ANGOLA

SELECTED ISSUES

June 2018

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ANGOLA

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OIL REVENUES IN ANGOLA: TRADEOFFS AND OPPORTUNITIES[1]

Angola is facing a stark trade-off between declining oil fiscal revenues over the medium term and increasing social and public investment needs. Opportunities do exist to make the most of Angola's remaining oil reserves, whilst reducing its debt burden and building fiscal buffers. However, a sound fiscal framework for the use of oil revenues that includes a well-designed fiscal stabilization fund may be needed. This chapter assesses the macroeconomic implications of different fiscal rules for managing oil revenues in Angola, and discusses policy options to address related tradeoffs. Under a spend-as-you-go (SAYG) fiscal rule, falling oil production and volatile oil prices lead to declining revenues, volatile public investment, and rising debt. Under a more active fiscal rule, public investment can be scaled up gradually, whilst at the same time building fiscal buffers and insulating the non-oil economy from volatile oil price movements.

A.   Introduction

1.   Whilst Angola remains the second largest oil producer in Africa, oil production has leveled off and could decline in the medium term. Aging oil fields and years of under-investment due to lower oil prices could lead to a steady decline of oil production over the coming decades. Meanwhile, oil prices are expected to remain soft at US$50–55 per barrel over the medium term. With limited fiscal and external buffers and significant infrastructure and social spending needs. Angola needs to find a more sustainable mix of policies than those pursued in the past. It is facing trade-offs between declining oil revenues and increasing social and public investment needs. However, opportunities do exist to make the most of Angola's remaining oil reserves, whilst reducing its debt burden and building fiscal buffers. This chapter assesses the macroeconomic implications of different fiscal rules for managing oil revenues in Angola and discusses policy options to address related tradeoffs.[2]

2.   The challenge for resource-rich economies like Angola is how to transform subterranean assets (oil wealth) into productive assets above the ground, including financial, physical and human capital assets. There are essentially two fundamental questions that need to be answered regarding the use of natural resource revenues. First, how much should be consumed and how much should be saved? And second, out of savings, how much should be allocated to foreign vs. domestic assets. Venables and Wills (2016) argue that for capital abundant economies, all resource revenues should be used to accumulate foreign assets and only the annuity value of these assets should be consumed in any period—this is the permanent income hypothesis (PIH) rule. For a country like Angola, however, which is relatively capital scarce, has high infrastructure and social needs and incomplete access to international capital markets, a substantial proportion of resource revenues may

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[1] Prepared by Thomas McGregor (AFR).

[2] A similar study was conducted for the 2012 Article IV Consultation, see Richmond, Yackovlev & Yang (2013). The model used here is that of Melina, Yang & Zanna (2016).

be better allocated to paying down existing debt and investing in domestic assets and human capital formation.

3. **The typical way in which resource rich economies have attempted to apply these principles is through commodity-based sovereign wealth funds (SWFs)**.[3] According to the Santiago Principles (2008), there are five distinct types of SWF, designed to support different policy objectives of the government given the specific economic challenges the country faces. In the case of Angola, with substantial development needs and public finances that depend to a significant extent on oil revenues, some combination of a 'stabilization' fund and a 'development' fund would seem most suitable.

B. Angolan Oil Sector: Developments and Relevance

4. **Angola is the second largest oil producer in Africa, but production has begun to decline of late**. Angola produced, on average 1.632 million barrels per day (MMbbl/day) in 2017, second in Africa only to Nigeria.[4] Proven reserves stood at 9.5 billion barrels in 2016, compared to 37.4 billion in Nigeria and 48.4 billion in Libya, making Angolan oil reserves the 3rd largest in Africa and the 17th largest in the world.[5] Since the discovery of onshore oil in the Cuanza Basin in the 1950s, production levels gradually increased between the 1960s and 1990s, reaching almost 0.75 MMbbl/day by 2000. Deepwater exploration began in the 2000s leading to oil production levels soaring to nearly 2 MMbbl/day in 2008. However, since then production remained flat and, more recently, even begun to decline. Currently, most of the country's oil production comes from offshore fields in the northern province of Cabinda and deep-water fields in the Lower Congo basin (Figure 1). Current production levels are around 10 percent lower than their two-year average of 1.75 MMbbl/day since August 2014, and below Angola's OPEC quota of 1.673 MMbbl/day.

5. **The oil sector in Angola is regulated by Sonangol, the state concessionaire and national oil company**. Sonangol has stakes in 32 out of the 36 oil producing blocks in Angola, and is the 4th largest oil producer in the country, after BP, Total and Exxon. The largest oil producing block in Angola is block 17. It is located offshore in the Lower Congo Basin and operated by Total, Statoil, Exxon and BP, producing over 0.6 MMbbl/day of crude oil in 2016.

6. **The Angolan oil sector is facing challenges due to underinvestment and the oil price collapse of 2014/15**. Structural factors include the natural decline of oil fields, which has not been offset by entry into production of new oil wells, years of underinvestment in the sector, and (at least until recently) coordination problems between sector players and Sonangol.

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[3] Some examples of SWFs include: Chile – structural balance rule; spending = difference between structural balance target and estimate structural revenue; Norway – spending rule; non-oil budget averages 3 percent of SWF; Russia— mechanism to reduce budget's dependence on oil and gas revenues (abandoned after 2009 crisis until 2015); Timor-Leste—3 percent of fund + oil reserves transferred to budget; Nigeria—price-based fiscal rule; revenue above a predefined oil price is saved in fund.

[4] OPEC statistics show that Angola was the largest oil producer in Africa and the 12th largest in the world in 2016.

[5] OPEC Annual Statistical bulletin 2017.

Figure 1. Oil Fields in Angola

Map of Angola | *Angola's offshore oil fields*

Source: EIA, US Department of State. | Source: Sonangol 2017.
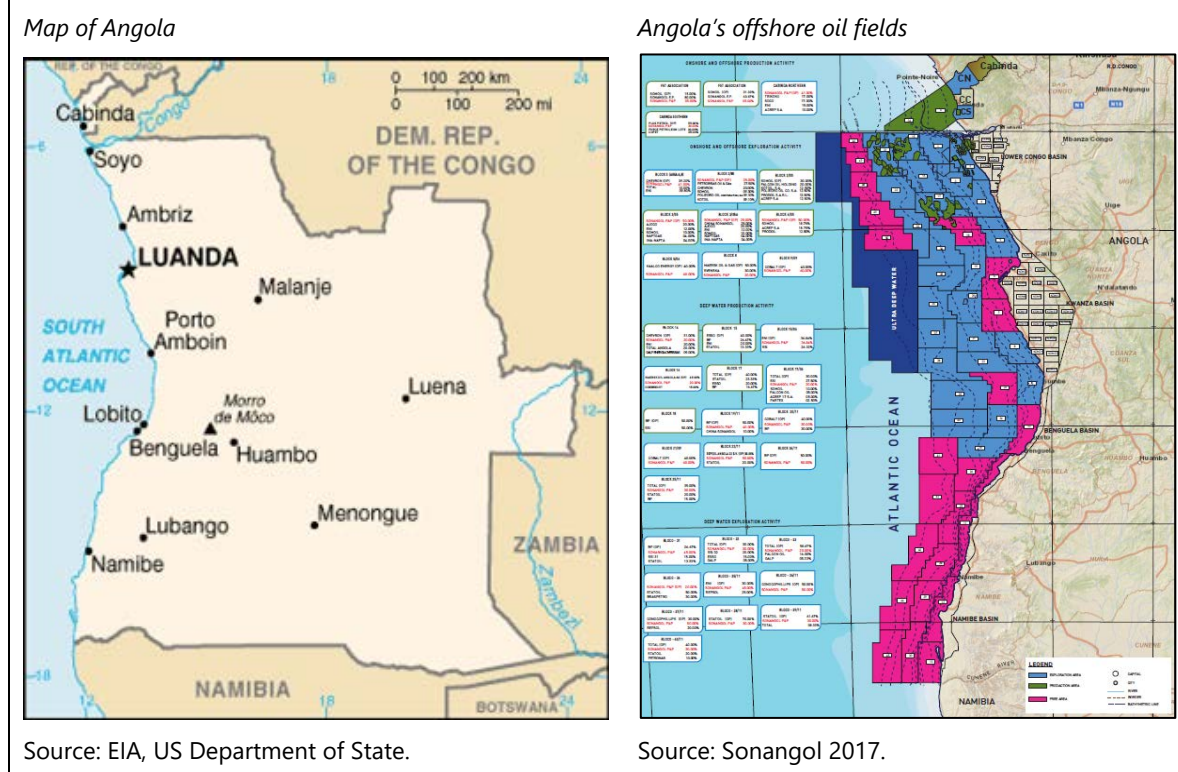
7.   Angola is heavily dependent on oil, both as a source of fiscal revenues and foreign exchange earnings. The oil sector accounted for about 64 percent of tax revenues and over 95 percent of exports in Angola in 2017. High dependence on oil revenues and volatile oil prices make budgeting difficult and increases the volatility of public spending. The track record has shown a systematically conservative oil price forecast but an over optimistic production forecast (Figure 2).

8.   Angola needs to reduce the procyclical nature of government expenditure whilst at the same time building fiscal buffers and allowing room to increase public investment. It needs to address three key fiscal issues going forward. First, achieve a sustained scaling up of public investment to support growth and reduce poverty. Public investment in Angola is currently low relative to sub-Saharan African peers, at 5 percent of GDP in 2017. Second, entrench public debt sustainability, including by reducing public debt (projected to reach 72.9 percent of GDP at end-2018) to lower levels. Third, reduce its heavy dependence on oil revenues and better shield public spending from oil revenue volatility. The latter could be achieved through: (i) finding a more stable revenue source for the budget, for instance, by adopting a VAT on January 1, 2019, as planned, and (ii) building fiscal buffers to support countercyclical fiscal policies and savings for future generations. Fiscal buffers could be managed by a well-designed fiscal stabilization fund with clear deposit and withdrawal rules and within a coherent medium-term fiscal framework (MTFF). This chapter discusses the tradeoffs associated with these fiscal objectives and identifies policies that would allow scaling up public investment and reducing public debt through use of a stabilization fund and adequate management of non-oil revenue taxation.

Figure 2. Oil Revenues in Angola, 2002–17

Difficult to predict oil price
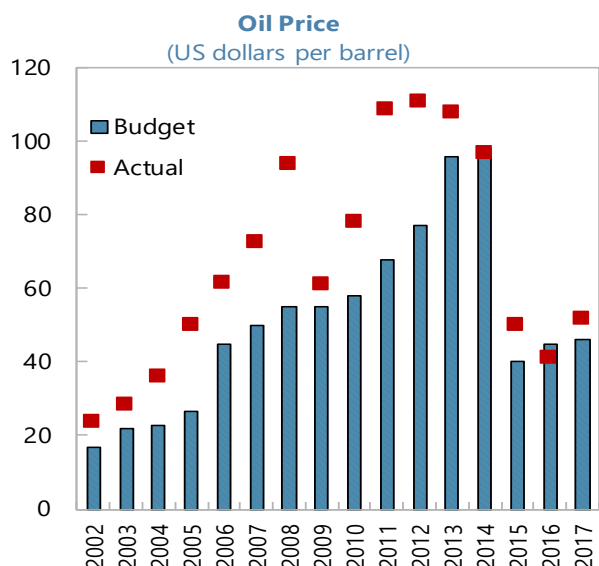
Optimistic budgeting of oil production

Oil Price
(US dollars per barrel)

Oil Production
(Million of barrels)
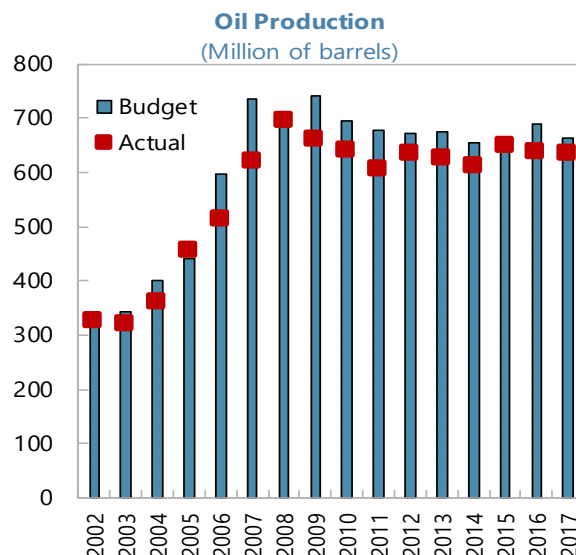
Oil revenues are highly volatile
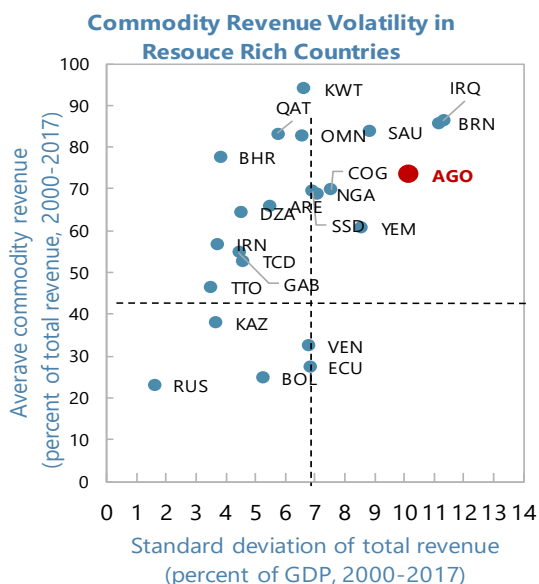
Angola oil production has fallen below the OPEC quota

Commodity Revenue Volatility in Resouce Rich Countries

Oil Production
(All blocks; million barrels a day, excluding gas)
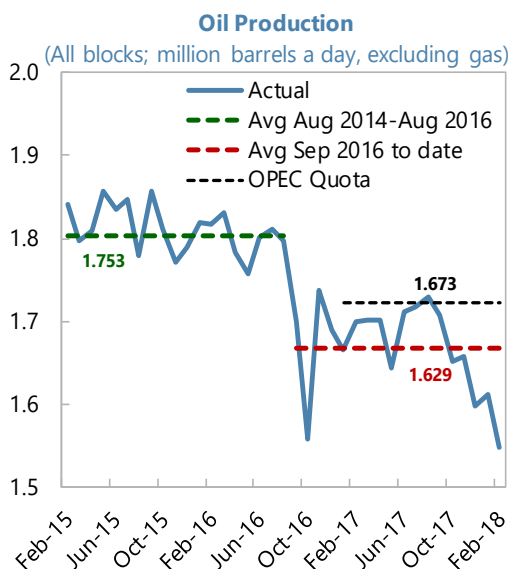
Sources: OPEC, MINFIN and Fund staff calculations.

C.   Model

9.   We use the IMF's Debt, Investment, Growth and Natural Resources (DIGNAR) model to assess the macroeconomic impact of different fiscal rules of oil revenues in Angola. DIGNAR is a small open economy general equilibrium model, developed by Melina, Yang & Zanna (2016).

It can be used to analyze the macroeconomic and debt sustainability effects of scaling up public investment in resource-rich developing countries. The model allows for increasing returns to scale in public infrastructure, but in a setting of inefficient public investment and absorptive capacity constraints. It also allows for flexible fiscal specifications for the use of oil revenues, including a spend-as-you-go (SAYG) rule and an exogenous investment scaling up rule, as well as a resource fund that may be used as a fiscal buffer.

10.   The model consists of three production sectors, two types of households, and a government that spends, taxes and issues debt. On the production side, the oil sector has exogenous paths for production and oil prices, the non-tradable sector uses labor, private capital and public infrastructure to produce output using Cobb-Douglas technology, and the tradable sector uses an identical production function but also exhibits a learning-by-doing externality on technology. On the consumption side, agents are either perfect foresight optimizers with access to financial markets or hand-to-mouth consumers. The government raises revenues via distortionary taxation (labor, capital and consumption taxes), receives payments from the oil sector and issues domestic and foreign debt. It then uses these revenues for recurrent expenditure, investment in public infrastructure and debt service.

11.   The choice of a fiscal policy rule will determine how volatile oil revenues will affect economic performance. The model allows exploring several fiscal policy rules. The first is a SAYG rule in which all oil revenues in each period are used to fund public infrastructure investment, keeping recurrent spending fixed. Any endowment at the stabilization fund remains at its initial level and taxes adjust endogenously to keep debt on a sustainable trajectory. Another option is a delinked approach under which the path for public investment is determined exogenously, and financed by oil revenues, debt issuance and non-oil taxes. Any surplus (deficit) revenues are saved in (withdrawn from) the stabilization fund. Under the delinked approach, the government needs to make explicit choices related to the path for public debt and non-oil taxation.

12.   Given the exogenous paths for oil production and the oil price, the choice of fiscal policy determines how much oil revenues are spent, and on what. The government can build a fund to insulate spending from volatile oil revenues. Choosing to invest in public infrastructure boosts growth by increasing the returns to private factors but also crowds out private investment, and is subject to inefficiencies—that is, only a fraction of public investment turns into public capital. Finally, the use of distortionary non-oil taxation to maintain debt sustainability has implications for the non-oil economy, by affecting the after-tax marginal return to capital and labor as well as the steady-state level of consumption.

13.   The DIGNAR model is calibrated to the Angolan economy using macroeconomic data up to and for 2017. The calibrated parameters are shown in Table 1.

D. Simulations

14.   This section describes the simulations carried out to assess the macroeconomic impact of different fiscal rules for managing oil revenues in Angola. It begins by describing the oil production and price scenarios, before setting out the fiscal policy scenarios and simulation results.

Oil Production and Price Scenarios

**15.   We project a gradual decline in oil production by 2023 and an annual decline of
5 percent per year thereafter**. As described in Section B, oil production in Angola peaked in 2008 but
has remained relatively flat since the oil price collapse of 2014/15. We assume that oil production
would remain roughly constant at 1.65 MMbbl/day until 2023.[6] This would be consistent with the
government implementing proposed reforms to improve the operational efficiency and financial
soundness of Sonangol and encourage foreign investment in the sector to slow the decline in
production levels.[7] From 2023 onwards, our baseline scenario assumes an annual decline in production
levels of 5 percent per year.

**16.   We use the IMF's Spring 2018 WEO projections for oil prices out to 2023 and then
simulate an AR(1) process for oil prices out to 2040**.[8] Oil prices are inherently volatile. Since the
early 1990s oil prices have ranged between lows of US$12 per barrel in 1998 and highs exceeding
US$110 in 2012. Since the collapse between 2014 and 2016, the oil price has recovered somewhat to
just over US$50 per barrel in 2015. Using the IMF's Spring 2018 World Economic Outlook (WEO)
projections, we forecast a pickup in oil price for the Angolan basket to US$62.5 per barrel in 2018,
followed by a gradual decline to US$54 per barrel by 2023. We then simulate two autoregressive
processes for oil prices from 2023 onwards as follows:

$$p_t = \alpha + \rho p_{t-1} + \varepsilon_t \tag{1}$$

where p_t is the Angolan oil price at time t, ρ is an autoregressive (AR) term, and $\varepsilon_t \sim N(0, \sigma_\varepsilon)$ are i.i.d.
shocks. Using data over the period 2016-2023, we estimate a persistence parameter, $\rho = .93$ and a
standard deviation of oil price shocks of $\sigma_\varepsilon = 0.1$. We use this parameterization to simulate the
baseline oil price scenario. Whilst the period used is relatively short, absent any other information, this
offers the 'best guess' regarding the dynamics of the oil price in the coming years. For the alternative
scenario we increase the standard deviation of the shocks series threefold, to $\sigma_\varepsilon = 0.3$, roughly the size
of the shock to oil prices following the global crisis of 2007-08. The oil production and price scenarios
are presented in Figure 3.

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[6] We use Sonangol's current production projection for the short-run, 1.650MMbbl/day, which constitutes a decline of
5.2 percent between 2017 and 2023 and is a conservative assumption for the decline in production.

[7] The government is committed to revitalizing the investment climate in the oil and gas industry, by implementing the
recommendations of the five task forces that were convened by President João Lourenço early in his administration to
stem the risk of declining oil production over the medium term.

[8] Real oil prices are typically thought to follow a random walk process without drift—that is, an AR(1) process with
constant and persistence coefficient equal to 1. Here we explicitly estimate this relationship for the Angolan oil price. It
turns out that the persistence term is estimated to be $\rho = .93$, and statistically different from 1, which we use in our
simulations. This process behaves almost identically to a random walk process.

Figure 3. Oil Production and Price Scenarios, 1990–2040

Production expected to decline over time

Oil prices follow more/less volatile paths

Sources: Angolan authorities and Fund staff calculations.
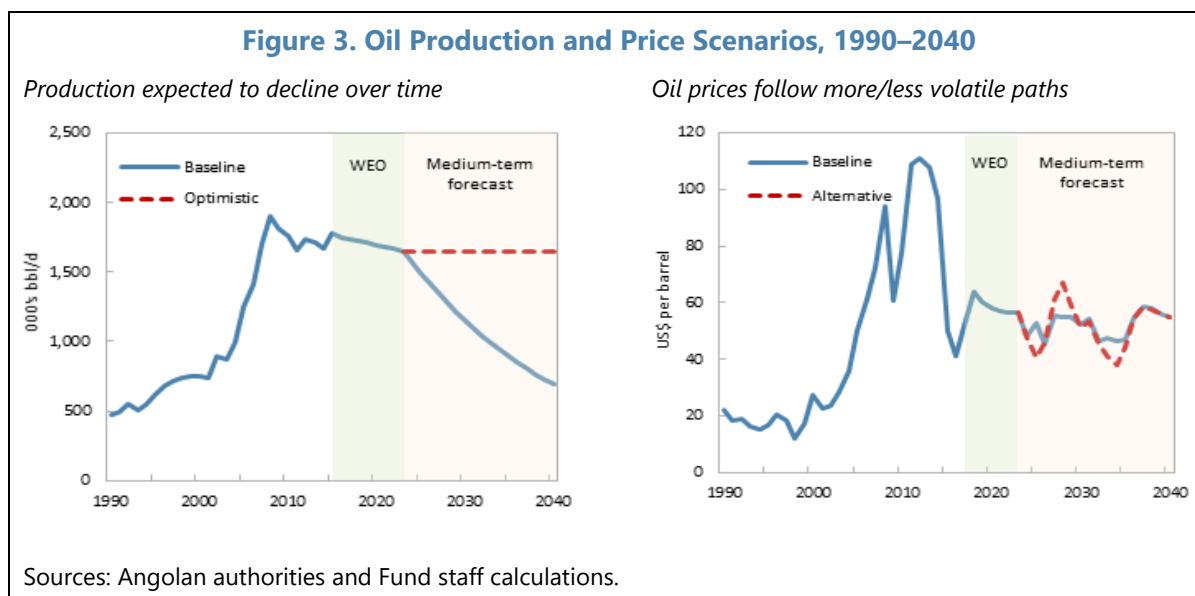
Simulation 1: SAYG Under Different Oil Price Scenarios

17.   The first fiscal rule considered in this chapter is a spend-as-you-go (SAYG) policy rule. Under SAYG all oil revenues are used to finance public investment in every period, and the stabilization fund remains at its initial level of about 3 percent of GDP.[9] We use the baseline oil production scenario and focus on the macroeconomic performance of the economy under two oil price scenarios: (i) a baseline path, and (ii) an adverse (more volatile) oil price path. The simulation results are presented in Figure 4.

18.   Under the SAYG rule, falling oil production and volatile prices lead to declining revenues, volatile public investment, and rising debt. Under the baseline scenario of falling oil production, government oil revenues, as a share of total revenues, decline from around 60 percent in 2017 to around 35 percent by 2040. As expected under the SAYG rule, the volatility in oil prices is translated into volatile resource revenues. The decline in revenues are transmitted directly into a decline in public investment which falls from 5 percent of GDP in 2017 to under 3 percent of GDP by 2040. Debt levels, after falling in the first year due to a temporary increase in oil prices, rise steadily to around 75 percent of GDP by the end of the simulation period. To prevent public debt from rising even faster, non-oil taxes must also increase over the simulation period, and remain highly volatile.

19.   Higher (distortionary) non-oil taxation and falling public investment results in falling private consumption and investment. Together these cause a severe contraction of the economy, both in the short and medium term, with non-oil output falling by between 10-12 percent compared to the initial level.

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[9] The SWF of Angola (FSDEA) was initially capitalized with USD 5 billion in 2013/14. In the simulations we assume the initial size of the stabilization fund at 3 percent of GDP. In addition, the government has liquid assets deposit at the BNA but we ignore these additional funds in the simulations.

Simulation 2: Delinked Approach with a Gradual Scaling Up of Public Investment

20.   The second set of simulations assume that public investment is scaled up gradually over time to 8.5 percent of GDP. As noted in Section B, public investment in Angola is low compared to its peers. The second set of simulations assume that public investment is scaled up gradually over time from 5 percent of GDP in 2017 to 8.5 percent of GDP—the sub-Saharan average—by 2040. We focus on the baseline scenarios for oil production and prices to abstract from any direct income effects. After peaking at US$62.5 per barrel in 2018 the oil price gradually declines out to 2023, after which it is then subject to shocks out to 2040, as in the previous simulations. The simulation results are presented in Figure 5 where, compared with Figure 4, the path for resource revenue is replaced with that of the stabilization fund. Under the delinked approach, public investment rise and becomes much less volatile than under the SAYG rule.

21.   We then assume three variants of a scaling-up fiscal rule:

1. Passive tax policy—non-oil taxes respond as needed to keep debt on a non-explosive path (Figure 5, solid black lines).
2. Active tax policy—non-oil tax rates are increased immediately from their initially low levels to create enough fiscal space and support building a stabilization fund (Figure 5, dotted blue lines).
3. Debt paydown—the proceeds from gradual increases in non-oil taxes are used to prioritize debt paydown (Figure 5, dashed red lines).

22.   Under the <u>passive tax policy</u> debt rises as public investment is scaled up, eventually requiring sharp non-oil tax increases and depleting the stabilization fund. Debt is on an upward trajectory from a very early stage due to the gradual scaling up of public investment and the saving of excess oil revenues in the stabilization fund. In the medium term, as oil revenues fall, non-oil taxes must be hiked sharply from 2025 onward to keep debt on a non-explosive path. Yet, debt exceed 70 percent of GDP towards the end of the simulation horizon. The public investment scaling up leads to a depletion of the stabilization fund in just five years. Private consumption—a major non-oil tax base in the model—is stable in the initial years of the simulation, but declines sharply as non-oil tax rates increase. It is worth noting however, that the decline in consumption under all three scenarios is less than under the SAYG rule scenarios. Higher public investment turns into higher public capital, which crowds in private investment. Together, higher private and public investment boost non-oil output growth. The stable paths for consumption and investment are due to the fact that fiscal policy is insulating the economy from the only source of volatility in the model—the oil price.

23.   We now consider an alternative scenario in which the government pre-empts the declining oil revenues and begins to mobilize non-resource taxation immediately.[10] Non-oil tax rates are assumed to rise immediately but smoothly over the simulation period. The key fiscal policy choice now is how to use the fiscal space created by mobilizing non-oil tax revenues.

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[10] Like many other resource-rich countries, including in the SSA region, Angola's tax potential is considerably higher than its actual tax-to-GDP ratio (e.g., Regional Economic Outlook for sub-Saharan Africa, Chapter 1, October 2015).

24.   Under the <u>active fiscal policy</u>, higher non-oil tax rates allow the government to build up a stabilization fund before transitioning to the financing of public investment. Excess government revenues in the early years, when public investment is still low, are used to build up a stabilization fund, which peaks at just over 7 percent of GDP by the mid-2020s, and debt remains relatively stable over the simulation period. Consistently higher non-oil taxes lead to declining private consumption from the outset, and the decline in the outer years is comparable to that under the passive fiscal policy rule. Stronger non-oil revenue mobilization also allows public debt to be reduced to about 50 percent of GDP towards the end of the simulation horizon.

25.   Prioritizing <u>debt paydown</u> leaves less resources available for the stabilization fund in the near term but creates fiscal space to rebuild it when oil prices rise in the future. Under the debt paydown scenario, the initial excess oil revenues are used to pay down debt instead of accumulating in a stabilization fund. This reduces the debt service burden substantially with debt falling to around 40 percent of GDP by 2040. The government is now able to manage future fluctuations in the oil price, building a stabilization fund in years of high oil prices and running it down when prices fall. As under the active fiscal policy rule, the gradual increase in non-oil taxes leads to lower consumption, but higher private and public investment boosts non-oil output growth.

E. Concluding Remarks

26.   Dwindling oil reserves combined with oil price volatility and significant spending needs would benefit from a sound MTFF for managing oil revenues. Given the volatile nature of oil prices, and the high dependence of the budget on oil revenues, the establishment of a stabilization fund within a MTFF would allow the government to achieve the dual objective of (i) building a fiscal buffer to reduce Angola's vulnerability to a decline in oil revenues, and (ii) insulating public investment spending from oil price volatility.

27.   Prioritizing growth-enhancing infrastructure investment and improving the business environment could yield significant growth benefits. The fiscal policies pursued under the delinked approach suggest that scaling up public investment could have a strong impact on non-oil GDP growth. However, public investment should increase gradually, in line with absorptive capacity. Moreover, Angola's public investment management framework should be improved to reduce inefficiencies (which have been estimated to be high), increase the quality of public infrastructure, and maximize the crowd in of private investment.

28.   Using part of an oil windfall to reduce public debt could be prioritized, as well as reforms to mobilize additional non-resource tax revenues. The use of a stabilization fund to manage excess oil revenues raises the important question of portfolio allocation for such a fund. Given the level of public debt—projected to reach 72.9 percent of GDP in 2018—priority could be given to using some of the oil revenue windfalls to pay down debt. Structural fiscal reforms would need to be implemented alongside the fiscal framework for oil revenues. These include mobilizing domestic non-oil tax revenues, including by implementing a VAT and increasing public investment efficiency as mentioned above.

Angola: Table 1. Calibrated Parameters

Parameter group	Description	Value
National accounting	long-run GDP growth rate (in percent)	6
	exports/GDP*100 (in percent)	27
	imports/GDP*100 (in percent)	26
	government consumption/GDP*100 (in percent)	17
	government investment expenditures/GDP*100 (in percent)	5
	private investment/GDP*100 (in percent)	4
	mining value added (natural resource production)/GDP*100 (in percent)	26
	government wealth fund/GDP*100 (in percent) (external savings)	3
	share of tradeables in government expenditures (in percent)	50
	share of tradeables in private consumption (in percent)	50
	government domestic debt / GDP*100 (in percent)	30
	Private foreign debt/GDP*100 (in percent)	0
	concessional debt/GDP*100 (in percent)	8
	government external commercial debt/GDP*100 (in percent)	22
	grants/GDP*100 (in percent)	0
Interest rates	annualized domestic net real interest rate	10
	annualized foreign net real interest rate earned by the stabilization fund	2.7
	annualized net real interest rate paid on concessional debt	0
	annualized net real risk-free rate	4
	annualized net real interest rate paid on government external commercial debt	7.3
Structural parameters	labor income share in non-traded sector (in percent)	65
	labor income share in traded sector (in percent)	45
	elasticity of output with respect to public capital	0.15
	capital depreciation rate in non-tradable sector (in percent)	10
	capital depreciation rate in traded sector (in percent)	10
	depreciation rate of public capital (in percent)	7
	learning by doing externality in the traded sector	0.1
	persistence in TFP in traded sector	0.1
	investment adjustment cost parameter in the non-traded sector	25
	investment adjustment cost parameter in the traded sector	25
	steady-state efficiency of public investment (share of investment turned into actual capital) (in percent)	50
	inverse of the Frisch elasticity of labor supply for optimizers	10
	inverse of the Frisch elasticity of labor supply for rule of thumb consumers	10
	inverse of the intertemporal elasticity of consumption	2
	elasticity of substitution between the two types of labor (in tradeables and non-tradeables)	1
	measure of optimizers in the economy in percent (non-credit-constrained households)	1
	elasticity of substitution between traded and non-traded goods	0.44
	home bias for additional government spending	0.4
	Elasticity of portfolio adjustment costs	0.001
Natural resource sector	royalty tax rate on natural resources (in percent)	20
Fiscal Policy	user fees of public infrastructure (in percent of recurrent costs)	50
	labor income tax rate	1
	consumption tax rate	1
	tax rate on the return on capital	8
	Elasticity of sovereign risk	0
Public investment	Severity of public capital depreciation when not maintained	1
	Severity of absorptive capacity constraints	0
	Thresholds of investment scaling up beyond which absorptive capacity constraints start binding (in percent)	200
	Floor for the sovereign wealth fund (in percent of GDP)	0

Figure 4. SAYG Under Baseline and Alternative Oil Price Scenarios

Falling oil production and volatile oil prices lead to volatile and falling revenues
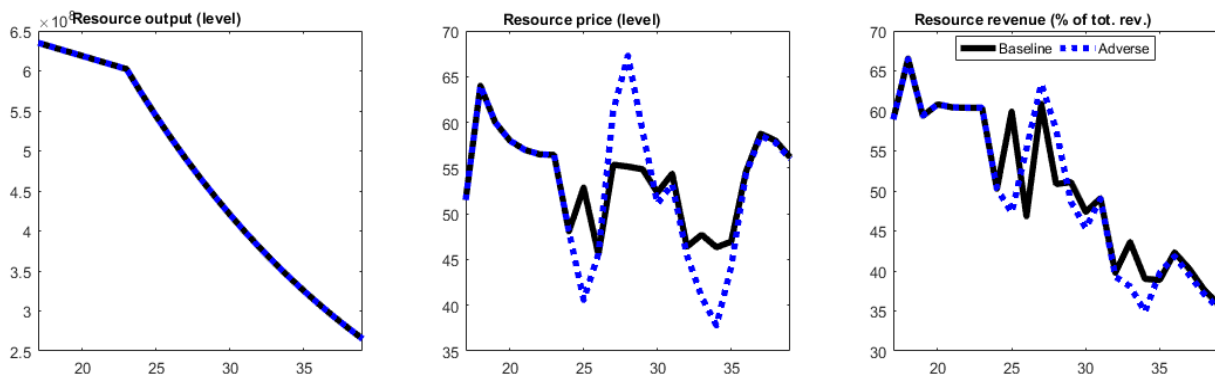
Public investment falls and debt rises demanding sporadic tax increases
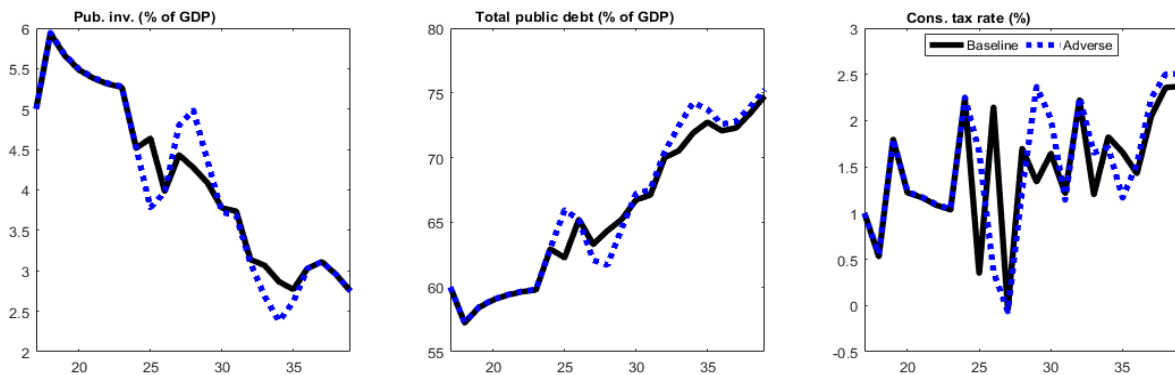
Private consumption falls, as does investment, causing growth to decline
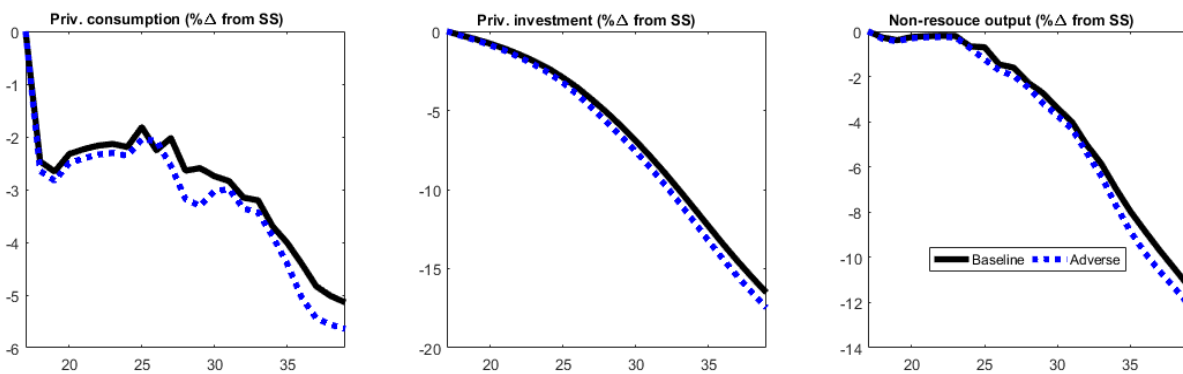
Sources: Fund staff calculations.

Figure 5. Gradual Scaling Up of Public Investment Under the Delinked Approach

We focus on baseline production and oil prices whilst gradually scaling up public investment
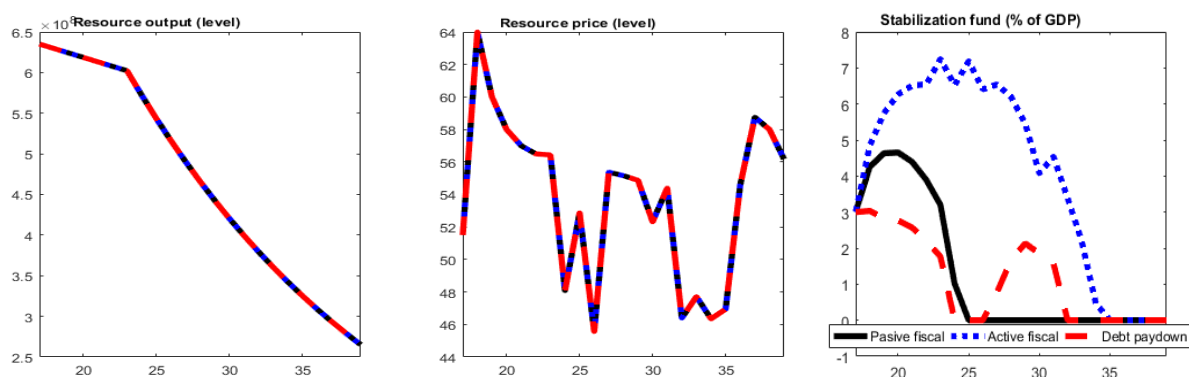
The path for debt now depends on the path for non-resource taxes and the stabilization fund
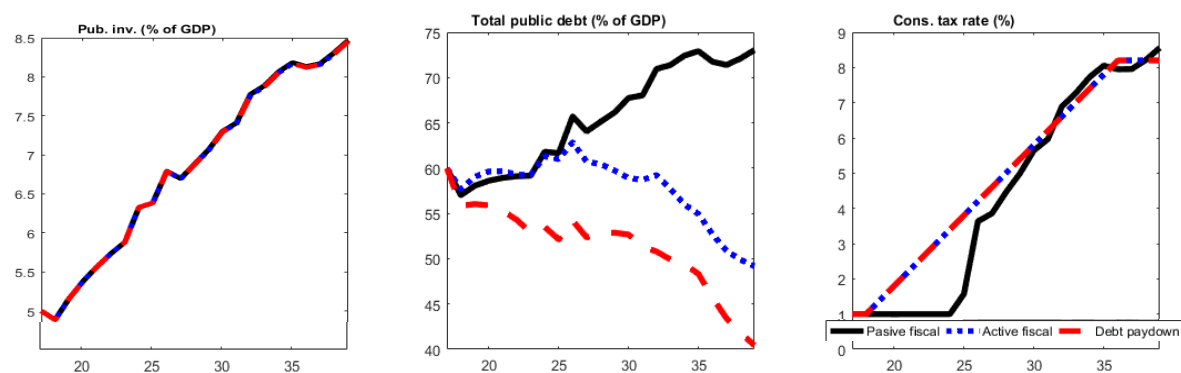
Private consumption is less volatile and investment is crowded in causing growth to accelerate
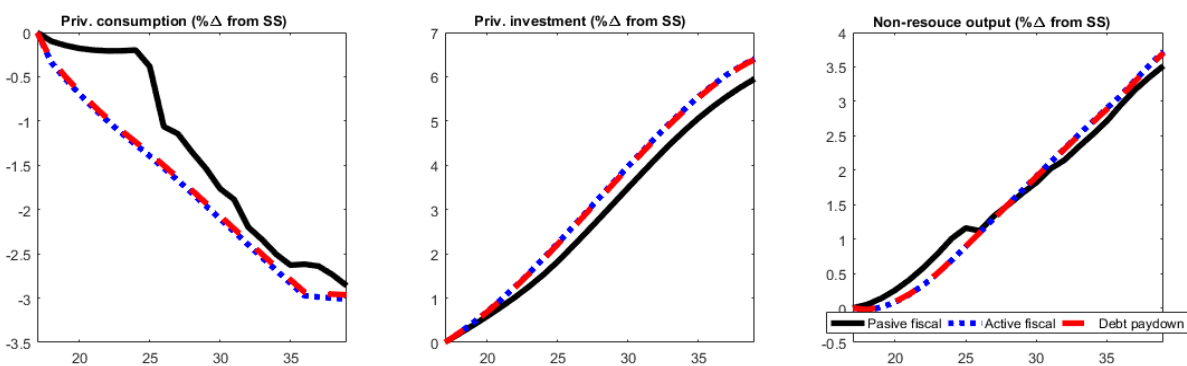
Sources: Fund staff calculations.

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MACRO-FINANCIAL LINKAGES IN ANGOLA[1]

This chapter examines the impact of lower oil prices on Angolan banks by articulating the transmission mechanism of the shock, stress testing the resilience of the banking sector over time, and investigating the nexus between the sovereign and banks. Static event analyses and stress test results confirm a deterioration of banks' soundness indicators as lower oil prices linger, and that this is more pronounced for state-owned banks. Also, sectoral balance sheet analyses confirm growing exposures of banks to the sovereign. In addition, panel regressions on banks' performance show that weakly capitalized and poorly run banks are adversely impacted while suggesting that sound macroeconomic policies should help mitigate the impact of the shock.

A. Introduction

1.   Since the onset of the oil price shock in 2014, asset quality has deteriorated in sub-Saharan Africa (SSA) oil exporters. Kinda, Mlachila, and Ouedraogo (2016) found that negative shocks to commodity prices are associated with higher financial sector fragility. [2] High and rising levels of non-performing loans (NPLs) in most oil exporters continue to exert pressure on banks' balance sheets, with possible adverse effects on banks' lending. NPLs in the sub-set of SSA economies have increased from an average of 5 percent in 2011 to 17¾ percent in the third quarter of 2017 (Figure 1). The macro-financial linkages between the financial sector and the real economy create feedback loops that tend to undermine recovery efforts. Recognizing this possible interaction, most of the economies have placed resolution of NPLs as a policy priority.

Figure 1. Nonperforming Loans and Growth
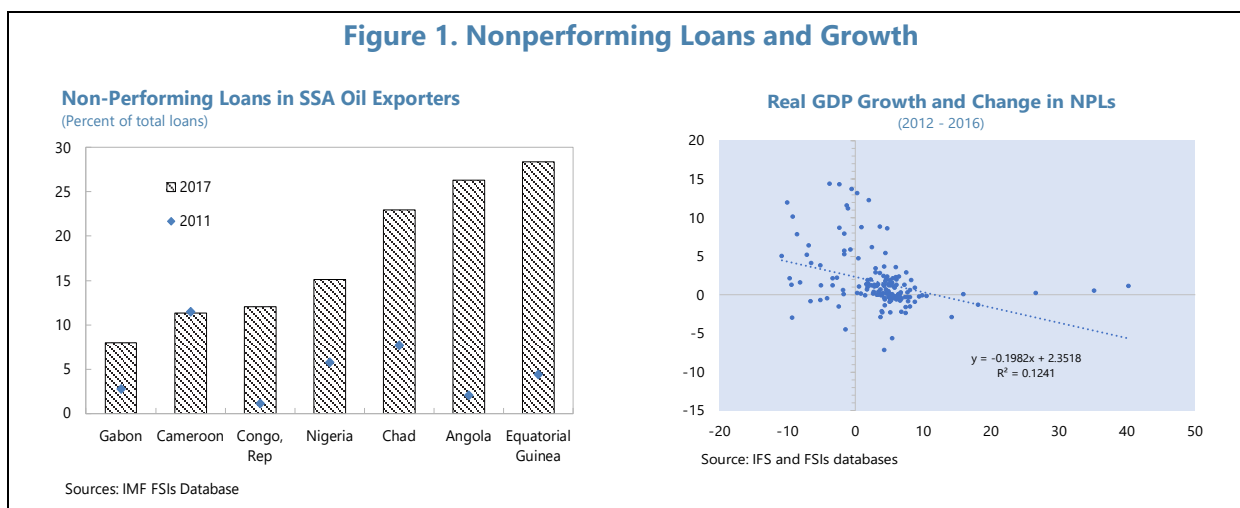
2.   Slowing economic activity after the oil price shock could be linked to the upward trend in NPLs. NPLs started to increase immediately after the oil price shock in 2014, but a sharp increase

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[1] Prepared by Rodgers Chawani (AFR) and Claudio Visconti (MCM).

[2] The paper shows that negative shocks to commodity prices tend to weaken the financial sector, with larger shocks having more pronounced impacts. According to it, negative commodity price shocks are associated with higher NPLs, bank costs and banking crises, while they reduce bank profits, liquidity, and provisions to NPLs. It also suggests that adverse effects tend to occur in countries with poor governance and undiversified export base, among other factors.

occurred in 2016, when GDP in most SSA oil exporters contracted. NPLs have since continued to rise exhibiting negative correlation with the pace of economic recovery. Weakening asset quality largely reflects the consequences of low fiscal revenue leading to payments arrears for government contractors, currency depreciation and tighter monetary conditions, and weakening borrowers' repayment capacity. Beyond macroeconomic factors, the high variability in NPLs indicates some contribution of country specific factors including quality of supervision.

3. **Weak economic activity has eroded asset quality at most banks in Angola**. The oil price shock has substantially reduced fiscal revenue and exports, with growth turning negative and inflation accelerating sharply. Imbalances also emerged in the foreign exchange markets leading to a depreciation of the currency and a tightening of monetary policy. The banking system weathered the initial impact of the lower oil prices well. However, the durably low oil price environment has taken a toll on capital buffers and asset quality for banks, especially for those with high state ownership.

Box 1. Structure of the Banking System in Angola

Banks play a key role in financial intermediation in Angola. The financial sector comprises 30 banks, 24 insurance companies, six pension funds, three micro-credit institutions, and 89 foreign exchange bureaus. However, banks dominate the financial sector, with assets representing above 90 percent of the entire sector, equivalent to 57.7 percent of GDP.

The ownership of Angolan banks remains diverse with significant state presence. Of the 30 banks, 18 are domestic private banks while nine banks are subsidiaries of foreign banks. Private banks tend to be associated with large Angolan private companies. Public sector entities have equity interests (including minority stakes) in about six banks, and the government directly controls three banks that hold an equivalent of 11 percent of total assets. The state-owned oil company Sonangol holds minority stakes in seven banks.

Bank concentration is high in Angola. Although the number of banks has increased from 11 in 2005 to 30 in 2017—potentially paving the way for more competition—bank concentration remains high. The largest five banks hold over 70 percent of both assets and deposits.

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4. **This chapter identifies macro-financial linkages, assesses the resilience of banks to shocks and channels for the sovereign and banks nexus**.[3] Considering that financial intermediation is predominantly bank-based in Angola, the paper focuses on the banking sector. An event analysis is used to inform the transmission of oil price shocks to the banking sector. Stress tests conducted for individual banks for successive years are used to determine the evolution of banks resilience in the wake of the oil price shock. Both the stress tests and the event analysis confirm the centrality of public banks in contributing to financial sector health and so the last section focuses on understanding and managing the sovereign-bank nexus for Angola. The paper concludes by discussing the policies needed to mitigate emerging financial stability risks.

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[3] The chapter did not cover other issues, such as the loss of correspondent banking relationships, due to limited granularity of available data and because of the criticality of credit risk for Angola (see paragraph 14).

B. Macro-Financial Linkages and Transmission Channels for Angola

5.   Heavy reliance on oil constitutes a key source of macro-financial linkages. Oil generates a significant share of fiscal revenues and exports. During 2011–2013, fiscal dependence on hydrocarbons was even higher, accounting for 75 percent of total fiscal revenue on average, and oil exports' share in total exports of goods and services was even higher at 97 percent.

6.   Limited economic diversification amplifies oil-induced vulnerabilities in the banking sector. Oil price movements and government spending create feedback loops for liquidity and credit that can lead to a buildup of vulnerabilities (Figure 2). Stronger performance of real and financial sector variables tends to be associated with oil price upturns. For instance, during 2000–2016, the growth rates of government spending and non-oil GDP were much stronger during oil upturns than in downturns. Oil price upturns lead to higher oil revenues and exports that translate into stronger fiscal and external positions. The resulting public spending growth shore up higher non-oil output growth, accumulation of reserves, and greater banking sector liquidity and credit growth. Given lack of diversification, in the event of an oil price downturn these developments reverse, manifesting into a slowing of credit and system-wide liquidity.

Figure 2. Macro-financial Linkages

Oil Price and Real Variables
(in percent of GDP unless otherwise stated)

Oil Price and Bank's Liquidity in Angola
(percent unless otherwise stated)
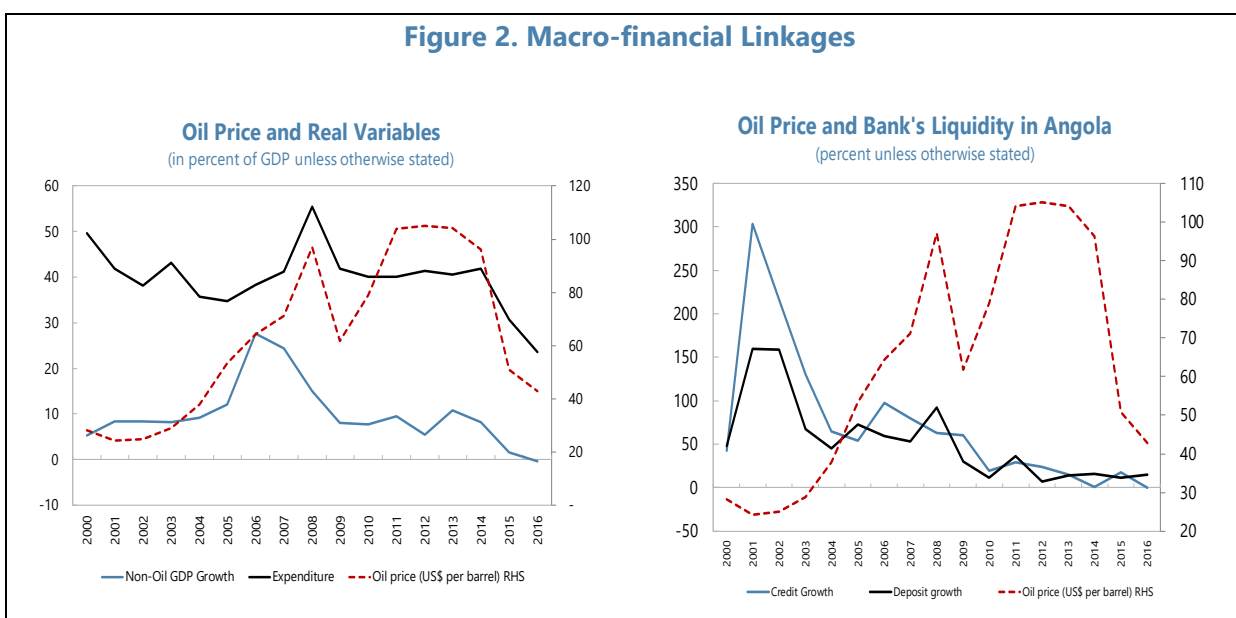
7.   Banks' business models are closely aligned with the oil sector. Government owns a majority controlling stake in three banks. About 14.1 percent of GDP banks' assets are held by state majority owned banks that also extend about 7.3 percent of GDP in loans. State-owned banks channel most of their lending to the public sector, and rely heavily on government deposits. Weak risk management practices have led to the three state-owned banks seeking recapitalization in the wake of the oil price shock. Private banks predominantly focus on corporate banking business (both credit and funding), which remains highly sensitive to changes in public spending. However, private banks also hold substantial amounts of government securities.

8.   **The oil price shock impacted Angolan banks through various channels (Figure 3):**

Figure 3. Transmission Channels of Oil Price Shocks to the Macro-Economy
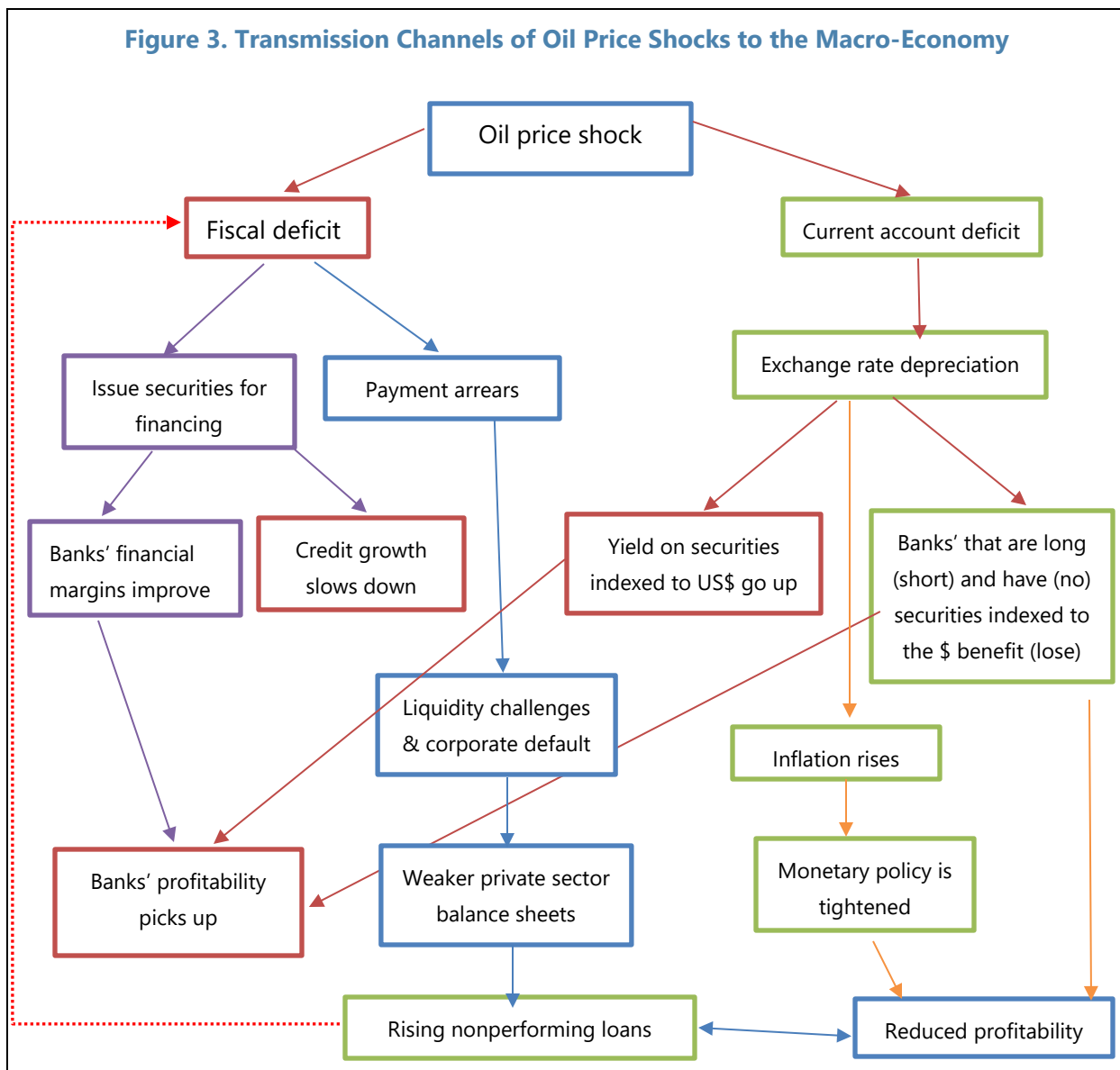
- *Oil price downturn impact banks mainly through fiscal activity.* Lower oil prices led to rising financing needs for the government that resorted to the banking sector via issuance of securities at higher and attractive yields and, in principle, with lower credit risk than the private sector. By investing in government securities, banks experienced a pickup in their financial margins. The strain in fiscal resources also led to payment delays and arrears to suppliers by the government, creating liquidity hiccups among suppliers. Reflecting the strains in the fiscal accounts, the government had a stock of about 4.5 percent of GDP in domestic payments arrears with its suppliers as of end-2017. These arrears contributed to the deteriorating asset quality as suppliers defaulted on their obligations with banks. Also, to offset its competing needs during a crisis, the government cut back its public investment projects, further reducing business for suppliers and construction companies and leading to financing difficulties and higher NPLs.

- *Lower oil prices reversed the liquidity cycle and imposed higher costs on banks.* The decline in oil prices led to a significant contraction of export earnings from the oil sector. This coupled with the cutback in public investment contributed to sharp swings in banks' liquidity. The need for structural refinancing compelled some banks to return to financing by central bank facilities, leading to higher funding costs. State-owned banks, that financed a large share of investment projects, registered weaker profitability, given their significant exposure to a common set of counterparties and limited ability to pass higher funding costs on to these clients.

- *Falling oil prices amplified banks' risk averseness especially for lending.* Angolan banks are generally cautious about lending due to lack of corporate transparency and weak legal protection to foreclose on collateral. Lower oil prices weakened banks' deposit base because a large amount of deposits is sourced from oil-related activities and the government. With deposits falling and government securities becoming more attractive, lending to the private sector suffered from crowding out effects. The loan-to-deposit ratio declined to 49.3 percent in December 2017, owing to greater scrutiny by financial institutions in their evaluation of investment projects under a challenging economic environment.

- *Monetary policy tightening in response to the shock had a differentiated impact on banks depending on their asset composition.* Lower oil prices led to a depreciation of the kwanza by over 40 percent from mid-2014 to April 2016. As most Angolan banks had long positions in foreign currency and foreign currency indexed instruments, the devaluation led to an increase in the kwanza value of their positions. Non-interest margins for banks picked up in 2014 reflecting earnings from foreign exchange transactions. But banks with short positions experienced refinancing needs and encountered challenges. With inflation peaking at above 40 percent in 2016, monetary policy was tightened leading to a contraction in aggregate demand, amplifying liquidity and credit risks.

C.   Event Analysis of the Impact of the Oil Shock on the Banking Sector

9.   An event analysis is used to validate the transmission of the oil price shock to the banking sector. Actual data are used for quarterly information on financial soundness indicators with the period-t designated as the beginning of the oil prices shock and observation of different aggregates assessed based on their evolution several quarters out. The static event analysis supports the impact of the shock on the health of the financial sector (Figure 4).

D.   Resilience of Angolan Banks to Macro-Shocks

10.   To gauge evolution of resilience for Angolan banks in the wake of the oil price shock, Stress Tester 3.0 was used.[4] This tool was chosen given the level of data granularity as before migrating to IFRS in 2017 most banks were not compiling accounts in a homogenous manner.

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[4] An IMF paper by Cihak presents an excel-based tool for running system-wide stress tests using bank-by-bank financial statements. The tool has the appeal of flexibility and transparency as it is relatively easy to understand, explain, and adapt to country circumstances. It can be used to run stress tests with limited data but allows for a more comprehensive set of stress tests if more data are available. The drawback regarding its use relates to its dependence on accounting information and so the quality of results depends on the data availability.

Figure 4. Event Analysis-Impact of the Oil Price Shocks on the Banking Sector

System-wide capital adequacy ratio (CAR) dropped from 22 percent in mid-2014 to 18.2 percent in mid-2016 but remained well-above the 10 percent minimum.

However, the percentage of banks with CAR below the regulatory minimum increased to 20 percent by mid-2015 from only 4 percent before the crisis.

Capital Adequacy Ratio
(percent)

Banks Below CAR
(percent of total)
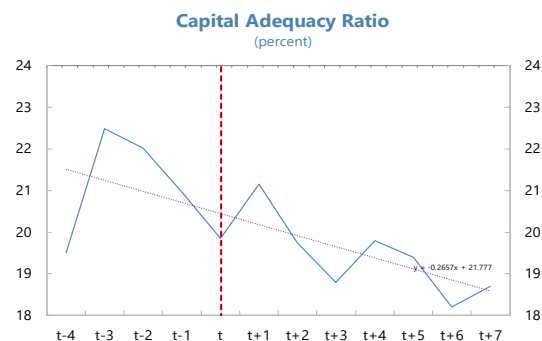
Sources: IMF
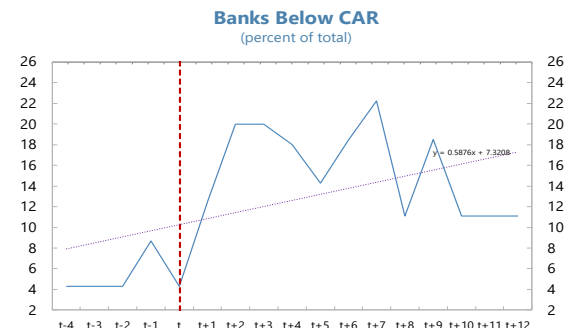
Sources: BNA

Asset quality deteriorated for the banking system although it was initially delayed by evergreening and varied reporting standards at different banks.

The number of banks posting negative earnings increased in the wake of the crisis.

Non-Performing Loans
(percent of total)
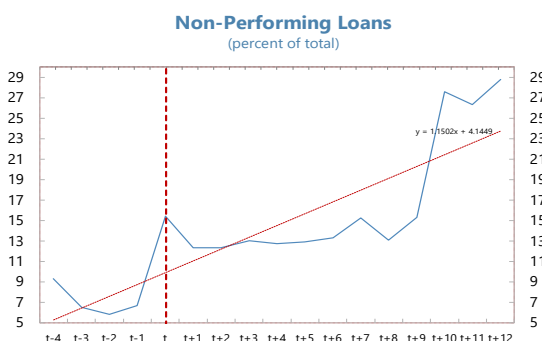
Banks' Profitability and Drivers
(U.S. dollar billions, otherwise stated)

Sources: BNA
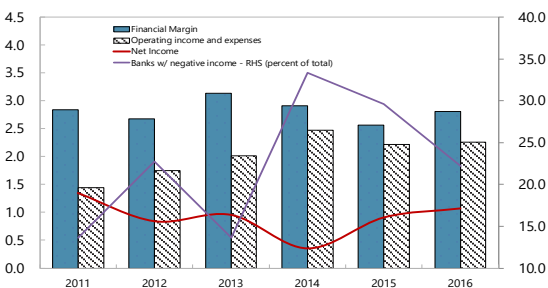
Source: Abanc

11.   The stress tests covered 11 banks that accounted for 90 percent of deposits. Banks were grouped into three subsets: (a) large banks; (b) medium banks; (c) small banks. Business models for local banks differ from those of foreign banks. Foreign banks have reduced their lending activities markedly and increased their holdings of government securities. Local banks have a wider target market which reflects the development needs of the country though lately have also reduced their lending to the private sector. Risk management in foreign banks is more likely to follow international guidelines.

12.   The stress tests covered a period of four years (2013–2016), assessing the impact at different points in time to get a comprehensive view on the evolution of the vulnerabilities. The analysis for the outer years was meant to capture the full impact of stress over time, including the recovery process, and potential structural tendencies rather than specific point estimates, owing to the uncertainty that comes with longer time horizons. Only solvency and credit risk tests were conducted in the absence of information on individual foreign exposures at the banks. Concentration risk arising from a default of large exposures and sectoral shocks were not performed given the absence of granular data.

13.   A challenging environment for banks is assumed given linkages to the macroeconomy. We use the actual oil price shock that begins in 2014 leading to a fall in fiscal revenues and exports, culminating in stalling economic growth and inflation accelerating to above 40 percent. We assume a partial fiscal and exchange rate adjustment to the shock, with the exchange rate depreciating by more than 30 percent. The deteriorating macroeconomic conditions in turn put a strain on financial conditions that manifests in negative credit growth and NPLs deteriorating to over 20 percent of total loans.

14.   The tests focus on credit risk because this is important for Angola in the wake of oil price shock. Lending has been the core of most banks' business in Angola for the past decade. Credit risk focuses on the risk that banks' borrowers will default on their contractual obligations. The credit risk shock comprised an aggregate increase in NPLs focusing on downgrade of classified loans across the entire credit spectrum. In other words, banks that had higher NPLs in the past, are assumed to have additional NPLs because of the shock. To determine the severity of the shocks, historical data were used on the elasticity of NPLs to GDP, exchange rate and other relevant macroeconomic variables, and *ad hoc* shocks that are in line with FSAP exercises in peer countries.

15.   Stress tests confirm a deteriorating capacity to withstand oil price shocks (Figure 5). The capital position of the banking system declines by 6 percentage points in 2013 but overall banks remain well-capitalized. The CAR would be around regulatory minimum, on aggregate, for 2014 if 20 percent of performing loans deteriorate across all streams but pressures emerge for medium sized and small banks. Reflecting capital injections and improving profitability, capacity to withstand the asset deterioration improves on aggregate to 1 percentage point above regulatory standards in 2015 but five out of the eleven banks remain undercapitalized. Given recapitalization efforts, the situation improves for most banks in 2016 but except for two out of the three public banks.

16.   Capital injection needs are higher for state-owned banks in the stress scenario. We estimate the recapitalization needs for banks that would more than double from 0.2 percent of GDP in 2014 to about 0.7 percent of GDP in 2016, before escalating to 1.3 percent in 2017. Importantly, the upper bound for potential fiscal costs of bank problems associated with the assumed stressful scenario are higher compared to the expected values to be borne by private shareholders. This confirms that the deterioration in financial conditions in the event of the oil price shock is worse for state-owned banks thereby creating potential contingent liabilities for the budget.

17.   Reverse stress testing is also used to gauge banks' resilience to the oil price shock. The test is designed to measure the size of the shock that would cause a bank to breach a predetermined threshold, such as the minimum capital requirement. It is appealing especially for instances where data granularity is limited. This approach provides an indicator of the resilience of a bank in the following way:

$$X=\{(RC+Inc)-(SRC*RWA)\}/\{(-SRC*PL*LLP)+(LLP*PL)\}$$

Figure 5. Solvency Stress Tests

Performing Loans Deterioration
(Regulatory Capital/RWA)

Performing Loans Deterioration
(Regulatory Capital/RWA)

Selected Banks Projected Recapitalization Needs
(Percent of GDP)

Public Vs Private Banks Recapitalization Needs
(percent of GDP)

Source: Abanc, BNA, & IMF calculations
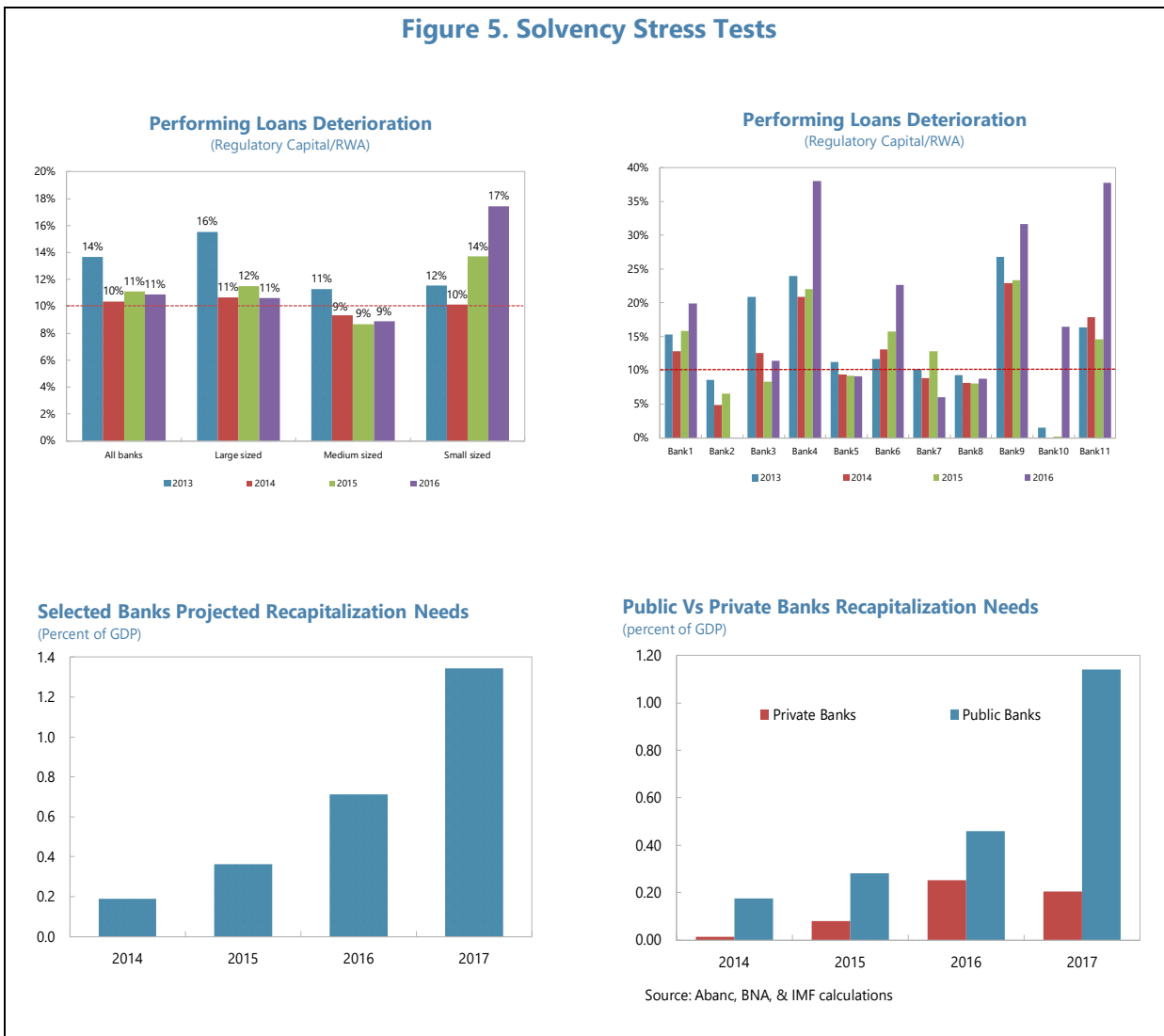
Where; X is the shock amount that would cause capital to fall below the hurdle rate; RC is the regulatory capital; SRC is stressed capital or the hurdle rate being tested; Inc is income; PL is performing loans; X is the shock; LLP is the loan loss provisions, and RWA is the risk weighted assets. Taken over various cross sections, the test provides an idea on how the underlying cushions of a bank is evolving with respect to its minimum capital ratio requirement.

18.   The results of the reverse stress test confirm a deteriorated position for banks owing to the onset of the oil price shock (Figure 6). Overall, the system-wide share of performing loans that would cause the CAR to fall below the regulatory minimum narrows significantly from 46 percent in 2013 to 22 percent in 2014. The deterioration is broad-based: from 57 percent to 22 percent for large banks; from 30 percent to 8 percent for medium-sized banks; and from 33 percent to 22 percent for the smaller banks. While a recovery is registered for both large and small banks in 2015, the difference between the projected and the required capital ratios continued to narrow for medium-sized banks.

Figure 6. Reverse Stress Testing for Banks
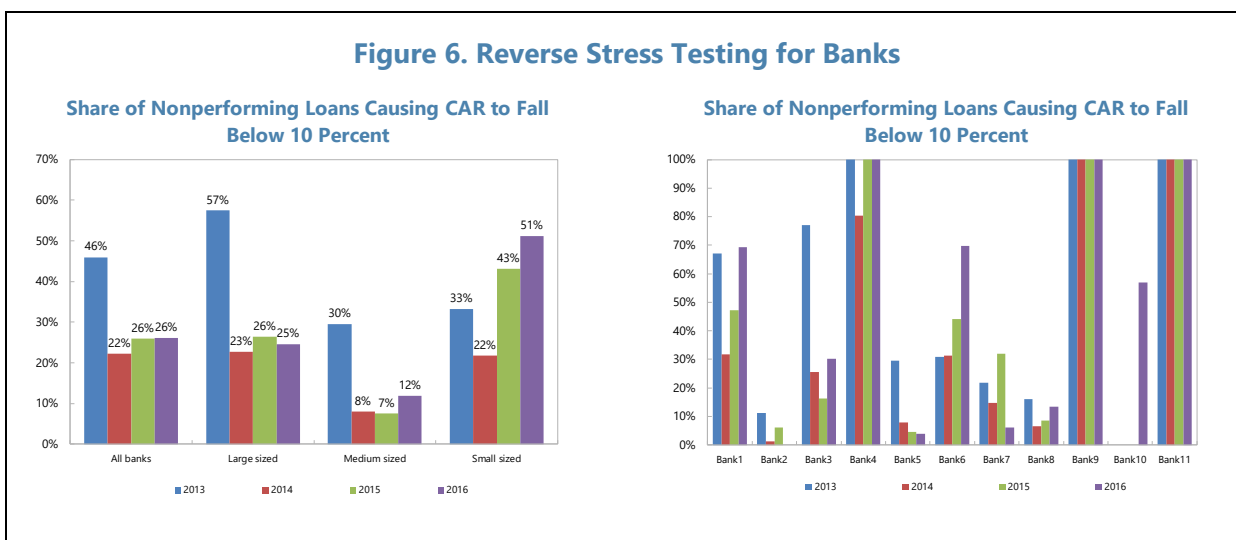
19. **The results of the reverse stress test are mixed for individual banks but confirm strained positions for the state-owned banks**. Most banks are resilient based on initial strong positions. Some smaller banks have higher capital buffers and are generally risk averse and thus are not affected by deteriorating capacity to repay for most economic agents, e.g., banks 4, 9, and 11 would require at the minimum all their NPL portfolio (100 percent) to default before breaching the minimum capital requirements. But two of the three state-owned banks that are weakly capitalized and exposed to both the State and individuals encounter significant challenges, except for one of them in 2016 following an injection of capital by the shareholders.

E. Managing the Sovereign-Banks Nexus

20. **Conceptually, sovereigns and banks are closely linked through direct and indirect channels**. These channels include banks' claims on sovereigns, semi-automatic links between sovereign and banks' credit ratings, public backstops, collateral operations, and the effects of fiscal distress on the overall economy. Because of the interrelationships, problems arising from the banking sector can trigger pressures for the sovereign and vice-versa.

21. **Key channels that explain the sovereign-bank nexus for Angola include**: the bond-holding and the safety-net channels. A preliminary assessment of the bond-holding channel is conducted through a sectoral balance sheet analysis.[5] The safety net analysis, in turn, is based on panel regressions.

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[5] The analysis used monetary and financial statistics, information related to the international investment position, all submitted by the BNA to the Statistics department of the IMF, and other information available to the Angola country team. Considering that most of the external sector information is undergoing improvements/revisions, the results ought to be interpreted with caution.

The Bond-Holding Channel

22.   A preliminary assessment of the bond-holding channel is conducted through a sectoral balance sheet analysis. The analysis used monetary and financial statistics and information related to the international investment position, all submitted by the BNA through the IMF's Statistics Department. Considering that external sector information is still undergoing improvements, the results ought to be interpreted with caution.

23.   Sectoral balance sheet analysis reveals growing exposures that could lead to vulnerabilities. Particularly, banks' exposure to domestic sovereign risk has risen as they hold 21 percent of GDP in government debt, compared to an exposure of the private sector to banks, mainly in the form of deposits, of about 46 percent of GDP. Banks typically generate less loans to the private sector than they collect in deposits (loans-to-deposit ratio is about 60 percent). While the motive for large holdings of bonds would be liquidity or collateral management, the incentive for Angolan banks seems to be hedging investments against foreign exchange adjustments as most of the bonds are indexed to the U.S. dollar with a two-year average maturity.

- **Commercial Banks**. The balance sheet of the banking sector (ODC) shows that its main liabilities (close to ¾ of the total and equivalent to 46 percent of GDP) are to the private sector, mostly in the form of deposits. These resources in turn are only partially loaned out to the private sector (about 21 percent of GDP), invested in government securities (21 percent of GDP), and placed abroad (2.5 percent of GDP). Banks also keep a high-level of reserve deposits with the BNA (7 percent of GDP).

- **Central Government**. It has a negative net asset position of 56 percent of GDP because of its indebtedness with foreign and domestic creditors. While external liabilities (37 percent of GDP) are mostly comprised of loans, domestic liabilities are typically in bonds, held by banks (21 percent of GDP) and the private corporations (17 percent of GDP).

- **Growing exposures**: A comparison between positions in 2013 (pre-oil shock) and 2016 confirms increases in government and banks liabilities of about 20 percent of GDP each. As these increases were not offset by corresponding changes in the asset position, the net asset position of government deteriorated by 25 percent of GDP and that of banks by 10.5 percent of GDP. These results are aligned with the increased fiscal pressures stemming from lower oil prices and further indicate that banks assets continue to be of lower quality.

Figure 7. Sectoral Balance Sheet Analysis

Note 1: Data as of end 2013 and end 2016.
Note 2: Node size is proportional to each sector's share in total liabilities. Node numbers are percent of GDP. Arrows point from the sector source of the exposure (the liability issuer) to the sector carrying the exposure (holder of liabilities). Arrow thickness is proportional to the size of the exposure relative to GDP.
Note 3: CG = Central Government, NBA = Central Bank, ODC = Other Depository, Corporations (banks), OFC = Other Financial Corporations, OPS = Other Public Sector, PrS = Private Sector, RoW= Rest of the World.

24.   Banks usually hold substantial public debt for several reasons but not limited to: liquidity—to have assets to back short-term funding and for use as collateral; risk-taking—transferring the risk to the sovereign; and financial repression—in instances where governments compels banks to absorb them. An assessment of what determines bond holdings for Angolan' banks by fitting a panel regression that uses bank specific and macroeconomic factors. Annual macroeconomic and bank data for 11 banks over the period 2007–2016 was sourced from the BNA. Balance sheet and income statement information was obtained from the bankers' association database. For estimation purposes, we simple panel regression with both fixed and random effects.

$$TBs_{i,t} = \alpha + \beta_1 X_{i,t}^B + \beta_2 X_t^S + \beta_3 X_t^M + \varepsilon_{i,t}$$

where the subscripts i and t represent respectively, individual banks and the time variable. The dependent variable TBs represents banks' government debt holdings in percent of total assets. XB, XS, and XM are respectively vectors of bank-specific variables, market structure variables, and macroeconomic variables; ε represents the residuals. The results are tabulated in Appendix 2.

25.   In Angola, government securities are used to store liquidity and help banks manage their portfolio. A strong and negative correlation with outstanding loans indicates that banks with less bankable investment opportunities store their funds in government securities. Oil prices shocks exhibit a negative relationship with government security holdings, confirming to some extent financing difficulties for the government during crisis years. However, well-capitalized and profitable banks take advantage of the higher availability of government securities.

The Safety-Net Channel

26.   Public ownership of banks exposes the sovereign to direct fiscal costs in Angola. Public sector entities have equity interests (minority stakes) in six banks and, as noted above, the government directly controls three banks that hold about 11 percent of banking system assets. State-owned banks operate against a backdrop of explicit and implicit government guarantees that generate bi-directional spillovers between the sovereign and banks. Since the oil price shock, the government has spent about 4 percent of GDP in recapitalizing such banks, and costs are expected to be above 1 percent in 2018 (Figure 8).

Figure 8. Actual Direct Fiscal Costs for Banks Including Recredit

Direct Fiscal Costs - Recredit
(Percent of GDP)

Source: MoF and IMF Staff Calculation
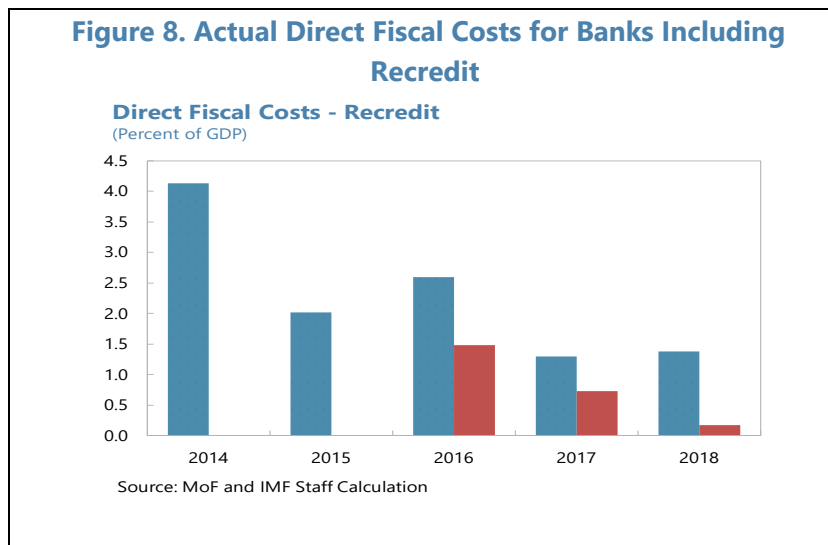
27.   To assess the empirical relevance of direct costs arising from poor banks' performance, a panel regression of Angolan banks' profitability was estimated. Annual macroeconomic and bank data for 11 banks over the period 2007–2016 was sourced from the BNA. Balance sheet and income statement information was obtained from the Bankers' Association database. For estimation purposes, we used the Arellano-Bond (1991) System General Method of Moments (GMM) approach. With many panels and only a few periods, and under the assumption of no correlation in the idiosyncratic errors, the estimator removes the panel-specific heterogeneity. A dynamic specification of the following model was used:

$$ROA_{i,t} = \alpha + \beta_1 X_{i,t}^B + \beta_2 X_t^S + \beta_3 X_t^M + \varepsilon_{i,t}$$

where the subscripts i and t represent respectively, individual banks and the time variable. The dependent variable I represents return on assets or return on equity. XB, XS, and XM are respectively vectors of bank-specific variables, market structure variables, and macroeconomic variables; ε represents the residuals. The results are tabulated in Appendix 3.

- With regards to bank specific factors, the coefficient of equity is positive and significant meaning that well-capitalized banks experience higher returns in Angola. As expected the results of inefficiency (as measured by bank costs relative to net interest income), is associated with weak performance. But the positive sign on operational expenses that is dominated by overhead costs indicate that most banks can pass on to the market the costs through high spreads. We do not obtain conclusive evidence that market power influences bank returns.

- Macroeconomic variables have a significant effect on banks' performance in Angola. Inflation has a positive effect on banks' profits, which suggest that banks forecast future changes in inflation correctly and promptly adjust their margins, reducing credit expansion. Output growth has also a positive impact on bank profitability. Interestingly, lower oil prices don't seem to lead to poor bank profits. This would be explained by the sovereign-bank nexus as oil crises create rising financing needs to government that lead to more bond holding and increased margins for the commercial banks.

- Based on the key factors that explain bank's profitability in Angola, creating a stable macroeconomic environment while ensuring that public banks are run efficiently and are well-capitalized would mitigate the adverse and spiral effects from the safety net channel.

F.   Concluding Remarks

28.   While there is significant heterogeneity among Angolan banks, it is evident that their performance is intertwined with the oil price cycle. Heavy reliance on oil constitutes a key source of resilience mostly for private banks while imposing key risks for the state-owned banks. The main channel of transmission remains fiscal activity, as lower oil prices constrain public spending and weaken non-oil GDP, setting in motion favorable (unfavorable) dynamics that may increase (decrease) credit and liquidity depending on bank-specific strengths. As demonstrated by the recent oil price shock, some banks can manage their portfolio and diversify to benefit from rising government financing requirements. Evidently, this leaves banks vulnerable to episodes of sovereign distress while at the same time crowding out lending to the private sector. Since the nexus between banks and sovereigns operates through multiple interacting channels in Angola, measures need to follow a holistic perspective as targeting individual channels might adversely impact others. While the strong usual caveats about drawing strong policy conclusions from relatively short periods of stress or panels apply, policy makers should consider to:

- Ensure that both banks and sovereign balance sheets are stronger to reduce the probability of sovereign distress while bolstering banks' ability to withstand shocks and to avoid a strong nexus acting as a transmitter or amplifier of financial stress with adverse feedback loops for credit and liquidity.

- Monitor closely excessive holdings of government securities to avoid creating a captive market that discourages prudent fiscal behavior and constrains the development of capital markets as a viable alternative for investments.

- Enhance surveillance for timely identification of risks and policy responses, including by gauging the underlying soundness of banks through strong supervision including asset quality reviews and stepping up efforts to upgrade risk management practices to avoid a recurrence of rising NPLs.

- Develop public-private loss sharing arrangements that entrench more powers to constrain public sector support making interventions smaller, temporal, and time bound. In this regard, reverting Recredit to its original mandate and adding a sunset clause to its operations could potentially limit contingent liabilities for the government.

- Ensure that undercapitalized banks implement action plans to comply with requirements and closely monitor their implementation.

Appendix I. Operational Aspects of Recredit

1.   Angola has created an asset management company (AMC) to acquire distressed assets from commercial banks. Recredit was established on August 4, 2016. It is wholly owned by the State, 6 with powers and obligations exercised by the Ministry of Finance. The mission of the company is to acquire, restore, and revitalize nonperforming loans (NPLs) with a goal to contribute to the stability of the financial system, inter alia, to the development of Angola. Recredit has a Board of Directors comprising 3 members including three from the fiscal authorities and is yet to be subjected to regulation and supervision.

2.   Recredit's original mandate was narrow. During its first phase, Recredit was set up as a conduit for the disposal of NPLs amounting to Kz201 billion—out of an estimated Kz705 billion as of May 2016—on the balance sheet of BPC bank. BPC, a systemic state-owned bank with about 17 percent of the banking systems' assets, is openly insolvent with tight liquidity conditions leading to the suspension of its lending activities in mid-2015.

3.   The mandate of Recredit was expanded and modified in late 2016. A Presidential decree extended Recredit's mandate to acquiring impaired but recoverable loans from the entire banking system to free up lending capacity. Recredit is has already negotiated NPL purchases of about Kz300 billion with BPC and is engaging with five additional banks to acquire about Kz180 billion more.

4.   Based on international experience with AMCs, design features of Recredit raise concerns. While any resolution framework must be tailored to country specific conditions, common factors contributing to the good performance of AMCs are clearly missing or deficient for the case of Angola.

- *Capacity to price nonperforming assets at their market value is limited*. While it was indicated that Recredit plans to purchase impaired loans at an average discount of 75 percent, determination of the market value remains a challenge. Proper valuation is undermined by poor loan record keeping and absence of supporting documentation, unbiased collateral appraisal, rapid decision on acquisition of assets by staff that are yet to build capacity, and complexities amidst a weak economy to determine probability of asset recovery, including cash flow projections.

- *The broader mandate does not seem warranted for Angola*. About 80 percent of the NPLs are concentrated in state-owned banks. Broadening the scope to private banks risks creating moral hazard, generating incentives to sell otherwise performing assets, or that would be regularized by individual work-outs, thus potentially undermining credit discipline. In addition, the mandate to recover investment projects, through strategic partnerships, and return them to the economy is complex, time consuming, and requires significant expertise.

- *Lack of political autonomy undermines the efficiency of Recredit*. Most NPLs appear to be related to politically exposed persons (PEPs). Recredit being wholly owned by the Government has limited independence and remains susceptible to political pressure. There is a significant risk that the disposition of assets could be skewed to political connections rather than due diligence.

- *Legal obstacles to market sales of distressed assets are significant.* While legal consent by the debtor is not needed in transferring the assets, basis for a clean transfer of titles in all asset transactions are not fully guaranteed in Law. Enforcement actions and creditor efforts to agree on debt restructuring could be subjected to delays by the debtor through triggering insolvency proceedings. The ability to quickly foreclose on collateral is impeded by a slow judicial system.

- *The ability of borrowers to initiate procedures for NPL purchase creates opportunities for exploitation.* The process to sell NPLs can be initiated by either the commercial bank or the borrower, a very uncommon and ill-conceived feature. If initiated by the bank, the borrower has no right of refusal to transfer the NPLs. If initiated by the borrower, Recredit will contact the bank to seek agreement. Direct access by borrowers could potentially create opportunities for rent-seeking and incentives toward bank loan default in the hope that Recredit will be more lenient to collect the loans or more willing to renegotiate the terms.

- *Proper incentives for achieving desirable goals need strengthening.* Recredit has no predetermined lifespan. This renders the institution liable to becoming a politically-driven "warehouse for NPLs" with a bias to prolong its existence unnecessarily at the expense of taxpayers.

- *Open bank assistance would potentially lead to unintended consequences.* Since Recredit is also authorized to buy assets from private banks, and without a clear guide for the allocation of its limited resources, there is a trade-off between economizing those resources and fairness in their use.

  Support from other institutions remains limited. Interaction with the BNA is currently inadequate. Recredit would benefit from more exchange of information and technical skills to prop up the capacity of its staff.

Angola: Table 1. Variables Definition	
Return on assets	Profits after taxes/total assets
Return on equity	Net income/Shareholders equity
Capital	Equity/Total assets
Size	Ln(total assets)
Efficiency	costs/net interest income
Market power	Individual bank's loans/Country's domestic credit
Cost management	Ln(overheads)
Cyclical Output	GDP growth rate
Inflation	CPI growth rate
Fuel	Oil price
Investment	Treasury bills/total assets

Angola: Table 2. Determinants of Bond Holdings (Results)

	FE	RE
Loans	-0.8147***	-0.6834***
	(0.17)	(0.14)
Return on Equity	0.1205**	0.1375***
	(0.05)	(0.05)
Market power	0.9231**	0.5594*
	(0.42)	(0.29)
Equity	0.7415***	0.7618***
	(0.27)	(0.24)
Inflation	0.024	0.0315
	(0.20)	(0.20)
Oil price	-0.1279**	-0.1322**
	(0.06)	(0.06)
N	109	109

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Angola: Table 3. Determinants of Banks' Performance (Results)

	Return on Assets		Return on Equity	
	GMM		GMM	
	Robust	**SGMM**	**Robust**	**SGMM**
lnSize	0.5842	-0.5888**	8.5453	-0.3477
	(0.36)	(0.25)	(7.94)	(3.43)
lnEfficiency	-4.1282***	-4.1320***	-46.2120***	-45.7871***
	(0.39)	(0.21)	(6.90)	(2.94)
lnOpExp	-0.6653**	0.3748*	-13.8812**	-6.9446**
	(0.30)	(0.22)	(6.67)	(3.19)
Market power	-0.0095	-0.0142	-0.1274	0.5086**
	(0.02)	(0.02)	(0.42)	(0.22)
Equity	0.1089***	0.1042***	-1.0297	-1.1321***
	(0.04)	(0.02)	(0.66)	(0.28)
Inflation	0.0308***	0.0327***	0.4442***	0.5061***
	(0.01)	(0.01)	(0.14)	(0.12)
Oil price	-0.0105***	-0.0124***	-0.1223	-0.0879**
	(0.00)	(0.00)	(0.08)	(0.04)
GDP growth	0.0613***	0.0986***	0.5198	0.6487**
	(0.02)	(0.02)	(0.60)	(0.27)
L.Return on Assets	-0.0249	0.0808**	-0.0746	0.0079
	(0.03)	(0.03)	(0.11)	(0.04)
N	81	94	81	94

* p<0.10, ** p<0.05, *** p<0.01

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GOVERNANCE AND ECONOMIC PERFORMANCE IN ANGOLA[1]

This chapter takes stock of the current situation, describes the main actions implemented so far by the Government of President João Lourenço, and discusses policies for further strengthening governance and fighting corruption in Angola. Since the end of the civil conflict in 2002, Angola has implemented a legal framework for supporting good governance and combating corruption. Despite these efforts, Angola did not catch up with peers in sub-Saharan Africa (SSA) and continues to underperform in many areas of governance. This reflects several factors, including remaining deficiencies in legal and regulatory frameworks, patchy law enforcement, and lack of independent and well-resourced anti-corruption institutions. The actions taken so far by the new government to promote good governance and fight corruption are encouraging steps in the right direction. Better governance will likely foster private sector led development and help achieve sustainable and inclusive growth. Bringing Angola's quality of governance and reducing corruption perceptions to the SSA average could increase real GDP annual growth by up to 2 percentage points in the medium term, according to our estimates.

A.   Introduction

1.   The Government of President João Lourenço elected in August 2017 is taking vigorous actions to address Angola's long-standing governance issues and high corruption perceptions. The new administration is fully aware that weak governance and entrenched corruption are a hindrance to Angola's development prospects. Therefore, improving governance has been one of the main priorities of President Lourenço. In the first six months since taking office the President dismissed many public officials and launched investigations into possible malfeasance at several public entities. He also created a specialized anti-corruption unit that would be the executive branch's key agency with a mandate to prevent and repress corruption-related crimes. The new government is also revamping the legal framework to improve competition in domestic markets and attract FDI which, if implemented effectively, would improve transparency and level the playing field and thus bode well for private sector development and growth.

2.   This chapter studies the link between governance and economic performance in Angola. It identifies areas where Angola has weak governance, using several governance indicators across time and relative to peers; assesses the possible macroeconomic implications of weak governance and corruption in Angola; discusses past and ongoing governance reforms, including the main actions taken so far by the new administration; and concludes with a summary of suggestions going forward.

3.   Governance refers to the broad "framework for exercising authority" while "good" governance refers to the "quality" of governance and its impact on outcomes. Broadly speaking, governance relates to the "rules of the game", while "good" and "weak" governance reflect how the game is played and its results. The Fund has defined governance as the set of "*institutions, mechanisms, and practices through which governmental power is exercised in a country, including for the management of public resources and regulation of the economy*." Similarly, the Fund refers to "good"

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[1] Prepared by Nelson Sobrinho (AFR).

governance as a normative concept, according to which the "*quality of governance can impact its effectiveness and efficiency in achieving desired outcomes*." (IMF, 2017a).

4.   **For the purposes of this chapter, corruption is defined as "*the abuse of public office for private gain.*"** This definition is widely accepted in the literature, and used by the Fund and other international organizations. It is also consistent with the provisions of the United Nations Convention Against Corruption. As the definition suggests, corruption is typically associated with the functions of the State and some of them—e.g., public finances and government regulation—may be particularly prone to creating opportunities for corruption (e.g., IMF, 2018; Tanzi, 1998).

5.   **More generally, distorted economic incentives and lack of accountability and transparency may create opportunities for corruption**. Corruption may arise in the provision of government services (e.g., licenses) and specifically when public officials in charge of enforcing property rights and other regulations can demand bribes. It is akin to a distortionary tax on private sector and hence raises the costs of production. Corruption also diverts resources from productive uses (e.g., human capital formation) into rent seeking and less growth-enhancing activities such as 'white elephant' projects (e.g., Shleifer and Vishny, 1993; Acemoglu and Verdier, 1998). Appendix I illustrates the economics of corruption through the lens of a simple model of bribery.

6.   **Weak governance and systemic corruption are potentially macro-critical for economic performance and may hinder growth through multiple channels**. In addition, systemic corruption is a symptom of weak governance and thus combating corruption cannot be delinked from strengthening governance overall (IMF, 2017a). This chapter will mostly focus on the following dimensions of governance in Angola (IMF, 2018):

- *Fiscal governance*. Weak governance and corruption undermine revenue mobilization, including by weakening tax compliance; generate inefficiencies and inflate costs on the expenditure side when public financial management (PFM) controls are weak; distort public expenditure towards areas more vulnerable to graft such as public procurement; and undermine accountability and provide opportunities for misappropriation of public funds when fiscal transparency is insufficient (IMF, 2018; Baum et al 2017; Tanzi and Davoodi, 1997).

- *Market regulation*. Burdensome regulation and red tape create opportunities for corruption, which acts as a tax that discourages private investment (Mauro, 1995).

- *Rule of law*. Weak enforcement of property rights and legislation, including anti-corruption laws, create uncertainty for private investors and may undermine economic activity (Gradstein, 2004; Acemoglu, 2006).

- *AML/CFT*. A weak framework for anti-money laundering and combating the financing of terrorism (AML/CFT) can undermine the integrity of the financial system, allow proceeds of corruption to be concealed, and hinder capital flows (e.g., IMF 2017b).

7.   **This chapter relies on Fund staff assessment, complemented by analysis of several third-party indicators (TPIs) of governance and corruption perceptions**. It draws primarily from staff's

work on governance-related issues for Angola, complemented by the use of the following TPIs: two main aggregate measures of governance—Kaufmann and Kraay's Worldwide Governance Indicators (WGI) and International Country Risk Guide's (ICRG) Political Risk Rating, complemented by the World Bank's Ease of Doing Business Indicators (DBI); and two measures of corruption perceptions—WGI's Control of Corruption Indicator (CCI), and Transparency International's Corruption Perceptions Index (CPI).[2, 3] These indicators cover different countries and time periods but are highly correlated with each other (Table 1), even though some of these correlations are high by construction (e.g., CCI is a component of aggregate WGI). To facilitate cross-country comparison, governance (corruption perceptions) indicators are normalized to 0-100, where 0 is the weakest (highest) and 100 the strongest (lowest) performance.

Angola: Table 1. Pairwise Correlations for SSA, 2005–16

	Governance		Corruption	
Governance	WGI	ICRG	CCI	CPI
WGI	1.00			
ICRG	0.88	1.00		
Corruption Perceptions				
CCI	-0.91	-0.78	1.00	
CPI	-0.94	-0.75	0.97	1.00

Sources: WGI, Transparency International, ICRG, and Fund staff calculations.
Note: WGI = Worldwide Governance Indicators, ICRG = International Country Risk Guide, CCI = Control of Corruption Indicator, CPI = Corruption Perceptions Index.

B. Stocktaking

Fiscal Governance

8. **Angola's fiscal transparency has many shortcomings**. The timeliness and quality of government finance statistics are weaker than expected for a country with the level of per capita income as Angola's. Consolidated and detailed fiscal data, including on non-oil revenues and government expenditures, are not published during the fiscal year. Data on oil fiscal revenues are published monthly but more detailed reports on oil fiscal revenues are disseminated on a quarterly basis only and with a long lag. These shortcomings prevent timely monitoring of budget execution by

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[2] The aggregate WGI used in this chapter was constructed by Fund staff by combining its six individual components: *voice and accountability*, *political stability*, *government effectiveness*, *regulatory quality*, *rule of law* and *control of corruption*. See Kaufmann et al, 2010, and http://info.worldbank.org/governance/wgi/index.aspx#home.

[3] In line with Fund policy, this chapter uses multiple indicators of governance and corruption. TPIs help provide a general view of a country's governance and corruption relative to peers but have limitations and should be interpreted with caution, including because some are based on perceptions (e.g., WGI and CPI), and their scores are subject to uncertainty and to methodological changes (e.g., in 2012 the CPI's compilation method for aggregating different data sources was simplified to include just one year's data from each data source). However, Hamilton and Hammer (2018) note that the CCI and CPI are valid measures of the magnitude of overall corruption in many country contexts.

stakeholders, leading to potentially weak financial accountability. They undermine identification and analysis of looming fiscal risks and thus the design of prompt policy responses. They also create unnecessary uncertainty for investors and potentially lead to unfavorable perceptions of sovereign risk such as lower credit ratings and higher borrowing costs (e.g., Arbatli and Escolano, 2015).

9.   Furthermore, Angola's quality and transparency of budget processes perform unfavorably compared to peers. Until mid-2000s, budget preparation and implementation in Angola lacked transparency, scrutiny, and citizen participation. The government used to provide the public with scant information during the budget preparation and during the fiscal year (Open Budget Survey;[4] Chêne, 2010). Efforts to improve transparency of fiscal accounts in the past decade (e.g., publication of the budget proposal), including in the context of a Fund-supported program, have increased the country's score in international surveys. However, oversight by the National Assembly of in-year budget implementation is weak at present. At the request of the National Assembly, Angola's Supreme Audit Court (*Tribunal de Contas*) issues ex-post audit reports on the yearly General State Accounts but audits do not cover all government entities and there is little evidence of follow-up on audit recommendations. In part reflecting these weaknesses, Angola's overall transparency score remains below peers' (Figure 1).

Figure 1. Evolution of Budget Transparency in Angola and Peers

Open Budget Index, 2006 and 2015
(higher score better performance)

Sources: International Budget Partnership (Open Budget Survey, 2006, 2015), and Fund staff calculations.
Note: SSA denotes the average for sub-Saharan Africa. The dotted blue line is a 45° line.
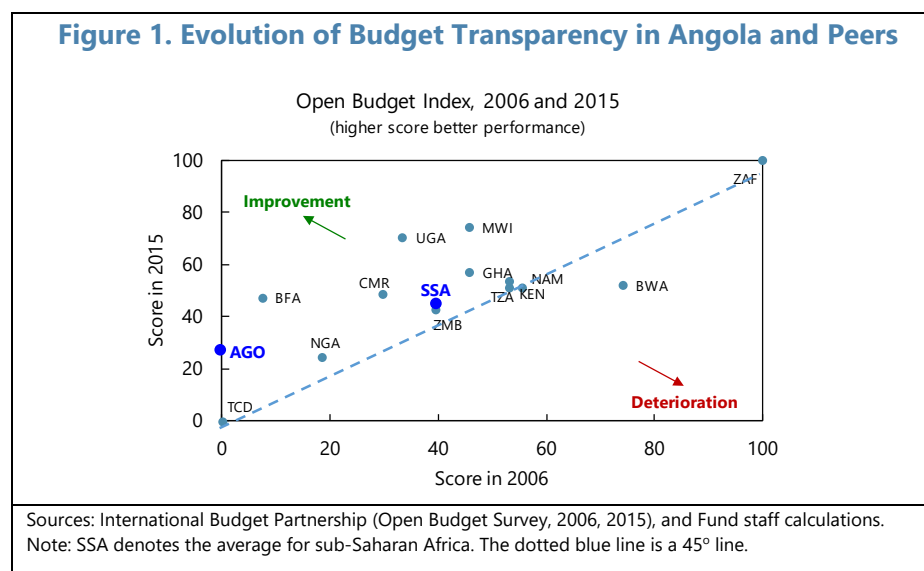
10.   Oversight of state-owned enterprises (SOEs) is largely ineffective. The Public Enterprises Oversight Institute (ISEP) has been unable to enforce good corporate governance practices across SOEs. Not all SOEs submit their annual accounts to ISEP for approval as required by law, and many that submit do not have their accounts in order and therefore approved. For instance, according to ISEP, only 8 out of 57 SOEs that submitted accounts in 2014 had their accounts approved without qualifications (updated detailed statistics have not been published by ISEP). Moreover, SOEs are not

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[4] http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/country-info/?country=ao.
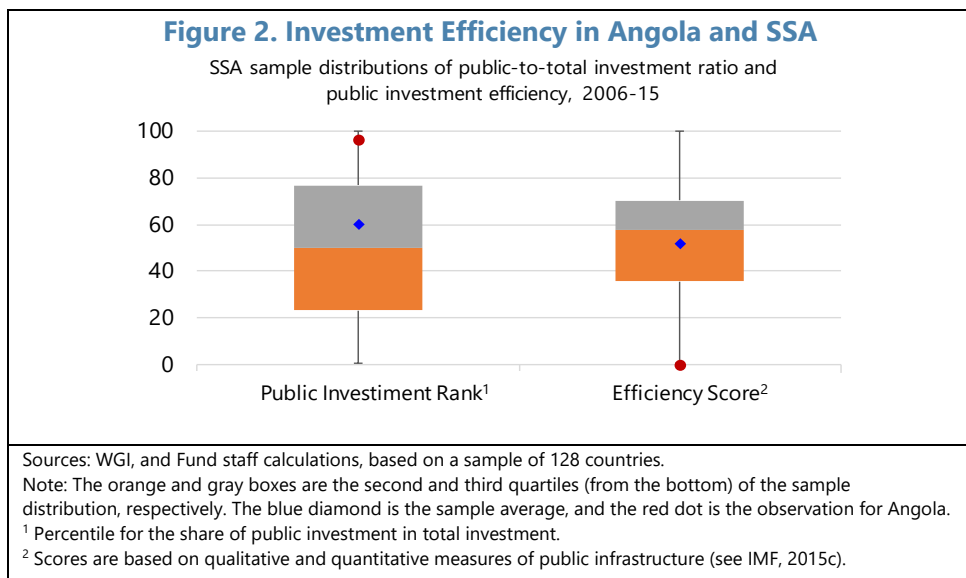
part of the perimeter of government finance statistics and remain a source of potential contingent liabilities for the State budget.

11.   Angola has made progress towards more effective expenditure control but important weaknesses remain. With support of Fund technical assistance (TA), large balances of domestic payments arrears accumulated up to 2014 were cleared and there was an effort to implement the TA recommendations to avoid a recurrence of this problem in the future. However, weak compliance with internal controls, and cash flow pressures as a result of lower oil prices since mid-2014 as well as spending pressures in the run-up to the August 2017 elections led to the accumulation of new arrears (the outstanding stock of domestic payments arrears is estimated at 4½ of GDP at end-2017). Weak expenditure controls undermine the credibility of the fiscal accounts and budget planning and create opportunities for corruption.

12.   Angola's public investment management framework has improved but its effectiveness remains low. The legal framework for public investment management includes provisions for planning, budget execution, and public procurement (e.g., *Public Investment Law* 31/10, *Public Contracting Law* 9/16). Angola's five-year national development plans (PNDs) identify priority investments, and define performance indicators for large investment projects (*Projectos Estruturantes*). PNDs are integrated with sectoral and regional development plans, and both are part of a long-term development plan ("Angola 2025"). Angola also created an information system to help prepare and manage its public investment program (SIPIP), and the Ministry of Finance has a specialized unit for inventorying, recording, and valuing all public assets—National Directorate of Public Assets (DNPE). In practice, however, the effectiveness of Angola's public investment management remains low, including because of lack of multiyear budgeting, weak project appraisal and selection, and vulnerabilities in the public procurement process, as discussed next.

13.   Most phases of the public investment cycle do not fully comply with best practices and this may create opportunities for corruption. Several weaknesses have been identified, including by Fund TA. In the *pre-contracting phase*: no requirement to conduct pre-feasibility studies that could avoid unnecessary costs from large projects assessed as non-viable at this stage; in the *contracting phase*: use of non-competitive bidding (*Concurso Limitado*, *Negociação*), and reliance on a limited number of regular contractors; in the *execution phase*: frequent amendments to public contracts often entailing large increases in the contract's original value; and in the *post-execution phase*: absence of ex-post performance assessment as required by law. Furthermore, budget units of most line ministries suffer from inadequate capacity. These shortcomings, particularly the use of non-competitive bidding, contract uncertainty, and weak capacity, expose Angola's public investment framework to vulnerabilities.

14.   These weaknesses are also correlated with Angola's low efficiency of public investment. Public investment was high in the decade prior to the 2014–15 oil price shock, accounting for about half of total investment, one of the largest share in the SSA region (Figure 2, first column). However, the quality of public investment was low (Figure 2, second column). Weak public investment management and low quality of public infrastructure prevented closing infrastructure bottlenecks more rapidly, and creating stronger externalities that could lead to higher private investment.

Figure 2. Investment Efficiency in Angola and SSA

SSA sample distributions of public-to-total investment ratio and public investment efficiency, 2006-15

Sources: WGI, and Fund staff calculations, based on a sample of 128 countries.
Note: The orange and gray boxes are the second and third quartiles (from the bottom) of the sample distribution, respectively. The blue diamond is the sample average, and the red dot is the observation for Angola.
[1] Percentile for the share of public investment in total investment.
[2] Scores are based on qualitative and quantitative measures of public infrastructure (see IMF, 2015c).

15.   Paying taxes in Angola is burdensome. A new tax authority (AGT) was operationalized in 2015. AGT has a large taxpayer office (LTO) that covers about 400 large companies which account for over 50 percent of non-oil fiscal revenue. LTOs are known to support tax compliance (e.g., IMF, 2015a; Baum et al, 2017). AGT is increasing the use of information technologies to improve tax administration and compliance. It already provides an electronic portal (*portal do contribuinte*) to taxpayers, where corporate tax returns can be submitted electronically. It is also implementing the Automated System for Customs Data (ASYCUDA), as well as an automated system for tax administration (SIGT). But Angola still has too many obstacles to paying taxes (Figure 3, and Table 2), making the tax administration vulnerable to corruption. Fenochietto and Pessino (2013) argue that corruption could be an important determinant of a country's tax potential. Furthermore, AGT is a young institution whose operations still face shortcomings, including lack of compliance with risk management practices, appropriate performance management framework, and an organizational structure with a clearer separation of roles and responsibilities.

Figure 3. Governance and Revenue Mobilization in Angola and SSA, 2006–16

Sources: WGI (governance), World Bank's Ease of Doing Business (obstacles to paying taxes), WEO (non-resource revenue), and Fund staff calculations.
Note: SSA denotes the average for sub-Saharan Africa. Dotted blue lines are fitted linear trends.
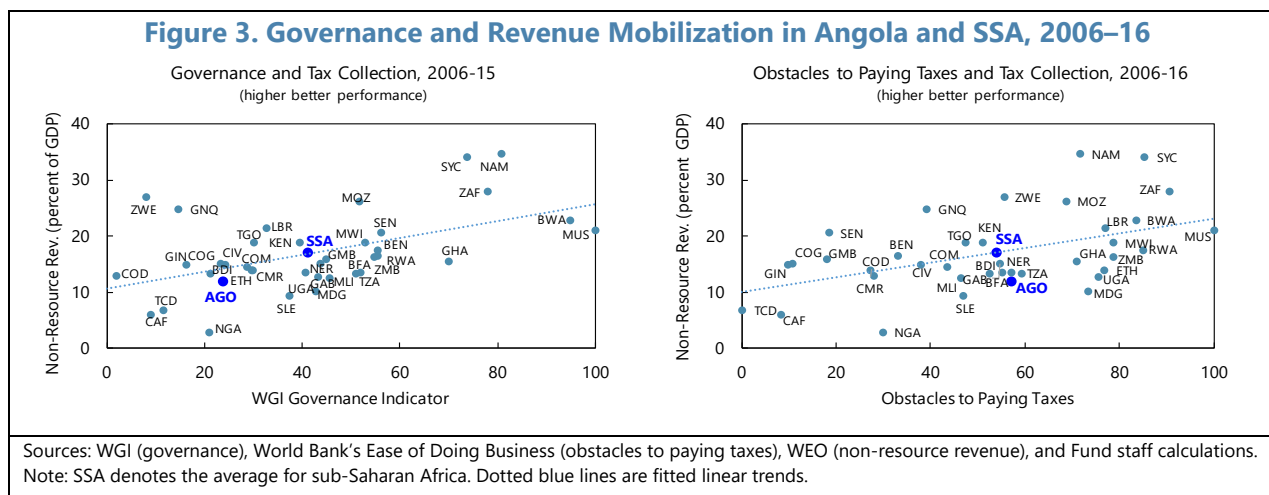
AML/CFT

16.   Angola's AML/CFT framework includes provisions that can support anti-corruption efforts. AML/CFT measures can provide useful tools to support efforts aimed at preventing, investigating and prosecuting corruption crimes. Angola's main AML/CFT law was enacted in 2011 (*Lei* 34/11). The law criminalizes the offences of money laundering and financing of terrorism and includes preventive measures to be applied by institutions. This law was an important milestone but deficiencies remained, including lack of comprehensive criminalization of money laundering/terrorism financing activities.[5]

17.   The AML/CFT legal framework was enhanced in 2014 with the *Law on Criminalization of Money Laundering Predicate Offences* (*Lei* 3/14), which designates corruption among the predicate offences for money laundering. This extends to passive and active corruption, trading in influence, and corrupt acts outside of Angola. Furthermore, a Financial Information Unit (FIU) was operationalized in 2015. However, the FIU remains under resourced to execute its core functions, i.e., identify, assess and disseminate suspicious transactions, and faces capacity constraints.

18.   Since its 2012 mutual evaluation, Angola has made progress in strengthening its AML/CFT framework. In February 2010, the Financial Action Task Force (FATF) identified Angola as a country with strategic AML/CFT deficiencies. In 2011–12, Angola underwent an assessment of its AML/CFT framework, but remained on the FATF's 'grey list' due to existing strategic deficiencies in its framework. In February 2016, having made sufficient progress in addressing the technical items of its action plan, Angola was removed from the FATF's monitoring process. Angola is scheduled to undergo its second mutual evaluation in 2020, at which time the country will be assessed against the revised 2012 FATF international standards.

19.   However, Angola is still perceived as a higher risk jurisdiction. The loss of direct U.S. dollars correspondent banking relationships (CBRs) was partly attributed to weaknesses in the AML/CFT framework and the perception of Angola as a higher risk jurisdiction, including with regards to corruption.[6] Weaknesses include legal deficiencies that make difficult to hold domestic politically exposed persons (PEPs) accountable, and insufficient risk-based supervision of financial institutions (IMF, 2017b). A more structured or systematic understanding of AML/CFT risks in the banking sector is needed, including by applying a risk classification between distinct types of banks (e.g., between foreign banks and those owned or controlled by domestic PEPs).

Overall Governance

20.   Angola's overall governance is weak relative to peers, in part reflecting the shortcomings discussed above. Angola generally scores low compared to countries in SSA, countries with similar income per capita, and oil exporters (see comparator list in Appendix II). Its score is typically at the

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[5] http://www.fatf-gafi.org/countries/a-c/angola/documents/merangola2012.html. Also, see World Bank (2012).

[6] Other factors also contributed to the loss of CBRs, including retrenchment by global banks since the global financial crisis, regulatory demands, and banks own risk management requirements (IMF, 2017b).

bottom quartile of the distribution of many measures of governance (Figure 4).[7] However, Angola performs more favorably in the ICRG indicator—around the SSA average—in part reflecting its stable political environment since the end of the civil conflict.

Figure 4. Aggregate Measures of Governance in Angola and Peers

WGI Governance Indicator, 2006-2015
(sample distribution, higher better governance)

ICRG Governance Indicator, 2006-2016
(sample distribution, higher better governance)

Sources: WGI, ICRG, and Fund staff calculations.

Note: The orange and gray boxes are the second and third quartiles (from the bottom) of the sample distribution, respectively. The blue diamond is the sample average, and the red dot is the score for Angola. Averages are for the sample periods indicated in the chart titles. LMI = lower-middle income countries; OIL = oil exporters.

21.   Angola's overall governance has yet to catch up with SSA peers. The long civil conflict destroyed physical and human capital, and undermined the State's ability to perform its normal functions. The process of State building has accelerated since the end of the conflict in 2002. Angola also improved its governance in the last decade but not fast enough to catch up with the SSA average as other SSA countries also improved their governance in the same period (Figure 5). Similar pattern also holds relative to lower-middle income countries and oil exporters.

Figure 5. Evolution of Overall Governance in Angola and SSA

WGI in 2005 and 2015 (higher better governance)

Sources: WGI, and Fund staff calculations.

Note: SSA denotes the average for SSA. The dotted blue line is a 45° degree line.

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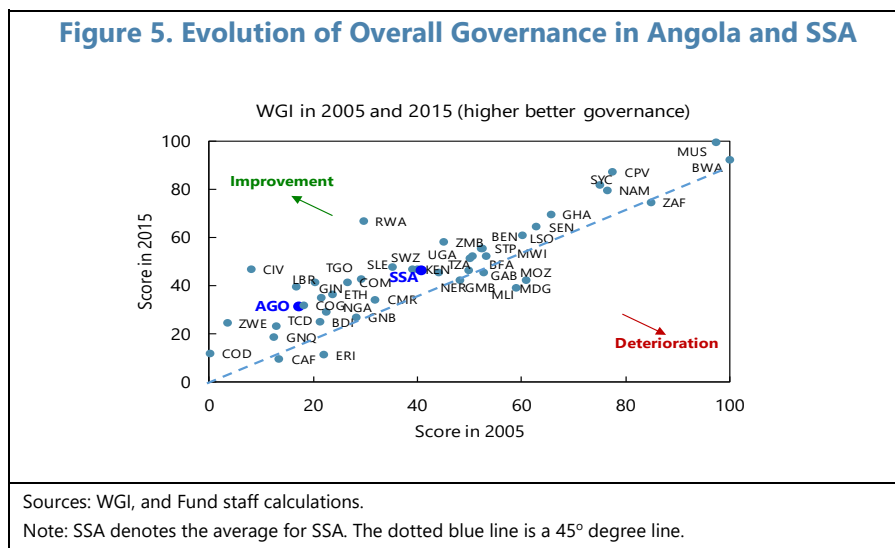
[7] Similarly, for other aggregate measures of governance, e.g. Mo Ibrahim Foundation's Index of African Governance.

Government Regulation and Rule of Law

22.   Angola's scores are also low in many aspects of governance, including *government effectiveness*—i.e., the government's capacity to formulate and implement sound policies effectively; *rule of law* and *enforcing contracts*—i.e., ability to respect laws and contracts, and secure and enforce property rights; and *registering property*—which illustrates the government's ability to provide basic public services efficiently (Figure 6).

Figure 6. Disaggregated Measures of Governance in Angola and Peers

Sources: WGI, and Fund staff calculations.

Note: The orange and gray boxes are the second and third quartiles (from the bottom) of the sample distribution, respectively. The blue diamond is the sample average, and the red dot is the observation for Angola. Averages for the sample periods indicated in the chart titles. LMI = lower-middle income countries; OIL = oil exporters.

23.   The progress made in recent years was insufficient to bring Angola closer to the regional average in important dimensions of governance. Angola improved *government effectiveness* but made less progress in the *rule of law* and in areas that support property rights such as *registering property* and *enforcing contracts* (Figure 7). The latter partly reflects an inefficient judiciary and ineffective system for conflict resolution in the private sector. Dealing with tax officials or getting a license or permit in Angola are perceived by business people as burdensome compared to peers (Table 2).

Figure 7. Evolution of Disaggregated Measures of Governance in Angola and SSA

Government Effectiveness, 2005 and 2015
(higher better performance)

Rule of Law, 2005 and 2015
(higher better performance)

Registering Property, 2010 and 2016
(higher better performance)

Enforcing Contracts, 2010 and 2016
(higher better performance)

Sources: WGI (first row), World Bank's Ease of Doing Business indicators (second row), and Fund staff calculations.
Note: SSA denotes the average for sub-Saharan Africa. Dotted blue lines are 45º lines.

Angola: Table 2. Firms' Perceptions of Regulatory Burden in Angola and Peers

(Percent averages, sample of 122 countries)

	Tax administration[1]	Licensing and permits[2]
Angola	30.0	41.8
Sub-Saharan Africa	27.6	17.2
Lower-Middle Income	21.6	15.3
Oil Exporters	18.9	19.2

Sources: World Bank Enterprise Surveys (most recent since 2010) and Fund staff calculations.

[1] Percent of firms identifying tax administration as a major constraint to doing business.

[2] Percent of firms identifying licensing/permits as a major constraint to doing business.

24. **Angola's weak governance and challenging business climate likely reinforce each other**. Angola is in the group of countries with most unfavorable governance and business climate (Figure 8). Its score in the World Bank's Ease of Doing Business survey is below most oil exporters', and non-oil exporters' in SSA such as Botswana and Namibia. The high costs of doing business in Angola reflect multiple factors, including cumbersome regulation, excessive State intervention in the economy, barriers to FDI, and a work visa policy that constrains the inflow of much-needed skilled workers. Weak governance and challenging business climate create opportunities for corruption and entrench vested interests.

Figure 8. Governance and Ease of Doing Business

(strong/weak indicates above/below the sample median)

Sources: WGI, and Fund staff estimations and calculations.
Note: Red denotes SSA oil exporters, orange denotes non-SSA oil exporters, green denotes SSA non-oil exporters and blue denotes the rest of the world.
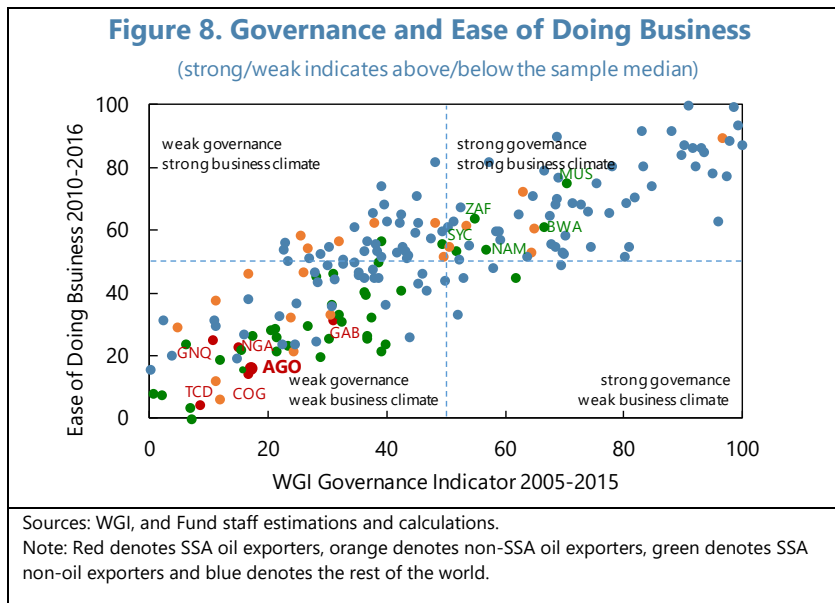
Corruption Perceptions

25. **Corruption perceptions in Angola are higher compared to peers**. Angola's normalized scores of corruption perceptions compare unfavorably across most corruption indicators and relevant comparator groups (Figure 9), echoing its low governance scores. This suggests that policies that strengthen overall governance may also lower opportunities for corruption in Angola. In the last decade, corruption perceptions improved considerably in many SSA countries but less so in Angola, and remained high and stagnant in the post-civil conflict period (Figure 10).

Figure 9. Corruption Perceptions in Angola and Peers

Sources: WGI, Transparency International, ICRG, and Fund staff calculations.
Note: The orange and gray boxes are the second and third quartiles (from the bottom) of the sample distribution, respectively. The blue diamond is the sample average, and the red dot is the observation for Angola. Averages for the sample periods indicated in the chart titles. CCI = Control of Corruption Indicator, CPI = Corruption Perceptions Index. LMI = lower-middle income countries. Oil = oil exporters.

Figure 10. Evolution of Corruption Perceptions in Angola and SSA

CCI, 2005 and 2015
(higher score higher corruption perceptions)

CPI, 2006 and 2016
(higher score higher corruption perceptions)

Sources: WGI, Transparency International, and Fund staff calculations.

Note: SSA denotes the average for sub-Saharan Africa. CCI = Control of Corruption Indicator, CPI = Corruption Perceptions Index. Dotted blue lines are 45° lines.

26.   Surveys of firms and business people confirm these aggregate perceptions. Corruption is reported by firms as a relevant obstacle to doing business in Angola. Many firms also report paying bribes or being requested a bribe in exchange for government transactions. Firms' corruption perceptions are about two to three times higher in Angola than in comparator groups (Table 3). A recent survey with Chinese entrepreneurs also shows similar findings for Angola and other seven African countries (Ethiopia, Côte d'Ivoire, Kenya, Nigeria, South Africa, Tanzania, and Zambia). The survey reveals that Chinese business people rate corruption as their top concern, with almost 60 percent of them reporting corruption as a relevant barrier to doing business. In five of the eight countries surveyed, 60–87 percent of the Chinese firms admit that they must pay bribes to obtain basic government services such as licenses (McKinsey, 2017).[8]

Angola: Table 3. Firms' Corruption Perceptions in Angola and Peers
(Percent averages, sample of 122 countries)

	Biggest constraint[1]	Major constraint[2]	Bribery incidence[3]	Bribery depth[4]
Angola	28.9	75.6	51.3	42.9
Sub-Saharan Africa	8.2	40.2	24.1	18.5
Lower-Middle Income	9.3	37.6	24.5	19.7
Oil Exporters	10.3	42.0	26.6	21.6

Sources: World Bank Enterprise Surveys (most recent since 2010) and Fund staff calculations.

[1] Percent of firms that consider corruption as biggest obstacle to doing business, out of 15 obstacles.

[2] Percent of firms identifying corruption as a major or very severe constraint to doing business.

[3] Percent of firms experiencing at least one bribe payment request.

[4] Percent of public transactions where a gift or informal payment was requested.

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[8] This survey focuses on Chinese entrepreneurs but its findings apply more broadly. Also, it complements information from the World Bank Enterprise Survey (Table 3) which is lagged for Angola and some other countries in the sample.
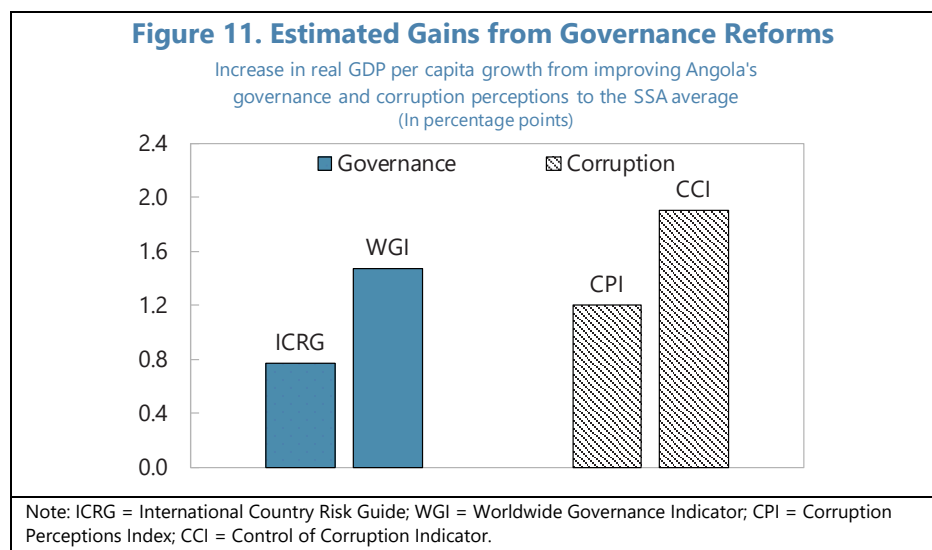
C. Macroeconomic Impact

27.   The literature points to a negative and significant impact of weak governance and corruption perceptions on growth. Mauro (1995) and many others have found that weak governance and corruption perceptions hinder investment and growth. Several studies have also found a strong negative correlation between corruption perceptions and fiscal outcomes, including lower revenue collection and lower quality of public infrastructure (Tanzi and Davoodi, 1997; IMF, 2016; Baum et al, 2017). Ugur and Dasgupta (2011) conducted a meta-analysis of the negative correlation between corruption perceptions and growth and concluded that it is genuine and economically relevant. They find that a one-unit improvement in corruption perceptions (roughly equivalent to one standard deviation) would increase annual GDP per capita growth by about 0.6 percentage point in low-income countries (LICs), and almost 0.9 percentage point in a "mixed" sample of LICs and non-LICs. IMF (2018) also finds similar growth gains, ¼-1½ percentage point for governance and ¼-2 percentage points for corruption perceptions, depending on the estimation technique and samples used.

28.   Angola could reap potentially large gains from improving governance and reducing corruption perceptions. This section assesses the potential gain in long-run growth from reforms that would bring Angola's quality of governance and level of corruption perceptions to the SSA average. The estimated gains are based on elasticities from Fund staff (Hammadi et al, 2018) using information for SSA and two measures of governance and corruption perceptions.[9] The potential growth payoffs from strengthening governance and reducing corruption perceptions could be relatively large:

- *Improving Angola's quality of governance to the SSA average could increase real GDP per capita growth by about ¾-1¼ percentage point annually*, depending on the governance indicator used (Figure 11, blue bars). Improving specific aspects of governance such as the quality and effectiveness of government regulation and the rule of law could yield growth payoffs of about ½–1 percentage point. This suggests that reforming even one aspect of governance could positively affect others due to complementarities (see Table 1) and thus amplify the overall growth gains.

- *Reducing Angola's corruption perceptions to the SSA average could increase real GDP per capita growth by about 1½-2 percentage point annually*, depending on the corruption perceptions indicator used (Figure 11, gray bars).

- The estimated gains could be larger if more ambitious targets are pursued—for instance, bringing Angola to the SSA frontier.

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[9] Hammadi et al (2018) estimate the correlation between governance (and corruption perceptions) and real GDP per capita growth through the lens of an empirical growth model focused on SSA, using system GMM and panel data for 190 advanced and developing countries over the period 1995-2015. The governance and corruption perceptions indicators used by the authors are the same used in this chapter, namely, ICRG and WGI for governance and CCI and CPI for corruption perceptions. The estimated elasticities for SSA remained statistically strong when submitted to standard endogeneity and several other robustness tests. The growth gains suggested by these elasticities are in the ballpark of those implied by other studies (e.g., Ugur and Dasgupta, 2011; IMF, 2018).

Figure 11. Estimated Gains from Governance Reforms

Increase in real GDP per capita growth from improving Angola's
governance and corruption perceptions to the SSA average
(In percentage points)

Note: ICRG = International Country Risk Guide; WGI = Worldwide Governance Indicator; CPI = Corruption Perceptions Index; CCI = Control of Corruption Indicator.

29.   Improving overall governance could also help increase non-oil revenues. Reducing opportunities for corruption and obstacles to paying taxes could help strengthen tax compliance and increase non-resource revenue collection (e.g., IMF, 2016). Following Fenochietto and Pessino (2013) and using a sample of SSA countries, it is found that weak governance increases forgone non-resource tax revenue (Appendix III). The estimates suggest that bringing Angola's governance to the SSA average (SSA frontier) could raise non-resource revenue by about 1 (4) percent of GDP.

30.   Governance reforms could trigger a virtuous cycle of growth. Stronger governance and lower corruption would help strengthen revenue mobilization and reduce wasteful spending. In turn, this would create fiscal space that could be used to mitigate social inequalities and enhance human capital formation.[10] It would also encourage the investments needed to increase export diversification and improve product quality, paving the way for faster growth, lower output volatility, and greater macroeconomic stability (Henn et al, 2013; IMF, 2014). In turn, greater stability and stronger growth would further enhance social outcomes and the fiscal position, in a self-sustaining virtuous cycle.

31.   However, reaping the growth payoffs would depend on the scope and quality of reforms and whether these reforms are sustained over time (i.e., no policy reversals). The above simulations do not identify *which* specific policies would improve governance and corruption perceptions, nor the precise *timing* of their impact. Furthermore, and as noted in the literature, the change in corruption perceptions does not necessarily reflect the actual changes in underlying variables under the control of policymakers; and that it could take several years for governance reforms to affect economic performance (Giavazzi and Tabellini, 2005). However, the reform proposals and ongoing reforms, including those initiated by the Government of President João Lourenço, as discussed in the next section, are important steps towards supporting the materialization of the growth gains estimated above.

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[10] Angola's investment in human capital is lower than SSA peers' and social programs are mostly ill-targeted and have been ineffective to address the country's large social gaps.

D.   Reforms: Progress So Far and Challenges Ahead

Political Willingness and Ownership

32.   Political will is critical for successfully implementing governance and anti-corruption reforms. Relevant pillars of Angola's framework for combating corruption and improving governance have been put in place since the end of the civil conflict. In 2009, former President José Eduardo dos Santos declared "zero tolerance" for corruption but efforts to fight corruption continued to lack decisive political ownership. Political will was a key ingredient in cracking down corruption in countries like Botswana, Estonia, Georgia, Hong Kong, Singapore, South Korea, and Rwanda (Svensson, 2005; Terracol, 2015).

33.   The Government of President João Lourenço elected in August 2017 seems committed to strengthen governance and fight corruption. The new administration has correctly assessed that strengthening governance and reducing corruption perceptions is not only a necessity but also critical for businesses. Before taking office, the President pledged to improve the business environment to attract FDI, increase the transparency about the way the government conducts its affairs, and fiercely fight corruption and adapt the banking system to international standards.[11] President João Lourenço's actions so far support good governance at the expense of vested interests. After many dismissals of public officials, investigations have been launched into possible malfeasance at several public entities (Appendix IV summarizes key actions taken so far).

34.   The experiences of other countries suggest that political leadership is necessary but not sufficient to fight corruption successfully. Political leadership and a commitment to fight corruption at the highest levels are an excellent starting point and must be complemented by sustained reforms (e.g., Terracol, 2015). Moreover, there is no "one-size-fits-all" approach to improving governance or reducing corruption perceptions. The international experience suggests that several factors may have contributed to success in this area, starting with political willingness, but also including reforms that reduced opportunities for corruption (e.g., lower red tape and trade barriers, greater fiscal transparency), and reforms that increased the costs of corruption (e.g., independent and strong judicial system, free media, and freedom of speech) (Klitgaard, 1988; Terracol, 2015; Mungiu-Pippidi and Johnston, 2017).

Improving and Enforcing Legislation

35.   Angola has put in place a legal framework to strengthen governance in public administration. The 2010 Constitution has provisions supporting transparency in public administration and against corrupt behavior by the President; a detailed *Public Probity Law* (2010) has norms of conduct for public officials; a *Public Procurement Law* (2010) promotes transparency in the procurement process and includes provisions against corruption; anti-money laundering laws (2011,

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[11] https://www.washingtonpost.com/news/worldviews/wp/2017/05/21/after-37-years-angola-will-get-a-new-president-can-joao-lourenco-reduce-widespread-corruption/?utm_term=.f28b024223b1.

2014) also contain provisions against corruption (see Section B); and a *Private Investment Law* (2015) sought to ensure predictability for investors and property rights.

36.   The *Constitution* has general provisions on governance and corruption. It requires the State budget to obey the principles of transparency and good governance, and be audited by the National Assembly and the Audit Court; it includes the fight against corruption among the key principles guiding Angola's foreign relations; and lists corruption among the crimes that could lead to removing the President from office.

37.   The *Public Probity Law* (*Lei* 3/10) is the main code of conduct for public officials. It incorporates the relevant anti-bribery provisions that had been previously spread across several statutes. The law criminalizes several types of acts (e.g., receiving bribes or kickbacks, theft of State assets). Punishments for illicit acts include fines, seizure of illegal gains, temporary (up to ten years) exclusion from public bidding, temporary (up to eight years) loss of political rights, and criminal penalties (jail time), depending on the act. Violations of budget execution rules are also punishable with imprisonment. To discourage illicit enrichment, the law requires public officials to report their assets when first assuming public office and at every two years thereafter.

38.   The *Public Contracting Law* (*Lei* 20/10) contains provisions to improve transparency, impartiality, probity and ethical behavior in the procurement process. It includes an entire chapter on ethics in the procurement process and goes further than the *Public Probity Law* by criminalizing both passive and active corruption.[12] The law also prohibits public officials from participating in procurement procedures when there is conflict of interest (e.g., procurement involving family businesses). Unlawful acts are punishable with imprisonment, administrative and disciplinary actions, and exclusion from public bidding for up to five years (Feijó and Nadorff, 2014).

39.   The 2016 amendment of the *Public Contracting Law* was a step towards greater efficiency and transparency in public procurement in Angola. To bring Angola's procurement regulation closer to international practices, the revision (*Lei* 9/16) simplified the number of contracting procedures and modalities and adopted two main forms for awarding public contracts: *direct contracts* and more competitive *open tenders* whose minimum threshold was increased threefold. The revision also aimed to prevent unethical behavior by public officials, including by prohibiting their involvement in any public procurement when there is a conflict of interest. The African Development Bank (AfDB), which supported this reform, also recommended launching a procurement portal (already operational); creating a centralized database with information on suppliers; establishing a Technical Procurement Agency; and adopting standardized bidding documents (AfDB, 2014).

40.   In 2015, Angola revised its *Private Investment Law* (*Lei* 14/15), including to help attract FDI. This law ensures against the risk of expropriation by the State and grants fiscal incentives that are conditional on certain criteria, including number of jobs created, geographic location, investment amount, and economic sector. The law also has provisions against unlawful practices by foreign

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[12] Analogous to the US Foreign Corrupt Practice Act and the UK Anti-Bribery Law (Feijó and Nadorff, 2014).

investors, penalties for tax evasion, and for violating tax incentives rules. However, the law does not include any provisions against active and passive corruption affecting FDI.

41.   Angola must enforce more effectively existing laws that support good governance and strengthen the institutions that implement these laws. The legal framework that Angola has put in place since 2010 broadly follows international benchmarks (e.g., Feijó and Nadorff, 2014) but critical issues remain to be addressed:

- *Bring the legal framework even closer to international standards*. For instance, while Angola has signed (2003) and ratified (2006) the United Nations Convention Against Corruption, its legislation does not meet standards of the Convention because it does not cover all corruption crimes defined by the Convention (World Bank, 2012). Remaining legal deficiencies in the AML/CFT that make difficult to hold domestic PEPs accountable should be also addressed, including to bring domestic PEPs into the AML/CFT legal framework.

- *Eliminate loopholes*. The implementation of the asset disclosure provision under the Public Probity Law has been uneven (World Bank, 2012). Public officials can full report upfront and under report afterwards. Its effectiveness is also questioned because declarations of assets are provided in a sealed envelope which can only be opened if authorized by a Court and the public official has been prosecuted for a crime (e.g., Chêne, 2010; Feijó and Nadorff, 2014).

- *Enforce better the legislation supporting good governance*. Angola lacks effective enforcement of the laws enacted so far (Feijó and Nadorff, 2014). It must enforce better its anti-corruption laws, prosecute and convict corrupt officials, and make efforts to recover the stolen proceeds. This would reduce the opportunities for corruption and increase its costs.

- *Improve the efficiency and effectiveness of the judiciary*. The judiciary is typically understaffed, slow, overburdened by a large backlog of cases, and is not adequately equipped to prosecute corruption and wrongdoings in the public administration (e.g., Chêne, 2010).

Strengthening Fiscal Governance

42.   There is scope to increase tax compliance and reduce the vulnerability of AGT to fraud and corruption. AGT would benefit from an organization restructuring that entails a clearer separation of roles and responsibilities. Measures that have been considered in other countries and are in line with Fund TA recommendations include: a specialized team to manage tax and customs arrears, an anti-fraud department to combat frauds and organized crimes (coercive compliance); and a taxpayer service to better interface with taxpayers and promote fiscal education (voluntary compliance). Existing paper-based bureaucratic processes create opportunities for corruption and should be replaced by more efficient and reliable procedures that use modern information technologies. AGT's basic operational procedures have recently been redefined as part of implementing ASYCUDA and SIGT, but this must be complemented by the following actions: increase the integrity of taxpayer registration; strengthen the LTO to reduce vulnerability to fraud and better handle the demands of large taxpayers, while improving its on-time filing ratios; strengthen tax audits and other verification programs to

ensure accuracy of reporting; and reduce customs post-clearance control while improving other customs administration functions.

43.   Additional measures are needed to increase the quality of public investment in Angola. Several actions could be pursued within the existing system without changing legislation, including: (i) greater use of the open tender *Concurso Público* to reduce overpricing and collusive behavior; enforcing a budget execution law passed in 2011 (*Decreto Presidencial* 320/11) that prevents unjustified amendments to contracts exceeding 15 percent of the contract's original value; (ii) supporting the Audit Court—which is deemed to have the capacity and jurisdiction to assess the financial and legal soundness of public investment projects—to exercise its authority and complying with its recommendations; (iii) conducting projects evaluations and requiring pre-feasibility studies for large projects; and (iv) enhancing technical capacity at line ministries. The recent transfer of the portfolio of public investment projects to the Ministry of Finance is a welcome step as it should help reduce coordination problems across ministries and improve the budget process.

44.   Stronger governance would allow better recalibration of investment composition while supporting growth. Strengthening public investment management could close up to two-thirds of the "efficiency gap" (IMF, 2015c), while reducing opportunities for corruption including in the areas more vulnerable to graft such as public procurement.

45.   Angola needs to further strengthen PFM systems. PFM-related actions include: (i) clearing the existing stock of domestic payments arrears and avoiding their recurrence in the future including by enforcing existing internal control mechanisms, holding public officials accountable for violating budget execution rules, and improving cash flow management to increase predictability for budget units, while strengthening their capacity; (ii) enforcing budget ceilings and avoiding reallocation of spending across the main types of expenditure (i.e., recurrent and capital) without approval of the National Assembly; (iii) strengthening budget oversight by the National Assembly and the Audit Court, while increasing the coverage of government entities audited by the Audit Court and following up on its recommendations; (iv) and enhancing fiscal transparency including by publishing in-year and annual fiscal reports on a timely basis and improving the quality of government finance statistics.[13]

46.   A credible medium-term fiscal framework (MTFF) is needed, including to assess spending needs associated with maintaining and running investment projects once these are completed. New projects should only be approved and started if there is fiscal space for their (future) current spending needs (IMF, 2017b). With support of Fund TA, the authorities have recently developed an ambitious work program to implement a full-fledged MTFF by 2019. The program aims at strengthening capacity, improving collaboration across government agencies tasked with policy analysis and medium-term forecasts, improving budget processes, and formulating a fiscal responsibility law to guide fiscal policy in the future.

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[13] With help of Fund TA, the authorities are taking steps to bring fiscal data compilation in line with the international standard, the *Government Finance Statistics Manual 2014* (GFSM 2014).

47.   Angola should further strengthen the transparency in the institutions responsible for managing the oil wealth. For instance, Angola should consider signing up for Extractive Industries Transparency Initiative (EITI) and comply with all recommended good practices, including in the areas of contracts and licenses, and oil revenue allocation.

48.   The transparency and oversight of SOEs should be strengthened. Audited financial statements of all SOEs should be timely and regularly published, as required by law, to improve accountability and transparency. The capacity and autonomy of ISEP should be strengthened to perform its oversight role effectively. Also, it should be able to hold accountable those SOEs that do not comply with the law regarding transparency and best management practices, monitor the financial situation of all SOEs on a timely manner, assess dividend performance, subsidy and capital injection needs, as well as potential sources of contingent liabilities including those stemming from government guarantees and public-private partnerships.

Improving the Business Climate

49.   Reforms that support private investment should complement the measures to improve the quality of public investment. Increasing the efficiency of public investment is necessary but not sufficient to sustain growth in the long run. Angola should also create the conditions for the private sector to play a greater role in total capital formation and economic diversification. Better institutions and regulations have been successful in facilitating diversification, sectoral reallocation of resources and product quality upgrading (IMF, 2014).

50.   Reforms tailored to Angola's needs would include: simplifying procedures for and expediting the issuance of work visas; reducing the large State footprint in the economy; eliminating imbalances in the forex market, including through unwinding administrative measures and restrictions in the forex market (IMF, 2017b). These reforms should be complemented by lowering constraints to FDI that are enshrined in the 2015 *Private Investment Law*; effective provisioning of basic public services (e.g., licensing procedures, registering property and enforcing contracts); and increasing the effectiveness of export- and investment-promoting agencies.

51.   Recently approved laws, if implemented effectively, would bode well for private sector development:

- *Revision of the Private Investment Law*. A draft law reform recently approved by the National Assembly in a first-round vote would remove the requirement for foreign investors to identify a local partner to be allowed to invest in priority sectors, eliminate minimum levels of FDI, and establish stronger sunset clauses for tax incentives. The creation in early 2018 of a one-stop shop for investors (AIPEX), provided it fulfills its mandate effectively, would support the authorities' efforts to attract FDI and diversify the export base.

- *A new Law on Competition*. Monopolies and oligopolies dominate key sectors of the Angolan economy (e.g., telecommunications, cement, and international trade). A new law recently approved by the National Assembly would lay out the legal foundations for promoting greater competition in domestic markets and establish an anti-trust authority to enforce the application of the law.

Strengthening the AML/CFT Framework

52.   Angola should further enhance its AML/CFT framework, including to regain CBRs. The use of alternative payment channels has mitigated the adverse impact of the loss of CBRs on the economy, but a durable solution is still needed. This would require strengthening Angola's supervisory, prudential, and AML/CFT frameworks. In this regard, Angola should implement preventive measures for domestic PEPs, and enhance risk-based supervision of financial institutions and designated non-financial businesses and professions, ahead of the next AML/CFT evaluation in 2020 (IMF, 2017b).

53.   These efforts should be complemented by additional actions, including: strengthening the capacity of the FIU so that it can perform its core functions effectively; building capacity in investigation and prosecution of money-laundering crimes; and complying with the FATF 40 Recommendations in preparation for the forthcoming Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG) mutual evaluation assessment scheduled for 2020. Fund TA will help the authorities to enhance the legal framework and risk-based supervision ahead of the ESAAMLG assessment. A positive assessment would hopefully prevent Angola from reverting back to the FATF list of jurisdictions with strategic deficiencies in AML/CFT. In addition, it may also help convince banks to eventually re-establish direct U.S. dollar CBRs in Angola in the future.

Strengthening Anti-Corruption Agencies

54.   Angola does not have a centralized anti-corruption agency. The investigation of corruption crimes is currently done by a small unit operating within the Office of the Attorney General—the National Department for Prevention and Suppression of Corruption (DNPCC)—created in 2012. DNPCC's work requires collaborating with other anti-corruption agencies, including the Audit Court, the Inspector General of State Administration (IGAE), the Ministry of Interior's Criminal Investigation Service (SIC), the National Department for Criminal Investigation and Prosecution (DNIAP); and the FIU (United Nations, 2017).

55.   Angola's anti-corruption units have different capabilities and legal autonomy. The Audit Court is Angola's supreme auditing institution with the authority to initiate investigations. It is perceived to possess extensive powers (Chêne, 2010), including to hold public officials accountable for public financial irregularities and mismanagement. On the other hand, IGAE is an investigative unit that answers directly to the Office of the President. Despite having a clear legal mandate, a recent episode involving high-level officials of the previous administration raises concerns about IGAE's autonomy and independence.[14] The authorities have acknowledged that DNPCC is too small and ill equipped to perform its tasks effectively.

56.   Strengthening existing anti-corruption agencies should be considered. The Attorney-General's Office, for example, noted that revamping existing units, especially DNPCC, could be easier than creating new anti-corruption agencies. Although there seems to be no consensus about this issue in the literature, some observers have favored the establishment of a centralized and independent

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[14] In 2017, IGAE was ordered to archive all investigations of potential wrongdoing by public officials during 2013–17.

anti-corruption agency in Angola (e.g., Feijó and Nadorff, 2014), probably because it would reduce coordination problems and be more effective in the fight against corruption.

57. **Against this background, President João Lourenço created in March 2018 a specialized anti-corruption agency within the Ministry of Interior**. The newly-created Department for Combating Corruption Crimes is organized under SIC, an arm of the Ministry of Interior that is tasked with combating economic crimes. This department would be the executive branch's key agency with the mandate to prevent and repress corruption crimes. Its role and responsibilities overlap with those of DNPCC. It is still unclear whether both departments would coexist or be merged eventually.

58. **The ongoing reforms, if sustained over time and complemented by other reforms, could help support higher growth**. The reforms that the authorities are already implementing and effective implementation of other reforms, such as the ones discussed in this chapter, would help improve Angola's governance and reduce vulnerabilities to corruption. Enabling an environment with less corruption opportunities would increase the legitimacy of public institutions, lower rent-seeking activities, and create a level-playing field for the private sector. Meanwhile, an improved public investment management would help crowd in private investment, and a better framework for supporting private investment and attracting FDI would further catalyze private sector development. Together, this could trigger a virtuous cycle of growth in Angola and thus support the materialization of the growth gains estimated in this chapter.

E.   Concluding Remarks

59. **Angola has a favorable window of opportunity to overcome its governance challenges**. The country is in a unique moment of its history. The scars of the civil conflict are fading away and the physical infrastructure needed to support growth has been progressively rebuilt and expanded. A stable and predictable political environment—itself an important ingredient for sustainable growth—is in place, and the rule of law is gradually taking hold. Moreover, the Government of President João Lourenço seems to have the political will to carry forward reforms that could further strengthen Angola's institutions.

60. **The following reforms should be considered to further improve governance in Angola**:

- *Speeding up and concluding ongoing legal reforms.* Bring the legal and regulatory frameworks in line with international standards including by implementing ongoing legal reforms (e.g., Law on Competition, and Private Investment Law), revising the existing AML/CFT legal framework and demonstrate successful implementation in preparation for the upcoming assessment in 2020.

- *Enforcing existing laws effectively*. Enforce effectively the existing anti-corruption and AML/CFT frameworks and budget and procurement laws. Equip the judicial system with resources and independence to play its role efficiently.

- *Improving transparency and oversight of fiscal institutions*. Enhance the transparency of budget processes, and publish detailed in-year and annual fiscal reports on a timely basis. Give citizens the opportunity to further engage in the budget process, especially during the budget preparation

phase. Legislative and audit institutions should exercise effective oversight of the State budget and government entities and their recommendations should be implemented.

- *Strengthening PFM controls*. Enforce existing internal controls to prevent recurrence of arrears. Optimize public procurement, including by using competitive bidding and reducing contract uncertainty. Improve the quality and credibility of government finance statistics.

- *Increasing the efficiency of public investment and facilitating economic diversification*. Strengthen the public investment management framework and implement policies to promote private sector development and FDI attraction. Together, these reforms would maximize the returns on investment and create more economic opportunities for the Angolan citizens.

- *Increasing the independence, transparency and oversight of oil-related institutions and SOEs overall*. Shield the state-owned oil company Sonangol and the sovereign wealth fund (FDSEA) from political interference. Strengthen SOE transparency and oversight and equip the Public Enterprises Oversight Institute SOE (ISEP) to enforce good corporate governance practices.

- *Strengthening anti-corruption agencies*. Equip these agencies with the material and human resources that are needed to perform their tasks expeditiously and efficiently. They should be granted autonomy and be shielded from political interference.

- *Building capacity*. This should be especially pursued in the areas of public investment management, tax administration, anti-corruption agencies, and institutions responsible for implementing AML/CFT measures.

61.   These reforms would help achieve faster and more sustainable growth. Bringing Angola's quality of governance and reducing corruption perceptions to the SSA average could increase real GDP per capita growth by up to 2 percentage points annually, or potentially more depending on the depth and quality of reforms, and on the authorities' objectives—for instance bringing Angola to the SSA average (which is nonetheless low compared to other regions) or to the SSA frontier. As oil prices are expected to remain soft for the foreseeable future, better governance would help foster private sector led development and achieve more sustainable and inclusive growth.

Appendix I. A Simple Model of Bribery[1]

Like most economic decisions, engaging in corruption depends on incentives. Addressing distorted incentives and effectively enforcing ethical norms of conduct and punishing corrupt behavior are strong mechanisms in the fight against corruption.

1.   **Suppose the decision on whether to take the bribe is based on a rational cost-benefit analysis**. A public official is offered a bribe B. If the official does not take the bribe, he keeps his pay W and his integrity. For simplicity, it is assumed that a pecuniary value H can be attached to integrity. H could be very small for unscrupulous people or when corruption is socially tolerated. If he does take the bribe, three possible scenarios may unfold. In the first, he is caught with probability p and convicted with probability q, in which case he loses his pay and a share $0 \leq s \leq 1$ of the bribe. He also faces a pecuniary cost J of going to jail (e.g., forgone income, which may be proportional to jail time), plus a cost of having his dishonesty exposed, equal to H for the sake of simplicity. In the second scenario, he is caught but not convicted, in which case he keeps his pay, the full bribe, but faces the cost H. In the third scenario, he is not caught and keeps his pay and the bribe, while facing no shaming cost.

2.   **It is assumed that the agent has linear utility *U***. The utility from not taking the bribe is $U(No\ B) = W + H$ and the expected utility from taking the bribe is:

$$U(B) = pq[sB - W - J - H] + p(1 - q)[W + B - H] + (1 - p)[W + B].$$

The terms on the right-hand side describe in this order the expected payoffs under the three scenarios just described. The official decides to take the bribe if $U(B) > U(No\ B)$, which happens if

$$B > \frac{2pqW + (1 + p)H + pqJ}{1 - pqr},$$

where $r \equiv 1\text{-}s$ is the share of the bribe recovered by the State. This inequality holds more easily, and hence the official is more likely to take the bribe when: the bribe is large; the salary W and the cost of public stigma H are low; the penalty J is soft; the probabilities of being caught p and going to jail q are small; and the share r of the bribe that can be recovered by the State is also small.

3.   **This simple model also identifies key ex-ante and ex-post incentives that could inform the design of an anti-corruption framework**: adequate compensation for public servants, commensurate punishment of corrupt behavior, and efficient administrative and judicial systems to monitor, investigate and convict corrupt agents. Promoting ethical behavior, honesty, integrity, accountability and transparency in the public administration and in the society more generally could also help reduce tolerance for corruption and increase its moral costs.

4.   **It has been noted that wage incentives can reduce bribery but only under certain conditions**, i.e. the public budget can afford higher wages, the enforcement apparatus is effective, and the bribe is not a direct function of the official's wage. If the official can bargain the size of the bribe, a higher wage would only strengthen his bargaining power (Svensson 2005). However, even when some of these conditions are not met, progress could be made along the other dimensions discussed above.

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[1] Adapted from Klitgaard (1988).

Appendix II. Comparator Groups

SSA peers (44): Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Republic of Congo, Comoros, Côte d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, São Tomé and Príncipe, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

LMI peers (51): Armenia Bangladesh, Bolivia, Bhutan, Cabo Verde, Cameroon, Cambodia, Republic of Congo, Côte d'Ivoire, Djibouti, Egypt, El Salvador, Federated States of Micronesia, Georgia, Ghana, Guatemala, Honduras, India, Indonesia, Jordan, Kenya, Kyrgyz Republic, Kiribati, Kosovo, Lao PDR, Lesotho, Sri Lanka, Mauritania, Moldova, Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, Solomon Islands, Sudan, São Tomé and Príncipe, Swaziland, Syria, Tajikistan, Timor-Leste, Tunisia, Ukraine, Uzbekistan, Vietnam, Vanuatu, Yemen, and Zambia.

Oil exporters (27): Algeria, Azerbaijan, Bahrain, Bolivia, Brunei Darussalam, Chad, Republic of Congo, Ecuador, Equatorial Guinea, Gabon, Islamic Republic of Iran, Iraq, Kazakhstan, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, Timor-Leste, Trinidad and Tobago, Turkmenistan, United Arab Emirates, Venezuela, and Yemen.

Appendix III. Governance and Tax Potential

Weak governance increases tax inefficiency and leads to suboptimal revenue mobilization from non-resource sectors in SSA countries. The forgone revenue estimated for Angola is larger than that for the average SSA country, reflecting its below-average quality of governance. Therefore, improving Angola's governance could help mobilize additional non-oil tax revenue.

1.   **Tax potential or forgone revenue is the distance between the tax frontier or tax capacity and the actual tax collection**. As noted in IMF (2015b), this difference reflects conscious policy choices and preferences for low taxation and inefficiencies that constrain revenue mobilization. Fenochietto and Pessino (2013) argue that the quality of policy and institutions may affect the tax potential. This appendix explores the latter in the context of SSA and Angola. Following Fenochietto and Pessino (2013) and IMF (2015b), a model for the tax capacity and tax potential is estimated using a sample of SSA countries, data covering the last decade, and an econometric model that allows country-specific variables to affect the tax inefficiency:

$$\tau_{it} = \alpha_i + \beta' x_{it} + v_{it} - u_{it},$$

where τ_{it} is (log) of non-resource revenue-to-GDP ratio for country i in period t, α_i is a country fixed effect, x_{it} is a vector of variables affecting revenue collection, v_{it} is an error term, and u_{it} is a nonnegative random variable independent of v_{it}. The term $\alpha_i + \beta' x_{it}$ is the (deterministic) tax frontier, whereas u_{it} is the (stochastic) tax potential. Following the above references, the vector x_{it} includes the level of development given by the log of real GDP per capita and its square (to capture potential nonlinearities), trade openness (exports plus imports in percent of GDP), value added of agriculture in percent of GDP (proxy for difficulty of collecting tax), public expenditure on education in percent of GDP (proxy for tax compliance), and a dummy variable to control for differences in government perimeter (central versus general government).

2.   **Weak governance is assumed to constrain revenue mobilization**. For the tax potential u_{it} it is assumed a truncated normal distribution with positive mean that is modeled as a function of governance (WGI), obstacles to paying taxes from World Bank's Ease of Doing Business survey, and dummies for armed conflicts and oil exporters. Therefore, weak governance and the factors aforementioned are expected to increase tax inefficiency and lead to suboptimal revenue mobilization.

3.   **As shown in the text table, most coefficients are statistically significant at conventional significant levels and have the expected sign**. The positive and significant coefficient on the dummy for oil exporters confirms that non-oil revenue mobilization is weaker in these countries, reflecting their less developed tax structures and tax administrations (Fenochietto and Pessino, 2013). It is also in line with the findings of IMF (2015b) using a sample of developing and emerging market economies. Moreover, the coefficients on obstacles to paying tax and on governance have the expected sign and are statistically significant. This evidence suggests that higher obstacles to paying taxes and weaker governance may indeed constrain revenue mobilization in SSA.

Stochastic frontier model for non-resource revenue in SSA		
Variable	Coefficient	Standard error
	Frontier model	
Constant	8.120 ***	0.9290
Log GDP per capita	-1.297 ***	0.2140
Log GDP per capita squared	0.076 ***	0.0124
Trade openness	0.002 ***	0.0004
Share of agriculture in VA	-0.011 ***	0.0014
Public expenditure on education	0.049 ***	0.0072
Government perimeter	0.058 **	0.0256
	Inefficiency	
Constant	0.336	1.4170
Oil exporter dummy	4.399 **	2.0850
Conflict dummy	0.554	0.8990
Change in obstacles to paying taxes	0.497 **	0.2310
Governance	-0.199 **	0.1000
Variance of inefficiency	1.197	0.0237
Gamma	0.983	0.0535
Observations	345	345

***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively.

Appendix IV. MPLA's Governance Reforms and Early Actions by the New Government

Angola's ruling MPLA party and winner of the August 2017 general elections vowed to improve governance and fight corruption. The broad contours of the MPLA's and the early actions by the Government of President João Lourenço go in the right direction.

1.   The winning party vowed to implement a broad reform of the State, involving public administration, administrative procedures, and the judicial system. The reform intends to increase the efficiency and effectiveness of government functions, while preserving law and order and political stability. The reform of the public administration would include redefining the roles of central and local governments, with the former focusing on elaborating, monitoring and assessing public policies, and the latter on delivering public services to citizens. Administrative procedures would be streamlined, to facilitate information-sharing and use of smart technologies. The reform of the judicial system would include passing laws to adapt the structure and operation of the judiciary to Angola's needs, improve property rights (e.g., an insolvency law), strengthen human resources, and recalibrate the size of courts' staff to ensure timely resolution of cases.

2.   The MPLA's anti-corruption strategy intends to reduce the severity of corruption problems in Angola but some specifics have yet to be fully spelled out. The strategy aims at combating all types of corruption and seeking stronger punishment for corrupt behavior. However, it is unclear how grand corruption would be addressed in practice and whether politically connected people implicated in corruption would be prosecuted to the full extent of the law. It is also unclear how the anti-corruption agencies, including the one recently created by the President, would fulfill their mandate effectively and in a coordinated manner.

3.   However, the basic principles of the strategy look conceptually sound. It is aligned with theory and evidence suggesting that harsher and surer punishment is a key ingredient for combating corruption. A reform of civil service wages, if pursued under the public-sector reorganization and if focused on performance-based compensation as envisaged by the authorities, could also help reduce the incidence of corruption (Appendix I).

4.   The early actions of the new government go towards improving governance, corruption perceptions, and the business environment:

- Curbing nepotism in the public administration;
- Moving against vested interests;
- Investigating high-level officials for potential wrongdoings;
- Creating an expectedly stronger anti-corruption unit;
- Approving a new Law on Competition;
- Approving a Private Investment Law that to attract FDI; and
- Creating a one-stop shop for investors.

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