gains, which create surpluses and permit farmers to break the vicious circle of subsistence farming.*

## **Structural transformation and agricultural productivity**

Structural transformation involves the reallocation of labor and capital from low-productivity sectors such as agriculture to more productive sectors or activities within a sector. The higher the productivity gap between the sectors, the larger the potential for aggregate productivity growth. Over time, the productivity gap between sectors declines and returns to labor, i.e. wages, across sectors should be equalized.

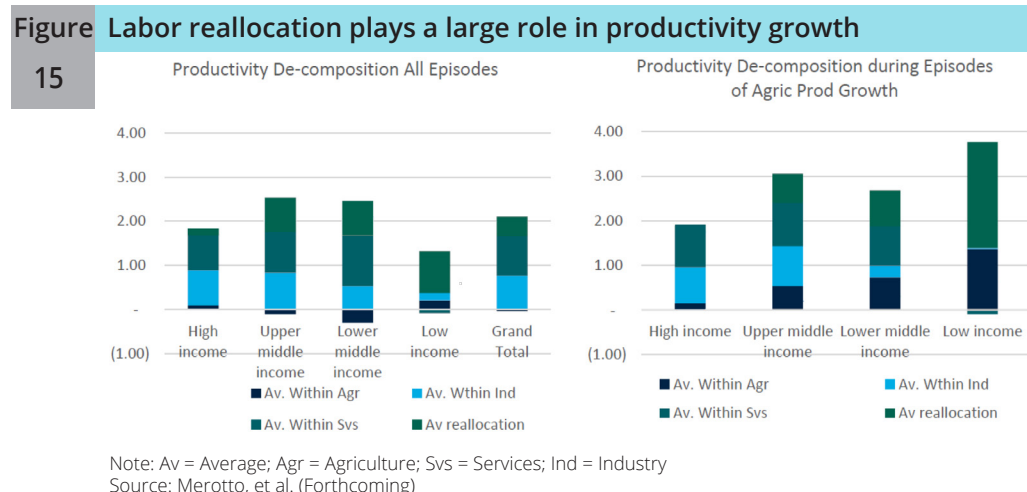
Structural transformation typically starts with agricultural productivity gains, which reduce the relative price of food and allows real wages (in other sectors, industry in particular) to remain competitive (as the consumption basket of wage earners is highly skewed towards food and textile items). The same argument holds for agricultural products which are direct inputs into industries.<sup>28</sup>

Agricultural productivity gains can also create production surpluses. It permits farmers to break the vicious circle of subsistence farming, where nearly everything produced is consumed within the same harvest cycle. Enhanced productivity releases workers or time for other activities within the sector or allows them to move to more productive sectors. Increased production and income increases the potential for savings and investments including in human capital. Improved agriculture earnings allow parents to keep their children in school, thus can serve as a springboard to a better life and provide the children of farming households with a broader set of economic opportunities, breaking the cycle of poverty. This can reduce farmers' vulnerabilities and raise their ability to take productive risks. Furthermore, higher incomes increase demand for non-agricultural goods. This can be crucial for other sectors to take off.

Structural transformation provides an opportunity for households to diversify their sources of income towards non-agricultural sources, thus reducing their vulnerability and probability of falling into poverty after a shock. For example, if crop harvests are poor due to a drought, wage incomes from members of a household employed in other sectors of the economy can keep up the consumption pattern of the household and help purchasing inputs for the next farming season. This argument for income diversification is also valid at the macroeconomic level: If structural transformation results in the creation and strengthening of other productive sectors, it can strengthen a country's resilience to external shocks. This can ensure that growth is more sustainable and helps manage exchange rates and inflation.

*Empirical evidence shows that labor reallocation plays an important role in productivity growth.*

A recent World Bank analysis<sup>29</sup> on the impact of labor movements across sectors on GDP growth (1991-2015, 156 countries) strongly suggests that productivity-enhancing labor reallocation (i.e. effective structural transformation) had the largest contribution to overall productivity increases in low-income countries (left panel of figure 15). During episodes of rapid agricultural productivity growth (right panel of figure 15), the positive effects of labor reallocation were most pronounced.



*Several key factors need to be activated to foster an effective structural transformation.*

Several key factors need to be activated to foster an effective structural transformation: an investment climate conducive to the development of new sectors; well-functioning labor, land and capital markets to facilitate labor reallocation; good urban and territorial planning to efficiently absorb labor moving out of agriculture;<sup>30</sup> and skills development to prepare the labor force for the use of new technologies.

### **Agricultural productivity growth matters for poverty reduction**

There is ample global evidence to suggest that increased agricultural productivity is a fundamental driver of effective structural transformation, leading to both economic growth and poverty reduction. The World Development Report of 2008 found that output growth in the agricultural sector is many times more effective in raising incomes among extremely poor households than output growth in other sectors, most of which are located in cities.<sup>31</sup> Our simple computations illustrate these points for Zambia, where agriculture still employs close to 48 percent of the population, approximately 80 percent of whom are poor. An annual growth in GDP per capita of 2 percent over the period 2015-30 would lift 0.9 (1.3) million more people in urban (rural) areas out of poverty by 2030, in comparison with a zero-growth scenario; an annual growth of 4 percent would lift 1.4 (2.7) million more people out of poverty in urban (rural) areas.<sup>32</sup>

There is widespread agreement about the basic linkages connecting agriculture and economic growth and the existence of an 'agriculture multiplier', which is greater than one. To achieve this, agricultural productivity growth is crucial. Evidence shows that no country can sustain a rapid transition out of poverty without raising productivity in its agricultural sector.<sup>33</sup>

*Zambia did not manage to raise agricultural productivity in recent decades.*

Zambia has not managed to raise agricultural labor productivity in recent decades and has experienced a widening gap in poverty between rural and urban areas. The recently completed Systematic Country Diagnostic for Zambia<sup>34</sup> associates such a growing divide with Zambia's failure to raise the productivity of agriculture for small-holder farmers. A comparison between Zambia and the Kyrgyz Republic also illustrates this point.

Zambia's and the Kyrgyz Republic's characteristics are comparable in many respects. Both countries are landlocked and rich in mineral exports: copper accounts for three-quarters of Zambia's export earnings, while gold accounts for over 40 percent in the

*Kyrgyz Republic managed to reduce poverty faster than Zambia.*

*Kyrgyz Republic recorded substantial gains in agricultural productivity, and Zambia losses.*

Kyrgyz Republic. In the early 90s, both countries experienced high levels of poverty and inequality (as measured by the Gini Index), and most employment and output were concentrated in agriculture. With the commodity boom starting in the early 2000s, growth and services picked up, before slowing down from 2013. Over the period 2000-2011, per capita GDP growth averaged 4.0 percent in Zambia and 3.3 percent in the Kyrgyz Republic.

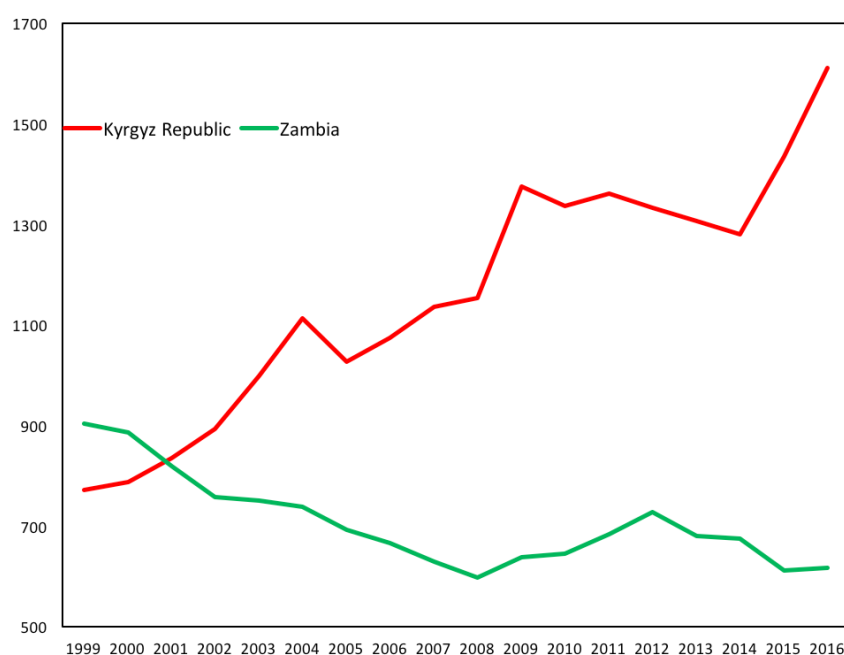
Yet, the poverty impact of the growth episode was starkly different. In Zambia, the proportion of the population living under US\$ 1.90 per day increased from 42.1 percent in 1998 to 57.5 percent in 2015. In the Kyrgyz Republic, however, this proportion declined sharply from 30.6 percent in 1998 to 2.5 percent in 2015 (table 6). During the same period, the Kyrgyz Republic recorded substantial gains in agricultural productivity, while Zambia experienced a sharp decline (figure 16). In addition, the Kyrgyz Republic managed to move a higher proportion of its labor force out of agriculture than did Zambia. Between 2000-2010, the Kyrgyz Republic moved 11 percent of its labor force out of the agricultural sector while Zambia moved only 5 percent.

Table	Poverty and inequality in Zambia and the Kyrgyz Republic						
6	Inequality			Poverty (US\$ 1.90 per day)			
	1998	2010	2015	1998	2010	2015	
	Kyrgyz Republic	46.5	30.1	29.0	30.6	4.1	2.5
	Zambia	49.1	55.6	57.1	42.1	64.4	57.5

Source: World Bank (2018), World Development Indicators (WDI)

**Figure 16** Agricultural labor productivity

Output per worker (US\$)



Source: World Bank (2018), WDI



## D. ZAMBIA'S EXPERIENCE WITH STRUCTURAL TRANSFORMATION

Following its independence, Zambia implemented several policy interventions to promote growth and industrialization. However, growth remained sensitive to copper price volatility. Within-sector productivity<sup>35</sup> growth took off in the late 1980s, followed by some reallocation of labor from agriculture to non-traded sectors (retail, informal services and construction). Yet, such reallocation did not generate large gains in poverty reduction because (i) it was not preceded by increases in labor productivity in agriculture; (ii) non-traded sectors did not record sufficient increases in productivity gains and remained highly vulnerable to copper price shocks; and (iii) sectors with higher productivity did not absorb a large share of the labor force.

*Copper prices have remained the key driver of Zambia's GDP growth.*

### **Rapid yet unbalanced output growth across sectors**

Despite several policy attempts to diversify the economy (box 5), copper prices have remained the predominant driver of Zambia's growth (table 7). The correlation between growth and copper prices remains strong at 88 percent. The high sensitivity of growth to copper prices does not imply that new economic sectors were not created in Zambia. In fact, mining output's share in GDP declined from 40 percent in 1965 to 14 percent between 1980 and 1990, and 12 percent between 2000 and 2015. Rather, it means that the copper economy still influences the non-copper economy through aggregate public and private sector demand and sector competitiveness (because of exchange rate fluctuations). This is evidenced by the trends presented in table 7: with a steep decline in copper prices between 2012-2016, average growth in all sectors declines, compared to past years.

### **Box 5 Policy context on industrialization and structural transformation in Zambia**

Zambia has implemented at least three industrial strategies since independence. First was the nationalization and import substitution industrial approach (1968-90). This was premised on the government's ownership of key sectors of the economy, and using preferential procurement, subsidies (from copper revenue) and import restrictions to support local industries. This proved unsustainable because the over-dependence on copper and imprudent macroeconomic management exposed the country to external shocks. Furthermore, the urban-rural divide, which existed during the colonial era, worsened as public investments and subsidies were urban-biased. Large external debt and low copper prices led to economic stagnation and a debt crisis from the 1980s. The structural adjustment and open market-based industrialization policy (1991-2000) were aimed at correcting macroeconomic, external and fiscal imbalances caused by low copper prices and by the previous policy. Despite improving macro-fiscal stability, structural adjustments exposed Zambia's already uncompetitive industrial sector to competition with imports (following trade liberalization), leading to deindustrialization, in a global context that saw China joining the World Trade Organization (WTO). Post-2001, an export-oriented industrialization policy emerged with an emphasis on balancing macroeconomic stability and export promotion. Export promotion was facilitated through the Export Processing Zones (EPZ) Act of 2001, and more recently through multi-facility economic zones (MFEZ). Since 2006, these policies have been integrated into national development plans. However, the development of non-copper exports has been undermined by an overvalued exchange rate, poor implementation of national plans, and policy inconsistencies relating to exports and import bans.

*Source: Mudenda (2009)<sup>36</sup>*

*Dependency of growth on copper prices also manifests through public revenues.*

The volatility of the kwacha (linked to copper price changes) has been deterring investment in exports of high quality non-mining products, thus undermining export diversification.<sup>37</sup> The key sectoral drivers of the non-copper output over the last 15 years have remained predominantly non-traded. These include construction, wholesale and retail trade, informal services and real estate, and they account for over 50 percent of GDP. They grew strongly with high copper prices between 2006 and 2011 but slowed with falling copper prices between 2012 and 2016.

The high dependency of growth on copper prices also manifests through public revenues. Public revenue from copper accounts for between 27-31 percent of total domestic revenue, depending on the level of copper prices. An absence of countercyclical

fiscal policy instruments to smooth government spending in the face of terms of trade shocks results in booms and busts in public expenditure and investments, with a pervasive impact on the non-copper sector. Since 2011, the pro-cyclicality of public policies was exacerbated by increased external borrowing, eventually raising risks of external debt distress (e.g. default) to 'high' in 2017 from 'medium' in 2015. The result has been the crowding out of private sector growth and heightened financial sector vulnerabilities, which have in turn curtailed efforts towards diversification into agriculture and other sectors of the economy.

Table 7	Non-mining output growth is sensitive to copper prices						
	Average Growth			Average Share of GDP			
	2000-2005	2006 - 2011	2012-2016	2000-2005	2006- 2010	2012-2016	
Copper prices (US\$/MT)	10.6%	16.5%	-10.3%				
Domestic public revenue	3.4%	10.9%	7.3%				
Agriculture, forestry, and fishing	-1.1%	-0.3%	-0.8%	19.9%	11.9%	8.1%	
Mining and quarrying	17.6%	17.6%	0.6%	5.9%	10.4%	10.7%	
Manufacturing	5.4%	5.6%	4.8%	9.8%	8.6%	7.9%	
Construction	14.4%	6.3%	5.3%	9.2%	11.7%	9.4%	
Wholesale and retail trade	6.8%	9.0%	6.5%	19.6%	19.1%	22.5%	
Financial and insurance activities	0.0%	-1.3%	2.6%	3.5%	6.5%	3.6%	
Real estate, prof. and admin. activities	8.9%	5.6%	4.4%	7.8%	7.6%	6.6%	
Community, social, and personal services	6.2%	11.4%	7.7%	10.6%	13.1%	14.8%	

Source: CSO Zambia, Ministry of Finance and World Bank Pink Sheets

*Despite becoming food secure, agricultural output has on average contracted. Zambia has not managed to transform agriculture.*

Meanwhile, agricultural sector output has on average contracted between 2000 and 2016 (table 7). The contraction reflects a bias in government agricultural policies and spending towards food security in staple crops at the expense of investments in sector transformation, such as agricultural infrastructure and support services, for example irrigation systems, extension services, research and development, technology adoption, education and market information.<sup>38</sup> Most farmers depend on rainfed agriculture, and 80 percent of these farmers live under the poverty line.<sup>39</sup> They have a lower crop yield per hectare; and they are also likely to be under employed, i.e. they work fewer hours than in other sectors (box 6).

#### Box 6 Labor productivity in agriculture might not be lower than that for non-agricultural sectors in urban areas

Despite national accounts-based estimates suggesting that labor productivity in non-agricultural sectors is up to 6 times higher than in agriculture, the large share of African labor remains in rural areas. This suggests that national accounts may underestimate labor productivity in agriculture, because it does not consider the differences in hours worked in agriculture versus other sectors. In many developing countries, subsistence agriculture labor is underemployed because they only work during the rainy season. Evidence based on micro-data from Tanzania, Uganda, Ethiopia and Malawi shows that while non-agricultural labor is on average 3.3 times more productive than agricultural labor based on national accounts, the productivity gap between non-agriculture and agriculture decreases to 1.4 times once controlling for hours worked in each sector.<sup>40</sup> In line with these findings, Merotto (2017) shows that for Zambian rural youth (between 15-24 years), 69 percent were underemployed while working in the agricultural sector, while only 48 percent were underemployed working in industry. In the service sector in rural areas, average underemployment was even at 75 percent. This supports the finding that (i) within-sector productivity growth is crucial for structural transformation and suggests that scaling up productivity and work hours in agriculture could have a higher impact on overall productivity; and (ii) it suggests that the productivity gap between the agriculture and non-agricultural sectors is lower than expected, confirming that productivity in the manufacturing and services sector equally needs to be increased to support an effective structural transformation.

Source: McCullough (2018)<sup>41</sup>, Merotto (2017)

*Zambia also has commercial and emergent farmers who are more productive.*

Zambia's agricultural sector is characterized by a dualistic structure, with organized and technically efficient medium and commercial farmers on the one hand, and small-holder subsistence farmers (approximately 75 percent of farmers with less than 5 hectares) on the other. Zambia has an increasing share of commercial and emergent farmers who are more productive as they have invested in mechanization, technology adoption and have better access to markets. Between 2001 and 2014, the number of farms measuring between 10 and 20 hectares (ha) grew by 79 percent, while the number of small-holder farmers with less than 2 ha grew at 27 percent. Between 2001 and 2012, the real agricultural income among medium-scale farmers increased at a rate of 83 percent faster than in the small-scale sector.<sup>42</sup> With respect to crop productivity, the 2016/17 season showed that small-scale soybean farmers achieved 0.93 MT/ha, compared to commercial farmers whose average yield was 2.87 MT/ha. Thus, of the 351,416 MT total production, small-holder farmers only accounted for 42 percent of the production.<sup>43</sup> However, despite the growth of commercially-oriented farmers, their export potential is undermined by an overvalued kwacha, policy uncertainty on agricultural exports and high costs of doing business.

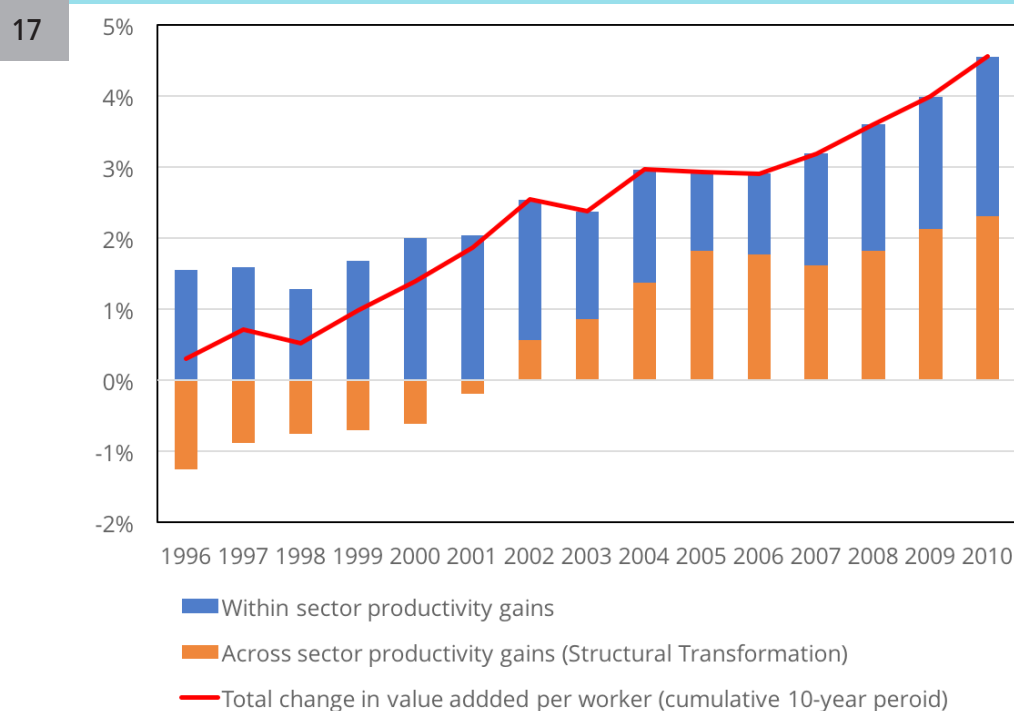
*Within-sector productivity began gaining momentum in the late 1980s.*

### **Despite labor reallocation, structural transformation is considered ineffective**

The post-2000 growth was associated with gains in within-sector productivity as well as the reallocation of labor towards more productive sectors. The question arises whether these trends reflect an effective structural transformation in Zambia. Using the McMillan and Rodrick (2011)<sup>44</sup> approach, we decompose total labor productivity into within-sector productivity and labor reallocation across sector elements (figure 17). The results suggest that Zambia experienced aggregate productivity losses between 1975 and 1987. This was due to falling copper prices<sup>45</sup>, negative productivity growth in manufacturing, agriculture and transport, as well as productivity stagnation of wholesale and retail trade. Loss of productivity in manufacturing firms largely reflects a lack of exposure to global competition, leading to slow technology upgrading and loss of competitiveness.

*Labour reallocation from agriculture to non-traded sectors occurred after 2000.*

**Figure 17 Reallocation of labor has occurred between 2000 and 2010**



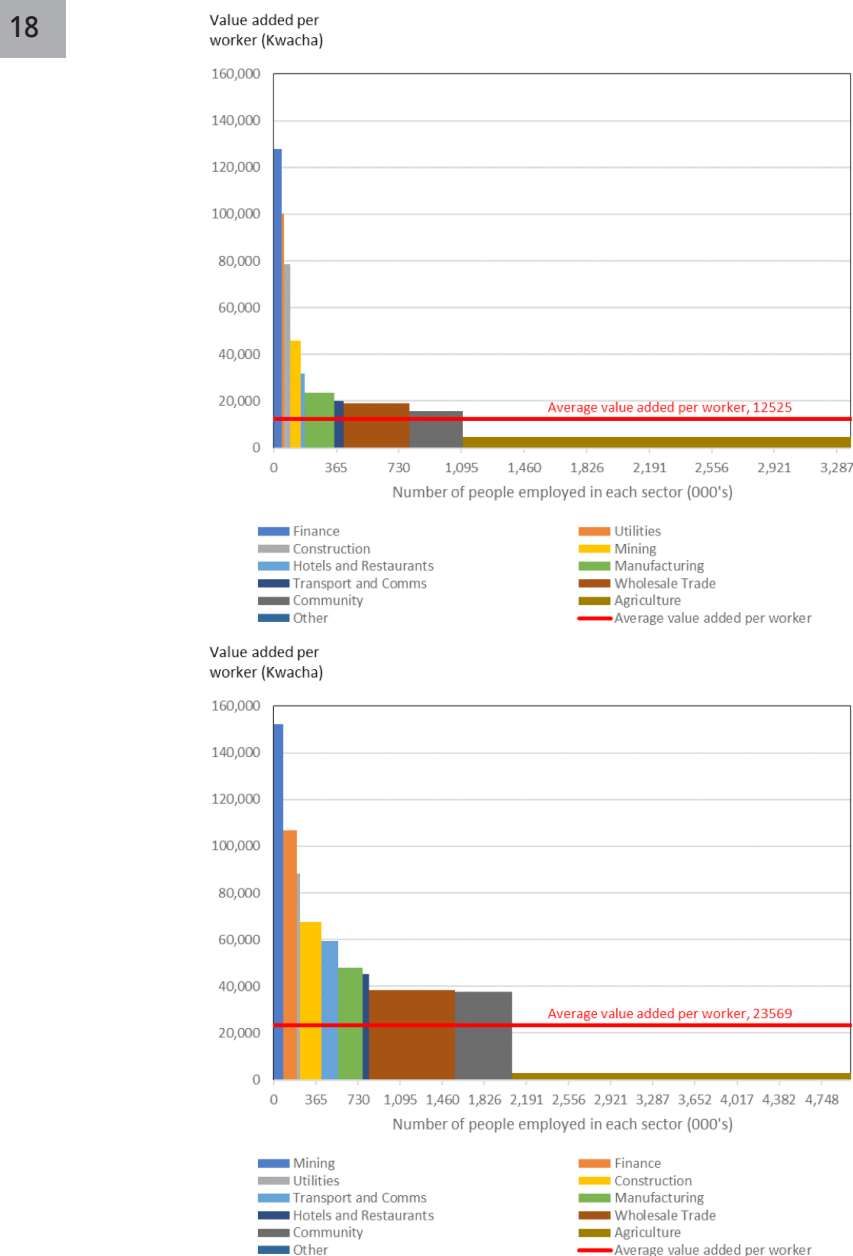
Source: Authors computations using GDDC (2014) data

*While the reallocation has generated productivity gains, it has not benefited the rural and urban poor.*

Within-sector productivity growth started gaining momentum in the late 1980s, after liberalization. During the same time, the contribution of labor reallocation towards sectors with higher productivity remained negative, largely because liberalization led to the movement of labor from state-owned enterprises towards low productive informal services and subsistence agriculture.

After 2000, productivity gains were recorded in mining, utilities, construction, transport, and the informal sector (community, social and personal services). This was followed by labor reallocation from agriculture to non-traded sectors (including trade services, construction and the informal services). Until 2010, this reallocation generated productivity gains because these sectors were more productive than agriculture. However, a large share of employment growth occurred in trade, and thereof a large share in the informal sector, which is low paid and often insecure. While construction and high value services, where value added per worker is high, also generated jobs, these sectors tend to benefit the higher-income groups in urban areas. The manufacturing sector, which shows an increasing value added per worker, does not generate much employment (figure 18). While labor reallocation has generated productivity gains, it has not sufficiently benefitted the rural and urban poor.<sup>46</sup>

**Figure 18** Sector value added per worker and employment: 1996 versus 2015



Source: Authors calculations using CSO data

*Structural transformation was not preceded by increases in labor productivity in agriculture and productivity gains in non-traded sectors were low.*

*Structural transformation has been ineffective in significantly a poverty in Zambia.*

Despite some reallocation of labor and overall productivity growth, structural transformation has been ineffective in significantly reducing poverty for several reasons. First, it has not been preceded by increases in labor productivity in agriculture where most of the poor are engaged (figure 16). Second, productivity gains in non-traded sectors, to which most of the labor force moved, were low. The demand for non-traded goods is limited by the low aggregate domestic demand, which is itself dependent on copper revenues. From 2010, most non-agricultural sectors recorded declines in labor productivity, despite a scale-up of public investments since 2012, reflecting the influence of copper prices. And third, it is likely that the difference in productivity levels between agriculture and the informal non-agricultural sector is lower than suggested by data which stems from national accounts, which emphasizes that productivity in non-agricultural sectors also needs to increase to achieve poverty reduction (see box 6).

*Urbanization has been largely concentrated in cities along the traditional line-of-rail.*

### **Rapid yet unsustainable urbanization**

The reallocation of labor from agriculture towards non-traded sectors correlates with trends in increasing urbanization in Zambia. The proportion of the urban population increased from 35 percent in 2000 to 45 percent in 2015. While the share of the population in rural areas continually declined over the last years, the growth in urban areas was a lot more focused in the capital city of Lusaka than in the country's secondary and tertiary towns in rural areas. This growth pattern is in contrast with other low-income countries, where growth of secondary and tertiary towns typically exceeds growth in capital cities.<sup>47</sup>

*Urbanization has supported the expansion of non-traded sectors.*

Increased urbanization has supported the expansion of non-traded sectors, including wholesale and retail trade, housing and construction, and transport and communication.<sup>48</sup> Zambia's growth since the 2000s benefitted Lusaka far more than other areas in the country. Lusaka appears to have developed the status of a 'consumption city', which is consistent with cities of many other resource-rich countries, where urbanization is rarely correlated with increased manufacturing, but is characterized by high import dependency (including food), employment in non-tradable services, pollution, congestion, slum formation, poor service provision and high unemployment.<sup>49</sup> These patterns are reflective of Lusaka's low absorptive capacity and its inability to generate agglomeration effects that support productivity gains and competitiveness. This is also reflected in employment trends by sector: Lusaka saw the largest increase in employment in wholesale and retail, from 10 percent in 1990, to 24 percent in 2000 and 30 percent in 2010 (figure 19).

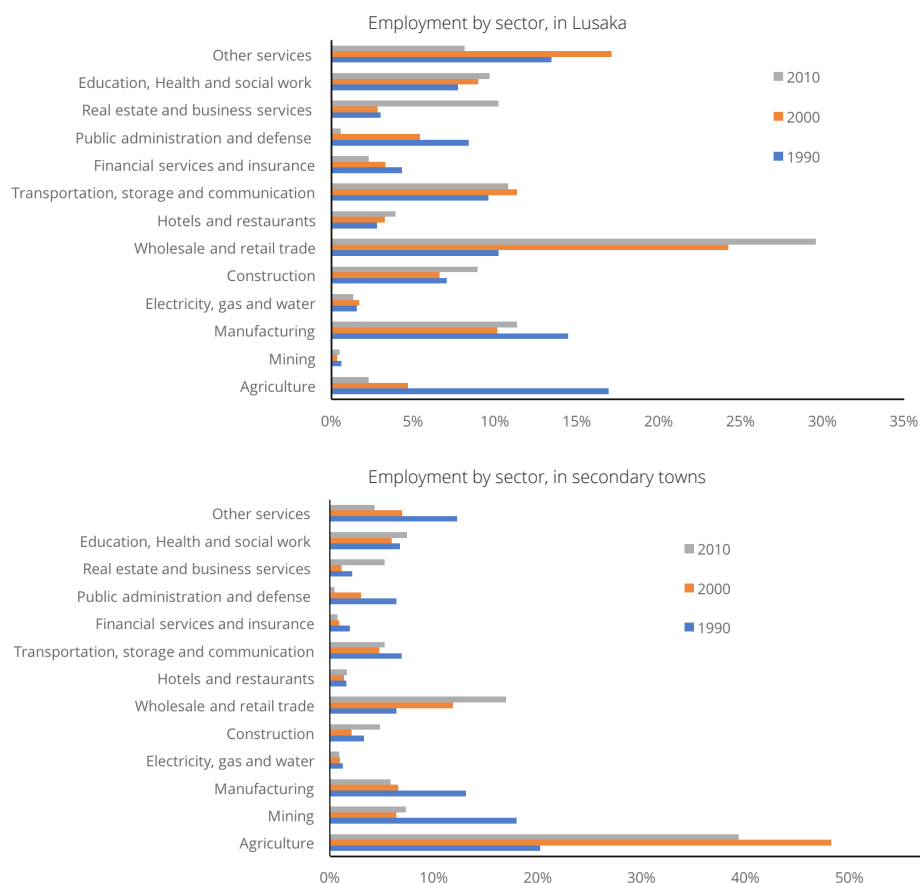
*Poverty has increased in provinces that have received less investments.*

Unsurprisingly, the rural-urban divide is also reflected in the share of investments and lending. Investments are skewed to urban centers. FDIs are concentrated in the traditional mining cities along the railway, except the emerging mining town of Solwezi in the North-Western Province.<sup>50</sup> Domestic bank lending is more balanced across sectors, and could support structural transformation. However, apart from being low, domestic lending is also highly concentrated in the provinces along the railway, with Copperbelt, Central, Lusaka and Southern provinces receiving 88 percent of total lending in 2016.<sup>51</sup> It is thus unsurprising that these provinces have seen the largest reduction in poverty since 2010.<sup>52</sup> The predominantly rural Northern, Western and Luapula provinces received only 4.6 percent of total domestic credit combined. Poverty, which was already very high in these provinces in 2010, has since increased further.

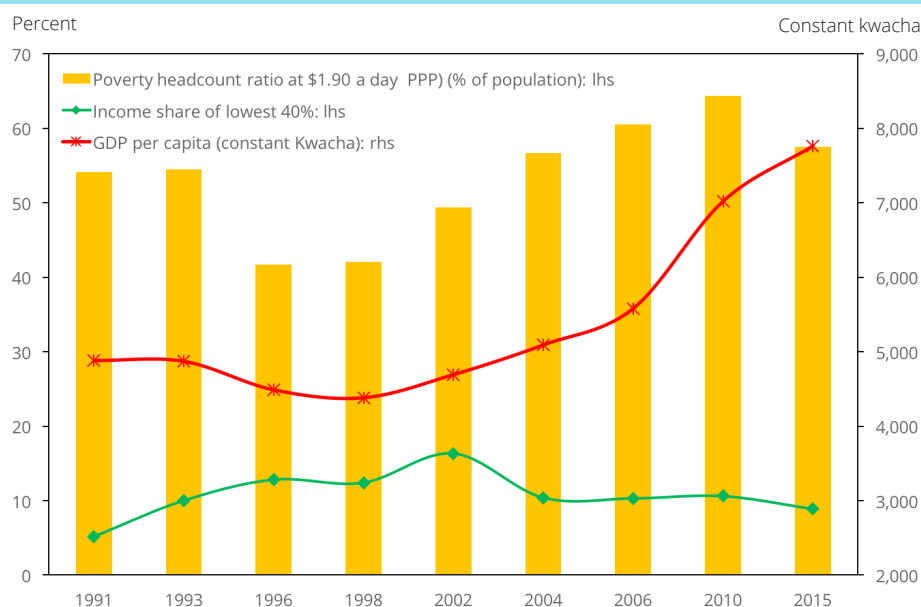
### **Increasing poverty and spatial inequality, in the midst of high growth**

As was evident from trends in productivity across sectors and low labor productivity in the agricultural sector, Zambia's post-2000 growth has not been inclusive. The proportion of people living under the US\$ 1.90 a day increased sharply from 49.4 percent in 2002 to 64.4 percent in 2010 before declining to 57.5 percent in 2015 (figure 20). Over the same period, inequality as measured by the Gini coefficient increased from 0.42 in 2002 to 0.57 in 2015. The share of income of the bottom 40 percent of the population almost halved to 8.9 percent in 2015 from 16.3 percent in 2002. Poverty is predominantly a rural phenomenon, where it rose to 76.7 percent in 2015 from 73.6 percent in 2010, while urban poverty fell from 25.7 percent in 2015 to 23.7 percent in 2010 (figure 21).

*The share of income for the bottom 40 percent halved to 8.9 percent in 2015 from 16.3 percent in 2002.*

**Figure 19** Evolution of sectoral employment in Lusaka and secondary cities

Source: Randolph (2018)

**Figure 20** Share of income of bottom 40 percent has fallen despite GDP growth

Source: World Bank (2018), WDI

*Over half of Zambia's urban population lack decent accommodation.*

Meanwhile, inequality and poverty have also increased within major cities. Segments of the high-income urban population increased (figure 22), while poverty also increased within poor segments of the population. Over half of Zambia's urban population lack decent accommodation, 45.6 percent have no access to electricity and 16.4 percent have no access to water.<sup>53</sup> Only 11 percent of the urban population is

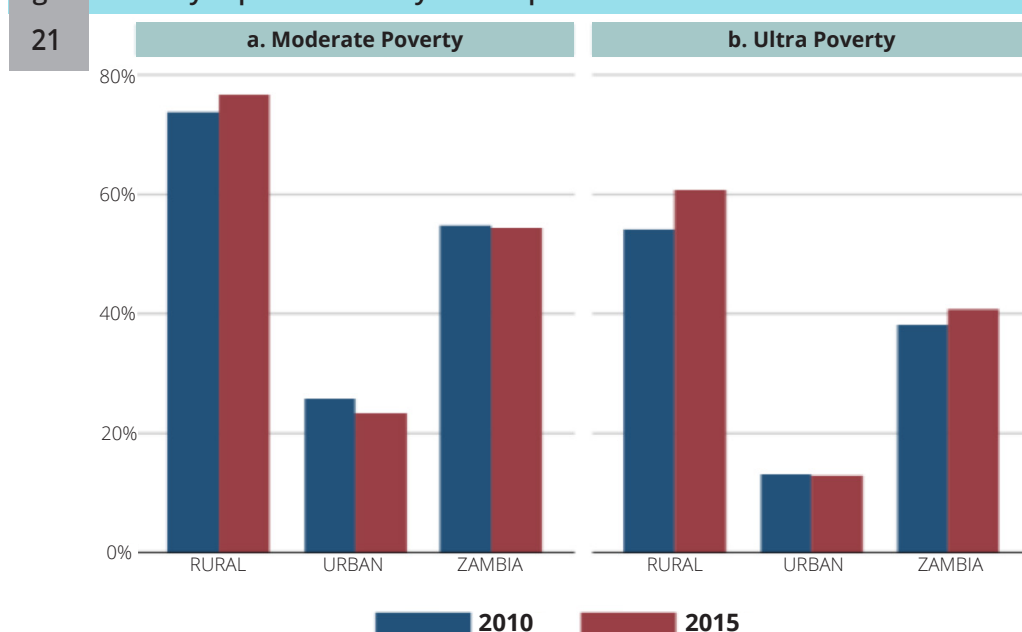


in formal employment, while the majority, 89 percent, is trapped in non-productive informal employment, which does not contribute sufficiently to the fiscal revenue.

Inequality has also increased between cities. While Lusaka benefitted from growth in the 2000s, this cannot be said for urban areas outside Lusaka. Urban population growth trends between 2000 and 2014 show that the share of low-income groups in total population grew mostly outside the largest city (figure 22). These trends emphasize that the country's economic growth since the 2000s benefitted Lusaka far more than other areas in the country. While employment in retail and services grew in Lusaka, this cannot be said for other areas: Secondary cities saw the largest increase in the agricultural sector from 20 percent in 1990 to 50 percent in 2000 and 40 percent in 2010 (figure 19). For tertiary cities, the share in employment in agriculture remained the same, around 70 percent in 1990 and 2010.<sup>54</sup>

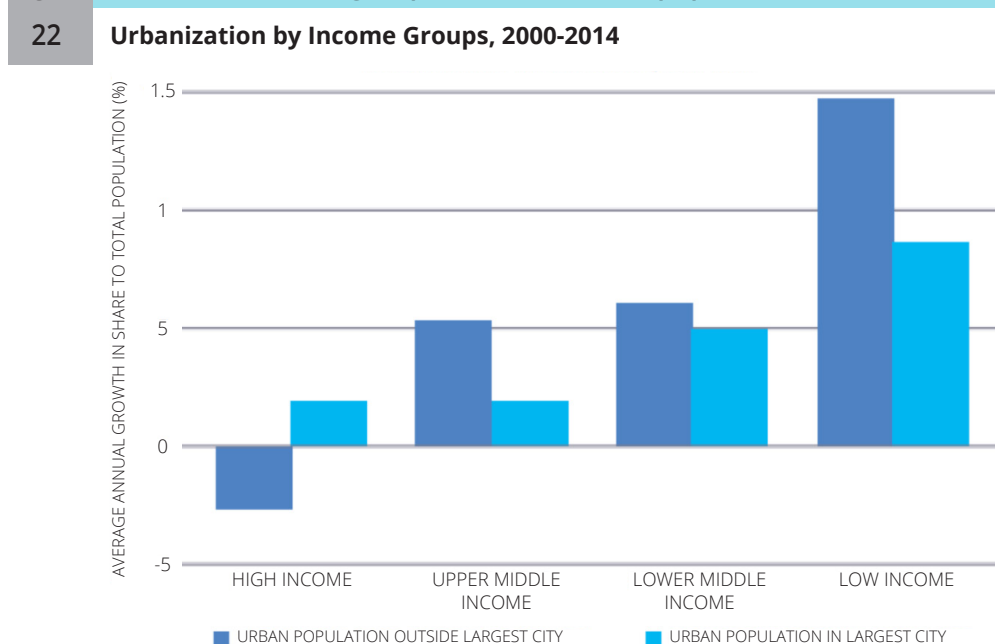
*Inequality has increased between cities.*

**Figure 21 Poverty is predominantly a rural phenomenon**



Source: LCMS 2010 and 2015

**Figure 22 Growth of income groups in share to total population**



Source: Merotto (2017)

## E. TOWARDS A MORE EFFECTIVE STRUCTURAL TRANSFORMATION IN ZAMBIA

Zambia has the potential to use agriculture as an engine for effective structural transformation, leading to gains in poverty reduction. This is particularly so given its (i) endowment with 44 million hectares of suitable land for agriculture (yet only 11 million is cultivated); (ii) abundance in water for irrigation (40 percent of the water in Central and Southern Africa); and (iii) proximity to eight neighboring countries – which are potential export markets. Increased regional and urban demand for diversified and processed products provides unprecedented opportunities to support the development of the manufacturing sector, specifically in agro-processing, which will provide employment and government earnings as well as upstream linkages to agriculture. This is expected to have a positive impact on growth, employment and poverty reduction.

*There is potential to make Zambia's structural transformation more effective and sustainable.*

Agriculture is one of Zambia's most important sectors, and is crucial for ensuring an effective structural transformation. However, agricultural productivity was low in the 1990s and remained low during the economic recovery period, with rural poverty rates remaining high. There is scope to stimulate productivity gains in agriculture, and industrialization by connecting small-holder farmers with large-scale farmers and to higher-value value chains of domestic supermarkets, and strengthening the agro-processing sector for import substitution and export. Evidence shows that agro-processing firms tend to develop in proximity to agglomeration centres also outside the line-of-rail. Thus, one way to strengthen structural transformation and enhance rural livelihoods is to stimulate agricultural and agro-processing activities in and around secondary and tertiary towns in rural areas, where a large part of the population lives.

This Brief looks specifically at the following areas: (i) Reorienting public spending on agriculture, and increasing spending in agriculture infrastructure, research and services to increase agricultural productivity; (ii) supporting commercialization and agri-business growth; (iii) improving human capital, and (iv) spatially targeting investments in the agriculture and agri-business sectors to maximize impact. We argue that spatial planning around secondary and tertiary towns has beneficial effects on the agricultural sector and agri-business development, both of which are key to structural transformation.

*In Zambia food demand is projected triple to US\$25 billion by 2030.*

### **Changing food demands provide unprecedented opportunities**

An important reason to focus on agro-processing as a driver for an effective structural transformation is the changing and growing demand for food, as a consequence of population growth, rapid urbanization and growth in income. World Bank (2013) estimate that urban food markets in Africa will increase fourfold and exceed a market value of US\$ 400 billion by 2030.<sup>55</sup> Thereby, a shift in dietary patterns is expected, a so-called 'nutrition transition', which is characterized by an increased consumption of animal products, vegetable oils and highly processed foods.<sup>56</sup> Similar trends are expected in Zambia, where food demand is expected to grow more than threefold in the next 15 years, to over US\$ 25 billion. For instance, demand for some product categories such as poultry have already tripled between 2012 and 2015 (from 3 kg per capita to 9 kg per capita).<sup>57</sup> Between 1996 and 2015, food expenditures for maize declined from 23 percent to 14 percent. Wealthy urban households increased expenditures on wheat (outweighing the share of maize expenditures), rice, potatoes and animal foods; rural households increased expenditures on coarse grains and tubers. While both urban and rural households increased expenditures for perishable and processed foods, there are large disparities between income groups and rural and urban areas – another indicator of the country's pervasive inequality.<sup>58</sup>

*The increasing and shifting food demand provides opportunities for agriculture.*

The increasing and shifting food demand provides large opportunities for domestic production in the agricultural sector and agro-processing, which can supply local as well as regional markets. Upgrading to meet local demand can be a stepping stone towards increased regional food exports, where neighboring countries may face constraints in agricultural production and are undergoing a similar nutrition transition. Between 2007 and 2017, Zambia registered trade surpluses in several food groups, specifically in unprocessed and partially processed commodities (e.g. cereals, oilseeds and oleaginous fruits but also sugar and products of the milling industry). But changing local demands are visible in Zambia's trade statistics, where Zambia registered consistent or increasing trade deficits in food product groups such as fish, or processed fruits and vegetables dairy, bakery goods.<sup>59,60</sup> For some of them, there may be potential for domestic produc-

tion, especially if transport costs can be reduced. In other cases, such as for canning, packaging costs may outweigh the benefits of producing the food locally.<sup>61</sup>

In addition, the evolving dietary patterns can incentivize a change in primary production towards productive diversification, which can enhance on-farm productivity, increase farmers' income through access to different markets at different times of the year, mitigate climatic and market risks, and enhance households' nutrition outcomes as on-farm food-availability changes as well.<sup>62</sup>

*FISP and FRA have helped food security, but at the expense of productivity and diversification.*

### **Reorienting public spending on agriculture**

Between 2000 and 2018, Zambia increased its agriculture spending from below 2 percent of the budget in the early 2000s to 10 percent in 2010-11, and it has fluctuated between 5 percent and 10 percent since. This is in line with Zambia's commitment under the Malabo declaration 2015, to increase agricultural spendings to 10 percent. This topic is further elaborated in the ninth Economic Brief *'Reaping Richer Returns from Public Expenditure Agriculture'*.<sup>63</sup> However, expenditure remained skewed towards supporting one staple crop – maize. Inefficient public spending was at the core of low productivity and specialized production systems. Between 2008 and 2016, on average 79 percent of the agriculture budget between 2008 and 2016 was spent on production (Farmer Inputs Support Program - FISP) and market support (Food Reserve Agency - FRA) subsidies. While the programs have helped to turn Zambia into a structural surplus producer for maize, they have not managed to enhance productivity, ensure nutrition security, or sustainably reduce poverty.<sup>64</sup> For instance, participation in the program raises maize production by 188 kg per 100 kg of FISP fertilizer, which is considerably smaller than in Kenya, where participation in a similar program raises maize production by 361 kg.<sup>65</sup>

*Maize-centric production may increase vulnerability towards climate change.*

The question remains whether maize production, even with increased productivity, will support Zambia's structural transformation agenda and address the growing and more diversified local and regional food demands, as well as provide the poor population with nutrition-dense foods. Furthermore, it remains questionable whether a maize-centric production strategy would be most resilient to climate change. Zambia's Intended Nationally Determined Contributions (INDC) indicates that climate variability and change have become a major threat to the country. Crop yields are projected to grow at a slower rate (between 2.9 percent for groundnut and 8.7 percent for maize) until 2050, compared to a situation without climate change.<sup>66</sup> Thus, productive diversification towards non-maize crops, combined with the adoption of climate-smart agriculture practices (e.g. introducing crop rotation, conservation agriculture, or agroforestry) which are well-adjusted to bio-physical and socio-economic conditions, can support farmers' resilience by decreasing variability and reducing losses. This is expected to support agricultural productivity and contribute to the country's structural transformation agenda.

*The government began reforming FISP and FRA. Savings from FISP and FRA reforms can be reallocated towards complementary investments and services.*

The government recognized the challenges with FISP and FRA and began reforms since the 2015/2016 season. Recent reforms to the FISP aimed at reducing public expenditure on input delivery by reducing the number of beneficiaries to 1 million farmers and introducing a flexible electronic voucher system, an electronic FISP (e-FISP). The e-FISP aims at improving the targeting, efficiency (following a reduction in costly procurement and transportation), transparency, and input choice, and incentivizes crop diversification towards higher-value and resilience-enhancing commodities.<sup>67</sup> In addition, a weather index insurance program was introduced to compensate farmers in case of weather-induced (e.g. early or late dry spells, excess rainfall) losses.<sup>68</sup> FRA reforms are intended at reducing the volume of maize procured to below 500,000 metric tons, thereby saving the fiscus and enhancing private sector participation in marketing maize, specifically through the Zambian Commodity Exchange (ZAMACE). This has been complemented by a commitment to better policy predictability in the sector.

A monitoring report indicates successes and challenges of the e-FISP. For instance, during 2017/2018 season, approximately 752,000 farmers activated their electronic cards; competition among agro-dealers has increased and 1,364 agro-dealers were registered and trained; and farmers' transactions could be tracked through the Zambia Integrated Agriculture Management Information System (ZIAMIS). Areas that can be improved are the release of program funds, the timely recruitment and accreditation of agro-dealers, the improvement of network infrastructure and more mobile banking facilities. Farmers' choice of production inputs still remains skewed towards maize seeds and fertilizer.

This could be improved by increasing the level of sensitization among farmers on the diverse inputs and allowing different timing of redeeming inputs, which was around the rainy season when production choice seemed to be biased towards field crops.<sup>69</sup> Due to challenges in rolling out the e-FISP to 100 percent of beneficiaries, the government has decided to target approximately 60 percent of beneficiaries in the 2018/2019 season.<sup>70</sup>

*Evidence suggests that agricultural R&D contributes up to 51 percent in productivity increases.*

The fiscal savings can then be reallocated towards complementary investments such as agricultural infrastructure (irrigation, feeder roads), agricultural research and development, and extension services and technology adoption. For instance, irrigated tomatoes and cabbage production multiply returns by more than 150 times compared to maize production.<sup>71</sup> However, currently, irrigation is barely used in small-scale crop production, and of the total irrigable land, 70 percent is not irrigated.<sup>72</sup> Studies based on SSA countries suggest that agricultural R&D contributes to up to 51 percent of productivity increases.<sup>73</sup> The rate of return on investment on agricultural R&D is estimated at 43 percent in developing countries and 34 percent in SSA. Studies also suggest that economic and trade policy reforms (especially those that change the terms of trade for agriculture), farmer education, and irrigation play a substantial role in increasing productivity.<sup>74</sup>

*Agro-processing accounts for 60 percent of Zambia's manufacturing sector*

Yet, these activities are severely underfunded throughout the continent. Currently, Zambia spends less than 1 percent of its agricultural GDP on agricultural R&D. To ensure that modern technologies, improved management practices and skills are transferred to farmers, the extension system or other mechanisms of providing agricultural advisory services provided through information and communications technologies (ICTs) cannot be overemphasized. Similar studies on China, India, Tanzania, Malawi, and Uganda emphasize the importance of spending on public goods, not only on agricultural research and development, but also the improved connectivity of rural areas, a modernized extension system and irrigation, which are associated with high returns.<sup>75</sup>

### **Supporting commercialization and agri-business growth**

Supporting commercialization and agri-business and agro-processing growth, linking farmers to local and regional markets and value chains, and improving the agriculture business environment are crucial for an effective structural transformation. Agro-processing accounts for 60 percent of Zambia's manufacturing sector,<sup>76</sup> thus strengthening the sub-sector can (i) provide important upstream linkages to the agricultural sector and be a vital driver of productivity; and (ii) support an allocation of labor and resources towards agri-business and agro-processing (storage, transport, processing, wholesale and retail of food), which provides additional income opportunities for rural populations and is expected to enhance the effectiveness of Zambia's structural transformation.

*Commercial farming and agro-processing have increased in Zambia.*

Zambia has plenty of opportunities: Commercial farming and agro-processing expanded in recent years, and agro-based goods account for almost half of non-mining exports, while agro-processing jobs accounted for 52 percent of non-service jobs in 2010 (while mining accounted for 25 percent).<sup>77</sup> Compared to other countries in the region, it has a well-developed agri-business sector, with more than 400,000 small-holder households linked to private firms through vertically integrated out-grower programs. The target crops are primarily cotton, and (less so) sugar, tobacco, and soya beans. Large commercial farms and estates also play an important role in Zambian agriculture and account for the bulk of exports of sugar, tobacco, wheat, horticulture products, coffee, and soya beans.<sup>78</sup>

*Small-holder and emergent farmers face challenges related to access to finance and technical support.*

However, small-holder and emergent farmers are facing challenges related to access to finance and technical support to take advantage of domestic and regional market potential. The Rural Agriculture Livelihood Survey 2015 suggests that only 15 percent of farmers had access to credit.<sup>79</sup> Due to customary land tenure systems and a subsequent lack of collateral, but also a lack of credit culture and high transaction costs, commercial bank credit to small-holder farmers remains low and access to finance through out-grower schemes remains most common (9.7 percent). While emergent farmers are rather market-oriented, often having access to off-farm income and the social and economic capital to participate in land markets, they may still need support or the skills to access private finance. Therefore, suggestions for the establishment of support funds to emergent farmers were put forward.<sup>80</sup> Such projects can build on past experiences

*Barriers to the development of the agri-business sector include inadequate supply and quality of raw materials or weak institutional and physical market infrastructure.*

*Proximity to rural roads has significant effects on agri-businesses.*

*The link between funding and educational outcomes is weak in Zambia.*

*Rural girls are largely excluded at higher levels of learning.*

of innovative pilots such as the Zambia Emergent Farmers' Program (by the Zambia National Commercial Bank Plc (ZANACO), International Finance Corporation (IFC) and Rabo Development), which provided commercially-based finance and agri-business support services to 124 farmers between 2010 and 2012. Recently, the government has established the Zambia Credit Guarantee Scheme as a private company. The company is tasked to develop a guarantee scheme to address the challenge of access to affordable financial products and services for small and medium-scale enterprises in priority sectors, including the agro-processing and agro-trade subsectors. At least in the initial years, primary agriculture is not expected to be covered. In addition, the establishment of a warehouse receipt system can support access to finance for agriculture for emergent and small-holder farmers alike. ZAMACE, which is not yet fully operational, can play an important role in the future. Thus, to support agri-business development, increasing the outreach of financial institutions and agricultural financial services in rural areas and considering the use of specialized funds and matching grants to off-set risks, and offer adequate training for target beneficiaries are crucial.<sup>81</sup>

The growing local consumer demand, also reflected in the increase in supermarket chains mainly from South Africa<sup>82</sup>, are a starting point for developing the agri-business and agro-processing sector. There are numerous barriers to entering this market, including the inadequate supply and quality of raw materials; weak institutional and physical market infrastructure such as packing houses, cold chains, certification processes or credit facilities; limited capacity to access and maintain technologies or the failure to compete against imports; or the inability to develop differentiated products to move into higher-value market segment.<sup>83</sup> To ensure the possibility for exports and compliance with consumer demand, consistent regulation and infrastructure (e.g. laboratories) to ensure food safety and quality, as well as pest and animal diseases control, remain important.

In addition, the cost of trade, which is consistently higher than in neighboring countries, is an impediment to competitiveness, as is the availability of power and other infrastructure.<sup>84</sup> Norman *et al.* (Forthcoming)<sup>85</sup> find that road development is significantly associated with the development of new, small agro-enterprises in Zambia. If the cost-distance to a paved road is decreased by about 30 km, the expected count of new agro-firms increases by a factor of 1.4, even in remote wards with low bio-physical production potential. In addition, the availability of skilled labor is a crucial incentive for agri-business development. Human capital (as a share of the university educated) has a positive impact on the establishment of agro-processing firm and jobs.

### **Improved human development**

In addition to being key inputs to within-sector productivity growth, education and health can also facilitate labor mobility towards more productive sectors. Zambia's commitment to improving education has been seen by an increased budget for public education (from 3.2% of total public spending in 2010 to 4.8% in 2017). However, there is a need to improve the use of the education and health budgets as past studies suggest that increased spending does not result in better education and health outcomes. In relation to education, most of the challenges resemble the global challenges highlighted in the World Bank's recent global report on education.<sup>86</sup> For example, a 2015 public expenditure review (PER) on education suggests that the link between resources allocation and education outcomes is weak because of poor targeting of beneficiaries and ineffectiveness in the implementation of policies and education delivery. Education delivery is undermined by an insufficient number of teachers, teachers' absenteeism, poor school management and supervision of teachers, and a lack of textbooks.

Rural girls are even more excluded at higher levels of learning due to financial constraints, social norms and early pregnancies.<sup>87</sup> The LCMS 2015 suggests that, while the Gross Enrollment Rate (GER) of secondary education for boys is 68 percent, that for girls is 62 percent. In TVET, female trainees account for 45 percent (TEVETA, 2012).

In addition to paying attention to these challenges, there is value in transforming the syllabi of higher education institutions to make them more suitable to the structural transformation agenda. For instance, agriculture training needs to go beyond just teaching the technical aspects of farming, and should rather put entrepreneurship and agri-business at the core of the agriculture syllabus.



*The agricultural sector and rural-nonfarm economy benefit from the proximity to urban areas.*

*Secondary towns can have a larger impact on poverty reduction than large towns and cities.*

*In Zambia agro-processing firms are in proximity of agglomeration centers and in areas of high poverty density.*

*To enhance the positive effect of secondary and tertiary town, a targeted approach to spatial and urban development and investment should be considered.*

### **Spatial planning and targeting of secondary and tertiary towns**

The agricultural sector and rural-nonfarm economy benefit from the proximity to urban areas, which provides opportunities for education, market access and commercialization, opportunities for agricultural diversification, and access to modern agricultural varieties and technologies. Empirical evidence shows that all of the above can have a strong impact on agricultural and rural non-farm income.<sup>88</sup> Secondary and tertiary<sup>89</sup> towns are expected to enhance these positive effects, being strong connectors between rural and urban economies by (i) functioning as traditional market towns for agricultural outputs; (ii) providing an accessible labor market and seasonal job opportunities; (iii) facilitating growth by providing services such as primary education, health care, water and sanitation infrastructure as well as administrative centers; and (iv) due to their proximity to rural areas, they allow urban migrants to maintain social family ties and lower living costs.<sup>90,91</sup>

Thus, secondary towns – compared to large towns like Lusaka – can have a larger impact on poverty reduction.<sup>92</sup> While large cities theoretically yield faster economic growth because of larger agglomeration economies, empirical evidence shows that the positive relationship between average city size and economic growth as observed in developed countries, does not hold true in developing countries, where the effect is either statistically insignificant or negative.<sup>93</sup> While average growth is largest in large cities, inequality also tends to be higher. Behrens and Robert-Nicoud (2014)<sup>94</sup> identify a rising per capita income and rising inequality gradient from rural areas to cities of increasing size. Christiaensen and Todo (2014)<sup>95</sup> show that as people moved from agriculture to the rural non-farm economy in Ghana, the proximity to intermediate cities reduced poverty more than in metropolitan urban areas. Overall, the inclusive nature of growth associated with the expansion of secondary towns seems to outweigh the possible loss in terms of average growth.<sup>96</sup>

Empirical evidence by Norman *et al.* (Forthcoming) shows that agro-processing firms and jobs in Zambia, which are indicators for structural transformation, are found in the proximity of agglomeration centers and are more often located outside the traditional line-of-rail corridor compared to non-agricultural firms. While there is a high concentration of jobs around the cities and towns in the central corridor, specifically smaller agro-firms are also located closer to areas of high poverty density outside the line-of-rail, where the share of self-employment in farming is high, specifically in the Eastern, Luapula, Northern and Muchinga provinces (compare MAP 1). Evidence also shows that a large number of new agro-processing firms have been growing in areas where already existing firms were located, and where commercial farms and subsistence farms are present. Thus, agro-processing firms have a large potential to better link producers to commercial farms in the proximity of agglomeration centers.

These findings point towards the need for spatial targeting of investment to support growth of agro-processing firms in and around rural agglomeration centers and inclusion of small-holder farmers into the respective value chains. For instance, investment can strengthen the emergence of ‘growth clusters’<sup>97</sup> outside the central corridor and in proximity to secondary and tertiary towns (e.g. Chipata, Petauke, Mwansa, Kasama and Mongu) which show initial growth in agro-processing and jobs and can have a positive impact on the economic development of the surrounding rural areas. The government has started to target investments in farm blocks, which show slow progress in implementation (box 7). To ensure spatially targeted investment can increase agricultural sector performance and rural livelihoods, it is important to build on and enhance existing market infrastructure and value chains, support value chains that respond to domestic demand, support small-holder farmers to raise productivity on their own land and enable them to build linkages with existing commercial and emergent farmers and agro-processors.

In addition to strengthening incentives for agri-businesses, policy measures should adopt a targeted approach to spatial and urban development. The above-cited empirical evidence showed that supporting urban areas and creating a network of cities and towns can have a positive effect on rural Zambians and Zambia’s structural transformation agenda. Several ideas have been put forth to support a spatial approach to economic transformation, which could include (i) undertaking a spatial diagnostic of



urban-rural linkages around secondary and tertiary towns with a view to developing agriculture and agri-business; (ii) introducing place-sensitive reforms for urban planning with an aim to benefit local businesses and workers and incentivize investment, including the facilitation of access to credit, subsidies for capital investment, preferential tax rates or opportunities for skills and labor force development and improved matching between firms and workers; and (iii) developing and empowering local councils, possibly with support from representatives of relevant ministries (commerce, agriculture livestock, water), which have the capacity to drive the spatial development agenda and implement locally relevant policies which further agri-business development and job-creation.<sup>98</sup>

### Box 7 Can farm blocks support rural development and agricultural transformation?

Since 2006, Zambia has identified farm blocks as core to its rural development policy and has integrated the idea in all its past 5-year national development plans (including the current one). The thrust behind farm blocks is targeted investment in agricultural infrastructure in selected farming land. Such targeted investments are expected to attract foreign and domestic investments into agriculture and link them to local communities through easier access to markets. An assessment by the Indaba Agricultural Policy Research Institute (IAPRI) in 2017 suggests that the implementation has been slow despite substantial budgetary allocation. In addition, they suggest that small-holder farmers have not been integrated into farming blocks. Other challenges include key infrastructure is either incomplete or missing; the development of the farm blocks is rather haphazard and not following the original plan; districts have usually diverted funds meant for developing farm blocks towards other spending lines; there is no communication equipment, making services requiring internet impossible; small-holder farmers lack knowledge on how to obtain land in farm blocks; and banks have been reluctant to finance unestablished small-holder farmers located in the farm blocks. Poor progress with farm blocks generally reflects the poor implementation of national development plans, as they are usually too broad and overambitious. A better approach would be focusing on piloting one farm block, fully developing it, and learning some lessons before developing a new one.

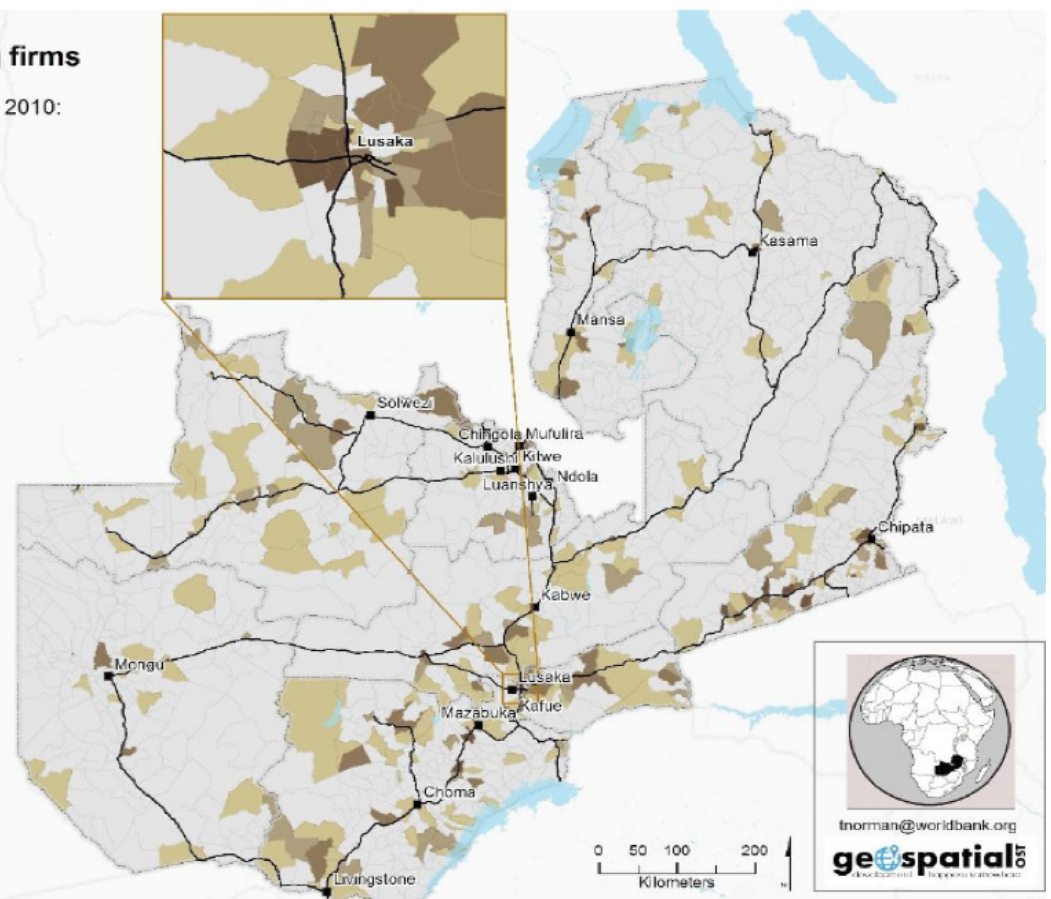
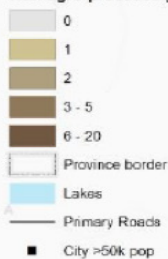
Source: Samboko, et al. (2017)<sup>99</sup>

### Map 1 Zambia new agro-processing firms in 2010

#### New agro-processing firms

New agro-processing firms in 2010:  
0-4 years

#### New agro-processing firms



Data source:  
Business Register 2010

Source: Norman et al. (2018)

## F. HOW CAN ZAMBIA PURSUE AN AGRO-LED STRUCTURAL TRANSFORMATION?

Agriculture offers an option for effective structural transformation in Zambia, given its vast fertile lands and water, and its proximity to eight neighboring countries. Increased regional and urban demand for diversified and processed products provides opportunities to support the development of the manufacturing sector, specifically in agro-processing, which will provide employment and government earnings. Below are ideas on how Zambia can take advantage of these opportunities.

- **Expediting agriculture reforms away from maize-centric policies to enhance productivity growth.** Maize-centric fiscal policy and agriculture policy inconsistencies have been constraints to agriculture transformation. Agriculture reforms which began in the 2015/2016 season should be expedited to facilitate investments in infrastructure, market information, extension services and R&D to enhance productivity growth in the agricultural sector.
- **Linking farmers to local and regional value chains.** The World Bank estimates that SSA's demand for food will increase by 60 percent between 2015-30. This offers prospects for agro-led industrialization for Zambia, which can increase labor reallocation to the manufacturing sector and has important upstream impacts. Linking small farmers to local and regional value chains is key. Infrastructure, access to information and strengthening local institutions to support such linkages should be developed and strengthened, but within the confines of the fiscal space to ensure that debt sustainability will not reverse future progress. Moreover, reforms to tackle policy inconsistency and the high cost of cross-border trade is critical.
- **Spatial planning and developing secondary and tertiary cities.** Policies and investments can be spatially targeted to areas with a high potential to attract agri-businesses. Spatial diagnostic studies to assess the potential of agribusiness potential in and around secondary and tertiary towns, and to justify spatially targeted public and private investments are a key starting point. This could be followed by targeted incentives for firms to move to these areas. Local councils need to be empowered to drive the spatial development agenda and implement locally relevant policies which further agri-business development and job creation.
- **Strengthening human capital to improve labor productivity and mobility.** Zambia needs to improve education and health outcomes, especially for poor and rural segments of the population. The National Health Insurance Bill is a positive step, but its effective implementation is critical. On education, focus needs to not only be on access, but quality. In addition, the syllabi of TVET institutions could be transformed to promote an agro-led transformation agenda by blending technical courses with entrepreneurship and agri-business courses.
- **Strengthen the link between macroeconomic management, public investment management and structural transformation.** Public investments play a crucial role in enhancing structural transformation, if high-value investments are selected and executed carefully and are spatially targeted. In this regard, the passing of the new Loans and Guarantees Acts with provisions for a thorough appraisal of public investments should be expedited. In addition, the multi-sector public investment appraisal board promised as part of the government's austerity measures should be set up immediately. It is also critical to improve transparency (including parliamentary and civil society oversight) in the selection and execution of projects.

# ENDNOTES

- 1 World Bank. 2018. "Africa's Pulse." Volume 17, April 2018, World Bank Group, Washington DC. <http://documents.worldbank.org/curated/en/292931523967410313/Africas-pulse>
- 2 World Bank Group. 2018. Global Economic Prospects, June 2018. Washington DC: World Bank.
- 3 Commitment basis entails a cash deficit plus new public expenditure arrears accumulated during the same fiscal year. A 'cyclical' fiscal deficit occurs as part of the business cycle e.g. if the economy is slowing, revenue declines and spending increases, leading to high cyclical deficit. A structural deficit is a fundamental imbalance in government revenue and spending, once cyclical elements are removed.
- 4 Zambia, Ministry of Finance. 2016. Economic Stabilization and Growth Program – Zambia Plus, by the Government of the Republic of Zambia, Lusaka.
- 5 Ministry of Finance. 2018. "Statement on Addressing Fiscal and Debt Challenges for Sustained Macroeconomic Stability and Growth." Lusaka, June 14, 2018. <http://www.mof.gov.zm>
- 6 Ministry of Finance. 2018. "Statement of the State of the Economy." Lusaka, July, 2018. <http://www.mof.gov.zm>
- 7 Lusaka Times. 2016. "How the Debt Limit and Excessive Borrowing Delay Civil Servant Salaries." March 3. <https://www.lusakatimes.com/2016/03/03/how-debt-ceiling-and-excessive-borrowings-delay-civil-servants-salaries/>
- 8 For an elaborate discussion of the past debt management challenges, see: World Bank. 2017a. How Can Zambia Borrow Without Sorrow? Economic Brief No. 10, Washington DC. <http://documents.worldbank.org/curated/en/782221512459934813/Zambia-economic-brief-how-Zambia-can-borrow-without-sorrow>
- 9 Ministry of Finance. 2018. "On the Treasury Government of Zambia US\$ 500 Million Sovereign Guarantee Issued to Stag African Investments Limited." Lusaka, May 30, 2018. <http://www.mof.gov.zm>
- 10 Bank of Zambia. 2018. "Fortnightly Statistics." Statistical report for June, Lusaka. <http://www.boz.zm/fortnight-statistics.htm>
- 11 Ghana, Ministry of Finance. "Investor Relations." <https://www.mofep.gov.gh/investor-relations/bond-investors>
- 12 World Bank. 2016. Ghana Policy-Based Guarantee. Financial Solution Brief, Washington DC. <http://pubdocs.worldbank.org/en/800221518206127385/Briefs-Guarantees-GhanaPolicy.pdf>
- 13 Independent Evaluation Group. 2017. Findings from Evaluation of Policy-Based Guarantees. Washington DC. <https://ieg.worldbankgroup.org/evaluations/lessons-policy-based-guarantees>
- 14 The kwacha usually appreciates in the first two weeks of January, April, July, and October due to increased inflow of foreign currency to meet quarterly tax obligations. See: Zambia Revenue Services. 'Tax Due Dates for 2013.' <https://www.zra.org.zm/commonHomePage.htm?viewName=TaxCalendar>
- 15 Central Statistical Office. 2018. June Monthly Report. Government of the Republic of Zambia, Lusaka.
- 16 Bank of Zambia. 2018. Monetary Policy Committee Statement for Q2 2017. August, Lusaka.
- 17 Bank of Zambia. 2016. Interest Rates and Bank Charges for Personal Accounts and Other Retail Accounts. December, Lusaka.
- 18 Bankers Association of Zambia. 2017. "Why Interest Rates Remain High." Presented at the Zambia Institute for Policy Analysis and Research (ZIPAR) Debt Management Conference, Lusaka, October 26.
- 19 Government of the Republic of Zambia. 2017. National Financial Inclusion Strategy 2017 – 2022. Lusaka. <http://www.boz.zm/National-Financial-Inclusion-Strategy-2017-2022.pdf>
- 20 Central Statistical Office. 2018. 2018 Crop Survey. Lusaka, Government of the Republic of Zambia.
- 21 FQM accounts for more than 50 percent of Zambia's copper production and public revenue from copper mining through its Kansanshi and Kalumbila mines, and stakes in other mines such as Mopani Copper Mine (MCM). It also accounts for over 50 percent of public revenues from the mining sector.
- 22 Bloomberg. 2018. "Zambia Slaps Miner First Quantum with US\$ 8 Billion Tax Bill." March 20. <https://www.bloomberg.com/news/articles/2018-03-20/first-quantum-confirms-7-9-billion-zambian-tax-assessment>.
- 23 Bank of Zambia. 2017. Monetary Policy Committee Statement for Q3 2017. November, Lusaka.
- 24 Ministry of Finance. 2018. Medium-Term Expenditure Framework 2019-21. Lusaka, Government of the Republic of Zambia.
- 25 World Bank. 2018. Commodity Market Outlook. April, Washington DC, World Bank. <http://pubdocs.worldbank.org/en/248071492188177315/mpo-zmb.pdf>
- 26 World Bank. 2016. Beating the Slowdown - Making Every Kwacha Count. Zambia Economic Brief No. 7, Washington DC. <http://documents.worldbank.org/curated/en/804591467989562427/Zambia-economic-brief-beating-the-slowdown-making-every-kwacha-count>
- 27 World Bank. 2017. How Can Zambia Borrow Without Sorrow. Economic Brief No. 10, Washington DC, World Bank. <http://documents.worldbank.org/curated/en/782221512459934813/Zambia-economic-brief-how-Zambia-can-borrow-without-sorrow>
- 28 Barrett, Christopher B., Luc Christiaensen, Megan Sheahan, and Abebe Shimeles. 2017. "On The Structural Transformation of Rural Africa." Policy Research Working paper 7938, World Bank, Washington DC. <https://openknowledge.worldbank.org/bitstream/handle/10986/25947/WPS7938.pdf?sequence=1&isAllowed=y>
- 29 Merotto, Dino, Michael Weber, and Reyes Aterido. Forthcoming. "Jobs Diagnostics: Facts and Findings." World Bank, Washington DC.
- 30 Jedwab, Remi, and Dietrich Vollrath. 2015. "Urbanization without Growth: A Historical Perspective." Explorations in Economic History 58: 1 - 21.
- 31 World Bank. 2007. World Development Report 2008: Agriculture for Development. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/5990>
- 32 For the sake of simplicity, these estimates assume constant urbanization rates and unchanged income distribution within rural and urban areas respectively between 2015-30. A more rapid urbanization rate would only marginally attenuate the higher poverty impact of rural development, in spite of optimistically assuming that higher population growth in urban areas would not impact urban poverty rates.
- 33 Timmer, C. Peter. 2005. "Agriculture and Pro-Poor Growth: An Asian Perspective." Working Paper No. 63, Center for Global Development, Washington DC.
- 34 World Bank. 2018. Zambia Systematic Country Diagnostic. Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/29702>
- 35 We decompose aggregate productivity growth into 'within-sector' productivity and 'across sector (structural transformation)' productivity, using the approach in McMillan and Rodrik (2011). The technical methodology for this decomposition as follows:  $\Delta P = \sum_i (P_i^t - P_i^{t-1}) S_i^{t-1} + \sum_i (S_i^t - S_i^{t-1}) P_i^{t-1} Y_i^{t-1}$  : where the left-hand side shows aggregate productivity, and on the right-hand side, the first component measures within sector productivity and the second measure
- 36 Mudenda, Dale. 2009. "Trade and Industrialisation Policies Experienced from Zambia." Trade & Industrial Policy Strategies, Lusaka.
- 37 Rankin, Neil, and Joseph Simumba. 2017. "Exports, Imported Intermediate Inputs and Exchange Rate Volatility in Zambia." Working Paper No. F-89214-ZMB-1, International Growth Centre, Lusaka. <https://www.theigc.org/wp-content/uploads/2016/11/Rankin-Simumba-2016-working-paper.pdf>
- 38 World Bank. 2017. Reaping Richer Returns from Public Expenditures in Agriculture. Zambia Economic Brief No. 9, Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/27521>
- 39 Merotto, Dino. 2017. Zambia Job Diagnostics. Volume 1: Analytics, Jobs Series Issue No. 7, Washington DC. <https://openknowledge.worldbank.org/handle/10986/27008>
- 40 McCullough, Ellen B. 2018. "Agricultural Labor is Not So Unproductive in Africa." In Agriculture in Africa: Telling Myths from Facts, edited by Luc Christiaensen and Lionel Demery. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/28543>
- 41 Ibid.
- 42 Sitko, Nicholas J., Jordan Chamberlin, and Brian Mulenga. 2015. "Unpacking the Growth of Medium-Scale Farms in Zambia: What are the Implications for the Future of Smallholder Agriculture." Working Paper No. 100, Lusaka, Indaba Agricultural Policy Research Institute. <http://www.iapri.org.zm/images/WorkingPapers/wp100.pdf>
- 43 Chapoto, Antony, Brian Chisanga, and Mulako Kabisa. 2017. Zambia Agriculture Status Report 2017. Lusaka, Indaba Agricultural Policy Research Institute. [http://www.iapri.org.zm/images/WorkingPapers/AgStatus\\_2017.pdf](http://www.iapri.org.zm/images/WorkingPapers/AgStatus_2017.pdf)
- 44 McMillan, Margaret S., and Dani Rodrik. 2011. "Globalization, Structural Change and Productivity Growth." Working Paper No. 17143, National Bureau of Economic Research, Cambridge. <http://www.nber.org/papers/w17143.pdf>
- 45 Commodity price movements can also directly impact productivity measures, as affecting firms' utilization rates. While absence of data on utilization rates in Zambia prevents estimating their impact, it is likely that lower demand for goods and services stemming from lower copper incomes generated a decline in the firms' utilization rate of capital and labor. See: Adler, Gustavo, Romain Duval, Davide Furceri, Sinem Kiliç Çelik, Ksenia Koloskova, and Marcos Poplawski-Ribeiro. 2017. "Gone with the Headwinds: Global Productivity." IMF Staff Discussion Note SDN/17/04, International

- Monetary Fund, Washington DC.
- 46 Resnick, Danielle, and James Thurlow. 2017. "The Political Economy of Zambia's Recovery: Structural Change without Transformation?" In *Structural Change, Fundamentals, and Growth: A Framework and Case Studies*, edited by Margaret S. McMillan, Dani Rodrik, and Claudia Sepúlveda, 235-266. Washington DC: International Food Policy Research Institute. <https://www.ifpri.org/publication/political-economy-zambias-recovery-structural-change-without-transformation>
  - 47 Merotto, Dino. 2017. *Zambia Job Diagnostics. Volume 1: Analytics, Jobs Series Issue No. 7*, Washington DC. <https://openknowledge.worldbank.org/handle/10986/27008>
  - 48 Tembo, Yohane. 2014. *Rapid Urbanization in Zambia: The Challenges Facing Our Cities and Towns*. Norderstedt: GRIN Verlag GmbH.
  - 49 Gollin, Douglas, Remi Jedwab, and Dietrich Vollrath. 2016. "Urbanization With and Without Industrialization." *Journal of Economic Growth* 21 (1): 35-70.
  - 50 Bank of Zambia. 2016. *Foreign Private Investment and Investor Perception Survey*. Lusaka.
  - 51 Bank of Zambia. 2016. *Credit Market Monitoring Report*. Lusaka.
  - 52 De La Fuente, Alejandro, Manuel Rosales, and Jon Jellema. 2017. "The Impact of Fiscal Policy on Inequality and Poverty in Zambia." Policy Research Working Paper 8246, World Bank, Washington DC. <https://openknowledge.worldbank.org/handle/10986/28907>
  - 53 Randolph, Gregory, and Dhruv Jain. 2016. "Promoting Job-Rich Urbanization in Zambia." Policy Paper No. 2, Zambia Institute of Policy Analysis and Research, Lusaka.
  - 54 Randolph, Gregory. 2018. *Boosting Urban Job Creation Beyond Lusaka: How to Catalyze Balanced, Job-Rich Urbanization in Zambia*. Lusaka, JustJobs Network Inc.
  - 55 World Bank. 2013. *Growing Africa. Unlocking the potential of Agribusiness*. Washington DC: World Bank. Washington DC. <https://openknowledge.worldbank.org/handle/10986/26082>
  - 56 Hawkes, Corinna, and Barry M. Popkin. 2015. "Can the Sustainable Development Goals Reduce the Burden of Nutrition-Related Non-Communicable Diseases Without Truly Addressing Major Food System Reforms?" *BMC Medicine* 13: 143.
  - 57 World Bank. 2016. *Zambia Agribusiness and Trade Project*. Project Appraisal Document - P156492, Report No. PAD 1880, Washington DC, World Bank. <http://documents.worldbank.org/curated/en/459181482116462283/Zambia-Agribusiness-and-Trade-Project>
  - 58 Chisanga, Brian, and Olipa Zulu-Mbata. 2017. "The Changing Food Expenditure Patterns and Trends in Zambia: Implications on Agricultural Policies." Working paper 119, Indaba Agricultural Policy Research Institute, Lusaka. [http://www.iapri.org.zm/images/WorkingPapers/wp119\\_final.pdf](http://www.iapri.org.zm/images/WorkingPapers/wp119_final.pdf)
  - 59 Fessehaie, Judith, Reena Das Nair, Phumzile Ncube, and Simon Roberts. 2015. "Growth Promotion Through Industrial Strategies: Zambia." Working Paper, International Growth Centre, Lusaka. <https://www.theigc.org/wp-content/uploads/2015/06/Roberts-et-al-2015-Working-paper.pdf>
  - 60 Source: United Nations Commodity Trade Statistics (UN COMTRADE) Database, Harmonized System (HS) Chapters 2-4, 7-12, 16-22, United Nations, New York (accessed September, 2018), <http://comtrade.un.org>
  - 61 International Growth Centre. 2015. *Growth Promotion Through Industrial Strategies In Zambia*. Lusaka, International Growth Centre. <https://www.theigc.org/wp-content/uploads/2015/06/2015-Policy-note1.pdf>
  - 62 World Bank. Forthcoming. *Productive Diversification in African Agriculture and Impacts on Resilience and Nutrition*. Washington DC, World Bank.
  - 63 World Bank. 2017. *Reaping Richer Returns from Public Expenditures in Agriculture*. Zambia Economic Brief No. 9, Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/27521>
  - 64 World Bank. 2017. *Reaping Richer Returns from Public Expenditures in Agriculture*. Zambia Economic Brief No. 9, Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/27521>
  - 65 Mason, Nicole M., Thomas S. Jayne, and Nicholas van de Walle. 2016. "The Political Economy of Fertilizer Subsidy Programs in Africa: Evidence from Zambia." *American Journal of Agriculture Economics* 99 (3).
  - 66 CIAT (International Center for Tropical Agriculture), and World Bank. 2017. *Climate-Smart Agriculture in Zambia*. CSA Country Profiles for Africa Series, CIAT and World Bank, Washington DC.
  - 67 Kuteya, Auckland N., Chinyama Lukama, and Vincent C. Malata. 2018. *Review of the E-FISP Performance During 2017/2018 Agricultural Season*. Monitoring Report May 2018, Lusaka, Indaba Agricultural Policy Research Institute. [http://www.iapri.org.zm/images/PolicyBriefs/Review\\_of\\_e\\_FISP\\_Performance\\_for\\_2017\\_18\\_Ag\\_Season\\_as\\_at\\_May\\_30\\_EDITED\\_ac.pdf](http://www.iapri.org.zm/images/PolicyBriefs/Review_of_e_FISP_Performance_for_2017_18_Ag_Season_as_at_May_30_EDITED_ac.pdf)
  - 68 Ibid.
  - 69 Ibid.
  - 70 Katambo, Michael Z. J. 2018. *Ministerial Statement on the Implementation of the Farmer Input Support Programme (FISP) in 2018/2019 Farming Season*. Presented on July 11, 2018, Lusaka, Zambia, Ministry of Agriculture. <http://www.parliament.gov.zm/node/7605>
  - 71 Hichaambwa, Munguzwe, Jordan Chamberlin, and Stephen Kabwe. 2015. "Is Smallholder Horticulture the Unfunded Poverty Reduction Option in Zambia? A Comparative Assessment of Welfare Effects of Participation in Horticultural and Maize Markets." Working paper 96, Lusaka, Indaba Agricultural Policy Research Institute. [http://www.iapri.org.zm/images/WorkingPapers/wp96\\_revised.pdf](http://www.iapri.org.zm/images/WorkingPapers/wp96_revised.pdf)
  - 72 World Bank. 2018. *Republic of Zambia Systematic Country Diagnostic*. Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/29702>
  - 73 Fuglie, Keith O., and Nicholas E. Rada. 2013. *Resources, Policies, and Agricultural Productivity in Sub-Saharan Africa*. Economic Research Report 145, Washington DC, United States Department of Agriculture, Economic Research Service.
  - 74 Goyal, Aparajita, and John Nash. 2017. *Reaping Richer Returns: Public Spending Priorities for African Agriculture Productivity Growth*. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/25996>
  - 75 Goyal, Aparajita, and John Nash. 2017. *Reaping Richer Returns: Public Spending Priorities for African Agriculture Productivity Growth*. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/25996>
  - 76 Fessehaie, Judith, Reena Das Nair, Phumzile Ncube, and Simon Roberts. 2015. "Growth Promotion Through Industrial Strategies: Zambia." Working Paper, International Growth Centre, Lusaka. <https://www.theigc.org/wp-content/uploads/2015/06/Roberts-et-al-2015-Working-paper.pdf>
  - 77 Merotto, Dino. 2017. *Zambia Job Diagnostics. Volume 1: Analytics, Jobs Series Issue No. 7*, Washington DC. <https://openknowledge.worldbank.org/handle/10986/27008>
  - 78 Chisanga, Brian, and Olipa Zulu-Mbata. 2017. "The Changing Food Expenditure Patterns and Trends in Zambia: Implications on Agricultural Policies." Working paper 119, Indaba Agricultural Policy Research Institute, Lusaka. [http://www.iapri.org.zm/images/WorkingPapers/wp119\\_final.pdf](http://www.iapri.org.zm/images/WorkingPapers/wp119_final.pdf)
  - 79 IAPRI (Indaba Agricultural Policy Research Institute). 2016. *Rural Agricultural Livelihoods Survey. 2015 Survey Report*, Lusaka, IAPRI.
  - 80 Sitko, Nicholas J., and Thomas S. Jayne. 2012. "The Rising Class of Emergent Farmers: An Effective Model for Achieving Agricultural Growth and Poverty Reduction in Africa?" Working Paper 69, Indaba Agricultural Policy Research Institute, Lusaka. <http://www.iapri.org.zm/images/WorkingPapers/wp69.pdf>
  - 81 CABRI (Collaborative Africa Budgeting Reform Initiative). 2014. *Zambia Case Study: Innovative Financing of Agriculture in the SADC Region*. Centurion, CABRI. <https://www.cabri-sbo.org/en/publications/ensuring-value-for-money-in-agriculture-innovative-financing-of-agriculture-in-the-sadc-region-case-study-zambia>
  - 82 For instance, Shoprite entered the Zambian market in 1995 and has currently 22 sectors, employing 2,500 people. Source: International Growth Centre. 2015. *Growth Promotion Through Industrial Strategies In Zambia*. Lusaka, International Growth Centre. <https://www.theigc.org/wp-content/uploads/2015/06/2015-Policy-note1.pdf>
  - 83 International Growth Centre. 2015. *Growth Promotion Through Industrial Strategies In Zambia*. Lusaka, International Growth Centre. <https://www.theigc.org/wp-content/uploads/2015/06/2015-Policy-note1.pdf>
  - 84 World Bank. 2016. *Zambia Agribusiness and Trade Project*. Project Appraisal Document - P156492, Report No. PAD 1880, Washington DC, World Bank. <http://documents.worldbank.org/curated/en/459181482116462283/Zambia-Agribusiness-and-Trade-Project>
  - 85 Norman, Therese, Dino Merotto, and Brian Blankespoor. Forthcoming. *Spatial Analysis of Agro-Firm Location and Jobs Potential in Zambia*. Washington DC, World Bank.
  - 86 World Bank. 2018. *World Development Report 2018: Learning to Realize Education's Promise*. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/28340>
  - 87 World Bank. 2018. *Zambia Systematic Country Diagnostic*. Washington DC, World Bank. <https://openknowledge.worldbank.org/handle/10986/29702>
  - 88 Binswanger-Mkhize, Hans P., Timothy Johnson, Paul Chimuka Samboko, and Liangzhi You. 2016. "The Impact of Urban Growth on Farm and Rural Non-Farm Growth in Kenya." Paper presented at the 5th International Conference of the African Association of Agricultural Economists, "Transforming Smallholder Agriculture in Africa: The Role of Policy and Governance," Addis Ababa, September 23-26.
  - 89 The definition of city size is not straightforward. District typology from Randolph, G. (2018): secondary city districts with a presence of urban settlement containing between 100,000-500,000 residents as of 1990 are Chingola, Kabwe, Kitwe – which are on the 'line of rail'. Tertiary city districts contain 10,000-100,000 residents and encompass: Chipata, Kalulushi, Livingston, Mansa, Mazabuka, Mongu and Solwezi.
  - 90 World Bank. 2009. *World Development Report 2009: Reshaping Economic Geography*. Washington DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/5991>
  - 91 Randolph, Gregory. 2018. *Boosting Urban Job Creation Beyond Lusaka: How to Catalyze Balanced, Job-Rich Urbanization in Zambia*. Lusaka, JustJobs Network Inc.
  - 92 Christiaensen, Luc, and Ravi Kanbur. 2016. "Secondary Towns and Poverty Reduction: Refocusing the Urbanization Agenda." Policy Research Working Paper 7895, World Bank, Washington DC. <https://openknowledge.worldbank.org/handle/10986/25698>
  - 93 Frick, Susanne A., and Andrés Rodríguez-Pose. 2016. "Average City Size and Economic Growth." *Cambridge Journal of Regions, Economy and Society* 9 (2): 301-18.
  - 94 Behrens, Kristian, and Frédéric Robert-Nicoud. 2013. "Survival of the Fittest Cities." *The Economic Journal* 124 (581): 1371-1400.
  - 95 Christiaensen, Luc, and Yasuyuki Todo. 2013. "Poverty-Reduction during the Rural-Urban Transformation: The Role of the Missing Middle." Policy Research Working Paper 6445, World Bank, Washington DC. <https://openknowledge.worldbank.org/handle/10986/15587>
  - 96 Ravallion, Martin, Shaohua Chen, and Prem Sangraula. 2007. "New Evidence on the Urbanization of Global Poverty." *Population and Development Review* 33 (4): 667-701.
  - 97 "A growth cluster can be defined as: a concentration of producers, agribusinesses and institutions that are engaged in the same agricultural or agro-industrial subsector, and interconnect and build value networks when addressing common challenges and pursuing common opportunities." (Gálvez-Nogales, Eva. 2010. *Agro-Based Clusters in Developing Countries: Staying Competitive in a Globalized Economy*. Rome, Food and Agriculture Organization. <http://www.fao.org/docrep/012/i1560e/i1560e.pdf>)
  - 98 Randolph, Gregory. 2018. *Boosting Urban Job Creation Beyond Lusaka: How to Catalyze Balanced, Job-Rich Urbanization in Zambia*. Lusaka, JustJobs Network Inc.
  - 99 Samboko, Paul, Ballard Zulu, Munguzwe Hichaambwa, and Auckland Kuteya. 2017. "Are Farm Blocks a Viable Model for Smallholder Farming in Zambia." Working Paper 129, Indaba Agricultural Policy Research Institute, Lusaka. [http://www.iapri.org.zm/images/WorkingPapers/wp129\\_rev.pdf](http://www.iapri.org.zm/images/WorkingPapers/wp129_rev.pdf)



**The World Bank Group  
Lusaka Country Office  
2nd Floor, Bank ABC House  
746 Church Road  
P.O. Box 35410  
Lusaka, Zambia**

**Tel: +260 211 373200  
+260 211 373217  
Fax: +260 211 373248  
[www.worldbank.org/zambia](http://www.worldbank.org/zambia)  
[commszambia@worldbank.org](mailto:commszambia@worldbank.org)**