ANGOLA

SELECTED ISSUES

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ANGOLA

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February 7, 2023

Approved By
The African Department

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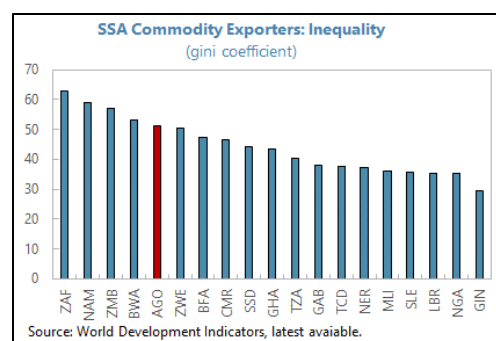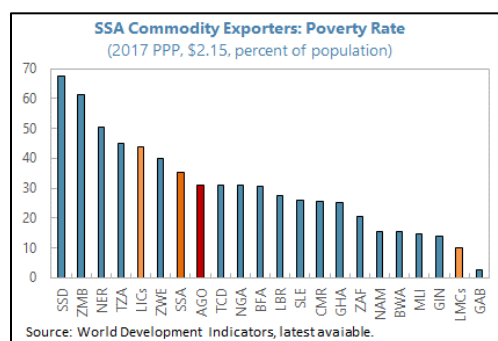
CONTENTS

DEVELOPMENT PLANNING, SDG PROGRESS, AND FISCAL SPACE IN ANGOLA[1]

A. Introduction

1.   **Boosting economic diversification and reducing poverty and inequality are key medium- to long-term challenges for the Angolan authorities**. The upcoming 2023-27 National Development Plan (NDP) offers an opportunity to assess and focus spending priorities with these challenges in mind. The Sustainable Development Goals (SDG) agenda can help to inform and focus this process by identifying areas in which Angola is particularly far from the high-performing thresholds for SDG attainment. This paper focuses on SDG categories related to human and physical capital and social spending, which will be critical toward the authorities' economic diversification goals (IMF, 2022). Angola lags most lower-middle income country (LMC) peers in both spending on and progress toward SDGs in these areas (particularly with regard to education and health), although it performs better relative to Sub-Saharan African (SSA) peers. Underperformance within its income group should be viewed in the context of a low starting point – emerging from a long civil war in 2002 and vulnerabilities to boom-bust cycles as a commodity exporter. This paper uses two models – a costing model and a financing model – to illustrate the large costs of reaching the SDGs by the target year of 2030 and to highlight particular cost drivers. While it finds that this cost is very high, it also shows that Angola can still make considerable progress toward achieving these goals over a longer period in a way that is consistent with macroeconomic stability and debt sustainability. It can do so by pursuing prudent borrowing; creating additional fiscal space through policy measures and reforms; increasing private sector involvement; and continuing with diversification-enhancing structural reforms. Along these lines, support from bilateral and multilateral partners will also be useful.

B. Context

2.   **Poverty and inequality in Angola are high compared to regional and income-group peers.** The legacies of civil war, including governance issues, and six years of recession in the runup to the global pandemic contributed to weak development outcomes despite Angola's oil boom over 2004-14. While Angola is classified as an LCM and has a relatively high GDP per capita (the 10th-highest in SSA in purchasing power parity terms),

SSA Commodity Exporters: Poverty Rate
(2017 PPP, $2.15, percent of population)
Source: World Development Indicators, latest avaiable.

SSA Commodity Exporters: Inequality
(gini coefficient)
Source: World Development Indicators, latest avaiable.

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[1] Prepared by Dalmacio Benicio (FAD) and Jason Weiss (AFR).

poverty remains elevated at 31 percent, underperforming relative to LMC peers (although this is in line with SSA commodity exporters and lower than LICs). This is also consistent with high levels of inequality, including relative to SSA commodity exporters.

3.   Underlying these relatively high poverty and inequality levels are large development gaps. In considering progress toward the SDGs, Angola lags relative to median SSA and emerging market (EM) peers across most categories (although it is much closer to SSA than EM peers). This includes, especially, the critical areas of health, education, water and sanitation, electricity, and roads, where Angola performs toward the bottom of EMs and, in the case of education, health, and roads, below the median SSA performers.

Angola: Sustainable Development Goals Performance Comparison

Source: Source: IMF staff calculations using Sachs, J., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. (2021). The Decade of Action for the Sustainable Development Goals: Sustainable Development Report 2021. Cambridge: Cambridge University Press.
Note: SDG3, SDG4, and SDG6 are the indexes ranging from 0 to 100 (left scale); SDG7 is the access to electricity as percentage of population (left scale); and SDG9 is the 2018 World Bank's Logistics Performance Index's Quality of Trade and Transport Infrastructure Component Score ranging from 1 to 5 (right scale), (available from: http://lpi.worldbank.org/international/global).

4.   The situation has likely worsened with the global pandemic. While social support was temporarily increased during the pandemic (see below), scarring due to the pandemic could be high. For instance, Cuesta Aguirre and Hanan (2021) find that past pandemics are associated with lower output and higher unemployment, poverty rates and gaps, and inequality into the medium term. They find that these negative effects are worse for countries with a starting point of relatively limited fiscal support and health expenditure and high informality – all factors that apply to Angola. Fuceri et al (2021) also found that past pandemics have led to increases in inequality, while IMF (2021) found that the COVID-19 pandemic had a disproportionately stronger impact on informal workers. Channels through which this can act can be, for instance, via education disruption, leaving a lasting impact on human capital accumulation; and informal workers' limited access to social safety nets. With limited social and health spending (see below) and an informal economy estimated at a sizeable 35 percent of GDP (Medina and Schneider, 2018), it would be expected that the pandemic will have had a particularly negative impact on development in Angola.
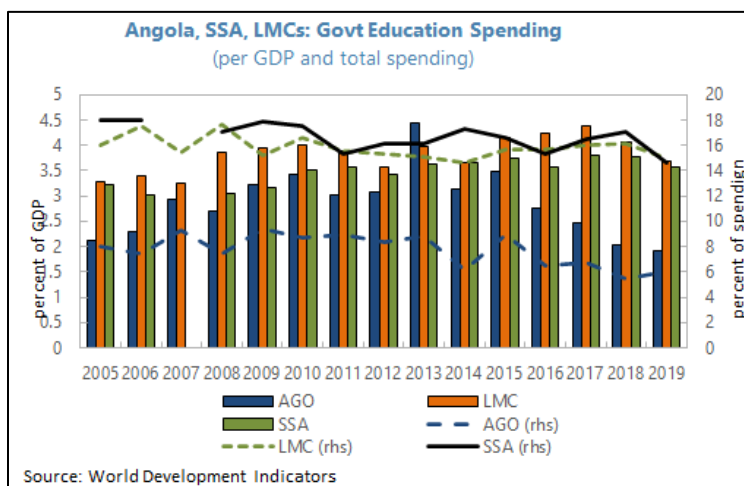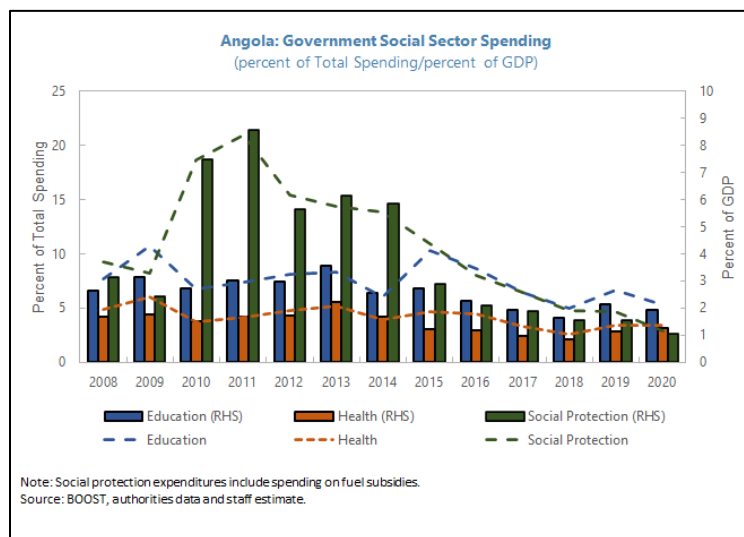
5. **Improving performance in these areas is a matter of macroeconomic stability as well as development.** Economic diversification away from the oil sector is a matter of both development and macro-criticality for Angola: Long-term global oil sector prospects are limited and the economy is still highly vulnerable to oil shocks. Gaps in human capital and infrastructure create drags on productivity and pose obstacles to diversification. Investments in these areas will be necessary to grow non-oil economic activity and make Angola less dependent on oil (IMF, 2022).
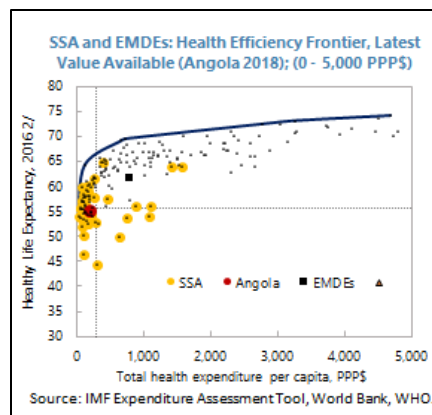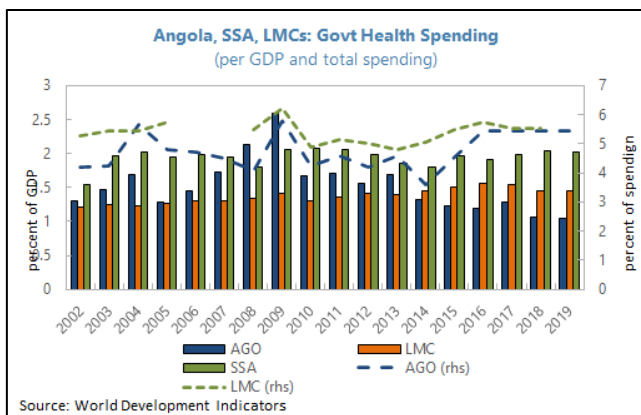
C.   Social, Human Capital, and Infrastructure Spending

6. **Angola's social and human capital spending has historically been low and inefficient.** Social spending has largely declined since the mid-2010s. This is the case for both public health and education expenditures as shares of GDP and total expenditure. This has made the gaps with peers more pronounced, especially in the case of education spending.

Angola: Government Social Sector Spending
(percent of Total Spending/percent of GDP)

Note: Social protection expenditures include spending on fuel subsidies.
Source: BOOST, authorities data and staff estimate.

7. **Education expenditure and efficiency lag peers.** As a share of total government expenditure, education spending significantly lags SSA and EMDE peers and fell in the runup to the pandemic, with spending biased toward tertiary education. In terms of efficiency, teacher-student ratios historically lagged EMDEs (although they are roughly in line with SSA peers) and appear to have had little relationship to outcomes. Teacher-student ratios are also low relative to primary and secondary school net enrollment, and net primary school enrollment has significantly lagged peers.

Angola, SSA, LMCs: Govt Education Spending
(per GDP and total spending)

Source: World Development Indicators

8. **Spending on health is low and inefficient.** Angola's public health expenditure as a share of GDP and total spending are low relative to SSAs and EMDEs. Moreover, public health spending as a share of GDP and expenditure has been on a downward trend since the early 2010s, excluding an uptick around the pandemic, with weak budget execution as well. Health spending efficiency in Angola is, in turn, also low, with weak health outcomes across a variety of individual areas.

Angola, SSA, LMCs: Govt Health Spending (per GDP and total spending)

Source: World Development Indicators

SSA and EMDEs: Health Efficiency Frontier, Latest Value Available (Angola 2018); (0 - 5,000 PPP$)

Source: IMF Expenditure Assessment Tool, World Bank, WHO.

9.   Overall social protection and labor assistance coverage has also been limited, with 12 percent of the population covered.
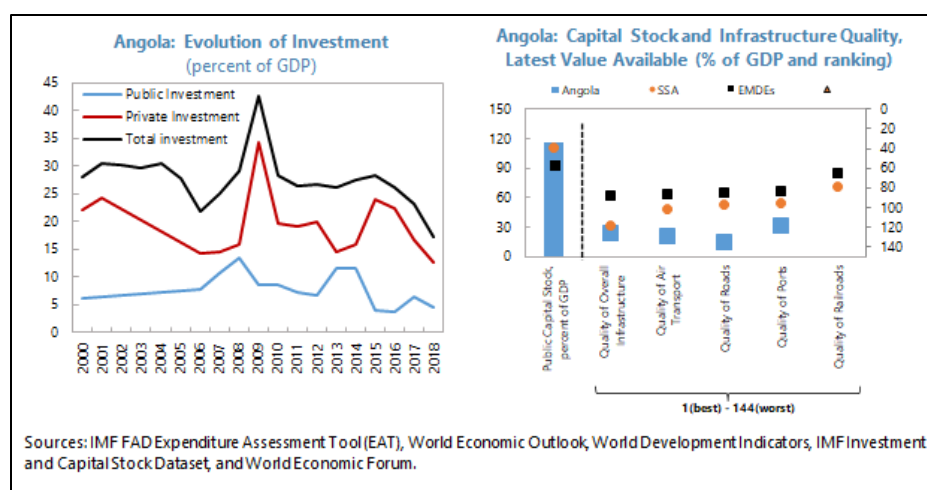This protection is skewed toward urban residents (14 percent coverage), with rural areas receiving lower coverage (8 percent). The social assistance component of social protection (rather than social insurance) covers only 5 percent of the population. These two measures of social protection are both low relative to SSA peers. The poorest quintile experiences the lowest level of coverage of all social and labor protection and only the second-highest level of social assistance coverage. The introduction of the Kwenda program in 2020 is a

Angola: Social Protection Coverage (percent of population covered, 2018)

positive sign of a scaling up and improved targeting of social assistance.[2]

Angola: Social Protection & Labor Coverage by Quintile, 2018

Angola: Social Assistance Coverage by Quintile, 2018

SSA: Social Protection & Labor Cov. most recent year available

SSA: Social Assistance Coverage most recent year available

Source: ASPIRE Database

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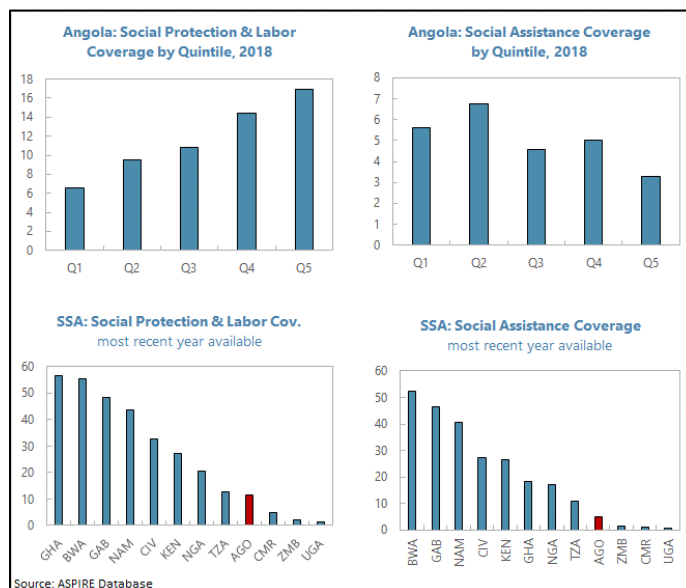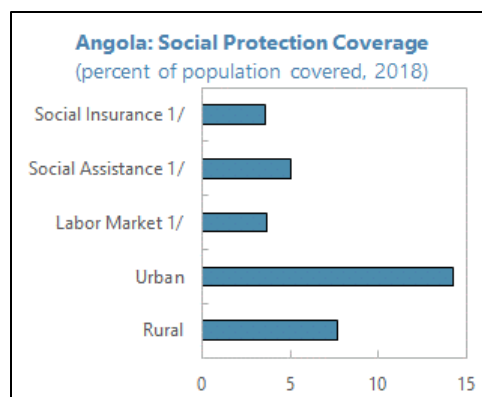
[2] The Kwenda cash transfer program has continued to expand, with over half of households registered and a third receiving payments, although logistical and infrastructure constraints have meant missed targets. The program is seen as the main impact mitigation mechanism (and prerequisite) for a potential fuel subsidy reform.

10. **Investment in infrastructure declined significantly over the past decade, and quality remains weak.** Public and private investment as a share of GDP rose sharply in the late 2000s amid the end of the civil war and a global oil boom, and then (necessarily, given the path of oil revenues and fiscal constraints) saw a decline from the mid-2010s onward. This investment does appear to have had some positive impact on Angola's public capital stock, which left it in line with its SSA and EMDE peers as a share of GDP. However, the quality of its infrastructure across several categories is relatively weak, suggesting inefficient use of that investment.
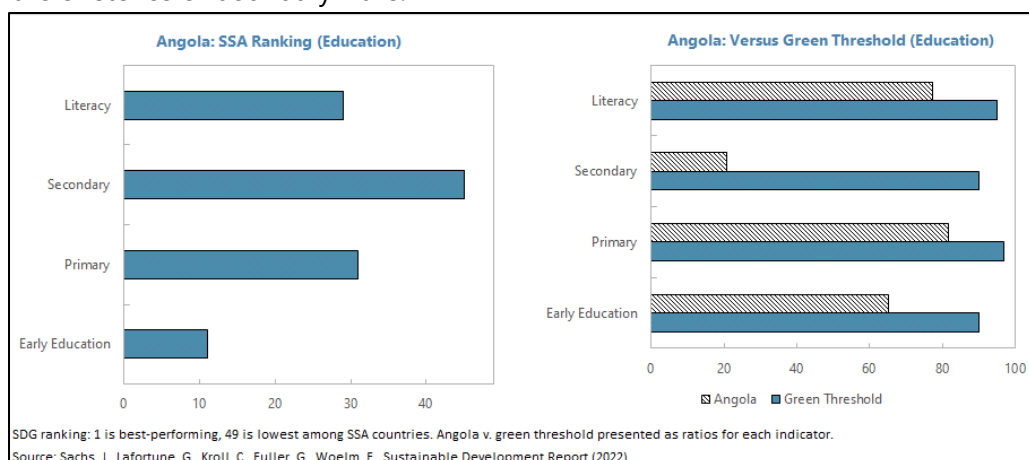

Sources: IMF FAD Expenditure Assessment Tool (EAT), World Economic Outlook, World Development Indicators, IMF Investment and Capital Stock Dataset, and World Economic Forum.

11. **The 2019 public investment management assessment (PIMA) is consistent with this view.** It found ample room for improvement in PIM procedures and practices, with Angola scoring low on measures of impact and public investment efficiency. As such, Angola has not benefitted as much as it should have from better access to infrastructure and public services, relative to the level of investments made: Reaching the SSA average for efficiency would double infrastructure access and increase infrastructure quality by 63 percent. This gap is driven in part by the institutional design of PIM in Angola, specifically regarding budgeting, project selection, procurement, and availability of funding, despite adequate formal rules and regulations.

D.   SDG Performance and Costs

12. **Investments in these areas to approach the SDGs would be significant.** For an illustrative example of the magnitude of the cost, we follow the methodology developed by Gaspar and others (2019) (see Annex I.I for a discussion of the methodology): For Angola to achieve, by 2030, the SDG outcomes in the critical human capital and infrastructure sectors of high performing countries in a similar income group would require additional annual spending of 20.8 percent of 2030 GDP. This additional annual spending is about 1.5 percent of GDP higher than the SSA average. Below, we provide a sectoral breakdown of the total cost estimate; discuss the drivers of these costs per sector;

and examine the current performance of SDG sub-sectors relative to SSA peers and the SDG "green threshold" (which defines SDG achievement for each indicator). [3]
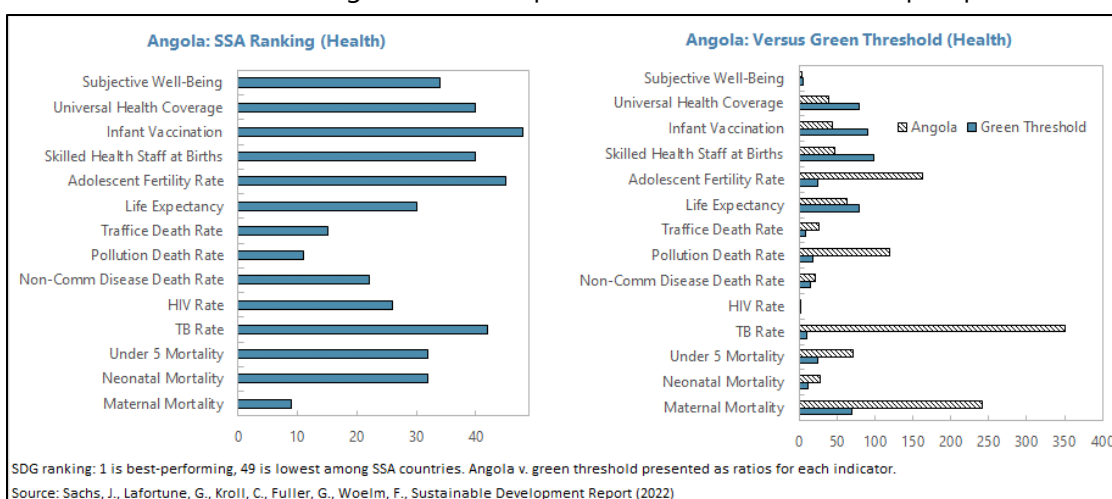
- **Education**: *Additional spending needs in education are about 8.3 percent of 2030 GDP (this is the most costly of the five categories). The SSA average for education is 5.7 percent of GDP.* The drivers of the estimated additional spending needs include *increasing enrollment rates, increasing numbers and quality of teachers, increasing teacher wages, and building new and improving existing school infrastructure.* Angola ranks relatively well against its SSA peers on SDG education sub-categories in terms of secondary enrollment. But it still underperforms in absolute terms, as it is significantly far from the SDG green threshold. Its primary and early education enrollment are much closer to the green threshold, although Angola underperforms most of its SSA peers on the latter. The required spending reflects both a need to (i) increase the teacher wage bill to hire more teachers to support higher enrollment and reduce class size; and (ii) raise capital spending to build more schools and improve school infrastructure, such as the availability of bathrooms, electricity, drinking water, and the existence of boundary walls.

Angola: SSA Ranking (Education)

Angola: Versus Green Threshold (Education)

SDG ranking: 1 is best-performing, 49 is lowest among SSA countries. Angola v. green threshold presented as ratios for each indicator.
Source: Sachs, J., Lafortune, G., Kroll, C., Fuller, G., Woelm, F., Sustainable Development Report (2022)

Angola: SDG Costing Assessment Detail: Education

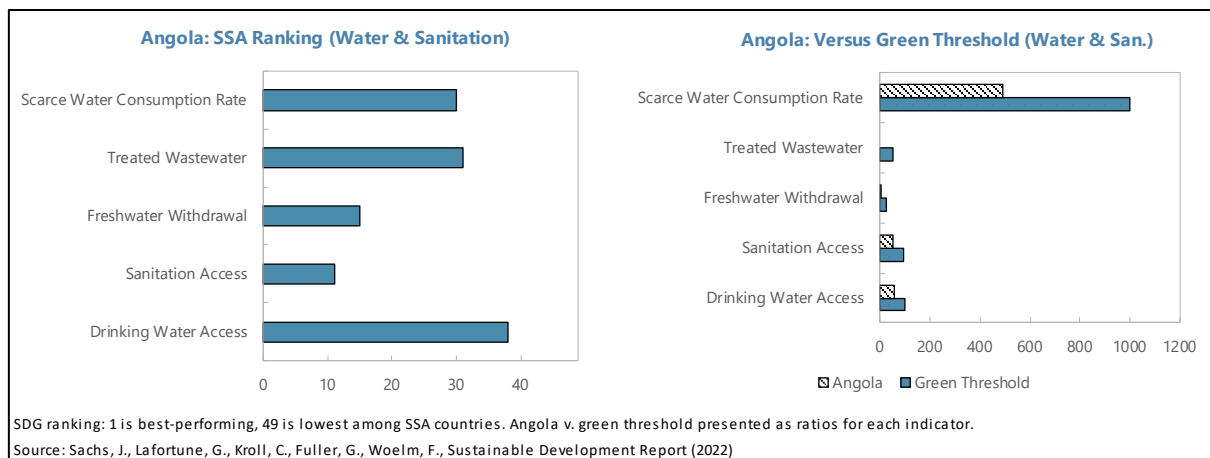|		Angola	
	High performance 1/	2020 (or latest)	2030
GDP per capita	4,137	1,743	1,821
Cost Drivers and Other Factors			
Students per teacher ratio	17.8	45.1	17.8
Teacher wages (ratio to GDP per capita)	2.7	2.0	2.7
Capital and other recurrent spending (% total spending)	43.5	30.9	43.5
Student age population (% total population)	33.2	51.8	51.1
Enrollment rate (preprimary to tertiary)	77.9	50.2	80.1
Private share (% of total spending)	34.6	23.2	34.6
Spending and Outcomes			
Education spending (percent of GDP)	6.8	2.5	10.8
Public education spending (percent of GDP)	4.5	1.9	7.1
Private education spending (percent of GDP)	2.4	0.6	3.7
Spending per student (USD 2020)	1,093	168	481
SDG4 index	93.5	42.2	>87
Additional Education Spending By 2030 (percent of GDP)			8.3

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[3] For each SDG indicator, SDG achievement is defined by the green threshold set for SDG dashboards. The difference between country score and the green threshold indicates the gap to be closed to meet that particular SDG (Sachs, Jeffrey et al, 2022).

- **Health:** *The additional spending needs in health care are about 5.7 percent of 2030 GDP (versus 4.2 percent of GDP for SSA),* including *increasing the number of doctors and other medical personnel as well as their wages.* Angola ranks relatively well compared to most SSA peers in most SDG health sub-categories, although it ranks in the bottom half of SSA on maternal mortality, non-communicable disease death rate, and pollution and traffic death rates. Angola's performance relative to the SDG green threshold is particularly far off on infant vaccination, skilled health staff at births, adolescent fertility rate, tuberculosis rate, and under-5 and neonatal mortality. To achieve high performance in the health SDG, the number of doctors should be increased tenfold. The number of other medical personnel, currently far below the high performing countries, should be increased by about two thirds from its current level. Moreover, wages of medical personnel must rise to catch up to peers.
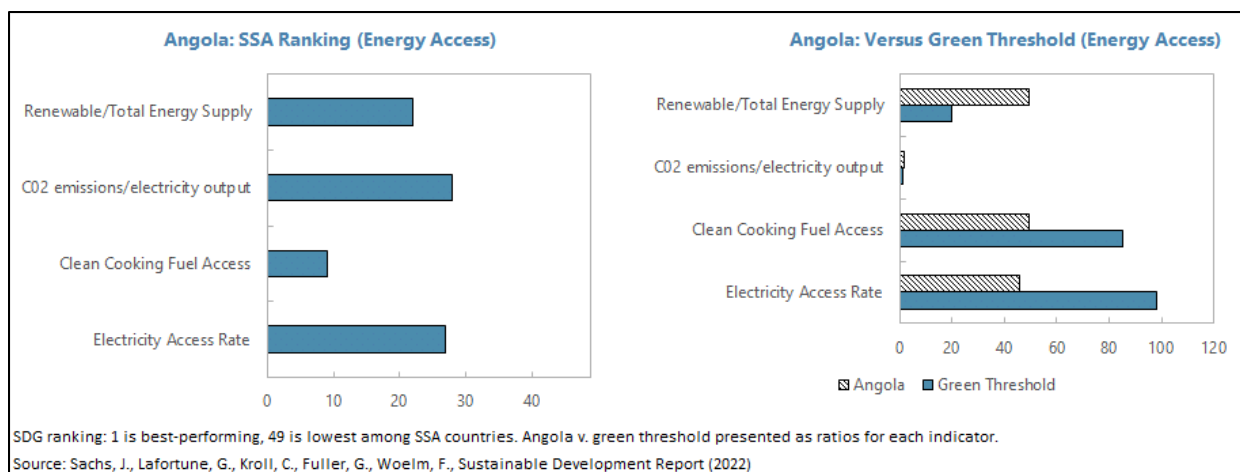

SDG ranking: 1 is best-performing, 49 is lowest among SSA countries. Angola v. green threshold presented as ratios for each indicator.
Source: Sachs, J., Lafortune, G., Kroll, C., Fuller, G., Woelm, F., Sustainable Development Report (2022)

Angola: SDG Costing Assessment Detail: Health			
		Angola	
	High performance 1/	**2020 (or latest)**	**2030**
GDP per capita	4,456	1,743	1,821
Cost Drivers and Other Factors			
High-cost population (<1 and 60+) (percent of total population)	15.4	8.0	8.0
Doctors per 1,000 population	2.1	0.2	2.1
Doctors per 1,000 population - demographically adjusted	2.9	0.2	2.1
Other medical personnel per 1,000 population	4.6	2.8	4.6
Other medical personnel per 1,000 population (demographically adj)	6.4	2.4	4.6
Doctor wages (ratio to GDP per capita)	7.1	5.0	7.1
Other recurrent & capital health spending (percent tot health spend)	55.6	62.2	55.6
Private health spending (percent of total health spending)	46.2	55.6	46.2
Spending and Outcomes			
Total health spending (percent of GDP)	7.0	2.8	8.6
Public health spending (percent of GDP)	3.8	1.3	4.6
Private health spending (percent of GDP)	3.2	1.6	4.0
Per capita health spending (US$)	310.9	49.6	155.8
SDG3 index	78.5	34.8	>75
Additional Health Spending by 2030 (percent of GDP)			**5.71**
1/ 3-year average GDP per capita US$3000-US$6000			

- **Water and Sanitation**: *Aiming to provide safely managed water and sanitation for all would require investing equivalent to spending 2.1 percent of GDP every year from now to 2030, a level comparable to the SSA average.* Angola is far behind the water and sanitation SDG green thresholds across all categories and ranks toward the bottom of SSA peers on sanitation access and freshwater withdrawal. The bulk of the burden of additional spending comes from safely managed sanitation in rural areas

Angola: SSA Ranking (Water & Sanitation)

Angola: Versus Green Threshold (Water & San.)

SDG ranking: 1 is best-performing, 49 is lowest among SSA countries. Angola v. green threshold presented as ratios for each indicator.

Source: Sachs, J., Lafortune, G., Kroll, C., Fuller, G., Woelm, F., Sustainable Development Report (2022)

Angola: SDG Costing Assessment Detail: Water and Sanitation

	Ending open defecation	Basic						Safely Managed				Total
		Water		Sanitation		Hygiene		Water		Sanitation		
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
Total unserved population (million), today and through 2030	0.9	12.2	13.8	13.8	13.8	11.1	12.8	15.8	17.3	11.6	15.8	33.1
Cost per capita (US$)	18.8	145.4	76.0	35.9	168.3	3.4	4.4	438.7	237.9	405.3	324.6	761.2
Total additional cost (US$ million)	16.8	1,778	1,048	497	2,323	38	56	6,952	4,105	4,684	5,122	25,198
Annual additional cost (US$ million)	16.8	119	70	33	155	3	4	463	274	312	341	1,688
Total additional cost (percent of GDP)	0.0	2.2	1.3	0.6	2.8	0.0	0.1	8.5	5.0	5.7	6.3	30.8
Additional annual cost by 2030 (pct GDP)	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.6	0.3	0.4	0.4	**2.1**

- **Electricity:** Although Angola performs well relative to the electricity SDG threshold in terms of renewables as a share of total energy supply, this is perhaps a function of a relatively low energy supply. It is far from the SDG green threshold on electricity access rate, as well as clean cooking fuel access. *Angola would need to invest an aggregate of 1.2 percent of GDP every year to 2030 to cover some 53 percent of the population lacking access to electricity and keep up with the fast-growing population and economic growth (this is the least costly of the five categories and is similar to the SSA average).* Electricity consumption is expected to increase, reflecting population growth and higher per capita consumption. This does not include investment in the planned shift toward renewable energy, which could bring substantial environmental advantages at a local and global level.

Angola: SSA Ranking (Energy Access)

Angola: Versus Green Threshold (Energy Access)

SDG ranking: 1 is best-performing, 49 is lowest among SSA countries. Angola v. green threshold presented as ratios for each indicator.

Source: Sachs, J., Lafortune, G., Kroll, C., Fuller, G., Woelm, F., Sustainable Development Report (2022)

Angola: SDG Costing Assessment Detail: Electricity		
Parameters		
Unit cost of investment (generation, transmission, dist. costs) (US$/kW)	2,600	
Depreciation rate per year	5%	
Regression coefficient (electricity consumption on GDP per capita)	1.06	
	2020	**2030**
Income, Population, and Electricity Access		
GDP (US$ billion)	58.3	81.8
Percentage growth		*40.4%*
GDP per capita (US$)	1,743	1,821
Percentage growth		*4.5%*
Population (thousand)	33,428	44,912
Percentage growth		*34.4%*
Access to electricity (percent of population)	46.9	100
Additional population to be connected by 2030		29,236,852
Initial consumption per capita (kWh)	348.8	
Electricity consumption per user (kWh)	743.8	779.1
Additional consumption per person to keep up with growth (kWh)		35.3
Cost of required investment		
Total construction cost of current electricity network (US$ billion)		3.46
Depreciation cost to maintain current electricity network (US$ billion)		0.20
Discounting factor for depreciation		0.60
Total cost of connecting new users (US$ billion)		6.45
Total cost to keep up with growth (US$ billion)		0.47
Total additional cost of construction (US$ billion)		6.93
1+ Annual compound annual growth rate of GDP, today to 2030		1.03
Factor to account for GDP growth		1.09
Additional annual cost by 2030 (percent of GDP)		**1.20**

- **Roads**: *Increasing rural access from the currently low 20 percent to 90 percent by 2030 will require* investing the equivalent of 3.5 percent of GDP every year from now to 2030 (just over half of the SSA average level) on *about 20,364 additional kilometers of all-weather roads* (or about a 142 percent increase in road length).

Angola: SDG Costing Assessment Detail: Roads		
Parameters		
Unit cost ($/km)	1,000,000	
Annual depreciation rate	5%	
Years to SDG end-period	10	
Income group	Emerging Market Economies	
Regression coefficients:		
Roads to GDP elasticity	0.5528	
Roads to population-density elasticity	0.5886	
Roads percent increase per rise in RAI index point	0.0105	
Roads percent increase per rise in percent rural population	0.0072	
	2020	**2030**
Income, Population and Rural Access		
GDP (US$ billion)	58.3	81.8
GDP per capita (US$)	1,743	1,821
Population (thousand)	33,428	44,912
Rural population (percent of total population)	34.5	27.5
Rural Access Index (RAI)	19.6	90.0
Contribution to growth of road network:		
GDP per capita growth's contribution		2.4%
Population density's contribution		17.4%
RAI's contribution		73.6%
Rural share's contribution		-5.1%
Growth of roads		88.4%
Length of roads (km)	14,340	34,704
Cost of required investment		
Total construction cost of current road infrastructure (US$ bn)		14.34
Depreciation cost to maintain current road infrastructure (US$ bn)		0.83
Discounting factor for depreciation		0.60
Total additional cost of construction (US$ billion)		20.36
1+ Annual compound annual growth rate of GDP, today to 2030		1.03
Factor to account for GDP growth		1.09
Additional annual cost by 2030 (percent of GDP)		**3.5**

13. **Taken together, an annual cost of 20.8 percent of GDP to achieve the human capital and infrastructure SDG outcomes of high performing peers by 2030 would mean, under a more realistic baseline scenario, that Angola would not be able to afford the investments required for more than 22 years beyond the target year of 2030 (see the financing options under the baseline scenario below).** This reflects an exceptionally low starting point and high spending pressure to meet SDGs and other spending needs while keeping public debt sustainable.

Angola: Summary of Additonal Expenditures by 2030	
(percent of GDP)	
Education	8.3
Health	5.7
Water & Sanitation	2.1
Electricity	1.2
Roads	3.5
Total	**20.8**

E. Financing for the SDGs

14.   There are still scenarios under which Angola could make significant progress towards achieving human capital and infrastructure SDGs. In this section, we explore the level and sources of financing that such scenarios would require. The SDG financing tool (Benedek, et al, 2021) is a framework that helps to answer the above questions (see Annex I.II for a description of the methodology). It evaluates the financing needed to achieve the SDGs in a macroeconomically consistent and dynamic setting. The tool allows the user to take as given the SDGs' needs as outlined in the previous section and assesses the economy's capacity to generate alternative financing options, including domestic revenue mobilization, private sector funding, and support from the international community. In particular, the framework gauges whether and how the SDGs can realistically be achieved by 2030 and, if not by 2030, then by when. It then uses different scenario assumptions to determine how large the remaining financing gap is, on average, between the current and target years. The tool is dynamic, with projections up to 2052, and with a production function that assures that output is consistent with spending on human capital (education and health) and physical capital (roads, electricity, and water and sanitation). The simulations include a set of accounting identities throughout the real, fiscal, and external sectors to ensure macroeconomic consistency.

15.   Before proceeding to the results, a few caveats should be acknowledged. First, as is the case in exercises using dynamic models, it must be cautioned that the model results are sensitive to the assumptions. As such, the model results should be regarded as illustrative only. Second, the model by design provides an estimate of the financing needed to support the estimated costs to achieve the SDG green threshold but is not a policy prescription.

16.   The SDG Financing tool suggests large financing needs:

- Under the illustrative cost example discussed above, Angola would need additional annual financing equivalent to 17.3 and 11.4 percent of GDP under the baseline and reform scenarios, respectively, to meet the human capital and infrastructure SDGs by 2030.

- Under the baseline scenario, Angola would not be expected to reach its SDGs by 2052 (the final year considered by the financing tool).

- Alternately, under a reform scenario, Angola can make considerable progress towards achieving its SDGs in a much shorter timeline (by 2040) than under the baseline and achieve much higher real GDP per capita. It would need to pursue prudent borrowing consistent with debt sustainability; prioritize tax revenue mobilization; reform fuel subsidies; optimize expenditure reallocation and efficiencies by targeting duly appraised, selected, and costed priority projects with the most value for money; increase private sector savings and participation; and pursue TFP- and growth-raising diversification of the non-oil economy.

F. Fiscal Space Is Limited

17.   These heightened development needs come in the context of a long but necessary fiscal consolidation. Global oil prices began to fall from 2014 onward. With over half of its revenue dependent on oil and public debt levels already elevated, this posed a critical threat to Angola's fiscal balances and debt sustainability. The authorities embarked on a necessarily sizeable fiscal consolidation over 2018-21 to ensure macroeconomic stability and preserve debt sustainability. With oil production and prices – and thus revenues – low for most of this period, and with interest spending as a share of total expenditure among the highest in SSA, the consolidation had a large primary expenditure compression component, although strong steps were also taken to boost non-oil revenues. While critical to maintaining stability, this was one of the largest adjustments in SSA over this period. Expenditure cuts fell on both current and capital spending roughly evenly.
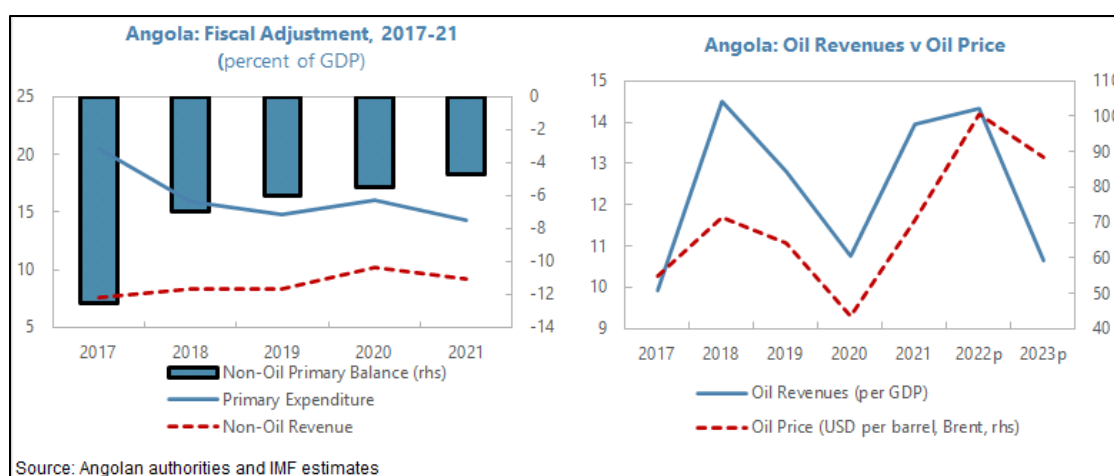
18.   Fiscal space remains limited. Angola enjoyed improved oil revenues in 2022 on higher prices and improved production, although the apparent windfall was counterbalanced to some extent by strong exchange rate appreciation, and was transitory given the outlook for future oil prices and production. Despite strong gains already made on tax policy in recent years (leading to a 3.0 percent of GDP increase in non-oil revenues over 2017-20), Angola still struggles to reach the collection levels of SSA peers. On the expenditure side, Angola's wage bill as a share of GDP is not excessive. Its interest bill is already relatively high among SSA peers: Historically it has comprised nearly a third of total spending; it is projected to fall to between a fifth and a quarter of total spending in the near term, but this would still be well above the regional and EMDE averages of 8.5 and 7.5 percent, respectively. Fuel subsidies take up a significant amount of fiscal space: They are expected to have peaked at 2.7 percent of GDP in 2022 but will still represent a major expense (of about 2 percent of GDP per year) through the medium term. With fiscal loosening in 2022 and Angola still at risk of sovereign stress, the authorities will need to continue to carefully manage the budget into the medium and long term.

G. Creating Fiscal Space

19.   As the SDG Financing tool shows, tax policies and fiscal structural reforms to enhance non-oil revenues, rationalize expenditure, and promote private sector participation will be critical to creating additional fiscal space. Achieving both medium-term fiscal anchors – a 60 percent debt-to-GDP ratio and a 5 percent non-oil primary fiscal deficit – is critical to debt sustainability and macroeconomic stability. Doing so while allowing for the spending necessary to work towards the development goals discussed above will require further progress on fiscal structural reforms.

20.   First, implementing outstanding tax policy and administrative reforms to boost non-oil revenue further (+2.4 percent of GDP per years relative to the baseline level). While the authorities implemented several tax policies measures in recent years to boost non-oil revenues, these remain low as a share of GDP relative to peers. Further gains in this area should be sought via additional outstanding tax policy and administrative revenue measures. On tax policy, additional measures should include reducing VAT thresholds, increasing progressivity and lowering brackets for the top marginal PIT rate, limiting thin capitalization, and reforming the property registry and property tax. On tax administration, the Angolan revenue authority (AGT) should adopt a new organizational structure and a modern compliance risk management approach by maximizing voluntary compliance. It should take a holistic approach that balances preventive, detective, and corrective actions and promotes structural reforms (including legislative changes and an IT overhaul). The AGT should also take tangible steps to access data for tax purposes and revamp customer relationship management activities. It should reinforce access to first party data by strengthening information-reporting obligations and further improving e-filing for large and medium-sized taxpayers, and by gradually improving access to third-party data (data provided to the revenue body by other public and private organizations or other jurisdictions).

21.   Second, create conditions to gradually but permanently phase out fuel subsidies and create fiscal space (+1.2-1.7 percent of GDP per year relative to the baseline level).
This includes complete options for fuel pricing reform options; analysis of quantitative poverty and social impacts; estimation of potential savings; options for mitigation measures for the vulnerable; and a communications strategy. The reform should also clarify the Treasury-Sonangol relationship and deregulate the downstream sector.

22.   Third, improve expenditure reallocation and efficiencies via institutionalization of medium-term fiscal planning (+0.5 percent of GDP per year relative to the baseline level). The authorities should fully implement the following, in line with their Public Finance Sustainability Law:

- Medium-term fiscal and expenditure frameworks that impose top-down fiscal discipline by fixing limits on broad fiscal aggregates and sectoral expenditure; and set timely budget advanced guidelines and ceilings.

- Reliable fiscal strategy in compliance with the fiscal rules in the PFSL.

- Analysis of fiscal risks from the perspective of the macroeconomy of SOEs and PPPs, with emphasis on strengthening the Ministry of Finance's oversight over and management them.

- Update and implement the 2019 PIMA recommendation action plan, with an emphasis on improving project appraisal, selection, and multiyear budgeting.

- Broader, timely, and consistent fiscal reporting.

23. **Taken together, these will greatly improve the authorities' ability to plan for long-term spending, and to do so in a more efficient manner, both of which will be critical to financing Angola's long-term development and social spending needs.** In this regard, coordination among ministries and departments should be strengthened through the adoption of an interagency macro-fiscal working group for medium-term fiscal framework preparation.

24. **Finally, create conditions for greater private sector involvement in the economy (+5.1 percent of GDP per year relative to the baseline level).** Idle public sector productive assets should be transferred into private hands by rechanneling private savings and investments into the expansion of the non-oil economy. The SOE reform roadmap and the new PROPRIV 2023-2027 program could be catalysts in this process, with expanded emphases on assets and companies in the financial, telecommunications, industrial, and transport sectors as well as various Sonangol assets. These actions would both be a positive step toward economic diversification, as these sectors will be key in building up non-oil activity and jobs and freeing up further fiscal resources.

H. Conclusion

25. **Economic diversification and poverty reduction in Angola will require more and better-quality spending on human and physical capital and, thus, greater fiscal space.** Spending in these areas has historically been lower relative to LMC peers, although broadly in line with other SSA countries, and with weak outcomes. Boosting human and physical capital with the goal of economic diversification and poverty reduction in mind will likely be a primary focus of the authorities' 2023-27 National Development Plan. This paper finds that achieving those goals, as benchmarked by the SDGs, will entail greater and more targeted investment, with the largest spending needs falling around education and health. As such, creating additional fiscal space, following through on the structural fiscal reform agenda, and attracting private investment will all be critical components of improving the level and quality of development spending in Angola.

Annex I. SDG Costing and Financing Frameworks

A. Costing

1. The Gaspar and others (2019) methodology for estimating additional spending for education and health is based on an input-outcome approach. Outcome is measured by the SDG result indicator whose values range from zero (furthest from achieving) to 100 (fully achieving) the goals. For example, the outcome for education is the SDG index 4, health is SDG index 3, water and sanitation are SDG indexes 6.1 and 6.2, electricity is SDG index 7.1.1, and road is SDG index 9.1.1. The methodology consists of three main steps. The first step assumes that SDGs outcomes are functions of selected inputs and unit costs. Second, for each country, the methodology sets the levels of key inputs and the associated unit costs at the values observed in countries with similar levels of GDP per capita that reach high development outcomes. The third step estimates the level of 2030 spending consistent with high performance SDGs, given the reference values for the inputs and unit costs and country specific factors.

- More specifically, let spending in one SDG sector in country i in 2020 be $s(b_i, x_i^{2020})$, a function of cost drivers b_i (for example, teacher-student ratio, teacher salaries) and other factors x_i (for example, school-age population, GDP per capita). We identify the levels of the cost drivers in countries with high scores in the respective SDG index (b*). Then we calculate 2030 spending in country i, given b* and the values of other factors that we project in country i for 2030, or $s(b*, x_i^{2030})$.

- For the physical capital, however, annualized additional spending, is estimated to close the infrastructure gap between the latest historical year (2020) and 2030, expressed in percent of 2030 GDP.

B. Financing

2. The framework is applied to the financing of SDGs. Taking the assessment of SDG needs in human and physical infrastructure as given (from Gaspar and others 2019 or more recent costing assessments), the model allows its user to construct different financing scenarios. For each scenario, it shows whether the SDG targets can be met or, if not, how large the remaining financing gap is on average between the current and the target years. The baseline sets the SDG target year at 2030 and follows latest staff projections, keeping growth at its long-term potential thereafter as no additional SDG spending occurs in this scenario. Alternative macroeconomic and financing scenarios are user-defined, providing the flexibility to analyze different policies in a tractable manner while ensuring internal consistency. Details of the model are described in IMF (2021a).

- The financing framework models the interaction between the fiscal and private sectors that finance spending on human capital and infrastructure and the productive capacity of the economy. It centers on the long-term relationship between investment and growth, following the Debt, Investment, and Growth (DIG) model and its extension to include human capital (Atolia and others 2019). Investment in education, health, roads, water, and power translates into better-educated and healthier populations and better and more

infrastructure—all boosting economic growth (IMF 2014). The framework is fully dynamic, showing how investment boosts growth over time.

- The framework assumes human capital, private capital, and two forms of public capital: publicly financed and privately financed. The latter is a novel feature of the model. It includes public infrastructure projects that are suitable for private investment, often labeled "bankable" public projects. The distinction between public and private capital lies mainly in the types of projects they encompass. For instance, rural roads normally require public investment (that is, they are "nonbankable"), while highways and water treatment plants can be thought of as public investment, possibly open to private financing (that is, bankable), and factories and farm equipment can (largely) be regarded as private sector investment. Human, public, and private capital are complementary. Hence investment in one type of capital raises the return on investment in other types of capital.

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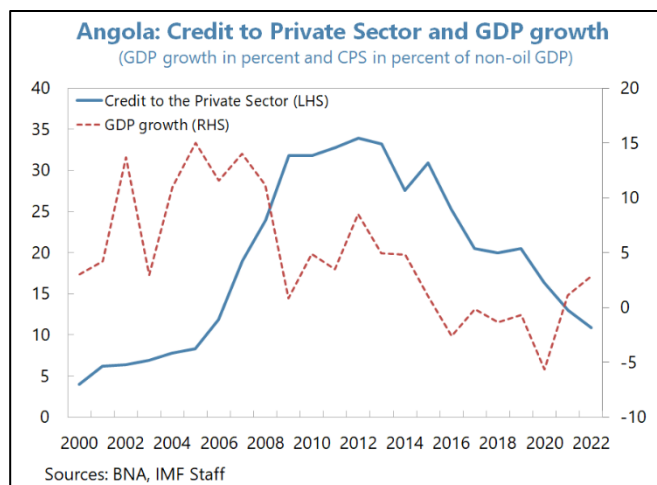
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ADDRESSING PRIVATE CREDIT GROWTH DISORDERS IN ANGOLA[1]

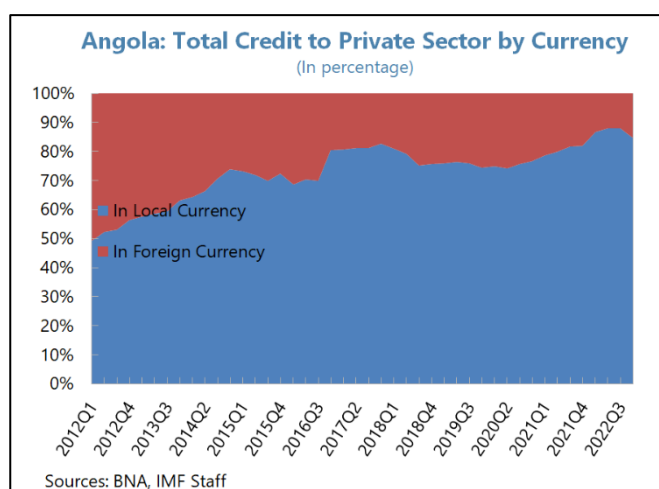## A. Developments In Private Sector Credit Growth In Angola

1.   Credit to the private sector seems to have largely followed the economic boom-bust cycle in Angola. Following the civil war, private credit grew rapidly in 2002–2008. After a period of relative stagnation private credit decelerated sharply after 2013, with some stabilization around the beginning of the IMF-supported program followed by a fast decline as the economy was hit by the Covid-19 pandemic shock. Despite recent signs of economic recovery, as oil prices increased and non-oil GDP growth picked up, credit to the private sector in Angola remains subdued.
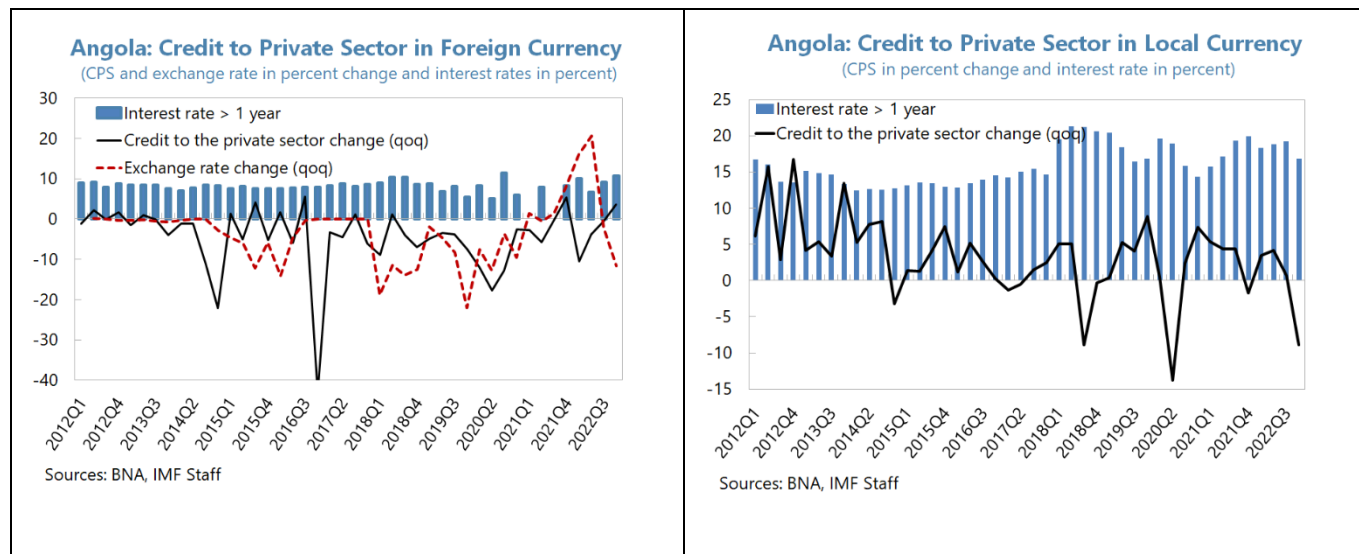
Angola: Credit to Private Sector and GDP growth
(GDP growth in percent and CPS in percent of non-oil GDP)

— Credit to the Private Sector (LHS)
--- GDP growth (RHS)

Sources: BNA, IMF Staff

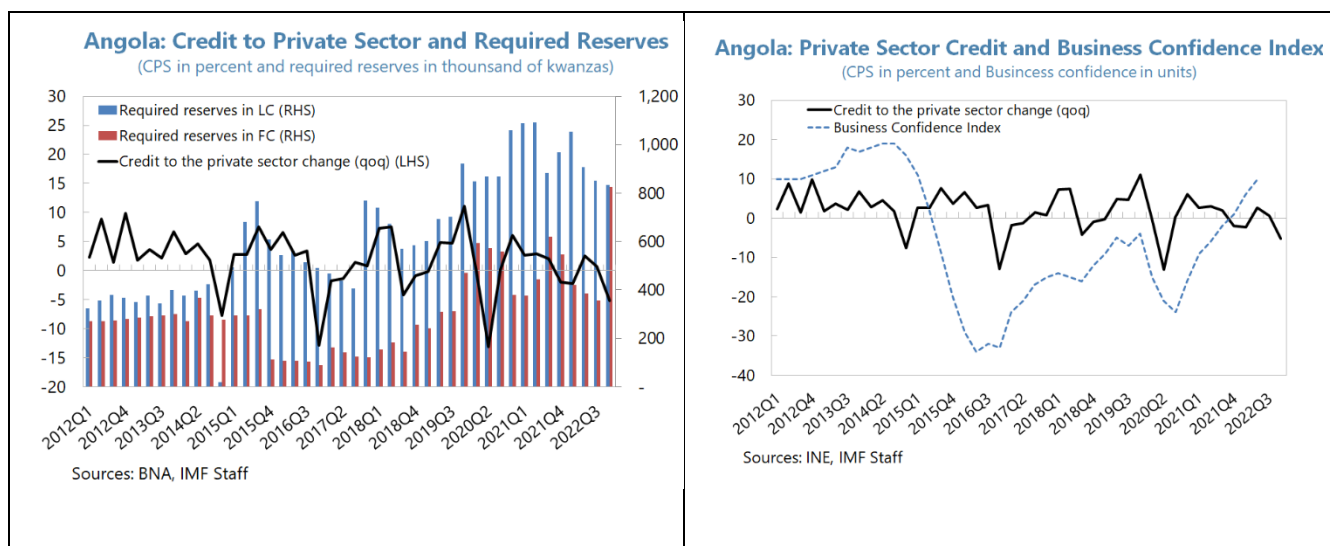**2.   Some prudential rules may have contributed to the decline in credit, but it was important for the BNA to impose them.** In 2014, the BNA prohibited foreign currency credit, except to exporters and the state (who are naturally hedged against foreign currency), which led to a decline in the share of banks' credit in foreign currency. Likewise, in 2019, the BNA prohibited kwanza credit indexed to a foreign currency, which had been a common practice for many years. While these measures may have contributed to the decline of bank credit to the private sector, they were important prudential rules to reduce credit risk, especially with regard to borrowers with no hedge against exchange rate fluctuations.

Angola: Total Credit to Private Sector by Currency
(In percentage)

■ In Local Currency
■ In Foreign Currency

Sources: BNA, IMF Staff

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[1] This Selected Issues Paper has been prepared by Marcos Souto and Marco Miguel for the Angola 2022 Article IV.

Angola: Credit to Private Sector in Foreign Currency
(CPS and exchange rate in percent change and interest rates in percent)

Sources: BNA, IMF Staff

Angola: Credit to Private Sector in Local Currency
(CPS in percent change and interest rate in percent)

Sources: BNA, IMF Staff

3.   Reserve requirements have started to have more of an impact on credit growth in recent years, while the business confidence indicator has moved in tandem with private credit. Until 2019, the relationship between required bank reserves and private credit growth was relatively weak. This was partially due to excess liquidity in the banking system. Starting in 2019, the central bank began removing excess liquidity, and required reserves and credit growth have moved in opposite directions: as banks deposited more reserves in the central bank, there were increasingly less resources available for lending. The relationship between the business confidence index and credit growth moved in the expected direction, indicating that as the sentiment about the business environment improves, credit to the private sector also responds more positively.

Angola: Credit to Private Sector and Required Reserves
(CPS in percent and required reserves in thounsand of kwanzas)

Sources: BNA, IMF Staff

Angola: Private Sector Credit and Business Confidence Index
(CPS in percent and Businecss confidence in units)

Sources: INE, IMF Staff

B. Constraints To Private Sector Credit Growth In Angola

4.   On the demand side, several important structural problems affect the ability of Angolan firms to present bankable projects. These problems include a large informal non-oil sector that has limited access to credit, capacity constraints at firms, and lack of professional accounting in the preparation of firms' financial statements. It will likely take significant effort, time, and financial resources, but it is imperative to tackle these issues in earnest if Angola is to create a sustainable supply of bankable projects while facilitating banks' assessment of associated credit risk. It is important to note that the oil sector in Angola is generally funded from outside the domestic banking sector.

5.   On the supply side, banks also face significant challenges to provide more support to private sector credit. Angolan banks' business model relies on the investment of around 40 percent of their balance sheets in Angola sovereign debt, leaving less room for private sector credit. Their balance sheets have also been encumbered with a high level of NPLs and associated required provisioning until very recently. The current level of real interest rates is also relatively high compared to other SSA countries. Despite significant improvements made after the 2019 Asset Quality Review, there is still a perception of some remaining capacity constraints at banks to assess and properly manage project risks.

C. Policy Response

The recent policy response to support credit to the private sector has been multifaceted. Notice 10/20 by the BNA, reissued in 2022, requires banks to provide a minimum of 2.5 percent of their liquid assets[2] to finance domestic production, with nominal interest rates in the range of 7-10 percent (banks' market interest rates in domestic currency, for loans over 1 year, are close to 20 percent, as of September 2022). Notice 9/22 broadly extends Notice 10/20 to housing and construction loans. There is also the Project to Support Credit (PAC), which seeks to provide support to national production of 54 items that are listed in the plan to foster domestic production (PRODESI), using budget resources to support micro enterprises.

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[2] To put this number into perspective, banks in Angola have an average 32 percent of liquid assets to total assets. Hence, 2.5 percent of liquid assets represents about 0.8 percent of total assets.

Table 1. Angola: Latest Initiatives to Promote Credit to Private Sector, 2020–2022

Subject	Decree	Year	Description
Minimum credit service levels	BNA Notice N.º 07/2020	2020	It establishes the minimum service levels that should be provided to banks' customers, by defining a maximum response time, as well as the formalization and availability of credit to these customers
Framework for the operation of the Credit Guarantee Fund	BNA Notice N.º 19/2020	2020	It establishes the operational rules applicable to the functioning of the Credit Guarantee Fund, established by Presidential Decree n.º 197/15, which is subject to the BNA supervision
Framework for the operation of credit guarantee societies	Presidential Decree n.º 193/20 BNA Notice N.º 20/2020	2020	It establishes the operational rules for the functioning of credit guarantee societies subject to the BNA supervision
Framework for Private Central Credit Register	Presidential Decree N.º 275/2020 BNA Notice N.º 01/2021 BNA Instruction N.º 05/2021	2020-21	It creates the legal framework for the establishment of private central credit registers and operation, including the regulation relative to collection, treatment and distribuiton of information on loans and other credit liabilites.
New legal framework for guarantees over movable assets	Law N.º 11/2021	2021	It establishes the legal regime applicable to movable property as a collateral to credit obligations
Real Estate Credit Concession	BNA Notice N.º 09/2022	2022	It aims at supporting the expansion of the Real Estate sector by providing credit with subsidized interest rates. In order to compensate the Commercial Banks for the inherent interest subsidies, BNA allowed the deduction of the financed values from the required reserves, thus making the transaction profitable. The document sets the interest rate at 7 percent for purchase of real estate and 10 percent for construction, as well as a maximum maturity of 25 years.
Real Sector Credit Concession	BNA Notice N.º 10/2022	2022	It extends the Notices no. 4/2019, 10/2020 and 6/2021 created to support Government's "Production Support Program, Export Diversification and Import Substitution" (PRODESI), by imposing minimum credit targets for all banks, including (i) maximum interest rate of 7.5 percent for investment loans and 10 percent for raw material purchase loans, (ii) minimum number of projects financed depending on the banks previous year net assets, (iii) the oustanding debt shouldn't be less than of 2.5 percent of the Net Assets at 31 December of the previous year.
Restructuring of the Credit Support Project (PAC) integrated in PRODESI.	Presidential Decree N.º 92/22	2022	The PAC is a program that aims to provide private investors favorable credit conditions in order to promote investment projects that contribute to the local production and industrialization of goods deemed essential. The program offers two type of financing mechanism, bank loans (through the Angolan Development Bank (BDA) with below market interest rates (7.5 percent) and private equity (through the Angolan Active Private Equity Fund (FACRA)

Sources: BNA and IMF staff

Further Policy Action to Address Demand Side Problems

6.   More investment in education is needed. Angola's spending on education is below the SSA average.[4] The result is a sub-par education system. Solving this problem will take time and require significant resources, but it needs to start in the earnest, as educational level is an important driver of growth and would increase human capacity in Angola. Empirical evidence has shown that the knowledge and skills of workers available in the labor supply are a key determinant for both business and economic growth.

7.   Vocational training could help improve productivity and enhance efficiency of labor. There is relevant empirical evidence that vocational education and technical training can have a positive non-trivial impact on economic growth, as for instance in Botswana (Mupimla and Nettimi (2009)) and Pakistan (Fatima and Saleem (2016)). It would be important to identify the main areas

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[4] According to the World Bank World Development Indicators, in 2020 Angola spent approximately 2.4 percent of its budget in education, compared to 3.4 percent for Sub-Saharan Africa.

that need to improve human capacity and tailor the vocational training to fill any gap. This type of training can be provided by both the government and the private sector.

8.   **Implementing a reliable and efficient accounting system plays a vital role in the economics of a country.** In a study conducted by the United Nations (UNO 2008), reliable financial reporting has been positively associated with greater economic growth, more efficient allocation of resources, lower cost of capital, and more investment, especially as it increases the comparability of firms within the country and across countries. The World Bank has insisted on the link between accounting and development since it initiated the setting of IFRS in the early 2000's (Randriamiarana (2015)). Strengthening the accountancy profession is key to economic development and international accounting associations have worked to help improve accounting infrastructure in different countries. (Welch (2012).

Further Policy Action to Address Supply Side Problems

9.   **Banks operating in Angola must continue to work on further strengthening their credit risk assessment and management capacity.** An asset quality review conducted by the BNA in 2019 uncovered not only the need for some banks to increase provisioning but also weaknesses in their credit risk assessment and management framework. Since then, the BNA has been working with the banks to remediate these issues. Effort has been made to also have banks improve their governance and internal controls. These efforts must continue within a timeframe consistent with the capacity of Angolan banks to implement these reforms.

10.   **Continued efforts are needed to strengthen financial stability.** These include the implementation of the new financial institution law and a comprehensive approach to dealing with troubled banks. The delays in the restructuring of two formerly state-owned banks, for instance, is further delaying their ability to provide new credit to the economy.

11.   **Guarantees allow lenders to take on additional risk, whether by creating a new loan product, offering improved loan terms, or lending to a new sector.** Several Credit Guarantee Schemes (CGS) have been employed in different constituencies with success. But CGS may add limited value and prove costly if not designed and implemented well. The World Bank (2015) has developed a set of principles to help guide authorities on the establishment of CGS. These include properly funding the CGS, having a robust legal and regulatory framework, and having sound and independent corporate governance, among others. Ensuring that the Credit Guarantee Fund and any other credit guarantee scheme operating in Angola are aligned with best international practices would be key.

12.   **Notwithstanding the progress made thus far, there is ample room to improve the current business environment to support higher private credit.** For instance, the lack and weakness of available collateral and the difficulty to enforce it, should the credit become nonperforming, reduces the incentives for banks to provide credit to the private sector. Even the difficulty to register the pledges in collateral could negatively contribute to the concession of credit to the private sector. It is thus important to ensure that the collateral registration process is

strengthened and made as agile as feasible. On the asset recovery process, despite the new insolvency law (2021), there still seems to exist relevant bottlenecks in the judicial processes to allow banks to recover the assets in a timely manner. It is also key to ensure that courts have the proper resources to processes these cases as efficiently as possible. The credit risk bureau managed by BNA has made significant progress (in 2021, an instruction was issued for financial institutions to report more and better credit information to the BNA). However, the BNA would greatly benefit from fully using the wealth of information available in the credit bureau database to assess financial stability and inform supervision, thus creating a sounder environment for credit to flourish. In 2022, the first private credit risk bureau was authorized to operate in Angola. It can prove helpful to create a channel of cooperation between the private and public credit registries.

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