MOZAMBIQUE ECONOMIC UPDATE

Mind the Rural Investment Gap

December 2019

THE WORLD BANK
IBRD • IDA

The World Bank's Mozambique Economic Update (MEU) series is designed to present timely and concise assessments of current economic trends in Mozambique in light of the country's broader development challenges. Each edition includes a section on recent economic developments and a discussion of Mozambique's economic outlook, followed by a focus section analyzing issues of particular importance. The focus section in this edition explores the disparities in access to basic infrastructure for service delivery between Mozambique's provinces and provides recommendations to improve the distribution of the public investment program. The MEU series seeks both to inform discussions within the World Bank and to contribute to a robust debate among government officials, the country's international development partners, and civil society regarding Mozambique's economic performance and key macroeconomic policy challenges.

The cutoff date for the current edition of the MEU was November 30, 2019.

Contents

TABLES

BOXES

Abbreviations and Acronyms

BdM	Bank of Mozambique (*Banco de Moçambique*)
BoP	Balance of Payments
CAD	Current-Account Deficit
CGE	Computed General Equilibrium (model)
CGT	Capital Gains Tax
CPI	Consumer Price Index
FAO	Food and Agriculture Organization of the United Nations
FDD	State Development Fund (*Fundo de Desenvolvimento Estatal*)
FDI	Foreign Direct Investment
FPC	Standing Lending Facility (*Facilidade Permanente de Cedência*)
FPD	Standing Deposit Facility (*Facilidade Permanente de Depósito*)
GDP	Gross Domestic Product
GEP	Global Economic Prospects
GFSM	Government Finance Statistics Manual
GIEWS	FAO Global Information and Early Warning System
IMF	International Monetary Fund
INE	National Statistics Institute (*Instituto Nacional de Estatística*)
IOF	Household Survery (*Inquérito sobre Orçamento Familiar*)
IPI	Industrial Production Index
LIC	Low Income Countries
LNG	Liquefied Natural Gas
MASA	Ministry of Agriculture and Food Security (*Ministério de Agricultura e Segurança Alimentar*)
MBTU	Million British Thermal Units
MEF	Ministry of Economy and Finance (*Ministério da Economia e Finanças*)
MIMO	Interbank Reference Interest Rate.
MPC	Monetary Policy Committee
MPO	Macro-Poverty Outlook
MSME	Micro, Small and Medium Enterprises
Mt	Metric tons
MZN	New Mozambican Metical
NPL	Non-Performing Loan
NSO	National Statistics Organization
PER	Public Expenditure Review
PERPU	Urban Poverty Reduction Program (*Programa de Redução da Pobreza Urbana*)
PMI	Purchasing Managers Index
RCF	Rapid Credit Facility
REER	Real Effective Exchange Rate
SADC	Southern African Development Community
SAM	Social Accounting Matrix
SOE	State Owned Enterprise
SSA	Sub-Saharan Africa
UNICEF	United Nations Children's Fund
US	United States
USD	United States Dollar
WB	World Bank
WDI	World Development Indicators
WEO	World Economic Outlook

Acknowledgements

Executive Summary

Recent Economic Developments.

As 2019 drew to a close, a year when Mozambique faced devastation caused by two severe cyclones, the country looks ahead having made significant progress in terms of economic stability, having strengthened its external buffers and having improved its fiscal position. The metical has been broadly stable since mid-2017, contributing to reduced inflationary pressures and providing room for an appropriately cautious monetary policy easing cycle. Growing investment flows, mostly linked to the extractive industries, have bolstered international reserves. Additional progress has been made in fiscal management with a notable reduction in the primary deficit between 2015 and 2018 and significant efforts to protect priority spending. Plus, with the progress to date in advancing its LNG interests, there is much to anticipate from the coming years. So, in this context and as the government enters a new term, where should the focus of policy makers be?

The challenge remains to be growth. Growth was set further back in 2019 as Cyclones Idai and Kenneth and slower coal production affected output and is expected to fall to around 2.3 percent in 2019, down from 3.3 percent in 2018. With a population growth rate of 2.8 percent, this translates into a decline in the standard of living. Poverty has been further aggravated by the cyclones, which are likely to have impacted both the urban and rural poor in the affected areas. Growth is expected to accelerate with developments in the LNG sector and progress in post-cyclone reconstruction. But much of this expected growth is generated from the demand side of the economy, namely extractives-led investment and growing consumer demand, and less so from the supply side such as

manufacturing, backbone services or non-extractive export growth. So, having put much of the past economic volatility behind, structural reforms for more sustainable and inclusive growth must return to the center of the agenda, with the objective of recovering from the recent cyclones in the short-term and, in the medium term, of using the LNG opportunity to produce, export and employ.

Estimated number of poor directly affected by floods and destructive winds associated with Cyclone Idai
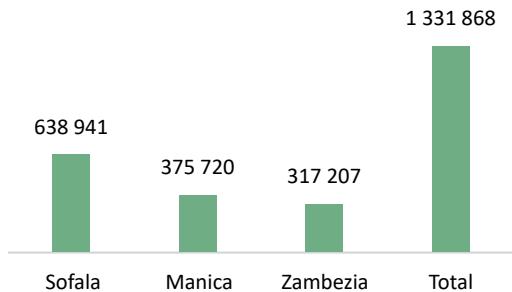
Source: World Bank staff calculations.

The fiscal outlook is also challenging. Having made progress in consolidating public finances up to 2018, the costs of the cyclone response, the electoral cycle and a still growing civil service wage bill forced the departure from this trend in 2019. And although debt levels have declined since 2016, the debt burden is still elevated. Thus, the outlook points to a tight fiscal setting and requires near term measures to reduce the deficit. A persistent focus on increased efficiency in expenditure, tackling the sources of fiscal risk and continued improvements in revenue management is essential in the coming years to bring financing down whilst meeting national development needs. And whilst significant progress has been made with subsidy reforms in recent years, measures to control the civil

service renumeration and to restructure loss-making SOEs are critical.

Lastly, Mozambique is entering a period of widening current account deficits as it enters the early stages of the LNG investment cycle. As in previous years, the current account deficit is expected to be largely financed by foreign direct investment and, increasingly, by LNG project financing. It enters this cycle with an improved external reserve position bolstered by investment inflows. But lackluster non-extractive export performance, lower growth in key trading partners and commodity price movements continue to be a source of external risk for Mozambique. Moreover, large forex inflows in the medium to long-term are an additional source of risk if not well managed. Mozambique is set to receive a significant influx of foreign currency: firstly to finance LNG projects then, towards the end of this decade, as natural resource revenues. If not well managed, this influx could result in a significant strengthening of the local currency which would erode Mozambique's competitiveness on the global market and place further pressures on the external position. Mismanagement could also hinder the good use of these resources through a well-executed public investment program and savings of surplus income for future generations.

Mind the rural investment gap.

The special focus section of this edition of the Mozambique Economic Update places a spotlight on public investment in basic infrastructure, a topic of significant importance if Mozambique is to raise equality in opportunity and pursue more inclusive growth. First, it asks whether disparities in access to basic infrastructure are growing or declining. The analysis finds that overall, disparities have been growing between rural and urban areas, especially in the rural parts of Mozambique's central and northern provinces. Beneath the regional trends is mixed performance at the sectoral level, with mild improvements in access to water, electricity and health facilities. However, access to transport deteriorated significantly, along with a moderate deterioration in access to primary schools, on average. The deterioration in access to transport is particularly notable, indicating a

significant deterioration in rural connectivity and contributing heavily to the overall decline in the measure of access to basic infrastructure.

With this context in mind, the report asks if the large increases in public expenditure during Mozambique's 2009 to 2015 investment boom years boosted funding to the underserved areas: did the public investment program seek to address the growing disparities? The results indicate that the provinces with the lowest levels of access to basic infrastructure in 2009 were amongst the least well-funded in subsequent years. Per capita investment levels were relatively lower in northern and central zones, especially Nampula, Zambezia and Cabo Delgado, which are amongst the most underserved areas. It also indicates that capital investment in roads has been skewed towards urban areas, contributing to the declining rates of rural connectivity, whereas the non-road capital budget was more balanced, potentially reflecting progress in rural water, electricity and health access. Moreover, the analysis notes that only 42 percent of the investment budget went to capital expenditure on basic infrastructure for service delivery between 2009 and 2015, with the remainder going towards non-capital outlays such as administrative and overhead costs.

Composition of the investment budget (%) 2009-15

22%
Public Administration

36%
Recurrent

42%
Capital
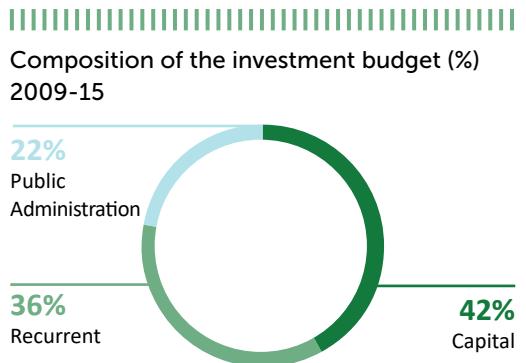
Source: World Bank staff estimates based on MEF and BOOST.

The section concludes by recommending setting specific targets to reach underserved areas in the *Plano Quinquenal do Governo* and the *Plano Económico e Social*, taking a forward-looking approach to target areas with growing populations, revising budget allocation formulas to account for access gaps and reducing the misallocations of investment resources to

recurrent or administrative uses through a sound public investment management system. Looking ahead, Mozambique is approaching a second investment boom in the coming decade as revenues from gas production are expected to widen fiscal space significantly in the late 2020s. In this favorable context, such reforms will help in getting public investment priorities right to ensure that the population benefits evenly from these resources.

Part One: Recent Economic Developments

Economic Growth

Mozambique's reliance on the extractive sector and exposure to climate shocks was evident in 2019 as lower coal production and tropical cyclones contributed to a further reduction in growth.

Still healing from the economic fallout that followed the hidden debts crisis, Mozambique's economy was set further back in 2019 as Cyclones Idai and Kenneth[1] and slower coal production dented output. GDP growth is expected to fall to around 2.3 percent in 2019, down from 3.3 in 2018.[2] With a population growth rate of 2.8 percent, this translates into a drop in GDP per capita in real terms and with this, a decline in the overall standard of living. Poverty has been further aggravated by the cyclones, which are likely to have impacted both the urban and rural poor in the affected areas (Box 1).

Cyclone Idai's impact on agricultural production is one of the main contributors to lower growth expectations. The cyclone reached Mozambique just before the first and largest harvest season of the year and affected an area representing almost a quarter of Mozambique's agricultural production. And whilst not all production in the area was lost,

the severe weather that accompanied the cyclone is estimated to have destroyed about 15 percent of planned agricultural output for the year, a large dent to a sector that accounts for 22 percent of GDP.[3] As a result, Mozambique is currently experiencing severe food insecurity in some areas with an atypically high number of households in need of emergency assistance.[4] Production of key cash crops which contribute to exports, such as cotton and sugar, was also affected (Figure 3).

Furthermore, coal production, which had been an important driver of growth since 2017, has slowed. Coal is affecting growth in two ways. Firstly, base effects are at play: with the 2017-2018 ramp-up phase that had bolstered growth in those years now slowing, production volumes are more stable at a higher level. Secondly, coal operations have been affected by the heavy rainy season at the start of the year, causing production targets to be revised downwards for the second year in a row.[5] With coal accounting for 71 percent of extractives exports last year, and 33 percent of overall exports, these circumstances have contributed to a significant drop in the extractive sector's contribution to growth in 2019 (Figure 4).

It is positive to note that private services and

---

[1] In March and April 2019, Mozambique was struck by two consecutive major cyclones with significant impacts on local populations, business and core infrastructure. More than 1.7 million people were affected, with damages and losses amounting to US$ 3 billion, and an estimated US$ 3.2 billion of total cost for recovery and reconstruction.

[2] The World Bank forecast for GDP growth in 2019 was revised downwards from 3.7 percent to approximately 2.3 percent post-cyclone Idai. GDP growth fell to 2.4 percent in the first half of 2019, down from 4.1 percent in 2018 and an average 4.2 percent over the last three years.

[3] World Bank staff estimates based on data shared by the Ministry of Agriculture and Food Security (MASA).

[4] FewsNet, Food Security Outlook for Mozambique, June 2019.

[5] In August 2019, Vale Mozambique revised production target for 2019 to from 14 million tons to 10 million tons, after having revised last year's production targets from 16 million tons to 12 million tons.(see https://clubofmozambique.com/news/vale-revises-moatize-coal-production-downwards-139289/).

manufacturing, which together accounted of 39 percent of GDP in 2018, are slowly starting to recuperate. Stimulated by improving investor sentiment with progress in LNG investments, easing interest rates and gradually recovering private demand, private services and manufacturing slightly increased their contribution to growth from 1.1 percent in the first half of 2018 to 1.3 percent in the same period of 2019. This trend is echoed by Mozambique's Purchasing Managers Index (PMI). This indicator of economic health for manufacturing and service sectors[6] shows a gradually improving trend backed by growth in new orders and a pick-up in production (Figure 5).

Box 1: Exposure and socioeconomic vulnerability to Cyclone Idai

Cyclone Idai, one of the worst tropical cyclones on record to affect Africa, struck mostly the provinces of Sofala, Manica and southern Zambezia, causing catastrophic damages. It is estimated that around 2,3 million people resided in areas exposed to potentially destructive winds (above 119km/hour) and flooded by the torrential rains, exceeding in some parts 50 centimeters. The city of Beira was one of the areas hardest hit by Idai. Satellite data on nighttime lights, a proxy of economic activity, fell by 75 percent relative to the levels of luminosity pre-disaster, indicating major damages to infrastructure and economic systems in the city. The burden of the destruction appears to have disproportionally affected the parts of the city with the largest concentration of poor households.

Along the same lines, Idai is expected to have ravaged livelihoods in rural areas along its path, chiefly agricultural activities. Sofala and Manica, for instance, are important producers of maize, contributing nearly 30 percent of the total production nationally. Overlaying the trajectory of the cyclone with land use maps suggests that a significant share equivalent to around half of the total output of maize may have been affected by the event. Furthermore, evidence from Jokwe, a cyclone of comparable magnitude that made landfall in Mozambique in 2008, shows large drop on consumption, food security and assets, which translated into sizable increases in poverty among affected households. An analogous level of vulnerability is seen in the parts from Sofala, Manica and Zambezia impacted by Idai, where over half of the population affected (1.3 million people) were already poor and many more were close to falling back into poverty if hit by a large shock.

Figure 1: Reduction in electric lighting in Beira after Idai
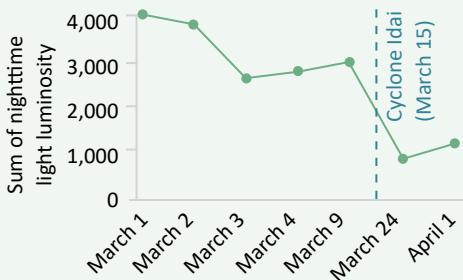
Source: World Bank staff calculations based on nighttime light data from VIIRS.

Source: Poverty Global Practice - World Bank.

Figure 2: Estimated number of poor directly affected by floods and destructive winds associated with Cyclone Idai

Source: World Bank staff calculations.

---

6   The Purchasing Managers' Index™ (PMI) published by Standard Bank is a weighted average of the following five indices: New Orders (30%), Output (25%), Employment (20%), Suppliers' Delivery Times (15%) and Stocks of Purchases (10%).

Growth is projected to accelerate in the medium-term with developments in the LNG sector and progress in post-cyclone reconstruction.

Mozambique is expected to follow an upward growth trajectory over the coming years as it prepares to experience a second FDI boom. Progress with the post-cyclone reconstruction program, a kick-off in the development of Mozambique's large LNG projects and recovering investor confidence, supported by monetary policy easing and higher foreign direct investment (FDI) inflows are expected to steer growth towards 5 percent by 2021 (Figure 6). After this, growth is set to begin increasing sharply in the mid-2020s as LNG production begins.

Although the LNG industry will create an impetus for growth in the medium-term, the challenge of ensuring that these gains can boost growth and job creation in the broader economy remains. As Mozambique's LNG prospects begin to materialize and send a positive signal to foreign investors, policy focus should increasingly be oriented towards improving the macroeconomic management to help de-risk the Mozambican setting, particularly through more a sustainable debt outlook, improved fiscal transparency and by tackling corruption (see Box 2).

Faster progress in the implementation of structural reforms will further strengthen linkages between the LNG sector and the rest of the economy. As the LNG sector begins investing, inflows into the economy will create demand for a number of sectors, including food production, professional services, real estate and transport, amongst others. Ensuring that steady progress is made in strengthening the business environment, including at the sub-national level, will improve operating conditions for firms (see Box 3). Another important reform area is increasing the supply of skilled labor to firms. In the long term, an improved education system would enhance the supply of skills, but in the short to medium-term, easing access to foreign labor where skills gaps exist may be beneficial. There are a number of other areas, including reforms to support more rapid development of backbone digital services, promote financial inclusion and improve property rights. If paired with improvements in infrastructure and connectivity, such a focused structural reform program would provide a more conducive setting for future growth.

Post-cyclone rehabilitation efforts will also influence the pace of the growth recovery in central Mozambique. The reconstruction and recovery program could provide much-needed stimulus to the economy in the short-term, although the extent depends on two factors: financing and absorption capacity. The authorities estimated the total damages and losses caused by cyclones Idai and Kenneth at US$ 3.2 billion, of which approximately 38 percent has been pledged by donors for relief and reconstruction. The ability to convert pledges into disbursements will be key in defining the timing and pace of the recovery. As it stands, the disbursement profile for many of the pledged amounts remains unclear. More important still, will be the authorities' ability to ensure efficient and timely resource absorption through strengthened implementation and transparency mechanisms.

Table 1: Growth outlook

	2018	2019p	2020p	2022p
Real GDP, % Δ	3.3	2.3	4.3	5.0

Source: World Bank staff estimates. p = Projection

||||||||||||||||||||||||||||||||||||||

Figure 3: Cyclonic shocks have weakened crop production in 2019…

Production of key agricultural goods (% change), 2017 -19
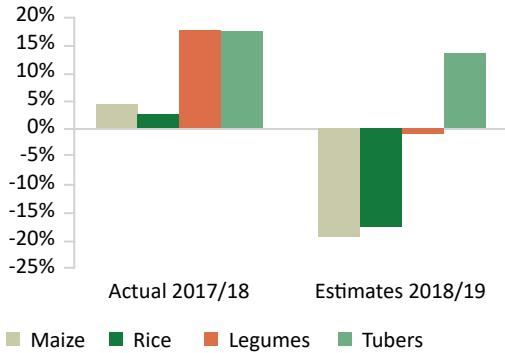
Source: MASA.

||||||||||||||||||||||||||||||||||||||

Figure 4: … and coal production is also lower.

Coal production (metric tons) and prices (US$/mt), 2015 – 19
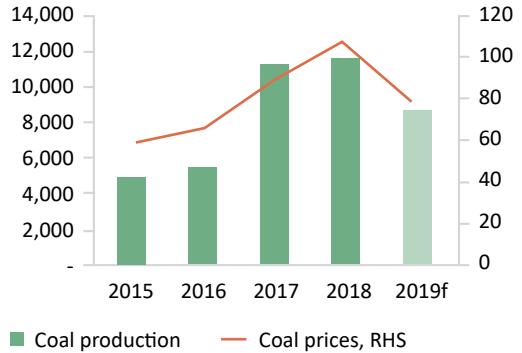
Source: Vale Mozambique.

||||||||||||||||||||||||||||||||||||||

Figure 5: In contrast, demand for service and manufactured goods is starting to recover

Quarterly growth (% change) and Purchasing Managers Index (> 50 = an improvement), 2018 - 19
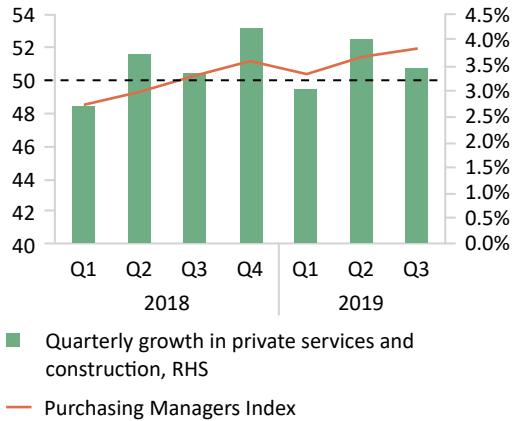
Source: INE; Standard Bank Mozambique / IHS Markit.

||||||||||||||||||||||||||||||||||||||

Figure 6: GDP growth is expected to narrow in 2019, before recovering towards 5 percent in 2021

GDP growth (% change), 2014 – 21
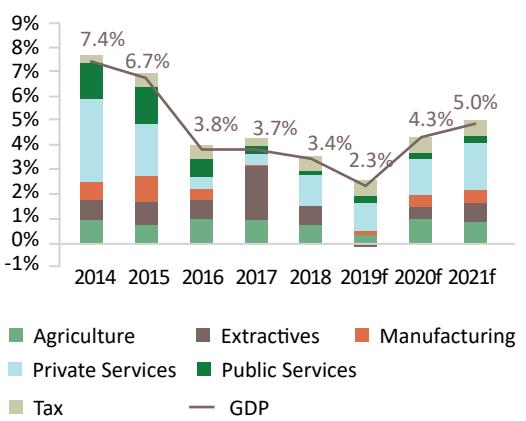
Source: INE; World Bank staff estimates.

Box 2: What is the recent experience of Mozambican firms with corruption?

According to Mozambican firms, corruption is a major problem. Corruption, major or petty, is undesirable. A third of Mozambican firms have cited it as a significant constraint to their activities, mirroring regional and global trends (41 and 33 percent, respectively). It is thus, of concern that in the most recent World Bank enterprise survey (2018), Mozambican firms cite corruption as the main obstacle for their businesses.

Figure 7: Requests for bribes are increasing and most common when obtaining a construction permit or electricity connection

% of firms that said "yes"

■ 2007   ■ 2018
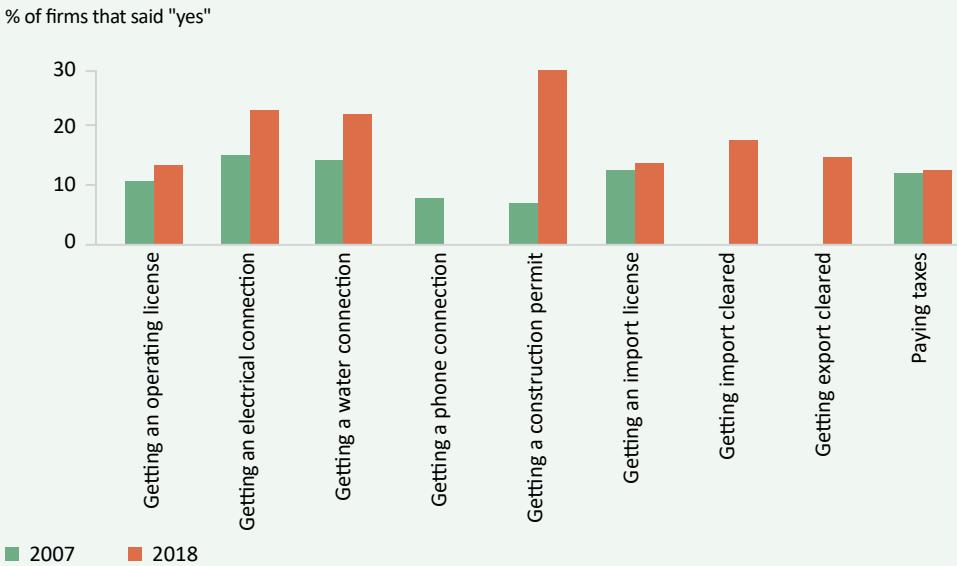
What are the bribes paid for? Firms report typically being asked to make informal payments when obtaining public services. Bribes to get electricity or water connections and construction-related permits are the most widespread. Demand for these bribes has increased when compared to 2007 and is at or above the average levels recorded both globally and in sub-Saharan Africa. Bribes to get an import or an operating license are also prevalent. Another type of corruption that many Mozambican firms face are payments to secure government contracts, which is experienced by 13 percent of firms that reported having secured or attempted to secure a government contract in the previous year.

Source: Mozambique Enterprise Survey, 2018.

Box 3: Advancing reforms for an enabling business environment –
evidence from Mozambique's Subnational Doing Business

The 2019 subnational doing business (SDB) assessment found pockets of good practice in Mozambique, which, if scaled up nationally, would significantly improve the business environment. For example, the *Ressano Garcia* border post, where there has been a gradual implementation of the one-stop border post project, ranks near the top third of the global ranking on trading across borders. The assessment, which considers four regulatory areas impacting the business environment across the country (starting a business, registering property and enforcing contracts) also found that contract enforcement is an area where Mozambique performs well at five points above the average for SSA.

Figure 8: If all local good practices were adopted, Mozambique's global performance would improve by 22 places...
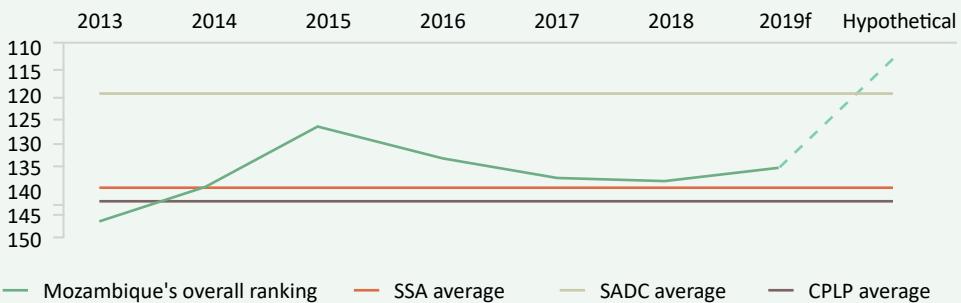
Source: World Bank Doing Business database.

Mozambique's overall ranking would jump 22 places (assuming all other countries stay the same) if all country-wide good practices were adopted. The SDB findings show that provinces across Mozambique have much to learn from each other, and that some reforms are of an administrative nature and can be implemented in a short period of time. A hypothetical location where a commercial dispute is solved in 348 days (as in Tete), costs 21.8 percent of the claim value (as in Manica) and scores 8.5 on the quality of judicial processes index (as in four provinces) would stand at 35 in the global ranking on this indicator (132 places higher than Mozambique's current ranking). Similarly, a location where property registration takes 37 days (as in Inhambane), costs 5.2 percent of the warehouse value (as in Maputo City and Zambezia), requires seven procedures (as in six provinces14) and has a score of 10 on the quality of land administration index (as in Tete) would rank 113 — a jump of 20 places in the global ranking. Altogether, the assessment shows that by adopting all the good practices found at the subnational level across the four indicator areas, Mozambique's ranking would jump 22 places on the overall ease of doing business, from 135 to 113 – exceeding the average for SADC countries.

Source: Doing Business in Mozambique 2019 - World Bank.

Exchange Rate and Inflation

Inflationary pressures remain low in a context of subdued domestic demand.

Year-on-year inflation stood at 2.6 percent in November 2019 (down from 4.3 a year earlier) placing 12-month average inflation at 2.8 percent. Mozambique has now gone from being one of the countries on the continent with the highest inflation rate (having peaked at 26 percent

in November 2016) to one with the lowest levels in 2019. Mozambique's USD exchange rate, an important determinant of inflation, has remained broadly stable, having traded at an average of 61 to the US dollar since mid-2017, contributing to lower inflation. But other factors are also affecting the price setting, including a combination of weak demand and recent downward revisions of fuel prices. Moreover, Cyclone Idai's overall impact on inflation so far has been modest and mostly localized. Beira, the area most affected, saw food inflation reach 10.3 percent in April this year as agricultural output suffered, but with a weight of just 18.6 percent in national CPI and limited integration amongst Mozambique's agricultural markets, its overall impact on inflation was muted.

Figure 9: Lower food price pressures have contributed to an easing in overall inflation...

Contributions to inflation (%) and USD/ MZN exchange rate, 2016 - 19
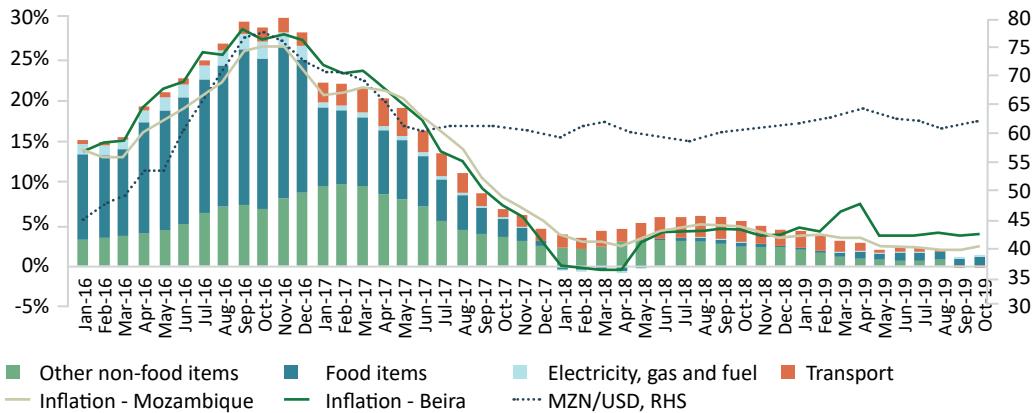
Source: INE.

The External Sector

Mozambique's current account deficit (excluding capital gains receipts) is expected to keep steady in 2019 as export performance flags and megaproject imports decline.

The current account deficit (CAD), excluding capital gains receipts, is expected to remain stable at around 31 percent of GDP in 2019 (reducing to 25 percent of GDP with capital gains).[7] The megaproject deficit is expected to narrow in 2019, despite a drop in commodity exports, mainly due to a significant reduction in megaproject imports in the pre-LNG investment phase. This counteracts a wider non-megaproject deficit, driven mostly by growth in consumer imports (Figure 11 and Figure 12; Table 2).

Commodity export performance in 2019 has been lackluster with lower prices for some of Mozambique's largest commodities. Goods exports are expected to decline by 14 percent in 2019. Coal and aluminum, which together accounted for approximately 60 percent of exports in 2017 and 2018, experienced significant reductions in their prices in 2019 which has affected overall export receipts (Figure 13). Coal prices at the end of November 2019 were 33 percent lower than at the end of 2018 whilst aluminum prices fell by 8 percent during the same period. Conversely, non-megaproject exports continued to increase in 2019, albeit at a slower growth rate. An 11 percent appreciation of the real exchange rate (RER) since the start of 2018 may be contributing to the slower growth in exports. But, with the RER being well below historical levels (Figure 10), it continues to provide a better setting for export growth as seen in 2019 for sectors such as tobacco amongst others.

---

[7]   In 2019, Mozambique received USD 880 million (approximately 6 percent of GDP) in capital gains receipts from the sale of assets in the LNG industry.

||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Figure 10: The recent real exchange appreciation may be contributing to slower non-extractive export growth

Real effective exchange rate index (2010 = 100) and Exports (USD millions), 2011 – 19

— Real effective exchange rate, LHS ⋯⋯ Exports excl. coal and aluminum (3 month moving avg), RHS
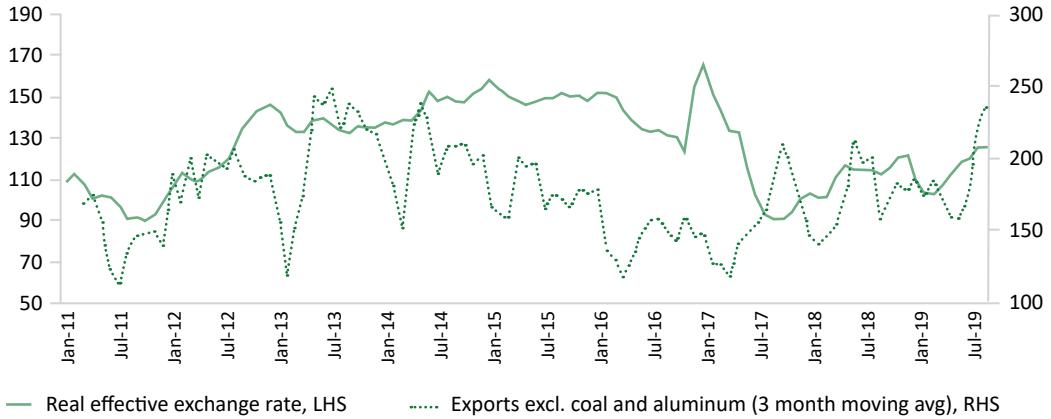
Source: World Bank staff estimates based on BdM and INE data.

Bolstered by strong investment inflows, the external position remains adequate despite a growing current account deficit.

As in previous years, the current account deficit was largely financed by foreign direct investment and, increasingly, by LNG project financing. FDI inflows continue to be the main source of external financing and are well above sub-Saharan Africa or low-income country averages (Figure 14), accounting for 64 percent of the CAD in 2019. Private external debt to finance the LNG investment program is also increasingly financing the deficit. Non-megaproject FDI has also expanded in 2019, bolstered by a large one-off investment for ports and logistics in the Nacala Corridor whilst investment levels in other sectors remain muted amidst a still weakened economic setting.

With the significant increase in external inflows, gross international reserves are expected to reach approximately USD 3.7 billion by end 2019, covering around 6 months of imports (excluding megaprojects). This places Mozambique's reserves at an adequate level and increases capacity to cushion potential external and domestic shocks.

A softer global growth setting and falling commodity prices present a less favorable external outlook.

Lower growth, globally and for key trading partners, and falling commodity prices continue to be a source of external risk for Mozambique (Table 3). Global growth has been revised downward from 2.9 percent to 2.6 percent, reflecting weaker than expected international trade and investment at the start of the year,[8] thus suggesting a sluggish outlook especially outside the extractive sector. Weakening commodity prices continue to be a cause for concern for Mozambique's key exports. Coal prices fell 42 percent in the third quarter of 2019 (compared to the same period last year) following already steep declines in the second half of 2018 and could weaken further if slower growth in China weakens demand.[9] The consequences of the geopolitical tensions in the Middle-East, and in particular fears of rising oil prices, may also create added risk for the outlook.

Moreover, large forex inflows in the medium to long-term are an opportunity to bolster Mozambique's external buffers but are also an additional source of risk if not well managed.

---

[8] World Bank Global Economic Prospects, June 2019.
[9] Risks are skewed to the downside and include weaker global growth and environmental policies aimed at reducing air pollution – particularly in China, which accounts for 11 percent of global demand.

Mozambique is set to receive a significant influx of foreign currency – initially to fund post-cyclone reconstruction efforts and to finance LNG projects then, towards the end of upcoming decade, as natural resource revenues. If not managed well, this influx could result in a significant strengthening of the local currency, which would erode Mozambique's competitiveness on the global market and place further pressures on the current account deficit. In this context, resource inflows are an opportunity provided that policy makers prioritize structural reforms, implement strategic investments well and increase institutional capacity to counteract risks.

Figure 11: The CAD (excluding capital gains) is set to remain stable in 2019...

Current Account Balance (USD millions), 2011-19

■ Megaproject ■ Non-megaproject
— Overall CAB — Overall CAB (excl. capital gains)
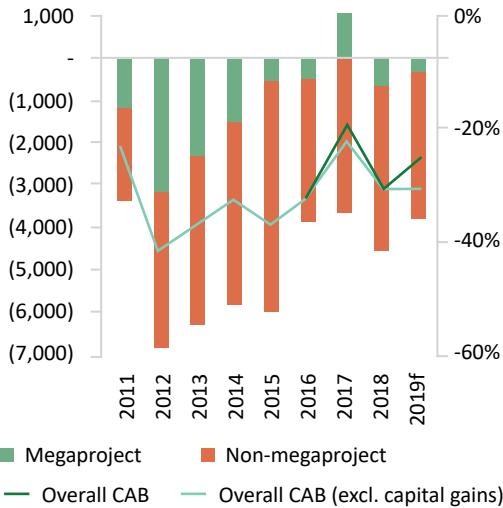
Source: BdM; World Bank staff estimates.

Figure 12: ...as lower import levels

Goods and Service imports (USD million), 2011-19

■ Megaproject ■ Non-megaproject — Total imports
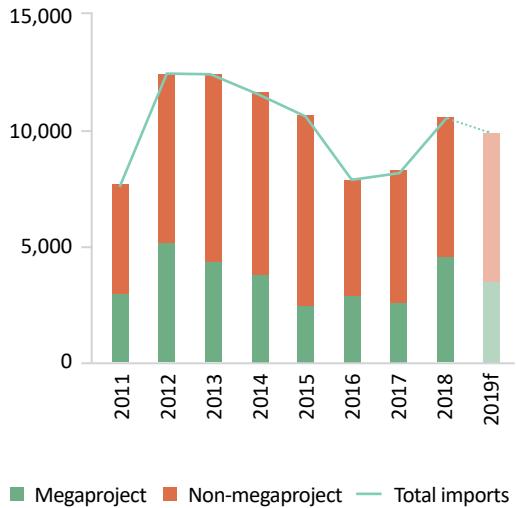
Source: BdM; World Bank staff estimates.

Figure 13: ... offset a drop in commodity exports

Exports (USD million) and price index (2005 = 100) of key goods, 2016-19

■ Coal exports ■ Aluminum exports
— Coal (Australia USD/mt), RHS
— Aluminum (USD/mt), RHS
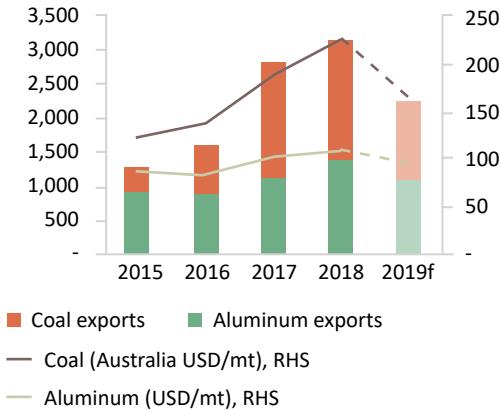
Source: BdM; World Bank staff estimates.

Figure 14: High FDI levels continue to support the external position

Net foreign direct investment (% of GDP), 2012-19

— Mozambique — SSA — LIC
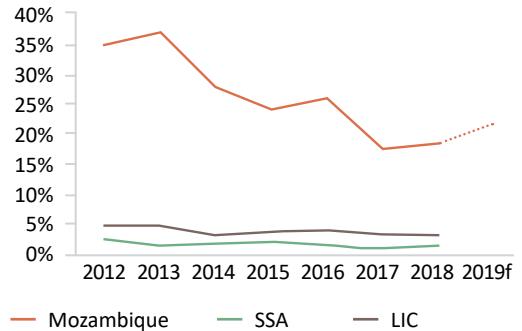
Source: BdM, WDI.

Table 2: **The Balance of Payments**

(USD millions, unless otherwise stated)	2016 Actual	2017 Actual	2018 Estimate	2019 Forecast	Δ 16/17	Δ 17/18	Δ 18/19
Current Account Balance							
(% of GDP)	-32.0	-19.6	-30.6	-25.1	...	...	...
Megaproject	-3.4	8.0	-4.6	-2.4	...	...	...
Non-megaproject	-28.6	-27.6	-26.0	-22.8	...	...	...
Current Account Balance							
(% of GDP), excl. capital gains	-32.0	-22.2	-30.6	-31.0	...	...	...
Megaproject	-3.4	8.0	-4.6	-2.4	...	...	...
Non-megaproject	-28.5	-30.2	-26.0	-28.6	...	...	...
Current Account Balance	-3,846	-2,586	-4,502	-3,792	-33%	74%	-16%
Trade Balance	-4,106	-2,830	-4,544	-4,642	-31%	61%	2%
Goods, net	-1,405	-498	-973	-2,007	-65%	95%	106%
Exports	3,328	4,725	5,196	4,472	42%	10%	-14%
Megaproject	2,413	3,657	3,913	3,045	52%	7%	-22%
Non-megaproject	915	1,068	1,282	1,426	17%	20%	11%
Imports	4,733	5,223	6,169	6,478	10%	18%	5%
Megaproject	771	733	1,277	1,206	-5%	74%	-6%
Non-megaproject	3,962	4,490	4,892	5,272	13%	9%	8%
Services, net	-2,701	-2,332	-3,571	-2,636	-14%	53%	-26%
Income and transfers, net	260	244	42	851	-6%	-83%	1906%
Capital & Financial Account	3,383	3,838	4,220	4,256	13%	10%	1%
of which							
FDI, net	3,093	2,293	2,692	2,428	-26%	17%	-10%
Megaproject	1,322	911	2,013	972	-31%	121%	-52%
Non-megaproject	1,771	1,382	679	1,456	-22%	-51%	114%
Other, net (1)	83	1,342	1,363	1,676	1520%	2%	23%
Overall Balance	-463	1,253	-282	465	...	...	...
excl. capital gains & support for cyclones	-463	903	-282	-415	...	...	

Source: BdM, World Bank staff estimates.
Notes: A positive growth rate for the Current, trade and goods balances indicates a wider deficit.
(1) Other flows include net portfolio investment; net currency and deposits; loans; insurance, pensions and standardized guarantee schemes (net); net trade credits and advances; net other accounts payable/receivable.

Table 3: **External outlook**

	2018	2019p	2020p	2021p
Nominal Commodity Price				
Aluminum USD/mt	2,108	1,790	1,760	1,800
Coal, Australia USD/mt	107	79.0	71.0	69.8
Hard coking coal, Australia USD/t	194	184	162	157
Liquefied Natural Gas, Japan USD/mmbtu	10.7	10.7	10.0	9.8
Tobacco USD/mt	4,863	4,750	4,727	4,704
Current Account Deficit, % of GDP	-30.6	-25.1	-39.6	-56.0
Financial and Capital Account, % of GDP	28.7	28.2	38.6	56.6
Net Foreign Direct Investment, % of GDP	18.3	16.1	22.0	28.8

Source: World Bank staff estimates, Thomson Research, KPMG Analysis; p = Projection.

Fiscal Policy

Having made progress in consolidating public finances, costs associated with the cyclone response and electoral spending, along with a still growing wage bill have reverted this trend in 2019.

With a reduction in the primary deficit from almost 6 percent in 2015 to 1.5 percent by 2018, Mozambique made significant progress in remedying its fiscal imbalances.[10] The overall fiscal deficit also narrowed from 7.1 to 5.1 percent of GDP (Figure 15). While revenues (excluding capital gains) did experience slight growth (0.8 percentage points of GDP), most of the consolidation effort took place on the expenditure side where total spending fell from 33 to 31 percent of GDP during this period. Considerable advances were also achieved on key reforms to strengthen fiscal management, including better regulation of debt and guarantee management, an improved legal framework for managing state-owned enterprises and improved public investment management procedures. The authorities have also cleared most of the validated arrears which amounted to 2 percent of GDP in 2018.[11] About 59 percent of these arrears were repaid in 2018 and 2019, and an additional 26 percent were settled through issuance of treasury bonds in the first half of 2019.

But recovery efforts following the tropical cyclones, election related costs and a growing wage bill added spending pressures in 2019 and are expected to push the primary deficit to 3.3 percent of GDP (excluding capital gains receipts). Immediate relief efforts and repair of critical infrastructures have contributed to put the expected capital budget for 2019 at 7.7 percent of GDP. The other main source of pressure, which has persisted in recent years, stems from growing civil services salary costs, which have been steadily increasing from 10 percent GDP in 2015 to an estimated 12 percent of GDP in 2019. It was therefore fortunate that Mozambique collected US$ 880 million in capital gains tax, equivalent to 6 percent of GDP, from the sale of assets between LNG operators this year. These much-needed funds will cushion these spending needs, support the authorities in continuing supplier arrears clearance and provide a buffer in the form of savings. It also brings the primary and overall balances (including capital gains taxes - CGT) to an estimated 2.5 and -1.4 percent of GDP in 2019, respectively.

Spending on investment, social and economic sectors: improving in a challenging financing environment.

The authorities have continued to make

---

[10] The primary balance is equivalent to the overall fiscal balance less interest payments.
[11] In 2018 the government validated a total of MZN 13.5 billion arrears that have been accumulated since 2015. An additional MZN 6 billion of estimated arrears are still being analyze.

efforts to bolster priority spending on social and economic sectors.[12] After remaining steady at 14 percent of GDP since 2016, spending on priority sectors went up by a percentage point of GDP to 15 percent in 2018, reflecting an increase in the investment budget for the health and infrastructure sectors (Figure 16). Safeguarding of priority spending has also been helped by directing a share of the capital gains windfall received in 2017 towards rehabilitation of road infrastructure and the conclusion of several social projects. Yet, overall, the burden of the fiscal adjustment since 2016 has fallen disproportionately on a category of expenditure that is important for future growth: public investment. A significant share of the fiscal adjustment to date relied on cuts to the investment budget with capital spending having declined from 12 to 7.7 percent of GDP between 2015 and 2018, which if continued, would result in reduced progress in access to basic infrastructure.

Spending on social and economic sectors is set to increase further in 2019 but efficiency of spending remains a challenge. At MZN 96 billion, total priority spending in the first 9 months of the year was 11 percent higher than the same period last year, driven by recurrent spending in education and health and infrastructure (in particular energy, public works and water) sectors. This trend, along with the additional spending linked to cyclone recovery efforts, suggests that priority spending could increase to 16.5 percent of GDP this year. Despite this, efficiency of spending and the growing regional inequality remain a challenge in Mozambique, especially in key service delivery sectors. See section two of this report for a more detailed discussion this topic.

Although Mozambique remains in debt distress, there has been progress in improving the external debt profile.

Although still elevated, debt levels are have declined since 2016. Public sector external debt is estimated to have narrowed from 103 to 98 percent of GDP between 2016 and 2019 on account of a 13 percent appreciation of the

metical during this period, as well as a significant reduction in external borrowing (Figure 17). External debt ratios are lower when the debt of the *Empresa Nacional de Hidrocarbonetos* (ENH)[13] is excluded, declining from 95 to 85 percent of GDP between 2016 and 2019, reflecting the contribution Mozambique's LNG financing to the debt stock.[14] Similarly, public sector debt (excluding ENH) dropped from 118 to 104 percent of GDP over the same period. Yet, debt service obligations have continued to be elevated with the external and public debt service to revenue and grants ratios estimated to reach 16 and 34 percent, respectively, at end 2019 (excluding capital gains tax).

With domestic credit growing as a source of financing, the stock of domestic debt has continued to grow. Central government domestic debt picked up by MZN 32 billion in the first 9 months of 2019 (around 3.4 percent of GDP) to meet budget financing needs, advance with domestic arrears clearance and to support ailing SOEs. These needs brought the stock of central government domestic debt to 18.2 percent of GDP by the end of September 2019, up from 11.7 percent at end 2016. This increase, which has taken place during a period of high interest rates, has raised the domestic debt service burden to an estimated 2.2 percent of GDP in 2019, up from 1 percent in 2016. Looking ahead, the maturity profile of these financing sources is contributing to considerable levels of debt-service concentration: roughly 80 percent of the stock of treasury bonds as at June 2019, estimated at 5 percent of GDP (equivalent to half of the domestic debt stock), is due between 2019 and 2022, raising rollover risk in the medium-term (figure 18).

The authorities are have made progress in resolving the MOZAM bond default. The authorities concluded negotiations of the US$ 727 million MOZAM 2023 bondholders in late 2019, resulting in a swap to a US$ 900 million bond. Under the agreement, the maturity has been extended from 2023 to 2031, and the annual coupon rate has been reduced from 10.5 to 5 percent until 2023 and 9 percent from

---

[12] Mozambique's development plans consider as priority sectors education, health, infrastructures, agriculture, and social welfare.
[13] Mozambique's national hydrocarbons company.
[14] IMF-World Bank Debt Sustainability Analysis (DSA) for Mozambique (2019) with GDP estimates for 2018 and 2019 updated.

2023 onward. A US$ 40 million consent fee to bondholders is also included.[15] The restructuring primarily offers cashflow relief. The resulting adjustment in Mozambique's debt profile will bring needed fiscal respite and could contribute to repairing the country's credit rating over a period of time.[16] In the meantime, the authorities took steps to legally challenge the Proindicus linked debt and to advance negotiations with the creditors of the Mozambique Asset Management (MAM) linked debts.[17] Nevertheless, the most recent debt sustainability analysis indicates that Mozambique will remain at a high risk of debt distress in the medium term even under the scenario that both the MOZAM and MAM debts are restructured, and the Proindicus debt is excluded from the public debt stock. This underlines the necessity of continued fiscal restraint and pro-active fiscal risk management in the medium-term.[18]

The fiscal outlook remains concerning and requires near term measures to strengthen medium-term fiscal management.

The outlook points to a tight fiscal setting and the need to reign in the public sector's financing needs whilst raising the efficiency of expenditures, especially for service delivery and infrastructure sectors. Mozambique expects a significant expansion in fiscal space with the start of LNG production. But these prospects require time to materialize. Given project development and production flow timelines, a significant increase in fiscal revenues could potentially be 8-10 years away. This places Mozambique in a tight fiscal setting for an extended period of time, given current debt levels. As such, a persistent focus on increased efficiency in expenditure, tackling the sources of fiscal risk and continued improvements in revenue management are essential in the coming year to bring financing down whilst meeting national development needs. With significant progress having been made with subsidy reforms in recent years, measures to control the civil service remuneration and to restructure loss-making SOEs are critical.

This is the right time to strengthen medium-term fiscal planning, both to navigate through the current fiscal context but also to establish the framework for judiciously managing future resource inflows. If not managed well, an LNG linked revenue boom would be a significant source of risk to macroeconomic stability. Managing these risks requires a battery of policies and instruments including a credible medium-term fiscal framework anchored in appropriate fiscal targets and a sovereign fund for saving and smoothing volatility. Similarly, borrowing decisions should be guided by a medium-term debt strategy anchored in sustainable debt objectives. Moreover, public investments would be more impactful if sourced from a pipeline of well-prepared projected that have been appraised from economic and social impact perspectives. Improved reporting and fiscal and monetary policy coordination are also essential. Mozambique has made progress in some of these areas and, with additional efforts, can establish a solid medium-term fiscal management framework and the right conditions for managing any future resource boom.

[15] http://www.mef.gov.mz/index.php/documentos/anuncios-e-comunicados/684-mozambique-reaches-an-agreement-in-principle-on-the-key-commercial-terms-of-a-proposed-restructuring-transaction-relating-to-mozambiques-usd-726524000-10-5-per-cent-notes-due-2023

[16] Having downgraded Mozambique from B2 in August 2015 to CAA3 in July 2016, Moody's upgraded Mozambique's sovereign debt rating by one notch, to Caa2, in September 2019. Similarly, adjustments to Mozambique's sovereign credit ratings have also been carried out by Fitch (from RD to CCC) and Standard & Poor (from SD to CCC+) in November 2019.

[17] The Proindicus and MAM credits are part of the hidden debts package, and amount to US$ 622 million and US$ 535 million, respectively.

[18] The IMF-Word Bank 2019 DSA for Mozambique shows that, despite improvements compared to baseline scenario, under no hidden debt scenario present value of debt to GDP and debt service to revenue indicators would still breach their respective thresholds.

Figure 15: Progress in fiscal adjustment has been reverted in 2019

Fiscal balances (% of GDP), 2015 - 19

— Primary balance (excluding capital gains tax)

— Overall balance (excluding capital gains tax)
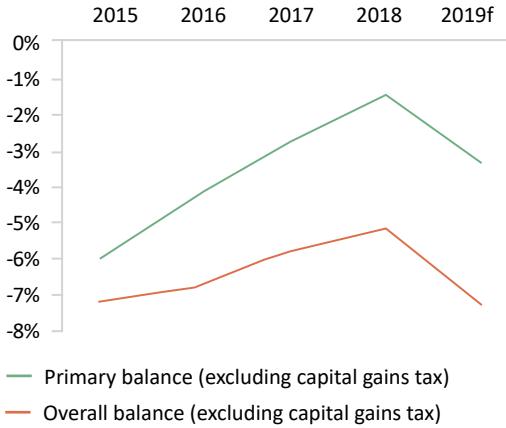
Source: MEF; IMF; World Bank staff estimates.

Figure 16: Spending on priority sectors is set to pick up in 2019 reflecting higher capital expenditures

Spending on priority sectors (MZN million, % of GDP), 2015 - 19

■ Recurrent   ■ Investment

— Total (% of GDP), RHS
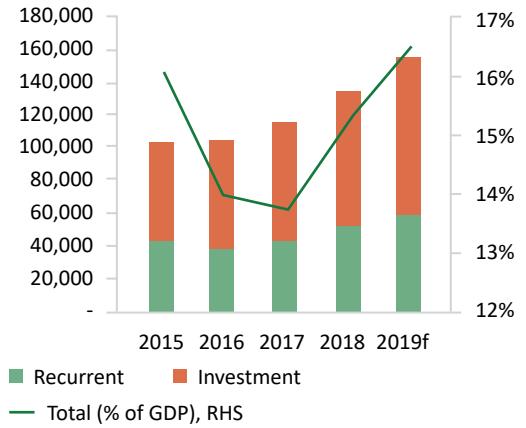
Source: MEF; World Bank staff estimates.

Figure 17: Currency appreciation has helped to bring total debt down...

Public sector debt (% of GDP), 2014 - 18

■ Public sector domestic debt (incl. guarantees)

■ IMF   ■ External Arrears

■ Government external guaranteed debt

■ General government external debt
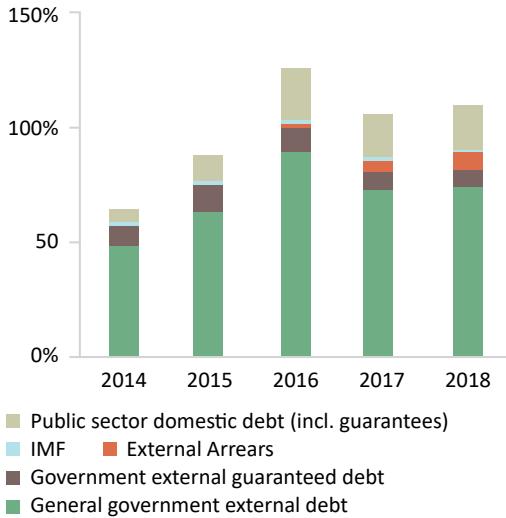
Source: 2019 DSA.

Figure 18: ...but domestic debt pressures are growing

Estimated bond amortization profile (MZN million, % of GDP, % of Revenue), 2019 - 2032

■ Amount due   ● % of GDP, RHS   ✳ % of Revenue, RHS

Source: World Bank staff estimates based on BVM.

Table 4: Government Finances (commitment basis)

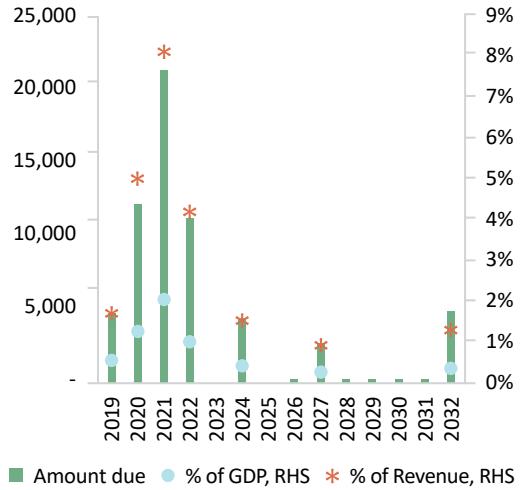| (In percent of GDP)	2015 Actual	2016 Actual	2017 Actual	2018 Estimate	2019 Forecast (1)
Revenue and Grants (excl CGT)	26.0	23.9	24.6	26.0	24.8
Total Revenue	23.2	22.0	25.1	24.0	29.3
Tax Revenues	19.5	18.4	20.0	20.7	25.9
of which capital gains			2.5		5.8
Non-Tax Revenue	3.7	3.6	5.1	3.3	2.8
(Incl. capital revenue)					
Grants	2.8	1.9	1.9	2.0	1.3
Total Expenditure & Net Lending	33.1	30.6	30.3	31.1	32.0
Current Expenditure	20.0	19.2	19.4	21.3	22.5
of which:					
Compensation to employees	10.0	10.4	10.6	11.5	11.9
Interest on public debt	1.2	2.5	3.0	3.6	3.8
of which arrears (2)		0.5	1.5	1.0	0.1
Capital Expenditure	12.0	8.1	6.7	7.7	7.6
Domestically financed	5.3	3.2	3.2	3.2	4.4
Externally financed	6.7	4.9	3.5	4.5	3.2
Unallocated expenditure	0.0	0.4	0.9	0.6	
Supplier arrears (3)	0.5	1.2	0.3	0.3	1.0
Net Lending	0.7	1.8	3.0	1.1	0.8
Primary Balance	-5.9	-4.3	-0.3	-1.5	2.5
Overall Balance	-7.1	-6.7	-3.3	-5.1	-1.4
Primary Balance (excluding capital gains tax)	-5.9	-4.3	-2.8	-1.5	-3.3
Overall Balance (excluding capital gains tax)	-7.1	-6.7	-5.7	-5.1	-7.2
Overall Financing	7.1	6.7	5.7	5.1	7.2
External Financing	4.0	3.9	6.8	3.3	0.6
Exceptional External financing - debt	0.0	1.8	4.0	3.2	0.1
Domestic Financing	3.2	2.9	-1.1	1.8	6.6
Exceptional financing (suppliers & CGT)	0.0	1.2	2.8	0.9	4.4
Total Debt (Public and Publicly Guaranteed)	87.4	125.6	105.6	109.0	117.3
External	76.5	103	86.5	90.0	98.2
Domestic	10.9	22.5	19.1	18.9	19.1
GDP (nominal, MZN millions) (4)	637,760	752,702	840,526	887,806	943,582

Source: MEF; Mozambique DSA, World Bank staff estimates.

(1) Forecast includes added election and cyclone recovery costs, as well as impact on revenue. US$ 118 million RCF is also included.

(2) And (3) are estimated on a commitment basis.

(4) Real GDP rebasing from 2009 to 2014 resulted in new GDP figures with impact on the fiscal indicators. The changes were more pronounced for 2015 and 2016 figures with nominal GPD increasing by 8 and 10 percent, respectively.

Monetary Policy

Monetary policy has continued to gradually ease, but the policy stance remains tight and credit growth is weak in a fragile economic context.

Low inflation set the stage for continued policy rate cuts in 2019. The interbank reference lending rate (MIMO)[19] dropped by 150 basis points to reach 12.75 percent by the end of 2019. Similarly, the reference lending rate (FPC)[20] dropped by the same amount during the course of 2019 and stood at 15.75 percent as inflationary pressures continued to ease (Figure 19). The easing cycle has been appropriately cautious in view of external price risks and concerns around the rate of fiscal adjustment. But Mozambique has one of the highest policy rates in the region, and with local and foreign currency reserve requirements at 13 and 36 percent, the policy stance remains tight (Figure 20). Given the weak economic setting, continued price stability and bringing the fiscal adjustment back on track could create the conditions for further monetary policy easing in 2020.

Commercial bank rates have slowly adjusted downwards, supporting a gradual recovery in credit. Banking sector interest rates averaged 21 percent in the first 6 months of 2019, 30 percent lower than the same period last year whilst the average retail rate for well-qualified borrowers narrowed to 18.5 percent in August 2019 (from 21.8 a year earlier). This has supported the demand for credit, which started to register growth in real terms in September. However, the spread between the commercial and the policy rates has started to pick up suggesting slowing policy rate transmission. Between March and September 2019, the deviation of the average commercial banks rate from the lending facility rate and from the MIMO increased by 250 and 200 basis points to 5.5 and 8 percent, respectively. In this context, and in a setting where the public sector's demand for credit remains considerable potentially crowding out the private sector's access to affordable credit, Mozambique's commercial rates continue to be amongst the highest on the continent and credit growth continues to be minimal (Figure 21 and Figure 22).

Non-performing loans and exposure to the public sector are key risks to an otherwise positive setting for the banking sector.

Bank exposure to public sector risk remains elevated. The rise in non-performing loans (NPLs) and exposure of banks to underperforming state-owned enterprises remain key vulnerabilities to the banking sector. NPLs rose from 8.4 percent of gross loans in 2017 to 12 percent in April 2019, before falling to 9.8 percent in October 2019. Credit performance has also remained poor, with second quarter 2019 prudential indicators on NPLs ranging between 2 and 19 percent for the largest banks. Exposure to the government, through securities and direct lending (including SOEs), remains elevated: exposure amongst the largest banks represented approximately 40 percent of total credit in June 2019. In this context, robust financial safety nets, including deposit insurance and resolution frameworks, are essential to increase confidence in the system, protect depositors, and promote sound competition.

But other key banking indicators are relatively positive. Average banking sector liquidity remains high. In October 2019, the liquid asset ratio was 38 percent (relative 32 percent on average for SSA countries). Profitability declined slightly reflecting the deterioration in asset quality. Return on assets and on equity, stood at 3.1 percent and 26.2 percent in October 2019, compared to 3.1 percent and 29.8 percent respectively at the end of 2018. Returns have been supported mostly by high interest rates, including income from Government securities, as well as fees and commissions. Capital market performance has also improved with the listing of new debt and equity instruments on Mozambique's Stock Exchange.

---

[19] Interbank Money Market Rate.
[20] *Facilidade Permanente de Cedência.*

Figure 19: Inflation easing has set the stage for further policy rate cuts but at a gradual pace...

Policy interest rates and CPI (12-month % change), 2016-19

■ 12 month inflation rate   — Prime rate

— Standing credit facility rate   — MIMO
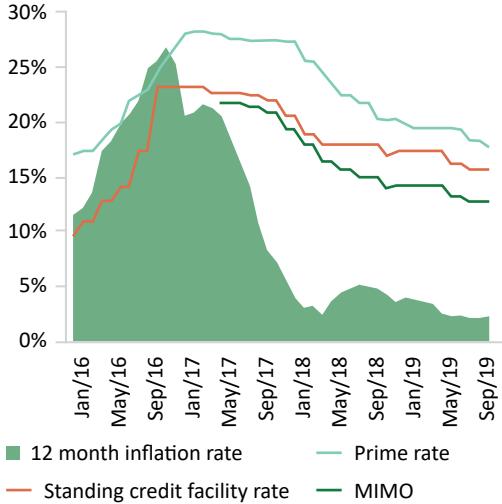
Source: BdM; INE.

Figure 20: ... whilst FX reserves requirement increased during the year

FX reserve requirement and nominal exchange rate, 2015 – 2019

— Reserve requirement local currency

— Reserve requirement foreign currency
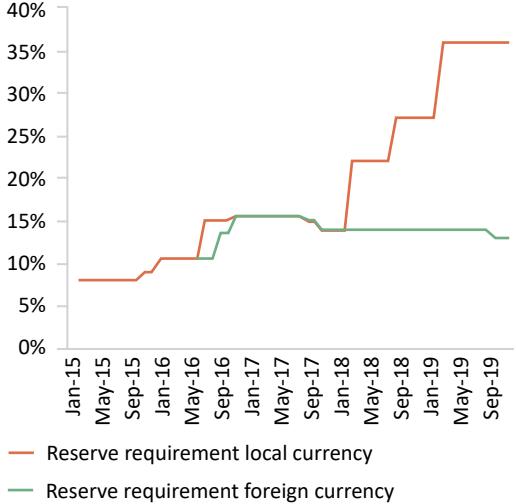
Source: BdM.

Figure 21: ...but interest rates remain amongst the highest on the continent

CPI adjusted policy and commercial interest rates (%), June 2019

■ Real monetary policy rates - June 2019

● Real prime rate - June 2019
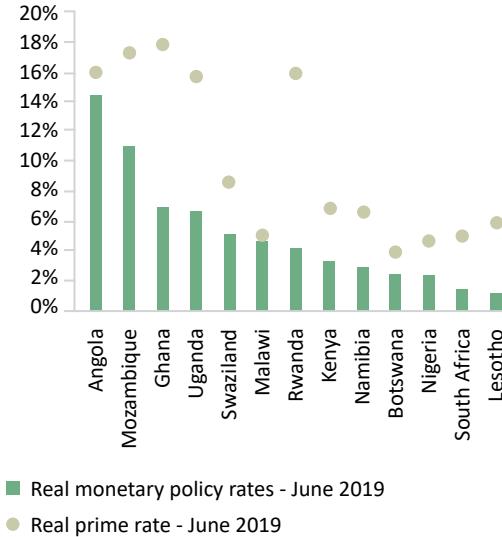
Source: Country Central Banks.

Figure 22: ...which has contributed to dampened credit growth

Credit growth (12 month % change), 2015-19

■ Credit in foreign currency

■ Credit in domestic currency

— Nominal credit growth   — Real credit growth
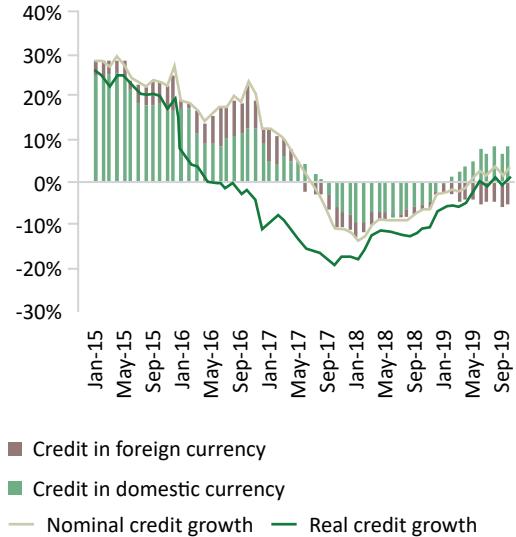
Source: BdM; World Bank staff estimates.

Progress in raising financial inclusion.

Access to finance is the second largest hurdle faced by firms in Mozambique, after corruption.[21] Financial institutions in Mozambique have very limited access to credit risk-sharing facilities to unlock financing to higher risk segments. While there are many microfinances, commercial, and development financing schemes available, access to finance is limited by conditions that include high interest rates and collateral requirements. According to the recently concluded Enterprise Survey, only 10 percent of firms had a bank loan or line of credit in 2018. The figure is even lower when considering MSME and firms involved in the agriculture sector, despite an overall improvement in the levels of financial inclusion in recent years (see Box 4).[22]

The Authorities are seeking to improve access to finance by advancing insolvency reforms and introducing a framework for secured transactions and movable collateral registration. The new Secured Transactions Law, approved by Parliament in November 2018, provides a landmark reform as it will enable businesses to use their movable assets as collateral. It will also make financial services such as leasing and factoring more feasible. Moreover, the Insolvency Administrator Regulations passed in March 2019 are intended to support more efficient debt recovery processes, which may result in improved credit conditions. The entrance of a private credit bureau into the market in 2019 is also a positive development as it will help complement existing credit information systems and offer non-bank financial information.

Box 4: **Strengthening financial inclusion in Mozambique: progress to date and further reforms needed**

Mozambique has made considerable gains towards financial inclusion, with growth in mobile wallet accounts playing a key role. Notable accomplishments between 2016 and 2018 include the opening of over 4 million new accounts, the growth in mobile money transactions, the expansion of financial access points, strengthening of the financial infrastructure for credit and secured transactions, and improvements in the legal and regulatory framework. Since 2015, mobile wallet ownership has grown three times faster than the rate for traditional bank accounts, with the value of transactions increasing from an average of 1 percent of GDP in 2014-16 to 19 percent in 2019. Strengthening of the regulatory framework, including legislation on non-bank e-money issuance and regulations on the use of bank agents has facilitated the emergence of digital finance in Mozambique, whilst the GoM's "one-district-one-bank" initiative has improved access to financial services.

Figure 23: Growth in mobile wallets has exceeded bank accounts...

Bank accounts and mobile wallets (number per 1,000 adults), 2014 – 2018
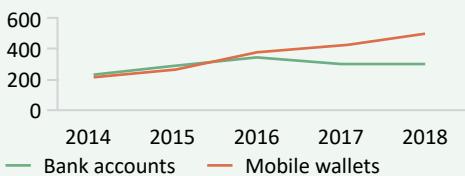
Source: BdM.

Figure 24: ...but women continue to be underpresented

Bank accounts and mobile wallets per 1,000 men and women, 2017 - 2018
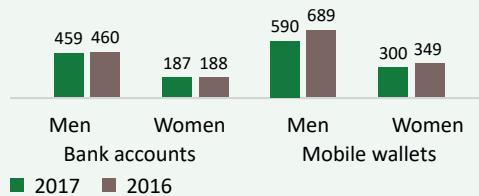
Source: BdM.

---

[21] According to the 2018 Enterprise Survey for Mozambique.

[22] Whilst MSMEs contributed to 28 percent of GDP and 42 percent of formal employment in 2015, an estimated 75 percent remain financially excluded. Similarly, agriculture, which accounts for one fifth of GDP, only benefitted from 3 percent of lending to the economy in 2018 (down from 12 percent in 2000 – 2010).

Despite this improvement, levels are still low and unevenly spread with women and the poor being particularly excluded. According to the Bank of Mozambique, an estimated 33 percent of Mozambican adults reported having an account in 2018. The gender gap in Mozambique is high with only 19 percent of women owning an account relative to 46 percent for men, which limits women from being able to effectively control their financial lives. Absence of basic infrastructure (roads, electricity, telecoms, etc) in rural areas is a hinderance, along with low customer awareness of financial services' benefits, limited acceptance of digital payments by merchants and challenging liquidity management.

Additional reforms are needed to ensure financial inclusion can be a key enabler for poverty reduction and increased shared prosperity. With only 58 percent of the population having a national ID, widening the list of documents required for low-risk customers to open a bank account will enable further individuals to have access to banking services. Introducing tiered KYC requirements will enable individuals who lack the full range of identification documents to open basic bank accounts. The digitization of government payments (social protection, pension and civil servant salary payments) by linking these to mobile wallets will eliminate cash payments, promote greater flexibility in individuals' access to their money and reduce distance to banking services (thus reducing public servants' absenteeism). Ensuring full interoperability between banks and e-money issuers is equally important as it will improve the efficiency of the retail payment system and allows for greater penetration of mobile wallets – particularly in rural areas.

Source: Mozambique National Financial Inclusion Strategy Medium-term review, 2019.
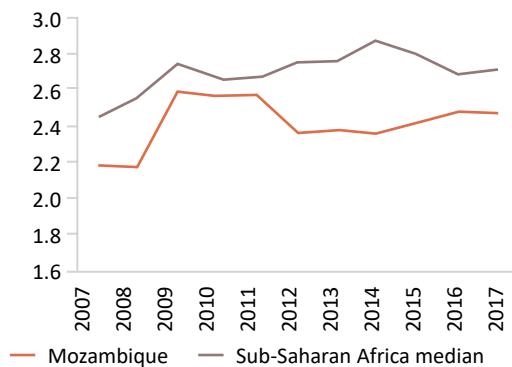
Part Two: Mind the Rural Investment Gap

In a context of reduced growth, diminished fiscal space and heightened exposure to natural disasters, meeting the basic needs of the growing population and tackling the country's massive infrastructure gap is an immense challenge. Drawing on the recent World Bank "Mind the Rural Investment Gap" report,[23] this section of the Mozambique Economic Update discusses the population's level of access to basic infrastructure and the role of the public investment program in increasing it. The report looks backwards to measure disparities in access and to assess whether the public investment program was effective in remedying them, in order to identify future improvements needed to reorient the investment program. The analysis finds that overall, disparities in access to basic infrastructure have been growing between rural and urban areas, especially the rural parts of Mozambique's central and northern provinces. The analysis also finds that the public investment program invested at lower levels in the most underserved areas during the investment boom years, thus contributing to the disparities. Instead, it maintained a significant focus on urban investments and channeled considerable resources to non-capital outlays such as administrative spending. The report concludes by recommending measures to reorient investment planning towards closing the access gap to promote both growth and equality of opportunity for all Mozambicans.

Mozambique is a country with large infrastructure gaps. Years of conflict before peace was widely established in the early 90s left Mozambique with a low stock of physical capital and low rates of access to basic infrastructure and services across the country. As Mozambique set out to recover and to build its economy, its infrastructure and institutions, significant progress was made from a very low base. Yet, the infrastructure gap remains large and demands from a growing population and elevated exposure to natural disasters increase the magnitude of the challenge. Today, Mozambique ranks below regional peers on

Figure 25: Mozambique has a large infrastructure gap
Quality of infrastructure; 2007 - 17

Source: World Economic Forum Global Competitiveness Index.[24]

---

[23] https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=31202216
[24] Roads, rail, ports and air transport.

access and quality of infrastructure measures (Figure 25). Given this context, narrowing the infrastructure gap has been identified as a policy priority by the Government of Mozambique.[25]

# A Growing Gap in Access to Basic Infrastructure.

What is the state of access to basic infrastructure? Have access levels across Mozambique improved? To answer these questions, we construct an index that provides a snapshot of access to basic infrastructure (improved water source, electricity, roads, markets, primary schools and health facilities), by province, using data from the *Inquérito sobre Orcamento Familiar (IOF)* household surveys, information about the physical stock of infrastructure[26] and other sources such as night-time lights data (see Box 5). This index can be interpreted as showing the average rank of the province in access to basic infrastructure, relative to others, allowing comparison to identify leading and lagging areas in a given period.

Figure 26: Regional disparities in access are evident

Access to basic infrastructure and population growth 2009-15
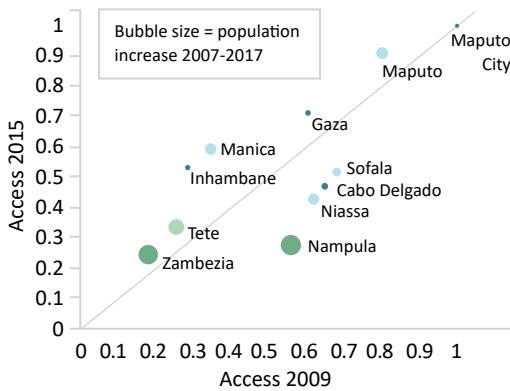
Source: World Bank staff estimates based on IOF.

Leading and lagging sectors.

Second, beneath the regional trends is a mixed performance at the sectoral level, with improvements in access to water, electricity and health facilities. Access to electricity and

Leading and lagging areas.

First, the evidence shows significant regional disparities in access, marking Mozambique's central and northern regions as the areas with lowest levels of coverage. As shown in Figure 26 and Figure 27, households in Maputo and Gaza have the highest levels of access to basic infrastructure. These two leading provinces maintained their position at the top and further improved access levels between 2009 and 2015. The two most lagging provinces, Tete and Zambezia consistently remained at the bottom of the scale. However, some areas caught up whilst others fell behind. Inhambane and Manica, which were lagging provinces in 2009 caught up to be amongst the leading areas in 2015, whereas four provinces dropped in the index: Nampula, Sofala, Cabo Delgado and Niassa. These four provinces, along with Zambezia (the most lagging province) have the highest percentages of the population below the poverty line in the country.

Figure 27: ...and largely mirror the country's poverty trends

Access to basic infrastructure and poverty reduction
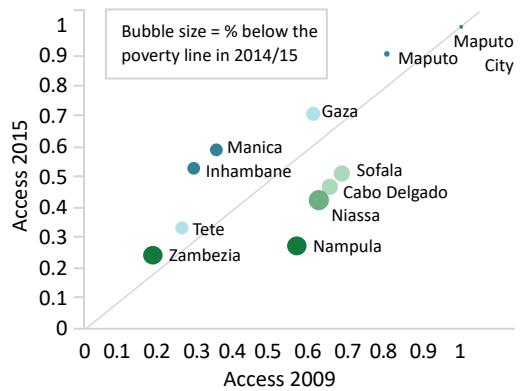
Source: World Bank staff estimates based on IOF.

water, which at 27 and 26 percent of households on average remains low, has increased in all provinces between 2009 and 2015. Similarly, access to health infrastructure, as measured by the distance of households to the nearest clinic, increased at the national level and is the only

---

25 Estratégia Nacional de Desenvolvimento 2015 -2035; Programa Quinquenal do Governo 2015 -2019.
26 This database was developed by the World Bank disaster risk management group to measure exposure and impact of natural disasters.

indicator to show faster progress at the rural level than in urban areas. In these three sectors, even though overall access levels remain low, investment has helped to improve the supply of infrastructure in most areas.

However, access to transport deteriorated significantly, along with a moderate deterioration in access to primary schools, on average. The deterioration in access to transport between 2009 and 2015 is particularly notable. This indicator, which is a proxy for access to roads, shows the largest deterioration as distance to transport tripled. Average distance to transport in urban areas increased slightly from 19 to 26 minutes, whereas in rural areas, it increased from 28 to 92 minutes. Similar trends are observed for the access to market indicators.

A growing rural access gap.

Third, the indicators show a widening gap between rural and urban areas across all **sectors with the exception of health and water, and a marked worsening in rural connectivity.** Disaggregating the sectoral trends between rural and urban areas shows that most of the deterioration in access observed in the underperforming sectors (transport, markets and schools) occurred in the rural parts of Mozambique. These trends suggest a significant deterioration in rural connectivity and rural access to markets since 2009. Distances to the nearest primary school also increased in rural areas from 24 to 43 minutes on average (the increase is highest in Nampula and Sofala), whilst urban access remained relatively stable (a 3 minute increase).[27] As for electricity, access in rural zones increased slightly (from 1 to 7 percent) but remains very low. In contrast, health and water have been able to narrow the gap, with health having almost eliminated it altogether: average distance to the nearest clinic is around 30 minutes in both rural and urban areas.

Box 5: **The access to basic infrastructure index**

In order to portray progress in access to basic infrastructure, we compute an index that aggregates information about the level of household access to water, electricity, roads, markets, primary schools and health facilities at the provincial level using household survey data information. Equal weights are applied. Using these indicators, the provinces can be ranked in terms of their relative performance as follows:

Suppose *x(m,n)* is sectoral indicator *m* for province *n* with a total of *M* indicators and *N* provinces. A provincial ranking is established for each indicator: each indicator is ranked over the N provinces to provide:

$$r(m,n) = rank[x(m,n)]$$

which takes the value 1 for the lowest performance and N for the highest performance. The sectoral rankings are averaged to establish an aggregate index. As such, the index for province n is defined as:

$$I(n) = (1/(NM)) \Sigma_m r(m,n).$$

With this ranking based approach, the index can be interpreted as showing the position of

---

[27] Mozambique has made significant progress in increasing lower primary school enrollment in recent years (97 percent net enrollment in 2016), whilst upper primary lags behind (23 percent net enrollment). The number of students estimated to be attending pre-primary programs is just 4 percent (World Bank, 2016). The increased distance to primary schools could reflect a longer commute to schools by enrolled students and/ or the slower progress in upper primary enrollment, especially in Nampula and Sofala – the two provinces with the most pronounced increase in distance to primary schools.

each province in relative terms in a given period. It shows the average rank of the province relative to others, with the maximum value (or the performance frontier) being the position of the best performing province. This approach allows us to compare Mozambique's provinces to identify leading and lagging areas across multiple dimensions in a given period (year). It does not allow for the comparison of progress against a non-observed frontier, e.g. a minimum expected level of access that exceeds the level attained by the best performing province.

Did the Public Investment Program Contribute to the Growing Disparities in Access?

The public investment program has a central role in ensuring access to basic infrastructure for service delivery. A number of factors can affect the rate of progress in reducing access gaps, such as the initial conditions, the rate of population growth in the area, deterioration in the existing stock of infrastructure and exposure to damage from floods and severe storms. But the main instrument in hand for policy makers in tackling these issues is the public investment system and the levels of investment it provides to underserved areas. Yet, as the rural access to investment gap grew, Mozambique was experiencing a public investment acceleration. At an average of 13 percent of GDP, Mozambique sustained a high level of on-budget public investment relative to its peers between 2009 and 2015,[28] placing it as one of the African economies with the highest rates of public investment over this period. An increase in both government and donor flows pushed investment up to this level.[29] So, was Mozambique's public investment program effective in reversing the emerging dichotomies in access to basic infrastructure?[30]

Only 42 percent of the investment budget went to capital expenditure on basic infrastructure[31] for service delivery between 2009 and 2015.

Approximately one third of the investment budget was used for recurrent spending between 2009 and 2015, and the remaining two thirds for capital expenditure. Recurrent spending included spending on personnel and non-durable goods and services. As such, only 64 percent of the investment budget may have contributed to gross capital formation (henceforth termed the capital expenditure). Although it is not unexpected for capital projects to contain some overhead costs, the significant volume of non-capital spending in the investment budget indicates weak budgeting and classification practices.

Of the capital spend, public administration was the largest spending category between 2009 and 2015, taking up 35 percent of expenditure, followed by roads at 25 percent. Most of the capital spending under the "public administration" category was allocated to outlays that do not contribute to the accumulation of service delivery related infrastructure such as housing, office furnishings, vehicles and transfers to other public agencies for administrative expenses. Although these may be considered important

---

[28] It is important to mention that off-budget investment is a significant share of total investment in Mozambique. For instance, an analysis of the off-budget capital investment executed by ten of the largest SOEs shows that public investment delivered through these entities was equivalent to 6 percent of GDP on average, between 2014 and 2015. Besides SOEs, municipalities, donor projects, non-governmental organizations, municipalities and private sector also play an important role in the provision of basic infrastructure.

[29] In fact, although donor funded capital projects were significant , the government's own resources (including budget support) were the main source of growth (explaining 78 percent of the investment growth), indicating a policy stance in favor of increased public investment.

[30] The analysis in this section covers on-budget donor investment due to the absence of information/ updated database on off-budget spending. Off-budget donor support is considerable in some sectors, notably health where off-budget donor financing was between one-third and one-half of the annual spend over the past decade (UNICEF, 2017).

[31] Mainly roads, water and sanitation, health, education, agriculture and environment.

costs for the upkeep of the public sector, their direct contribution to increasing access to basic services and raising the productive capacity of the economy is limited. As shown in Figure 28, roads accounted for 25 percent of capital spending. Other key areas such as education, water, health and agriculture accounted for a smaller share of spending (10, 7, 5 and 4 percent respectively). Therefore, after deducting recurrent spending and administration expenses from the investment budget, just 42 percent of Mozambique's on-budget investment was allocated to capital formation in key economic and social sectors between 2009 and 2015.
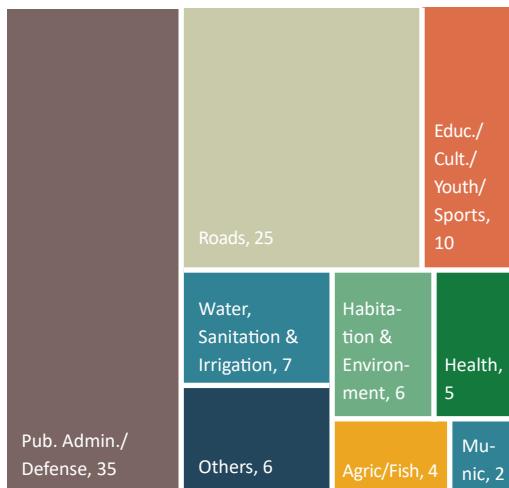
But more recently, investment budget cuts helped improve the composition of the capital budget.

With the recent cuts to the investment

budget, the composition of the capital budget improved. Sharp cuts to the investment budget were made as part of Mozambique's fiscal consolidation efforts from 2016 onwards, when an economic crisis necessitated deep fiscal and monetary adjustment programs. With these cuts, investment expenditure dropped from 12 to 8 percent of GDP between 2015 and 2018. With this, the capital budget began shedding public administration spending, recurrent investment spending dropped slightly from 4 to 3 percent of GDP in 2017 whilst capital expenditure dropped at a faster pace, from 11 to only 4 percent of GDP, leaving a capital budget with a larger share for basic infrastructure spending (Figure 29). This helped sectors such as roads, health and education protect their shares and indicates an attempt to safeguard spending on basic infrastructure.

Figure 28: **Public administration was the largest investment spending category prior to 2015...**

Composition of capital expenditure budget; 2009-15

Source: World Bank staff estimates based on MEF and BOOST.

Figure 29: **... but fiscal consolidation contributed to shedding of public administration spending**

Sectoral composition of capital spending (% of total investment capital spending), 2014 - 17

Source: World Bank staff estimates based on MEF and BOOST.

The Spatial Distribution of the Public Investment Program.
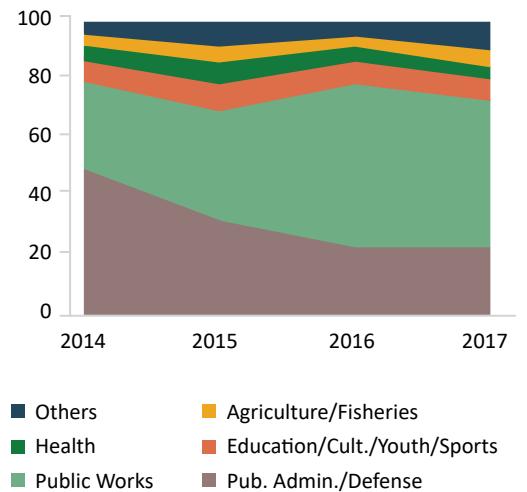
Did the increases in public investment during Mozambique's boom years boost investment to underserved areas? To answer this question, we disaggregate investment expenditure to the subnational level (provinces and districts) and by rural and urban zones by combining detailed public expenditure information with administrative data that proxies subnational

spending levels[32] to generate the first available estimates of district level investment expenditures. The results show significant variation in expenditure levels both between and within provinces. In general, expenditure trends mirror the access indicators in pointing to lower investment levels in northern and central zones, especially Nampula, Zambezia and Cabo Delgado. This divide is most apparent in non-roads spending patterns.
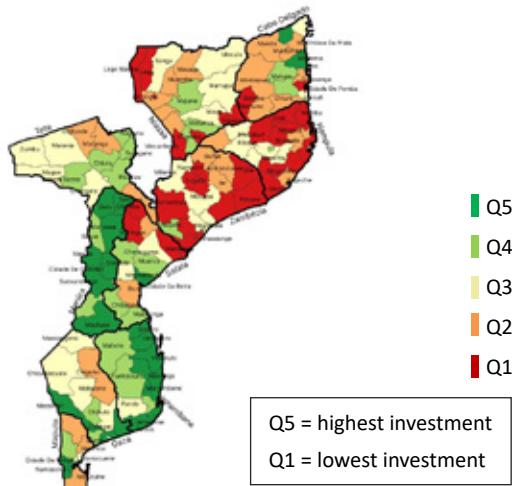
Insufficient progress in channeling resources to underserved areas.

The provinces with the lowest levels of access to basic infrastructure in 2009 were amongst the least well-funded in subsequent years. As discussed in the first part of this report, in 2009, rural areas had lower access to basic infrastructure than urban, with Zambezia, Tete, Inhambane and Manica having the lowest levels of access (less than half of the access levels of Maputo). Investment levels in Inhambane and Manica were amongst the highest in the country over this period, helping these two provinces catch-up and improve their position in the access to basic infrastructure index by 2015. Zambezia and Tete, the two provinces with the lowest rates of access both in 2009 and 2015, were amongst the least well-funded areas, which further contributed to their limited progress. Nampula, the province that experienced the largest deterioration in access was also amongst the least well-funded. Other parts of the country such as Niassa and Cabo Delgado show a more mixed pattern (Figure 30 and Figure 31).

||||||||||||||||||||||||||||||||||||||||||

Figure 30: Insufficient progress was made in channeling resources to underserved areas...

District level investment by quintile, 2009 - 15

Q5
Q4
Q3
Q2
Q1

Q5 = highest investment
Q1 = lowest investment

Source: World Bank staff estimates based on World Bank Infrastructure database.

||||||||||||||||||||||||||||||||||||||||||

Figure 31: ...with expenditure trends mirroring access indicators

Basic infrastructure access index by district, 2015

Q5
Q4
Q3
Q2
Q1

Q5 = highest access
Q1 = lowest access

Source: World Bank staff estimates based on World Bank Infrastructure database.

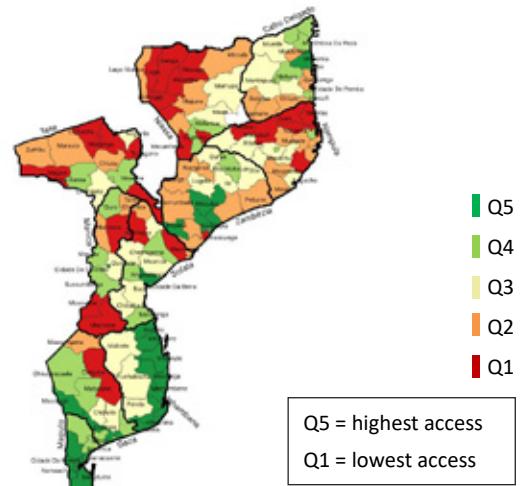### Urban bias in roads investment and difficulty in keeping-up with population growth.

Road expenditure tended to be higher in urban areas, thus contributing to the observed decline in rural connectivity, whereas non-road spending had the opposite tendency. Figure 32 plots district level road and non-road expenditure between 2009 and 2015 against district levels of urbanization.[33] The results of this basic measure indicate a tendency for higher road spending in more urban districts. This suggests that a larger

---

[32] Information from the Roads Fund on provincial expenditure shares is used to split total road expenditure by province. The data is further disaggregated to the district level using the size of the road network in each district. Non-roads capital expenditure, which relates mostly to health, education and other sectors that employ a large volume of civil servants, is split by province using the size of the local public administration as a proxy and is further disaggregated at the district level based on population shares.

[33] Roads expenditure per km² and non-roads per capita.

share of the roads budget during the investment boom years focused on urban connectivity, echoing the significant increase in distance to transport reported by rural households and resulting in decreased levels of rural connectivity. One of the reasons for this could be linked to the costs of maintaining the road network, which may naturally favor urban areas as they have a denser road network. In contrast, non-road expenditure tends to decrease with the level of urbanization, possibly reflecting progress in the larger rural per capita allocations in sectors such as health, education and water.

Moreover, investment has been unable to keep up with population growth. Figure 33 indicates a limited link between roads expenditure and population growth, possibly as roads coverage is linked more closely to area size. But when it comes to non-road expenditure, the evidence suggests that per capita expenditure levels decline as population growth rates rise; investment in access to basic non-roads infrastructure is not keeping up with demographic needs, even during the investment boom years.

Figure 32: A large share of the budget for roads focused on urban connectivity, whilst non-roads spending is more evident as the levels of urbanization decrease

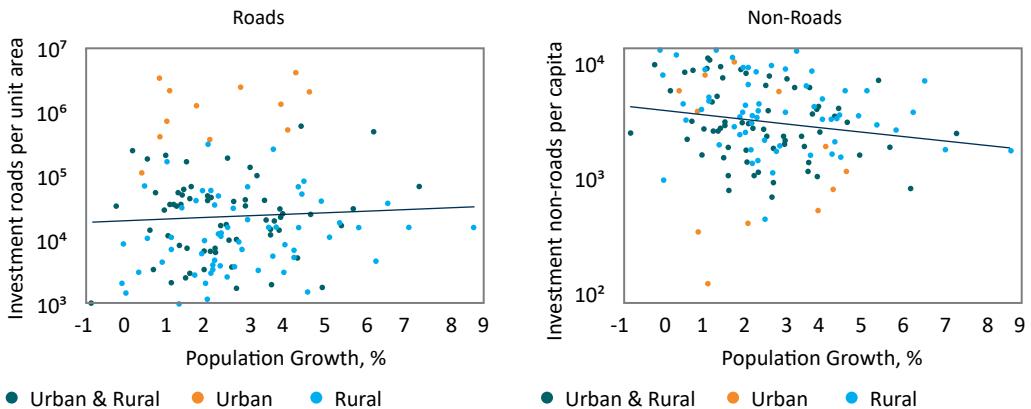Relationship between road and non-road investment (2009-15) and level of urbanization at the district level
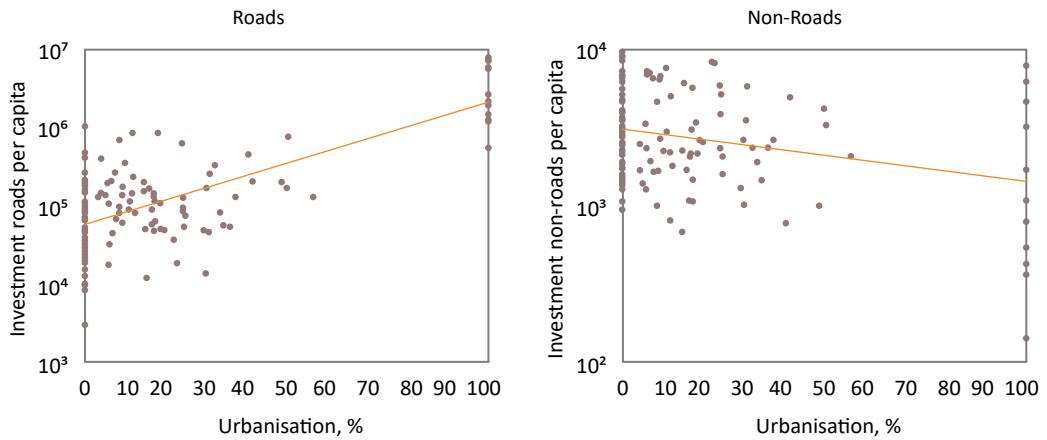
Source: WB staff estimates using BOOST; INE.

Figure 33: Investment levels tend to have a weak relationship with population growth

Relationship between road and non-road investment (2009-15) and the rate of population growth at the district level

Source: WB staff estimates using BOOST; INE.

Why Invest in Closing the Rural Investment Gap?

Because rural investment matters for both rural and urban welfare.

As Mozambique's population grows and begins to become more urbanized, whilst most of the poor remain in rural areas, getting the public investment mix right will be critical for both growth and equality of opportunity. Urban areas are densely populated growth hubs that can potentially generate high returns to good investments whereas rural areas contain most of the population and the majority of the poor. So, what is the right investment mix? To explore this question, we draw on important insights from the economy wide model[34] that discusses the potential tradeoffs and outcomes of investment scenarios (see Box 6 for more details on the economy wide model).

Box 6: The economy-wide model

The economy wide model discussed in this section of the report is a "computable general equilibrium" (CGE) model, which captures the workings of the economy and the linkages between households, producers, government and the rest of the world to estimate the potential impact of policy changes, investments or domestic and external events (Dorosh et al, 2016). It draws on a 2012 social accounting matrix (SAM) for Mozambique, a consistent framework that captures the flow of transactions that takes place in the economy, which has spatially disaggregated across cities, towns and rural areas (Thurlow and Seventer, 2016).

[1] Thurlow, J. and D.E. Van Seventer. 2016. A social Accounting Matrix for Mozambique: A Nexus Project SAM. Washington DC, USA: IFPRI.
[2] Dorosh, P. et al. 2016. Urbanization, Rural-Urban K=Linkages, and Economic Development in Mozambique. Background paper for the World Bank Mozambique Urbanization Review. Washington DC, USA: IFPRI.

The model indicates that maintaining urban per capita investment levels to meet urban population needs, at the expense of rural investment, penalizes welfare in both urban and rural areas. The model results show that such a policy would raise urban GDP and welfare growth levels and yield faster growth in industry and services, thus accelerating structural change. But these effects come with an important trade off through slower growth in the rural economy and in rural welfare levels. This scenario also leads to worse outcomes for the urban poor. This is because weaker agricultural growth would have a upward knock-on effect on urban food prices, especially for less imported products, disproportionately impacting the urban poor. Overall, the results of this scenario warn against an urban-centered investment program, even in the context of more rapid urbanization, given the potential for adverse effects on the rural economy and the urban poor.

Instead, leveraging urban growth to invest in rural areas can be advantageous to both rural and urban areas. Given the adverse effects of an urban-centric investment program on rural growth, the model evaluates the implications of a higher volume of investment overall, to allow for higher rural investment levels whilst also raising urban investment. The increase in public investment is financed by higher taxation in cities. It's a scenario that leverages growth in urban areas to finance rural investment needs and support a more balanced investment portfolio. This approach results in the same increase in national GDP growth as the urban investment scenario, whilst also providing more rapid agricultural growth. Agriculture's linkages to manufacturing (mainly agro-processing) and services create rural-urban spatial linkages and jobs in these industries, especially in towns.

---

[34] Dorosh et al.; "Urbanization, Rural-Urban Linkages, and Economic Development in Mozambique"; IFPRI; 2016. Background report prepared for the 2017 World Bank Mozambique Urbanization Review.

This also promotes structural change. Cities also grow, albeit at a slower rate than the urban-centric investment scenario. In terms of outcomes, whilst all groups (poor and non-poor in rural and urban areas) experience welfare growth, the improvements in wellbeing of the rural population and the town-based poor exceeds the urban-centric scenario.

Because raising access in rural areas is linked to faster job creation.

The analysis in this section explores the relationship between public investment expenditure, access to basic infrastructure and jobs in rural and urban areas. We measure how within-district changes in investment expenditure affect within-district changes in access to basic infrastructure and jobs using a district level fixed effects model. This also allows for the differentiation of the results by rural and urban areas. The estimates are thus akin to a difference-in-differences estimate (Box 7 provides more detail). Two types of expenditures are considered: investment spending on basic infrastructure and spending on roads only, given the importance of roads in Mozambique's investment budget and the extent of the deterioration in access to transport noted in the previous section.

The analysis draws on detailed public expenditure data and household level information from the *Inquérito sobre Orcamento Familiar* (IOF). Data on public investment from 2009 onwards is sourced from the Mozambique BOOST, a highly detailed database of on-budget expenditure.[35] Two expenditure categories are used in the analysis: (1) economic investments covering a range of multi-sector investments; and (2) road investments. The database contains detailed expenditure information but is only partially disaggregated at the sub-national level. To obtain

district level estimates of investment expenditure on roads, we use data from the Roads Fund, a public agency executing major road investments to obtain information on the sub-national distribution of investment. Similarly, non-road investment is disaggregated to the provincial level using the size of the public administration (measured by the size of the civil service workforce) as a proxy for investment expenditure at the provincial, then further disaggregated at the district level based on population shares. In the absence of a more accurate measure of district level investment spending, this approach was adopted considering the expected close link between spending on schools, health facilities and other infrastructures and the number of civil servants (e.g. teachers and health workers) in a district. The data on outcomes such as consumption expenditure, poverty, and employment are obtained from the from 2008/09 and 2014/15 IOF surveys.[36] We also use the information the survey provides on distance to schools, clinics, water, transport[37] and markets to measure access to public these basic infrastructures.

The results indicate that the public investment budget has a more catalytic role in improving access levels in rural areas. The results suggest that a MZN 1 billion (around 32 million $US in 2014) increase in investment is associated with a 2 minute decrease in the time it takes an individual to access key infrastructures on average. The association is stronger in rural areas, where the increase is linked to a 7-minute drop in time needed to reach public services compared with less than 1 minutes in urban areas. Similarly, a MZN 1 billion increase in roads expenditure decreases the time to reach transportation by 9 minutes. Here again, when we look at urban and rural areas separately, we find no significant effect in urban areas, whereas in rural districts, an increase in public spending by MZN 1 billion decreases the time to transportation by as much

---

[35] BOOST is a database tool with detailed information on public expenditure based on data from e-Sistafe: Mozambique's public finance information management system. The tool, now used by 40 countries, was launched by World Bank in 2010 with the aim of increasing transparency, accountability and capacity to assess expenditure efficiency.

[36] Poverty rates are based on the World Bank methodology, where a poor household lives on less than $1.9 a day (2011 USD). The total number of jobs is estimated using the total number of people reporting being employed in each district and sector (public, private, and informal) and year and by grossing up the weights provided in the survey (see Blundell et al. (2004) for an example of grossing up weights). The number of informal jobs is measured by subtracting from total jobs the number of formal local jobs as per the 2014 firm census.

[37] Distance to transport is considered a proxy for access to roads.

as 25 minutes. These results point to "more bang for the buck" for investment in rural areas when it comes to increasing access. Mozambique's rural areas tend to have a lower density of infrastructure compared to urban areas, where distances to basic infrastructure tend to be less of a concern than the needs for density, maintenance and quality of infrastructure. In contrast, infrastructures such as roads and school buildings are missing or distant in many rural areas, making investment important for raising the levels of access (i.e. reducing distances) to these infrastructures.[38]

Public investment is also found to be associated with increased job creation, predominantly **with the creation of private and informal jobs in rural areas.** In particular, increasing public spending by MZN 1 billion is associated with the creation of around 1500 jobs in the private sector across all areas.[39] The results suggest that this relationship is larger in rural regions where around 2000 private jobs are created and additionally 14 thousand jobs are created in the informal sector. Wages remain unaffected across districts, which suggests a horizontal supply curve, driven by high unemployment. Some of the jobs created could be linked directly to the works associated with the investment itself, but the jobs are also likely to be created as infrastructure development supports growth local economic activity.

Box 7: District level fixed effects model specifications

To explore the association between public investment and access to public goods, the following regression is estimated:

$$Y_{hdt} = \gamma I_{dt} + \alpha_d + \lambda_t + \varepsilon_{hdt}$$

where Y_{hdt} stands for the average reported time to transportation, markets, water, schools and clinics in hours by household h in district d and in year t, γI_{dt} is the estimated spending on economic investments. α_d and λ_t are district and year fixed effects and ε_{hdt} the error term which is clustered by district. Importantly, the two time periods allow the inclusion district fixed effects and estimation of how within-district changes in road expenditure affect within-district changes in access to transport. The estimate is thus akin to a difference-in-differences estimate. The same regression is estimated to explore the association between roads expenditure and access to transport.

To understand the relationship between public investment and job creation across regions and sectors (public, private, informal) the following specification for economic investments and roads are estimated separately:

$$Y^s_{dt} = \gamma I^s_{dt} + \alpha^s_d + \lambda^s_t + \varepsilon^s_{dt}$$

where Y^s_{dt} is the number of jobs in district d and in year t in sector s (public, private, informal); α_d is a district fixed effect; λ_d is a year fixed effect and ε_{hdt} is the error term which is

---

[38] These results do not imply that investment in rural areas is more efficient than urban investments. Investments in urban areas could have higher economic returns given their higher population density and concentration of economic activity. Rather, the point here is to emphasize that investment spending in rural areas is linked to faster progress in increasing access levels given the paucity of basic infrastructure.

[39] This refers to direct and indirect jobs.

clustered by district. γI_{dt} is public investment and captures the relationship of interest.

To explore how different types of infrastructure spending interact with each other in affecting consumption and poverty, the main specification is re-estimated by sequentially introducing dummies for other public goods into the last specification and allowing for interactions with access to transportation.

Because inequality in opportunity matters.

Uneven access to basic infrastructure contributes to inequality in opportunity. Inequality of opportunity occurs when the ambitions of the nation's children and youth are unmet for lack of access to basic services such as education, health and connectivity to roads due to the circumstances of their location or family. It is a type of inequality that is bad for growth since it limits the opportunities of tomorrow's potential workforce to be productive.[40] It also contributes to deepening the inequality divide and to the erosion in social cohesion that would be more prevalent in an economy more capable of providing opportunities for all. Narrowing Mozambique's rural investment gap, especially in northern and central provinces, is needed to establish a more equal footing for all segments of the population.

How to Close the Rural Investment Gap?

Looking ahead, Mozambique is on the cusp of a second investment boom in the coming decade, providing a tangible opportunity to address the growing gaps in access to basic infrastructure. Revenues from gas production are expected to widen fiscal space significantly in the late 2020s, providing considerable resources for Mozambique to invest in its infrastructure and in better opportunities for the population. In this favorable context, reforming the public investment program would place Mozambique in a position to ensure that the

population benefits evenly from these resources. Some key recommendations include:

Setting specific targets to reach underserved areas in the *Plano Quinquenal do Governo and the Plano Economico e Social.* Taking spatial disparities into account when deciding where and how much to invest is essential if the public investment program is to succeed in reversing the growing gaps in access. The analysis presented in this report indicates insufficient progress in channeling resources to underserved areas and calls for a sharper policy focus. For instance, the *Plano Quinquenal do Governo,* the Government of Mozambique's five-year plan, and the *Plano Economico e Social,* the annual policy plan underlying the budget, would benefit from explicitly adopting targets that identify underserved areas and whether they are catching-up or falling behind.

Updating budget allocation formulas to account for access gaps. The budget allocation process is largely incremental. It begins by allocating resources to ensure that previous year spending - principally in terms of salaries, goods and services - is covered to assure the continuous functioning of the public administration. Then, the remaining resources, if any, are distributed following two steps: (i) based on historical trends, the government splits between central government and provinces; (ii) once the total share of the provincial budget is determined, allocation follows a formula that assigns a weight of 70 percent to the subnational population and 30 percent to the multidimension poverty index.[41] Therefore, although the provincial

---

[40]   World Bank (2019), "World Development Report: The Changing Nature of Work".

[41]   The Multidimensional poverty index combines measurement of household consumption with access to basic services. It is distributed as follows: household consumption (30 percent), access to clean water (15 percent), access to sanitation (15 percent), health (20 percent) and education (20 percent).

allocation formula gives weight to territorial disparities, the distributional impact is limited as it applies to a small proportion of the total budget. A recent study by UNICEF (2017) shows that the proportion of resources subjected to the distributional formula averaged between 0.4 to 0.8 percent of the total annual spending and between and 3 to 4 percent of the annual domestic investment envelope, between 2012 and 2014. These small figures demonstrate the limited potential for the current allocation mechanism to tackle disparities that exist or emerge in population and poverty, creating a high level of path dependency in the budget. Moreover, evidence suggests that when compared with estimations based on the formula allocation criteria,[42] the budget law and the actual executed spending allocations are biased towards southern provinces, sub-allocating to the northern and center provinces that are the poorest. In addition, a recent World Bank review of sub-national allocations (2018) analyzed the different formula-based transfers and allocations to districts highlighted the limited consideration of equity in allocation formulas, e.g. by allocating equal amount for different subnational governments[43] and weak proxies for socioeconomic and access conditions at subnational levels, limiting accurate assessment of local needs (World Bank, 2018).[44] Therefore, there is scope for sharpening the equity focus of subnational allocation formulas by restructuring budget allocation formulas to take access gaps into account, then ensuring that the formulas are applied in practice. The type of analysis presented in this report, which maps the gaps and measures relative progress, would inform such reforms.

Reducing misallocations of investment resources to recurrent or administrative uses through a sound public investment management system. A growing investment budget should not come at the cost of higher inefficiencies and misallocations. Putting systems in place that screen proposed investments before funding them will help limit this tendency in Mozambique's investment budget and increase the quality of expenditure. Screening would also limit slippages from the recurrent budget to public investment program. The Government of Mozambique is establishing such an investment management system that seeks to promote impact and efficiency through improved project appraisal and selection procedures. The system should be widened to include monitoring and to cover investments by SOEs considering that, as illustrated by the analysis, these entities undertake a sizeable share of the public investment portfolio.

Strengthening municipal revenue mobilization to fund urban investment and free-up resources for rural areas. Revenue mobilization by most municipalities is far below potential as these urban authorities continue to rely on central government transfers to fund both their overheads and investments. This is mainly due to limited technical and administrative capacity. For instance, most municipalities do not have updated databases of land and assets such as properties nor the technical capacity for property appraisal to facilitate the collection of property taxes. Similarly, there is significant room for improving municipal service delivery and the collection of service-related fees. Improving revenue mobilization of urban authorities would help finance the needed investments for smooth progress in urbanization and help free-up much needed resources for investing in rural areas.[45]

Lastly, adopting a national action plan for increasing access to basic infrastructure that is overseen at a high level would provide momentum and coordination to these efforts. The risk that future investments will contribute

---

[42] As described in the MTFF document and methodology, the subnational allocation criteria for provinces is an average that assigns a weight of 70 percent to the subnational population and 30 percent to the multidimension poverty index (which combines measurement of household consumption with access to basic services). For districts, the allocation formula is a weighted average of population (35 percent), area (20 percent), district own revenues (15 percent), and the multidimensional poverty index (30 percent).

[43] For example, the Road Funds allocates MZN 2 million per district irrespective of specific characteristics.

[44] PERPU and FDD, for example, use aggregated poverty levels, which is a limited indicator of relative needs in terms of basic services and may not be so related to the objectives of the funds, in this case employment creation and food production. Closer proxies, such as food security to estimate support needed for food production could be explored.

[45] See the World Bank "Mozambique Urbanization Review", 2017 for a more detailed discussion of reforms needed to improve municipal revenue mobilization.

to maintaining the status quo or even widen the gap further is significant. A clearly targeted action plan that is monitored at a high level would help to reverse this trend. Coordination is of particular importance given the sizable share of off-budget investments in infrastructure and the variety of players involved, especially in the current decentralization context. SOEs, municipalities, provinces, donor projects, non-governmental organizations and other private initiatives play an important role. By taking this into account, the action plan can influence in the dynamics of public investment and influence the distributional outcomes more fully.

References

Dorosh et al.; "Urbanization, Rural-Urban Linkages, and Economic Development in Mozambique"; IFPRI; 2016. Background report prepared for the 2017 World Bank Mozambique Urbanization Review.

Dorosh, P. et al. (2016). "Urbanization, Rural-Urban K=Linkages, and Economic Development in Mozambique". Background paper for the World Bank Mozambique Urbanization Review. Washington DC, USA.

Grandvoinnet, H.M.; Searle, B; Nombora, D; Raha, S; Tolbert, S. (2018). "Horizontal funds distribution to sub-national government in Mozambique: funding the districts and municipalities" - policy note. Washington, D.C.: World Bank Group.

IMF (2019), "World Economic Outlook: Global Manufacturing Downturn, Rising Trade Barriers," IMF: Washington DC.

IMF (2019), "World Economic Outlook: Growth Slowdown, Precarious Recovery," IMF: Washington DC.

IMF, (2019), "2019 Article IV Consultation Staff Report for Mozambique," IMF: Washington DC.

IMF (2019), "Republic of Mozambique—Request for Disbursement Under the Rapid Credit Facility—Debt Sustainability Analysis," IMF, Washington DC.

Republic of Mozambique, Central Bank of Mozambique (2019), "Indicadores Prudenciais e Económico-Financeiros," Maputo, Mozambique.

Republic of Mozambique, Central Bank of Mozambique, (various quarters), "BOP and Monetary Survey data," Maputo, Mozambique.

Republic of Mozambique, Central Bank of Mozambique, (various months), "Monthly Situation bulletin," Maputo, Mozambique.

Republic of Mozambique, Central Bank of Mozambique, (various sessions) "Monetary Policy Committee briefings," Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (2019), "Launch of a Consent Solicitation in respect of the outstanding Notes" Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (2019), "Notice of Result of Written Resolution," Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (various years), "Audited State Accounts," Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (various years), "State Budget," Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (various years), "Budget Execution Report," Maputo, Mozambique.

Republic of Mozambique, Ministry of Economy and Finance, (various years) "Annual Public Debt Report," Maputo, Mozambique.

Republic of Mozambique, National Institute of Statistics, (various years), "National Accounts," Maputo, Mozambique.

Republic of Mozambique, National Institute of Statistics, (various months), "Consumer Price Index bulletin," Maputo, Mozambique.

Republic of Mozambique, National Institute of Statistics, (various months), "Economic Activities Index bulletin," Maputo, Mozambique.

Republic of Mozambique, National Institute of Statistics, (various months), "Economic Confidence Indicators bulletin," Maputo, Mozambique.

Republic of Mozambique, National Institute of Statistics, (various quarters), "Short-Term Industry Indicators," Maputo, Mozambique.

Republic of Mozambique, (2015), "5-year Government Plan," Maputo, Mozambique.

Republic of Mozambique, (2014), "National Development Strategy: 2015-2035," Maputo, Mozambique.

UNICEF (2017). "Analysis of the Budget Allocation Criteria by the Government of Mozambique: An analysis of the territorial Allocation". UNICEF Mozambique Working Paper MWP2017/06. Mozambique.

Vale Moçambique (2019), "Quarterly Performance Report", Maputo, Mozambique

World Bank *(forthcoming)*, "Mind the Rural Investment Gap", World Bank: Washington DC

World Bank *(forthcoming)*, "Mozambique National Financial Inclusion Strategy – Mid-term Review", World Bank: Washington DC

World Bank, (2019), 'Annual Meetings Macro-Poverty Outlook, (various countries)', World Bank: Washington DC.

World Bank, (2019), "Commodity Markets Outlook – October 2019", World Bank: Washington DC.

World Bank (2019), "Doing Business in Mozambique – Comparing business regulations in 10 provinces with 189 other economies", World Bank: Washington DC.

World Bank (2019), "World Development Report - The Changing Nature of Work", World Bank: Washington DC.

World Bank (2017). "Mozambique Urbanization Review". Africa Urban and Resilience Unit. Mozambique, World Bank: Washington DC.

World Bank, (various years), "World Development Indicators," World Bank: Washington DC.

THE WORLD BANK
IBRD • IDA