



REPUBLIC OF MOZAMBIQUE

SELECTED ISSUES

January 2016

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December 4, 2015

Approved By
African Department

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MACROECONOMIC AND FISCAL IMPLICATIONS OF NATURAL GAS PROJECT¹

With exploration concluded at the Rovuma offshore gas fields in Northern Mozambique, international oil companies developing offshore gas projects are close to taking the first round of Final Investment Decisions (FID) for major investments in the construction of gas processing facilities. This annex aims at assessing the impact of the gas projects on Mozambique's economy, including on fiscal revenues. Results, which are based on the Fund FARI model, suggest that, by the mid-2020s, half of the country's output will be generated by natural gas. However, the fiscal revenues from the projects will remain moderate until the mid-2020s because of large depreciation costs for gas liquefaction facilities. Although the economic potential emerging from the projects is tremendous, macroeconomic and fiscal implications are quite sensitive to international commodity price developments and other risk factors, highlighting that the government's authorities would be well-advised in taking a cautious approach.

A. Background and context

1. **Development of the Rovuma offshore gas fields will be the largest project in Sub-Saharan Africa in terms of its investment size.** The Rovuma offshore gas fields, in Northern Mozambique near the border with Tanzania, are divided into two concession areas, Area 1 (lead concessionaire: Anadarko) and Area 4 (lead concessionaire: ENI). Total amount of the gas reserves is estimated at about 180 trillion cubic feet, which is equivalent to the entire gas reserves of Nigeria. The total investment for the projects is projected to exceed \$100 billion. Once gas production reaches its peak, Mozambique could become the third largest liquefied natural gas (LNG) exporter in the world after Qatar and Australia.
2. **Final Investment Decisions (FID) for constructing the first round of gas liquefaction and processing facilities ("trains") are expected to be taken by mid-2016.** Both Area 1 and Area 4 operators have submitted their development plans to the authorities, and the government and the operators are currently negotiating the project structure as well as other development plan related issues. Area 1 operator proposed a structure integrating gas extraction (upstream) and gas liquefaction (midstream) activities, while Area 4 operator proposed a structure segmenting the upstream and midstream activities. The proposed project structure includes creating Special Purpose Vehicles in other countries for marketing and financing of the projects. Other issues, such as the revision of existing exploration contracts and the resettlement of domestic residents should be addressed before the FID. If all these issues are resolved soon, FIDs for the initial liquefaction plants ("trains") can be taken by mid-2016, and operators can start

¹Prepared by Keiichiro Inui, Leandro Medina (both AFR), and Christian Henn (SPR).

constructing liquefaction trains and finalizing their sales and purchase agreements with prospective LNG buyers.

3. **Operators remain confident in the projects' profitability over the medium term; but further price decreases could pose risks.** The gas reserves are located under the deep ocean floor, which could increase the costs of drilling wells and building pipelines and other facilities compared with onshore gas fields. Nevertheless, the developers can take advantage of economies of scale with large amounts of gas located in a few numbers of field, thereby requiring fewer wells than other gas projects. In addition, construction costs of liquefaction facilities could decrease, as new gas projects in some other countries stopped because of the low commodity prices. Finally, operators assume that hydrocarbon prices will increase somewhat over the medium term. However, already ongoing LNG projects are still numerous, including in Australia and the US (on account of shale gas production). Completion of these projects would substantially increase gas supply, which may further decrease gas prices in the medium term if demand does not rise enough. In 2015, gas prices in the East Asian market, where operators envisage to sell most of the Mozambican gas and where gas typically fetches the highest prices, have already dropped substantially compressing the price difference vis-à-vis the North American market.

4. **Staff assumes that production and exports of LNG will start in 2021, and production volume will be gradually scaled up during the 2020s.** The Area 1 consortium initially plans to construct two onshore liquefaction trains, each of which will produce about 5.5 million tons of LNG per annum. The Area 4 consortium will primarily build a floating liquefaction facility (FLNG), which will produce about 3 million tons of LNG per annum. Both operators could start production of LNG in 2021, and they will utilize cash flows generated from sales thereof to finance construction of additional liquefaction trains. In total, we expect that 13 onshore trains and 4 floating trains will be built for the gas project. The total production volume of the LNG could reach 89 million ton per annum by 2028.

B. Macroeconomic and fiscal implications

5. **Staff updated the assessment of the impact of the gas projects on growth, fiscal revenues and balance of payments applying the Fiscal Analysis of Resource Industries (FARI) model.** The FARI model, developed by the IMF's Fiscal Affairs Department, constitutes a tool to support the design of fiscal regimes by providing annual fiscal revenue projections for individual petroleum and mining projects based on various assumptions in terms of fiscal regimes parameters, production volumes and profiles, and prices². The results reflect staff's best estimate based on latest information from the authorities and the gas companies, but are likely to evolve as the projects are implemented and new information becomes available.

² The assumption of gas prices is based on oil price projections in the latest World Economic Outlook, and a constant coefficient of 0.14 is applied to calculate gas prices from the oil prices.

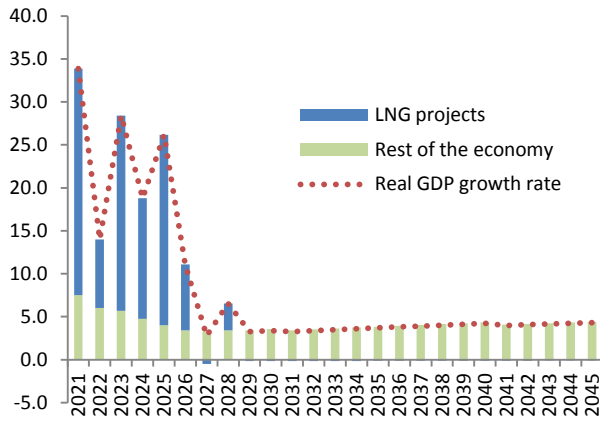
- **Growth:** During the 2020s, the gradual increase in production of LNG will significantly raise GDP growth rates. The average real GDP growth rate between 2021 and 2025 could reach 24 percent. As a result, share of the LNG projects in total nominal output of Mozambique could reach more than 50 percent by the mid-2020s. After LNG production reaches its peak level in 2028, with the final liquefaction train starting operation, the real GDP growth will moderate to 3-4 percent. This reflects underlying growth of 6-6½ percent of the non-LNG economy and no further growth of the LNG sector. Therefore, the LNG share in total output would gradually decline starting in the late 2020s.
 - **Fiscal revenues:** The total fiscal revenues from the LNG project throughout the entire project period until 2045 could reach about \$500 billion. Main sources of the fiscal revenues are (i) the government's share of profit gas, (ii) the corporate income tax on the concessionaires, and (iii) the dividends paid by the state-owned hydrocarbon company (ENH), which owns a 15 percent share of Area 1 and a 10 percent share of Area 4. Even though the gas production would rapidly scale up during the early 2020s, fiscal revenues during the first few years are limited, because of the large cost recovery for continuous investments in building liquefaction plants. It is important for the fiscal authorities to be aware of this time lag between gas production and fiscal revenue flows when planning their medium-term fiscal strategy. By the late 2020s, the fiscal revenues from the gas projects could account for more than half of total fiscal revenues.
 - **Balance of payments:** Mozambique will experience unprecedented large current account deficits during the late-2010s, peaking at more than 90 percent of GDP in 2020, due to the massive investments in the LNG trains. Once the gas production begins, the current account balance could gradually improve and reach surplus in 2025. Following a similar pattern to the fiscal revenues, the current account during the first few years of the 2020s will remain in deficit because of investments in subsequent trains. By the mid-2020s, LNG will account for about $\frac{3}{4}$ of the total exports. After that period, staff assume that increased public investments, e.g. in infrastructure, and reforms will improve external competitiveness of the non-mining industries and crowd in private investment leading to a subsequent increase exports of other products. Assuming that risks of a Dutch-disease induced by exchange rate appreciation can be contained, this gain in competitiveness could materialize from late-2030s, and the overall current account balance would remain in surplus until the end of the LNG production.
6. **Various risk factors could significantly change the long-term projections.**
- First, sales prices of the gas could drift below the baseline assumptions. An enduring slowdown of the global economy could trigger further declines in global gas prices. Also, if the first FIDs were significantly delayed for some reasons and in the meantime other global LNG projects meet most of gas consumers' demand, sales prices could be lower. Fiscal revenues could be particularly sensitive to lower gas prices, because most of the revenues are related to the profits of the projects.

- Second, changes in taxes and other fiscal regimes could pose large impact on fiscal gains. The Decree Law legalized in 2014 ensures long-term fiscal stability, in which planned development of royalty tax rates (initially 2 percent and gradually raised to 6 percent) will not be changed without agreements between the government and the company. However, changes in the project structure as a result of the current negotiation could still negatively affect government revenues, if profits were shifted abroad or to other entities to which lower tax rates apply.
- Finally, long-term economic growth could naturally be dampened if the windfalls from the gas projects were not appropriately managed. If the government spent money mostly on non-productivity enhancing current spending or less efficient capital investments, the growth of the non-LNG economy may not be as high as estimated in the baseline scenario. Also, it is important to forestall any loss of external competitiveness of the non-mining sectors due to “Dutch Disease” by effective management of fiscal revenues. In this regard, Ross (2014) highlights several avenues that Mozambique could follow, including setting up a Sovereign Wealth Fund, managing savings, and fiscal rules, as well as increasing competitiveness in non-resource based sectors. Such topics will become more prominent in future policy discussions.³

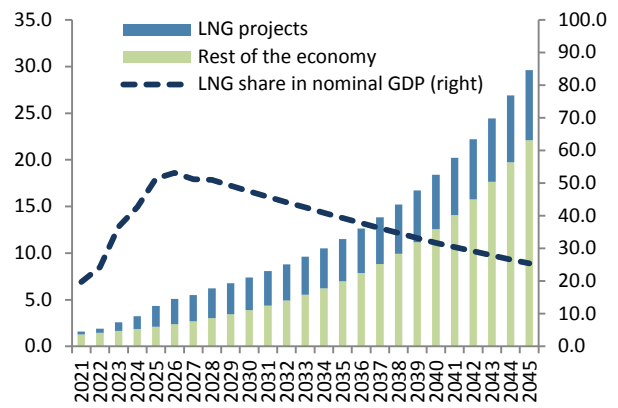
³ Ross, D., (Editor). 2014, “Mozambique rising: building a new tomorrow,” Washington: International Monetary Fund, 2014.

Figure 1. Mozambique: Macroeconomic and fiscal implications of the LNG projects

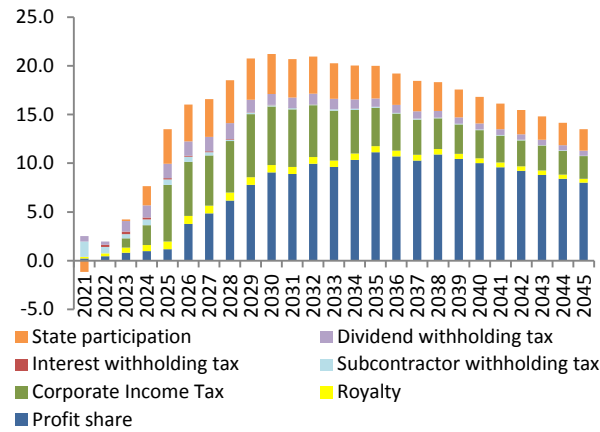
Contribution of the LNG projects to real GDP growth
(Percent)



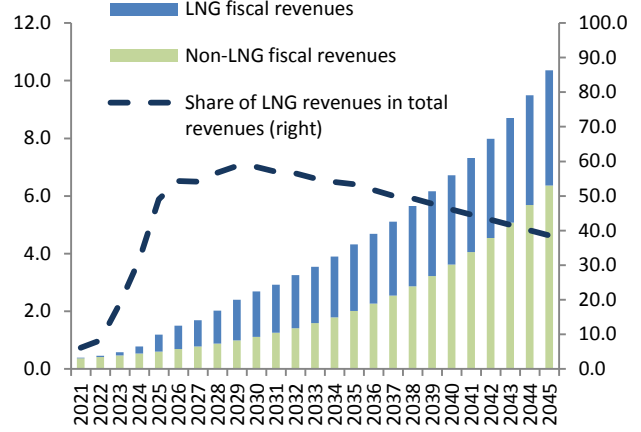
Share of the LNG projects in nominal GDP
(Trillion of metical, Percent)



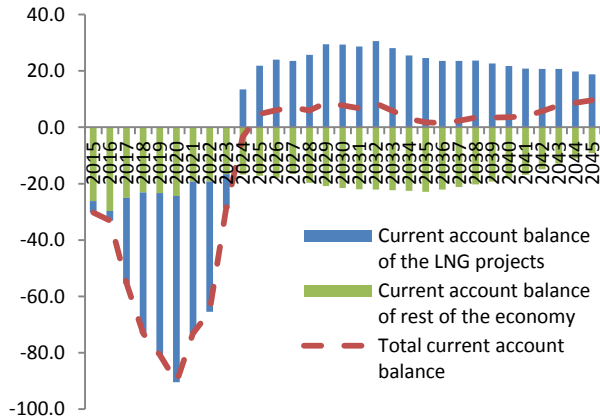
Fiscal revenues from the LNG projects
(Percent of GDP)



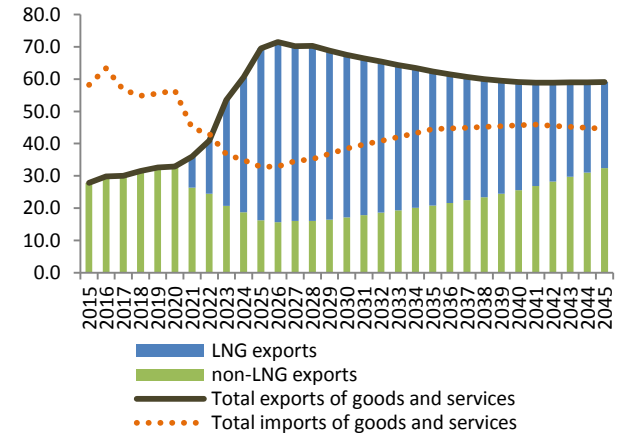
Share of LNG revenues in total fiscal revenues
(Trillions of metical, Percent)



Current account balance
(Percent of GDP)



Goods and services trade
(Percent of GDP)



Sources: IMF staff estimates and projections.

MONETARY POLICY, BANKING STRUCTURE AND INTEREST RATES IN MOZAMBIQUE¹

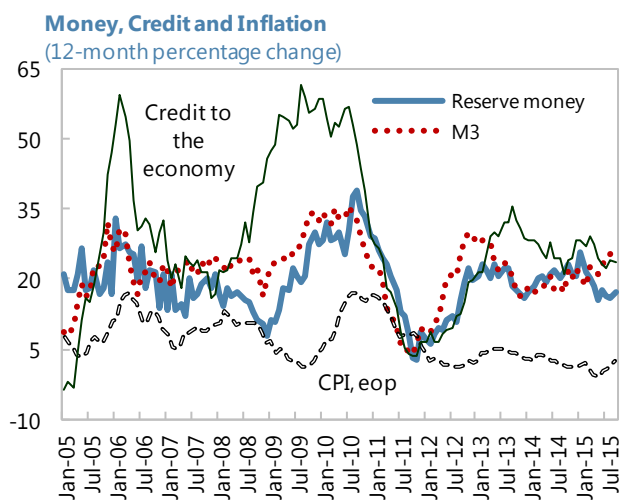
Mozambique is experiencing rapid banking sector expansion. The number of bank branches increased from 228 in 2005 to 529 in 2014. While this development was matched by a great effort by the central bank to promote the growth of credit to the private sector, the interest rates on bank lending remain prohibitively high for SMEs and commercial banks' responses to the central bank's policy rate adjustments are sluggish. This annex explores the structural factors that may explain this phenomenon and discuss policy implications.

A. Background and Context

1. **The main objective of monetary policy is to maintain price stability, with the reserve money being the operating target.** Every year the government announces an inflation objective, which is currently defined as a medium-term target in the 5-6 percent range and becomes the Bank of Mozambique's (BM) inflation objective. Secondary to controlling inflation, the BM also attempts to promote private sector credit growth and financial deepening. The reserve money targets are calibrated through the consideration of broad money and credit growth and the impacts on the interbank interest rates and market interest rates. The BM also uses interest rate adjustments to aid reserve money targeting and help communicate its monetary policy intention to the market—in the monthly Monetary Policy Committee (MPC) meeting, it would decide on any changes to its Standing Lending Facility (FPC) rate and Standing Deposit Facility (FPD) rate after assessing the macroeconomic environment and the inflation outlook, in addition to setting the monthly reserve money target and any change in the reserve requirement.
2. **The BM uses a conventional range of liquidity management instruments to achieve its objectives.** The main tool is open market operations, which include T-bills auctioned by the BM for monetary policy purposes and repo operations. The BM also uses less frequently the changes in reserve requirements and spot interventions in the interbank foreign exchange market. Reserve requirements apply to all deposits (i.e., local and foreign currency, demand and time deposits), including Government deposits. Banks are required to hold their required reserves on a daily basis, in local currency, and with no remuneration.

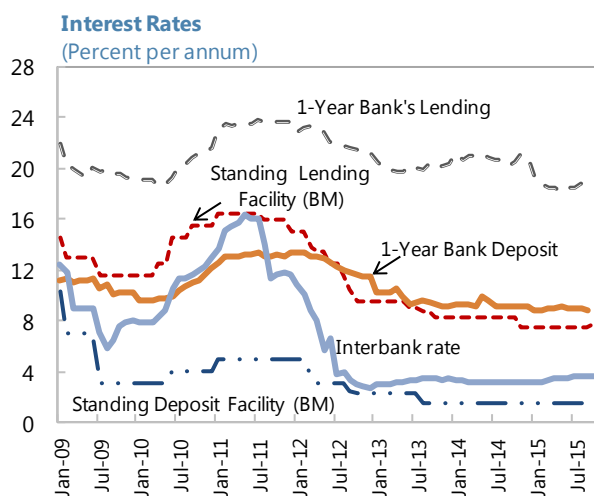
¹ Prepared by Felix Fernando Simione and Yuan Xiao.

3. **The underdeveloped domestic capital market prevents a smooth monetary transmission mechanism, making fine tuning of policy stance difficult.** During periods of large swings in reserve money growth, the impact of monetary developments on inflation outcome is more discernible; this was for instance the case after the significant monetary tightening in 2011. However, for most periods monetary fine tuning does not seem to exert visible impact on inflation. This could be due to the fact that the banking system tends to be structurally over liquid and that only a small share of the CPI basket is influenced directly by monetary policy (the CPI basket is dominated by food and administered products).



4. **The influence of the policy rates on the interbank market appears to be weak.** There is a wide corridor between the two policy rates, FPC rate and the FPD rate, which provides little guidance to movements of the interbank rate. The spread between FPC and FPD rates is currently at 575 basis points after the BM narrowed the width of this corridor in recent years, but it is still much wider than in most emerging markets (typically at about 200 basis points) or advanced economies (typically at about 100 basis points). In practice the FPC is not used frequently by commercial banks. The interbank rate shows very low day-to-day volatility, and anecdotal evidence suggests that the interbank market is dominated by one/two banks that are structurally overliquid in meticals, and therefore can act as de facto price setters and market makers.

5. **Furthermore, the market deposit rate is sticky, while the lending rate responds more to the deposit rate than to the policy rates.** For example, between mid-2011 and late 2015, the BM cut the FPC rate by 900 basis points cumulatively, while the one-year deposit rate and lending rate only moved by 450 basis points and 500 basis points, respectively. As the deposit base of the banking system is dominated by a few large institutional investors, these depositors are able to shop around for the best rates. This results in a downward stickiness of the deposit rate. Moreover, data, reinforced by anecdotal evidence, suggests that, although some prime rates are linked to the FPC rate, the commercial banks tend to set the lending rates as a markup over their deposit rates, which reflect better their true funding cost



than the FPC rate. The stickiness of market interest rates not only hampers the proper transmission of monetary policy, it also constrain implementation of the BM's strategy of financial deepening—with the high and sticky interest rates, few SMEs are able to afford bank credit and, as a result, the rapid credit growth that the BM has been promoting in recent years tends to concentrate on large borrowers or on consumer loans backed by salaries.

B. Characteristics of Mozambique's Banking Industry

6. **Financial access in Mozambique has increased remarkably over the last decade.**

Representing about 50 percent of the access points to formal financial services in 2014,² commercial bank branches increased from 228 in 2005 to 563 in 2014, reflecting in part an increase in the number of banks from 12 to 18 over the same period. This expansion of banking access, despite being more pronounced in urban areas, was observed country-wide and associated with a steady rise of private sector credit (Figure 1).

7. **However, a high degree of market concentration underpins the financial sector growth in Mozambique.** The top 3 largest commercial banks accounted for 83 percent of total banks' credit in 2011. Credit concentration is high not only compared to relatively more developed countries in the region (e.g. Mauritius and Botswana), but also compared to countries at a similar development stage such as Tanzania, Zambia and Congo (Figure 1). Although the degree of concentration has declined over time, it did so at a relatively slow pace. While Zambia and Botswana have experienced a consistent decline in concentration over time, in 2011 Mozambique exhibited the same concentration level as in 1998 (Figure 1).

8. **Domestic customers' deposits constitute the main funding source for the commercial banks.** Banks' incentives to use the central bank's lending facility, the interbank market, or foreign credit lines for liquidity appear to be limited as: (i) there is a maturity mismatch between the central bank lending facility (overnight) and commercial bank loans (longer maturities); (ii) big and small banks exchange only a fairly low level of liquidity in the interbank market, which partly reflects banks' risk aversion to increase exposure to each other; and (iii) foreign credit lines to banks (in the form of foreign currency) not only are very limited in size, but also subject banks to prudential regulation restrictions that discourage lending to non-exporters and in foreign currency.

9. **While playing a key role in banks' financing, the deposit base is very narrow and also concentrated among a few large institutional clients, including public companies and non-bank financial institutions (NBFI) comprising pension funds and insurance companies.** These clients' share in the total banking system's deposits has grown substantially since 2005, reaching 20 percent in mid-2010, before stabilizing at 15 percent at end-2014 (Figure 1). This concentration level is high if one takes into account that there are only 14 public companies, 2

²According to the 2014 FinScope Consumer Survey.

large pension funds and not more than 10 large non-bank financial institutions. Market participants claim that the share is much higher for many individual banks. These institutional depositors could largely dictate their interest rates and are driving the marginal costs of the banks. On the other hand, with a deposit-to-GDP ratio at 33 percent at end-2011, Mozambique ranks far below Mauritius (90 percent) and South Africa (59 percent) in terms of financial resources available for banks' intermediation. It only performs marginally better than Angola, Tanzania, Malawi and other SADC low income economies (Figure 1).

10. **There are concerns that high market concentration may be contributing to the observed high lending interest rate** as excessive concentration in credit and deposit could grant high pricing power to large banks and depositors. In fact, the average lending interest rate has declined gradually over time but, at close to 19 percent for one-year maturity in late 2015, it remains among the highest in the region. This is despite pronounced cuts in the central bank's policy rate over the last years (Figure 1). In the next section, we attempt to assess whether the lending interest rate is correlated to credit and deposit concentration over time.

C. Assessing the Effect of Credit and Deposit Concentration on the Interest Rate

11. **Staff assessed the impact of credit and deposit concentration on the average lending interest rate over the period 2002M1-2014M12 through a regression analysis.**³ The results are reported in Table 1 from which we highlight the following:

12. **Deposit concentration has a significant effect on the lending interest rate:** all else being equal, each 10 percentage point increase in public companies' and NBFIs' deposit concentration ratio is associated with 240 basis points increase in the lending interest rate on average. This suggests that, among other factors, high deposit concentration, especially in small and medium-sized banks, may be an important driver of the lending interest rate behavior in Mozambique.

13. **Credit concentration significantly affects the lending interest rate, but the impact depends on the monetary policy stance.** The higher the central bank's lending interest rate, the lower the effect of credit concentration and vice-versa. Assessed at the median policy rate over the sampled period (14.5 percent), the coefficient of credit concentration is estimated at 0.19. This suggests that, other things being equal, each 10 percentage point increase in the credit concentration ratio is associated with 190 basis points increase in the lending interest rate.

³We estimate a co-integration and instrumental variable regression whereby credit concentration is instrumented for by the degree of dollarization in credit and deposit. The estimation controls for the central bank's lending facility interest rate, reserve money, inflation and reserve requirement. The lending interest rate is the banking system average prime interest rate on loans for one-year maturity. Deposit concentration is measured as the ratio of public companies' and NBFIs' deposits to total banking system deposits, excluding foreign currency and demand deposits. Credit concentration is measured as credit of the top 5 banks as a share of total banking system credit.

Excessive credit concentration potentially generates sizeable interest rate costs. We illustrate this by estimating model-implied interest rates assuming lower credit concentration levels than actually observed in Mozambique. All else equal, the interest rate could be around 600 basis points lower if Mozambique's credit concentration level was similar to South Africa's (Figure 2)

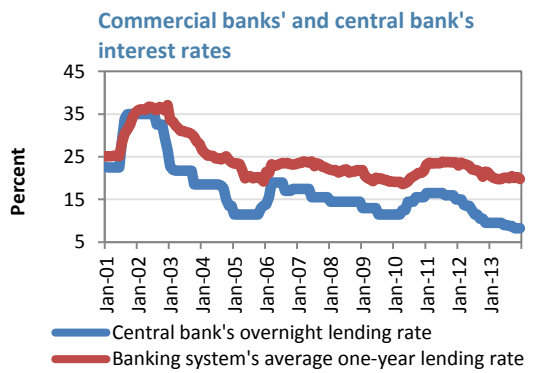
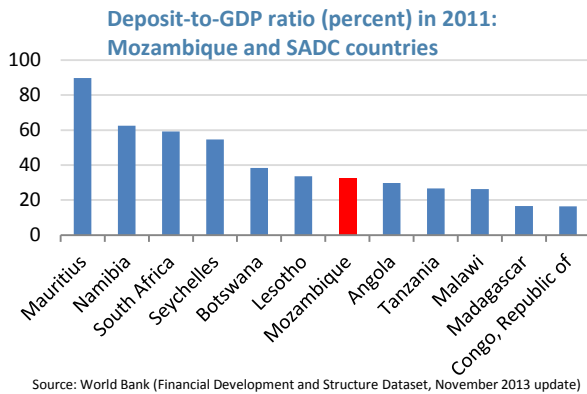
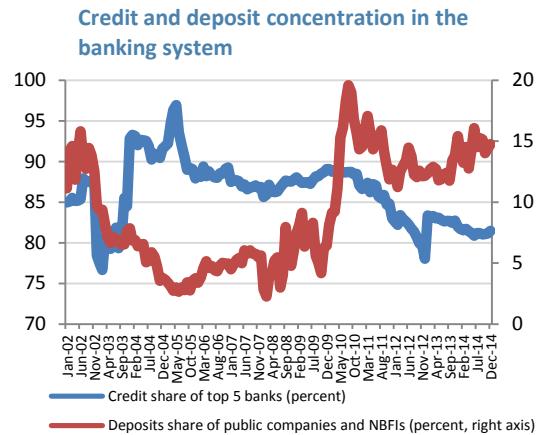
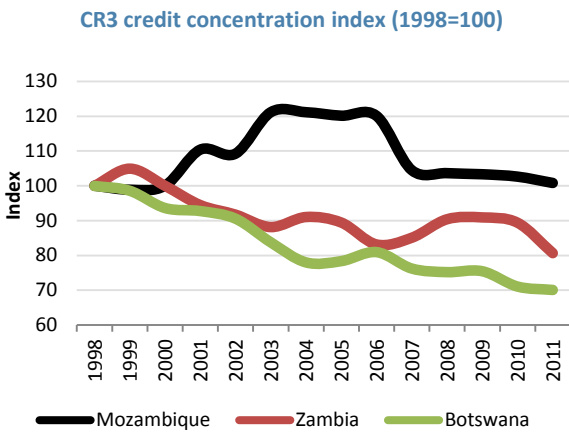
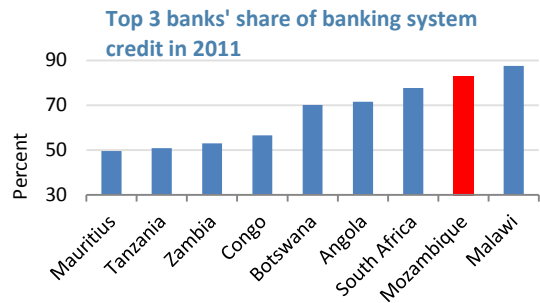
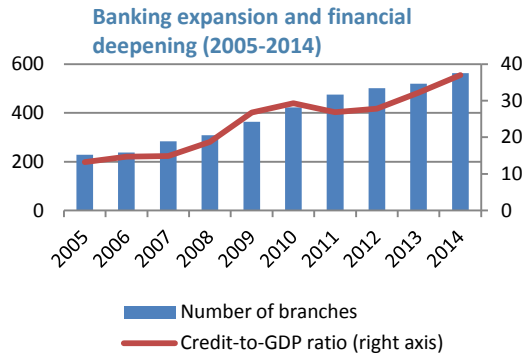
14. **High credit concentration weakens the effectiveness of monetary policy.** The central bank policy interest rate does have a statistically significant and positive effect on the market lending interest rate, but the pass-through is constrained by the degree of credit concentration. The higher the credit concentration, the lower the effect of central bank's lending rate.

D. Conclusions and Policy Implications

15. **High deposit and credit concentration could be part of the reasons contributing to the high lending interest rate in Mozambique.** Not only higher credit and deposit concentration is associated with higher lending interest rate, but higher credit concentration also appears to weaken the effectiveness of the central bank's policy rate adjustment. This finding is consistent with the Structure-Conduct-Performance theory, according to which highly concentrated banking industries tend to enjoy lower competition, leading to higher interest rates and reducing banks' incentives to respond to monetary policy stimulus. The findings suggest two policy implications:

- I. **Promote an environment for greater competition in banking.** Although the presence of a few large dominant banks is not uncommon in a small financial system, competition is important and can be promoted by strengthening the regulatory framework to limit monopoly powers and implementing financial literacy programs aimed at empowering the public with the ability to assess and compare available financial products across banks.
- II. **Promote private savings and competition in the deposit base,** including through campaigns to bring into the banking system funds currently lying in the huge (partly unbanked) informal sector. This could contribute to widening the deposit base and hence reduce banks' dependence on a limited number of large depositors with oligopolistic market power.
- III. **Deepen the domestic capital markets and help SMEs to obtain financial services.** Given the shallow domestic markets and the intrinsic risks of SMEs in a low income country, simply promoting more credit growth is unlikely to help increase the access of credit by the SMEs greatly. The financial literacy programs can assist the SMEs to produce better loan application packages that demonstrate better the viability of their businesses.

Figures 1. Mozambique: Selected Banking Sector Developments



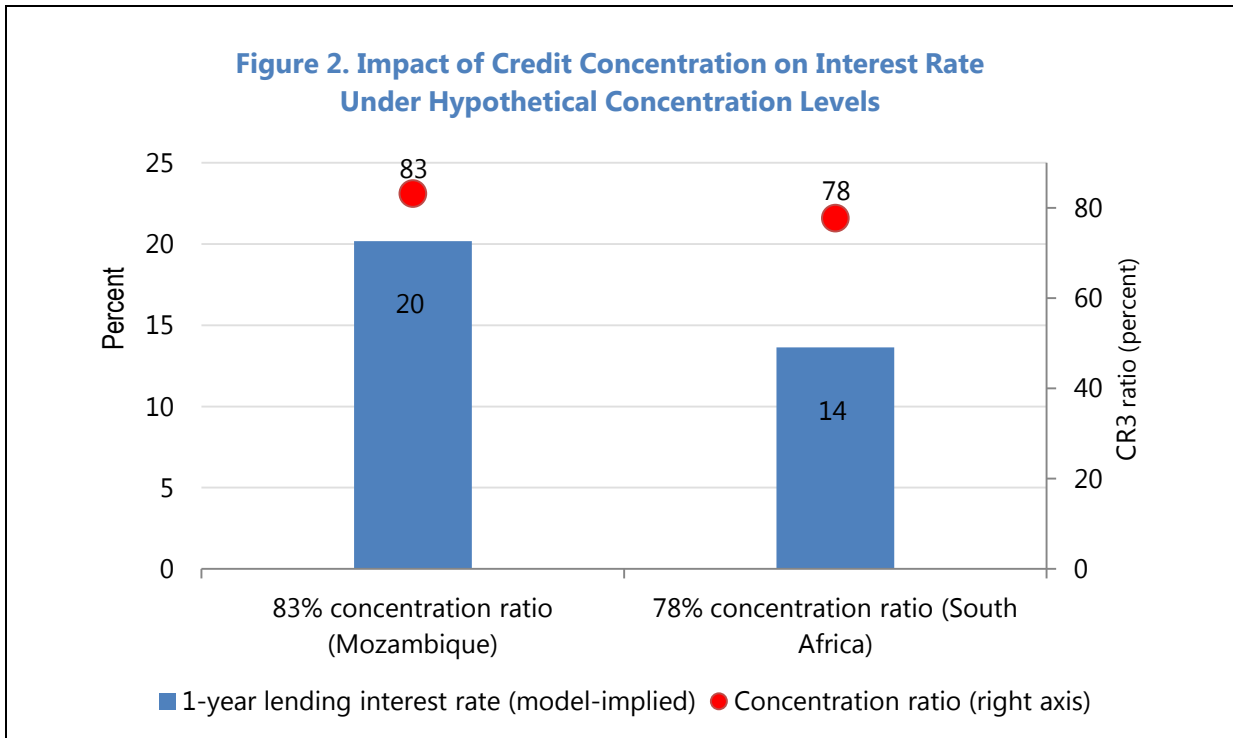


Table 1. Regression Results

Dependent variable: average prime interest rate on bank loans for 1-year maturity (percent)

Regressors	Coef.	Std. error¹
Concentration of public companies' and NBFIs deposits (percent)	0.24**	0.09
Concentration of top 5 banks' credit (percent)	1.20***	0.01
BoM's policy interest rate-FPC (percent)	6.21***	2.01
Interaction of FPC with credit concentration	-0.07***	0.02
Reserve money y/y growth (percent)	-0.11***	0.04
12-month end-of-period inflation rate (percent)	-0.06	0.08
Reserve requirement rate (percent)	0.95***	0.26
Constant	-99.22	38.35
Adjusted R2	0.81	
F test	102.09	
Observations	156.00	

***, ** and * denote statistical significance at 1%, 5% and 10%, respectively.

(1) Newey-West robust standard errors

FISCAL POLICY AND INCLUSIVE GROWTH IN MOZAMBIQUE¹

A. Introduction

1. **Inclusive growth is a key issue in Mozambique.** Inclusive growth refers to a type of growth that is broadly shared, results in economic opportunities for the population (including through greater job opportunities) and ultimately has a noticeable impact on poverty reduction. While the poverty rate declined in Mozambique from 69 percent in 1997 to 54 percent in 2003, it seems to have remained stagnant since then (Ross *et al.* 2014).² As a result, few countries offer such a stark contrast as Mozambique: one of the highest rates of economic growth in the world (average of 7.5 percent over two decades), coupled with an extremely low elasticity of poverty with respect to growth (about 0.1 percent).³ This suggests that a large share of the Mozambican population is not benefiting enough from these high levels of growth.

2. **Inclusive growth issues are often complex and multidimensional.** There is consensus that in low income countries inclusive growth requires (i) an emphasis on *agriculture* (because it is a labor intensive sector); (ii) improvements in the *business environment* (to attract investment and broaden economic opportunities); (iii) greater *financial inclusion*; and (iv) a *well-designed fiscal policy*. This paper focuses on this last dimension. How can fiscal policy help make growth more inclusive in Mozambique? In particular, this paper examines the role of that fiscal policy can play to reduce poverty and income inequality as a policy strategy to make growth more inclusive.

3. **Fiscal policy can be one of the most effective instruments to reduce income inequality and help make growth more inclusive.** The reduction in income inequality is important for three reasons. First, high levels of income inequality make it *difficult to sustain growth* over long periods of time (Berg and Ostry 2011). Second, it can lead to *political instability* (Alesina and Perotti 1996, Boix 2015) as citizens demand increasing access to economic resources – a challenge that can become even more acute in a country like Mozambique that is likely to become one of the largest liquefied natural gas (LNG) exporters in the world. And third, high levels of inequality *hamper government policies to reduce poverty*. In other words, the higher the level of inequality the lower the elasticity of poverty to growth is likely to be.

¹ This chapter was prepared by Leandro Medina and Alex Segura-Ubiergo.

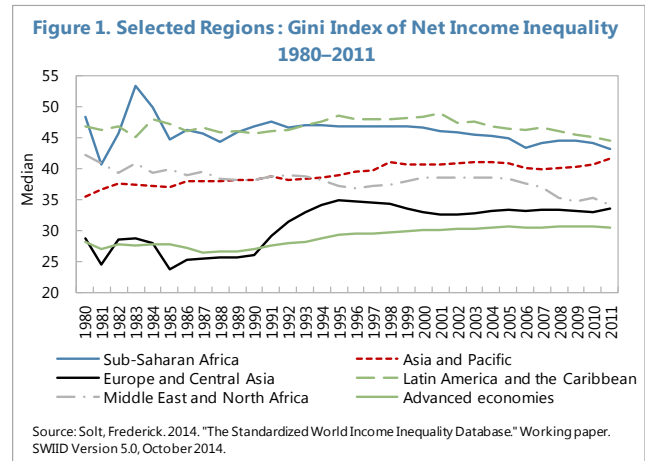
² Mozambique is undertaking a household survey which is expected to update the poverty rate in the coming months.

³ This means that a one percent increase in per capita income only results in a reduction of 0.1 percent in the poverty rate.

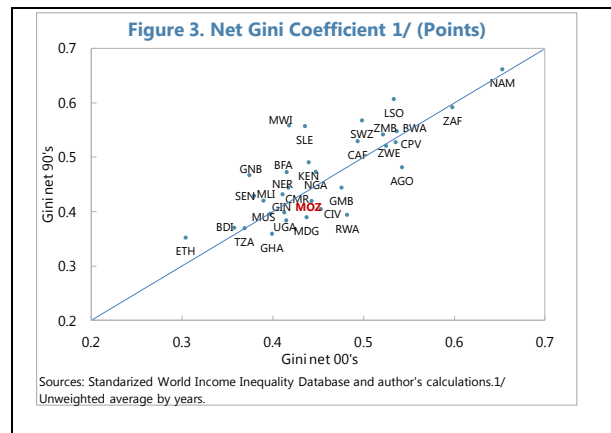
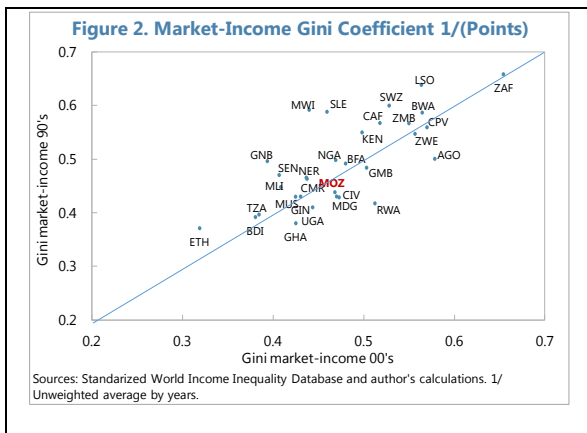
4. **This chapter is organized as follows.** Section II provides some stylized facts about inequality in Sub-Saharan Africa, and Mozambique, in comparative perspective; Section III analyzes how fiscal policy can play a greater role to reduce inequality in Mozambique, and Section IV provides some concluding reflections and highlights areas for further research.

B. Some Facts about Income Inequality

5. **Income inequality has received increasing public attention since the global financial crisis and the events of the “Arab Spring”.** Sub-Saharan Africa (SSA)’s income inequality remains among the highest in the world, with the second highest level after Latin America. But income inequality in SSA presents even greater policy challenges because SSA has the highest levels of poverty and gender inequality in the world, which suggests that a large share of the population is likely to be excluded from the benefits of “growth”. Another concern is the fact that income inequality in SSA is in general higher at all levels of income, compared with countries at similar income levels in other regions. International experience suggests that such persistently high income inequality can hamper macroeconomic stability and growth.



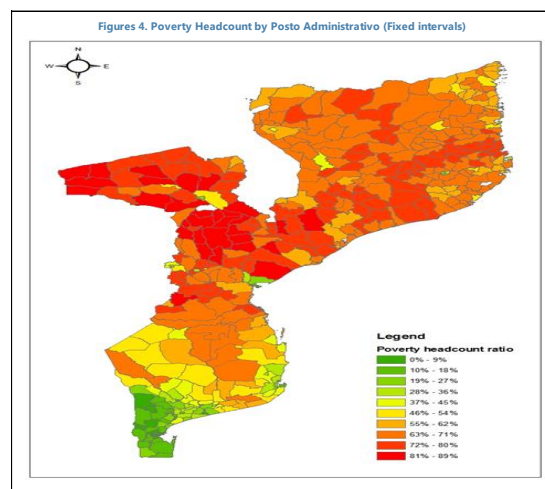
6. **In Mozambique, income inequality has increased despite high rates of economic growth.** Both market-income inequality and the net Gini coefficient are worse in the 2000s than in the 1990s.⁴



⁴ The Market-income Gini coefficient is a standardized measure of income inequality before taxes and transfers, while the Net Gini coefficient measures inequality after taxes and transfers.

The increase in the Gini coefficient from 0.44, on average, in the 1990s to 0.47 in the 2000s contrasts with Mozambique's strong and sustained economic growth of above seven percent over the last two decades.⁵

7. **Income inequality in Mozambique also has a spatial dimension.** Most of the country's wealth is located in the southern area, and especially around the capital Maputo. Similarly, higher rates of poverty appear to be highly concentrated in the central and northern regions, particularly in rural areas (Alfani et al. 2012). Fiscal transfers to rural areas could help address this spatial dimension of inequality, but experience with fiscal transfers to date so far, especially to municipalities, has shown mixed results.



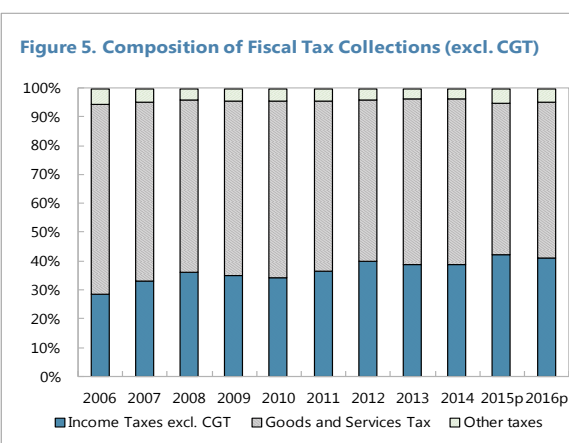
C. Three Key Policy priorities

8. **Fiscal policy can play a key role to help reduce income inequality through three mechanisms: tax policy, public investment, and social policies.**

Tax Policy

9. **Direct taxes, especially personal income taxes, are often preferable for redistributive purposes than consumption taxes.**

In Mozambique, the share of direct taxes has increased over time, and income taxes now account for about 40 percent of tax collections (excluding capital gain taxes). While property tax revenue is progressive and is considered less disruptive for economic growth,⁶ its current share in Mozambique is negligible. Despite the increase in the share of direct taxes over time, their relative efficiency is low. In particular, the efficiency of the corporate income tax is low due to the system of fiscal incentives (2009 Fiscal Benefits Code), which



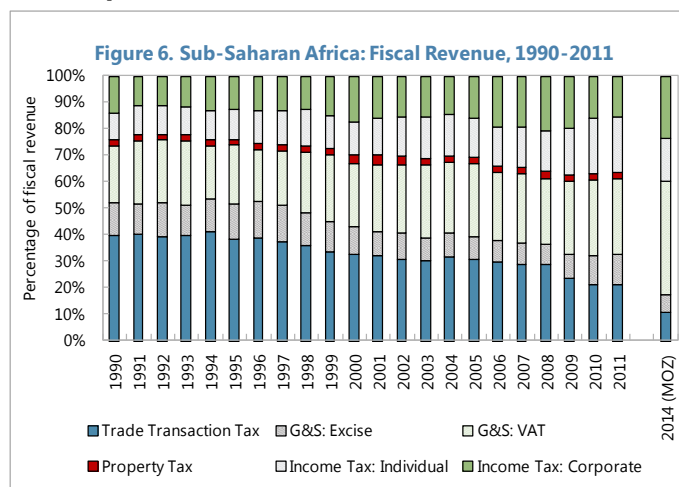
⁵ The Gini coefficient is a standardized measure of statistical dispersion intended to represent the income distribution of a nation's residents, and is the most commonly used measure of inequality. The highest the Gini index, the more unequal the income distribution in a given country.

⁶ Tax and Economic Growth, Economics Department Working Paper No. 620. OECD, 2008.

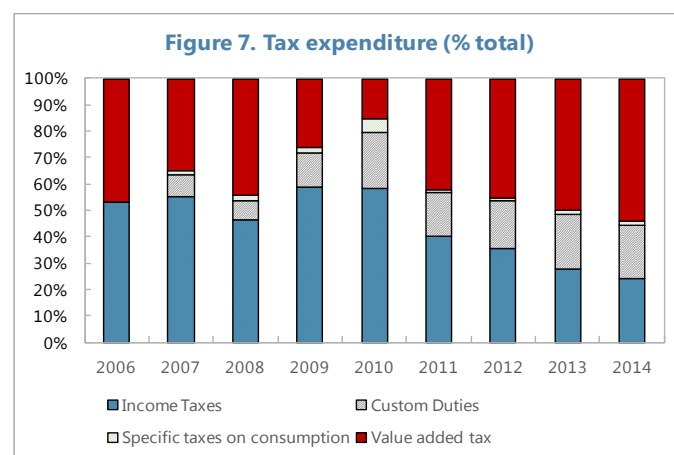
tends to favor large, capital intensive projects.⁷ Higher income brackets also enjoy larger tax credits. There is a special regime for small taxpayers but its equity could be improved by increasing the exemption threshold to ensure that small taxpayers are not unduly burdened.⁸

10. Reducing consumption tax rates, with broadening of the base and improvements in efficiency to avoid a loss of revenues, can also help redistribute income. Like in other Sub-

Saharan countries, the VAT has become a key source of fiscal revenues. But the Mozambican VAT is crippled with an extensive list of exempt and zero-rated items which need to be reviewed and rationalized. Exemptions have an unclear impact on the poor and shrink the tax base. VAT efficiency in Mozambique is well below the average for Southern African Development Community (SADC).⁹ Reviewing the current VAT structure could help prevent an erosion in the tax base and ensure that the benefits accrue to the worse off part of the society.



11. Finally, fiscal incentives in Mozambique are costly and reduce fiscal space for other social spending. A variety of fiscal incentives have been offered in several sectors¹⁰ to attract investment. While tax expenditure decreased in 2014¹¹ due to a reduction in the number of investment projects, they still represented 3.3 percent of GDP, with an increasingly high concentration of VAT import exemptions for large investment projects.



⁷ A recent independent study argues that large mining projects by foreign companies in Mozambique account for up to 12 percent of GDP but contribute less than 3 percent of tax revenues and represent 3 percent of employment. Fjeldstad and Heggstad, 2011.

⁸ Varsano, IMF, 2012.

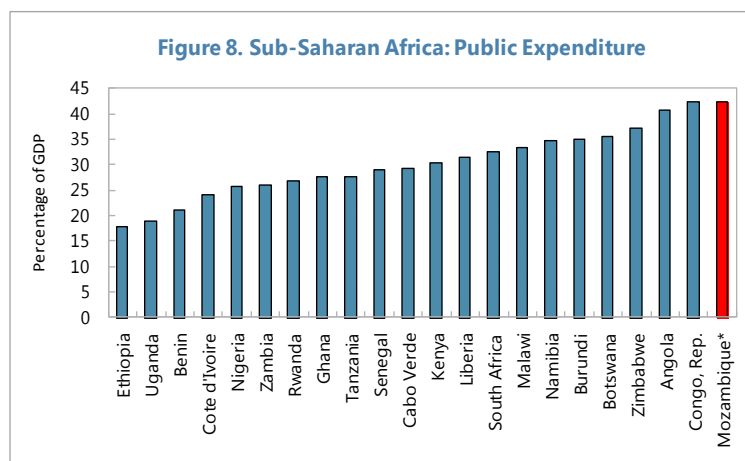
⁹ Public Expenditure Review. World Bank, 2014.

¹⁰ This includes tax holidays, tax rate deductions, investment tax credits, accelerated depreciation, and exemptions and deductions for inflated expenses.

¹¹ Tax expenditure is reported in fiscal reports and decreased from 4 percent of GDP in 2013 to 3.3 percent in 2014.

D. PFM and Public Investment Management

12. **Public spending in Mozambique has increased rapidly over the last few years, but its efficiency and redistributive capacity is limited.**¹² In percent of GDP, public spending in Mozambique is higher than in most countries in the region, including South Africa (which has the highest income per capital in the SADC region). But the Mozambican economy is comparatively small (just 5 percent of South Africa) and public spending per capita is only \$283 (one of the lowest in Sub-Saharan Africa). In addition, growing public spending has also been driven by the wage bill, goods and services and domestically financed capital expenditures, with insufficient controls to ensure value-for-money.



13. **Certain reforms could increase the efficiency of public spending and its redistributive potential:**

- Public spending should be better aligned with a robust medium-term fiscal framework that ensures fiscal sustainability.** No redistributive policy can succeed over the long term if it does not ensure fiscal sustainability. The pace of debt accumulation and the increase in public spending in recent years are not sustainable, also resulting from the poor quality of debt contracted and a lack of rigor in project selection criteria. This can lead to a negative stop-and-go spending pattern. An abrupt need for fiscal consolidation often hits the poor and the most vulnerable segments of the population as governments often resort to across-the-board cuts. The adoption of a fiscal rule, embedded in fiscal responsibility legislation, could help achieve this objective and ensure that the revenue boost provided by natural resource revenues is used effectively, including by focusing on equality-enhancing expansions in health and education.
- The public investment management system should ensure that the best and most efficient programs are chosen as part of the multi-year planning and annual budget cycle process.** Choosing projects without proper due diligence or highly concentrating projects in one part of the country mean that some regions benefit more than others, or that some sectors get a disproportionate amount of public resources. This is not conducive to effective redistribution and inclusive growth. Although borrowing was concentrated on projects in the South of the country until 2012, new loan contraction has become increasingly more geographically balanced. Current reforms are likely to

¹² Total expenditures and net lending reached over 42 percent of GDP in 2014.

contribute to further improvements, including efforts to (i) approve a new legal and institutional framework for public investment management, (ii) introduce mandatory evaluations by a centralized evaluation committee using feasibility studies and a set of well-defined rules, and (iii) develop a comprehensive project database.

- **Expensive fuel subsidies could also be eliminated taking advantage of lower oil prices.** These subsidies are costly and highly regressive. In 2014 they were equivalent to 1.4 percent of GDP and less than 2 percent of the subsidy accrued to the bottom quintile of the population.

E. Priority Spending

14. **The current definition of priority spending is too broad and makes it difficult to identify the most critical social programs.** Under the current budget classification, over 70 percent of the government budget is classified as priority spending. The use of an administrative classification means that the budget of entire ministries is classified as “priority” irrespective of the actual programs/projects that are being financed by a particular ministry. For example, the purchase of new cars for the Ministry of Health would be classified as priority to the same degree as the procurement of vaccines. There is therefore a need to identify specific programs as priority, rather than classifying the whole budget of a particular ministry.

Conclusion

15. **Mozambique has benefited from strong and sustained economic growth over the last two decades.** However, this economic growth has not been sufficiently inclusive. Mozambique’s income inequality has increased over the last decade despite high rates of economic growth. This suggests that the benefits of growth have not been broadly shared, and the elasticity of poverty to growth has been relatively low. Geographical inequality (with much higher income levels in the Southern provinces) could also become a source of political tension given that most of the natural resource wealth is located in the Northern provinces.

16. **Within this context, fiscal policy can play a useful role to help reduce income inequality.** Key reforms would include (i) expansion of the tax base, reduction of exemptions (which have accrued to large corporations) and increasing reliance on direct taxes; (ii) greater focus on the efficiency and the appropriate sectoral and geographical distribution of public investment; and (iii) a reduction in the scope of priority spending to focus on the most critical social sectors and programs.

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FUEL IMPORT AND SUBSIDY REFORM¹

A. Introduction

1. **There is broad consensus that subsidies are often costly, inequitable and unsustainable, and yet subsidy reform is one of the most difficult tasks a government can undertake.** Subsidy reform is often difficult because those who stand to lose from the reform may be in a position to exert substantial political pressure. Nevertheless, a reform of the fuel import system and of fuel subsidies is necessary in Mozambique because the current system is costly, inefficient, and poorly targeted, with the most vulnerable segments of the population benefitting little from the subsidies.
2. **The fuel subsidy system is costly, though the cost has been declining as a result of the recent decline in international prices.** While international oil prices declined from \$108 to around \$50 per barrel from June 2014 to mid-October 2015, retail prices in Mozambique have not changed, which allowed the government to offset part of the fiscal cost associated with past subsidies. However, in May 2015, despite the decline in international prices, the government had to securitize about \$100 million (0.7 percent of GDP) of debt due to fuel distributors to pay off part of the subsidies accrued in 2014, due in large part to inefficiencies in the import system. These resources seem difficult to justify in a context of declining international prices and they could have been used more effectively to finance better targeted subsidies, either through social transfers, transportation subsidies, or by expanding access to basic health and education.
3. **The cost of importing fuel to Mozambique is higher than in most other countries in the region due to a series of inefficiencies in the import system, especially since April 2014.**² This generates pressures on the budget and on international reserves. A higher fuel import bill creates balance of payment pressures given that the central bank has agreed since 2009 to provide up to 100 percent of the foreign exchange needed for fuel imports. On average, fuel imports account for the majority of the foreign exchange sales by the central bank.
4. **This annex reviews briefly the system of fuel imports and subsidies in Mozambique and makes some suggestions for reform.** Successful reform would contribute to achieving three interrelated objectives: (i) budgetary savings that could generate fiscal space for social programs, (ii) greater transparency and efficiency, and (iii) a reduction in balance of payment pressures.

¹ Prepared by Esther Palacio and Alex Segura-Ubierno

² FAD (2015).

B. Current Challenges

5. **Fuel imports in Mozambique are centralized through a consortium of fuel distributors (Imopetro).** Imopetro prepares the tender to select a trader authorized to import fuel for six months and coordinates the mobilization of foreign exchange through a bank syndicate to finance the related imports. Membership in Imopetro is compulsory and no operator is authorized to import fuel outside this system. Petromoc, the public sector fuel distributor has *de facto* control of Imopetro given its 51 percent stake. The signature of the contract is supposed to follow an international tender process which is supervised by an ad-hoc inter-ministerial commission (CACL).³ This commission was created to ensure transparency and competitiveness in the procurement of fuel products, but there were complaints in 2014 about possible irregularities.

6. **The current system for fuel imports, fuel pricing and fuel subsidies is affected by several problems:**

- **Transparency.** While the last contract for fuel imports was attributed in May 2015 following stronger tendering procedures, the relatively transparency in the tendering of previous contracts was a source of concern. The principle of the lowest price was, in particular, not followed with the contract extensions awarded in 2013 and 2014 without a clear explanation of why this was the case. Inefficiencies in the import system are likely to have resulted in a higher cost of imports and, therefore, a need for a higher fuel subsidy.⁴
- **Fuel Import System inefficiencies.**⁵ First, there is weak supervision and control of the key parameters that affect fuel prices.⁶ Second, Imopetro has limited capacity to monitor the

³ This fuel procurement commission is in charge of reviewing the procurement process proposed by Imopetro (selected trader and financing entities), verifying the conformity of import prices, overseeing the implementation of the import fuel contract and helping mobilize foreign currency when necessary.

⁴ In addition, the formula for the conversion from barrels to metric tons was not clear, and some strategic changes in temperature at different moments of the importing process resulted in losses for Mozambique, as quantities received were lower than invoiced.

⁵ There is no universally accepted “optimal” system for fuel imports. In Sub-Saharan Africa there are five possible frameworks: (i) a liberalized system open to all market participants (e.g. Namibia, Mali and Botswana); (ii) a government monopoly, where fuel imports are controlled directly or through the state company (Angola, Niger, Sudan); (iii) an oligopoly of imports to fuel refineries (South Africa, Ivory Coast); (iv) a semi-liberalized system where imports are open to fuel distributors, but subject to government authorization (Congo DRC, Nigeria, and Chad), and (v) an open international tender system (Tanzania, Kenya).

⁶ This includes verification of the date of shipment in the bill of lading (which affects the determination of prices and is not always monitored), (ii) delivery delays (shipment can take up to three months to reach the country, which increases risk of changes in international prices and FX risk), and (iii) weak control of import of quantities at the origin and destination (which can generate leakage of fuel imports to neighboring countries).

execution of the fuel import contract and impose penalties for non-compliance. Similarly, CALC focuses on supervision activities around the procurement process, and has no dedicated technical staff, or ability to impose sanctions. Finally, imports are financed by a bank syndicate that helps mobilize foreign currency (typically by requesting US dollars from the Central Bank) on behalf of Imopetro. Forcing private sector fuel distributors to mobilize financing through Imopetro and the bank syndicate increases costs and generates a direct link between fuel imports and international reserves given that the central bank gives an implicit guarantee to provide foreign exchange and, in practice, offered until November 2015 a more favorable rate than available through the interbank market.

- **Fuel Pricing.** While there is a formula that should set retail prices transparently, with monthly adjustments, this formula has not been implemented since July 2011. In fact, the formula is currently used only to calculate the size of fuel subsidies. The current fuel pricing structure is complex and does not adequately reflect actual costs associated with fuel imports, distribution and retail. The main problems include (i) a lack of clarity on the calculation of the subsidy component, which should be the difference between the retail price and the formula price; (ii) the use of CIF prices inflated by inefficiencies in the fuel import structure and with no detailed breakdown; (iii) higher direct import costs than efficient levels; (iv) a poorly understood price correction factor; and (v) distribution and retail margins that are not regularly updated.
- **Cost-effectiveness of fuel subsidies.** In 2014 fuel subsidies reached 1.1 percent of GDP on an accrual basis. An estimated 50 percent of this subsidy (\$73 million dollars) was due to inefficiencies in the system of imports that resulted in unusually large gaps between the formula CIF price and the international FOB price without any benefit for the population. In practice, part of the fuel subsidy is used to compensate the public sector fuel distributor (Petromoc) for its quasi-fiscal losses. This fuel subsidy could be included in the budget (as an explicit subsidy to Petromoc).⁷ The rest of the subsidy was captured disproportionately by the top income quintile of the population in urban areas, which received about 48 percent of the subsidy.

C. Policy Recommendations

7. **Reforms should aim at generating fiscal savings, reducing pressures on international reserves and achieving greater transparency and efficiency in the sector.** Fuel subsidies paid by the State could have been lower (especially in 2014) through a more efficient import system. This

⁷ For example, Petromoc has the most extensive network of fuel stations, including in remote areas where transportation costs are higher, and where other private sector distributors would have no incentive to operate. As a result, Petromoc incurs operational losses (due to the social objective of ensuring fuel availability throughout the country) that should be compensated to ensure that the company is managed with a commercial orientation. Best international practice is to record transparently these expected quasi-fiscal losses/activities in budget documents.

would have reduced the amount of fuel imports and the volume of FX sales by the central bank. Three specific steps could help improve the system:

8. **First, fuel product distributors and large natural resource companies** (known as megaprojects in Mozambique) **should be allowed to import fuel and mobilize financing directly, in line with their market needs.**

- The current centralization of the import system implies that the company with the weakest balance sheet (Petromoc) in practice controls the process through its majority stake in the monopoly importer (Imopetro). This generates reluctance on the part of the banks to provide dollar liquidity to Imopetro as they see that exposure risks to Imopetro are affected by the financial position of Petromoc. In a decentralized system, each company would be able to mobilize its own foreign exchange independently. Petromoc's balance sheet would also be strengthened if the Treasury provided timely compensation for its quasi-fiscal activities (see above).
- Until November 2015, the Central Bank sold foreign exchange at a more favorable rate than the effective interbank rate to help reduce the import bill and offset some of the system inefficiencies. In a liberalized system, the main fuel importers (especially for megaprojects in the coal sector) and fuel distributors could try to mobilize financing to pay for their fuel shipments directly out of their export proceeds, through offshore loans (subject to central bank authorization), or financing from their parent companies.
- In addition, the domestic banking system has enough deposits in dollars in the form of customers' deposits (about \$1.8 billion in October 2015) to be able finance the fuel imports. This would require that banks buy dollar deposits from their customers at a sufficiently attractive foreign exchange rate. They, however, have little incentive to mobilize these dollars as long as the Central Bank is willing to sell dollars at a discount.
- The companies would also have a greater incentive to supervise the shipments and audit the quantities received. Imopetro should then be dismantled or transformed into an organization where participation by the fuel distributors is voluntary.⁸

9. **Second, certain institutional changes would be required to support the new system:**

- **Use a reference price.** This should help to align incentives for Imopetro and other fuel importers and distributors to seek the lowest import cost possible. The CIF price in the

⁸ This reform would require strong government regulation and supervision to avoid market collusion and ensure quality, safety and regular access to fuel products in all areas of the country. The formula might have to be adjusted to replace actual cost of imports by a benchmark price based on the Platts and a mark-up reflecting the cost of an efficient supplier. Oil companies would have different import costs and import schedules, and transparent pricing would be key to avoid collusion in vertically integrated companies.

formula should be based on a benchmark international reference price increased by a standardized margin reflecting an efficient importer, rather than on actual import costs.

- **Regular application of the price-setting formula.** Freezing retail prices for a long period of time makes the use of the formula unmanageable and leaves the system vulnerable to manipulation and mismanagement, which adds to the cost of the subsidy. To ensure transparency and efficiency, consideration should be given to the establishment of an independent institution responsible for data collection, implementation of the automatic pricing mechanism, verification of the tender process and execution of the fuel imports contract.
- **Reinforce government regulation and supervision to avoid market collusion and ensure quality, safety and regular access to fuel products in all areas of the country.**

10. **The reactivation of the fuel price-setting mechanism would also generate several important benefits.** First, it would permanently eliminate the need for a fuel subsidy, which could generate savings of around \$65 million per year, on average, if we consider the annual average subsidy disbursed over the last five years.⁹ Second, it would help activate a market adjustment mechanism as rising prices would help reduce import volumes. The use of the formula and elimination of the subsidy would also help reduce the possible problem of “leakage” or “smuggling” of fuel imports to neighboring countries. Finally, some compensatory measures may be needed to adjust to the new system. A fuel price increase of 20 percent is estimated to decrease income by 20 percent in the two lowest quintiles of the income distribution. The government could study targeted subsidies to the public transportation system and/or and expansion of the existing social safety net programs.

⁹ However, at the international prices prevailing in late October 2015, the current system did not generate any explicit subsidies (it actually involves a fairly modest negative subsidy). These market conditions provide a good opportunity for reform, even though the recent depreciation of the metical over the last two weeks of November may require another reassessment of the situation.

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