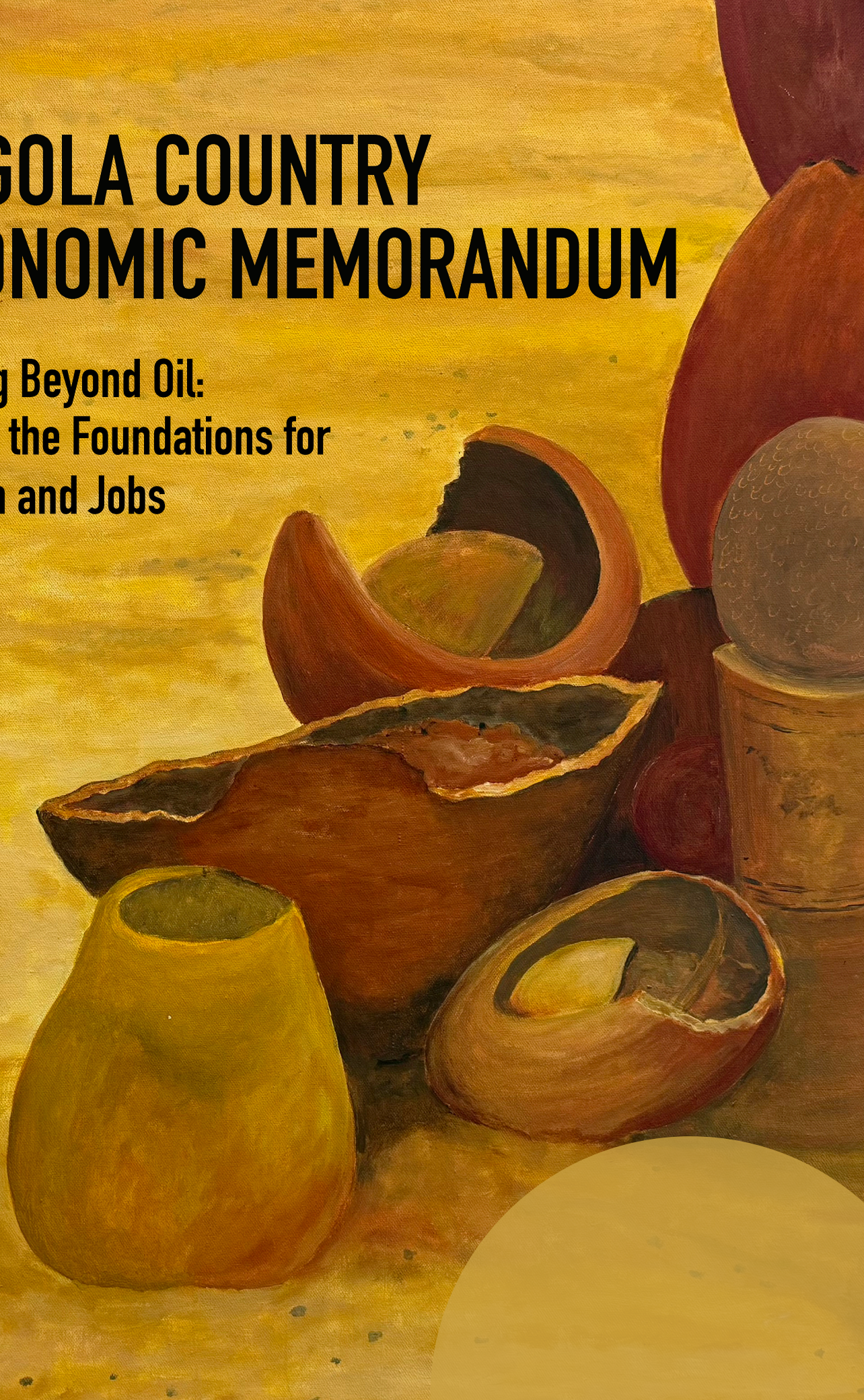


ANGOLA COUNTRY ECONOMIC MEMORANDUM

**Moving Beyond Oil:
Laying the Foundations for
Growth and Jobs**



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1818 H Street NW Washington DC 20433

Telephone: 202-473-1000

Internet: www.worldbank.org

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Angola Country Economic Memorandum

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for Growth and Jobs**

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Acronyms and Abbreviations

ANTT	Agência Nacional de Transportes Terrestres (National Land Transport Agency)
BNA	Banco Nacional de Angola (National Bank of Angola)
BOT	Build-Own-Transfer
CEM	Country Economic Memorandum
COVID-19	Coronavirus Disease 2019
CPI	Corruption Perception Index
CPPI	Container Port Performance Index
CSA	Climate-Smart Agriculture
DRC	Democratic Republic of Congo
DTIS	Diagnostic Trade Integration Study
DUAT	Direito de Uso e Aproveitamento da Terra (Land Use and Benefits Right)
ECI	Economic Complexity Index
EITI	Extractive Industry Transparency Initiative
ENDE	Empresa Nacional de Distribuição de Electricidade (National Electricity Distribution Company)
ENE	Empresa Nacional de Electricidade de Angola (National Electricity Company of Angola)
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FFS	Farmer Field Schools
FUNDEB	Fund for the Maintenance and Development of Basic Education and Teacher Appreciation
GDP	Gross Domestic Product
GNI	Gross National Income
GOA	Government of Angola
GUE	Guiché Único da Empresa
GVC	Global Value Chain
GW	Gigawatt
HCI	Human Capital Index
IBEP	Improving Business Environment for Prosperity
HHI	Herfindahl-Hirschman Index
ICAO	International Civil Aviation Organization
ICT	Information and Communication Technology
IDA	Institute of Agrarian Development
IDEA	Identification, Delivery, and Empowerment

IDREA	Expenses, Revenue, and Employment Survey
IGCA	Institute of Geography and Cadaster of Angola
INACOM	Instituto Angolano das Comunicações (Angolan Communications Institute)
INEA	Instituto Nacional de Estradas de Angola (Angolan Roads Institute)
IPP	Independent Power Producer
IPT	Power Transmission Model
ISP	Internet Service Provider
ITU	International Telecommunication Union
JUCE	Single Window for Foreign Trade
kWh	Kilowatt-Hour
LAYS	Learning-Adjusted Years of Schooling
LMIC	Lower-Middle-Income Country
LTGM-NR	Long-Term Growth Model Natural Resources
LV	Low Voltage
M2	Money Supply
MED	Ministry of Education
MEP	Ministry of Economy and Planning
MINAGRIF	Ministry of Agriculture and Rural Development of Angola
MINEA	Ministério da Energia e Águas (Ministry of Energy and Water)
ML/FT	Money Laundering and Financing Terrorist
MoF	Ministry of Finance
MOSAP III	Angola Smallholder Agricultural Transformation Project
MV	Medium Voltage
NDP	National Development Plan
NLP	Non-performing Loan
PDMP	Power Development Master Plan
PICE	Integrated Platform for External Trade
PP	Percentage Point
PPP	Purchasing Power Parity
PPP	Public Private Partnership
PRODEL	Empresa Pública de Produção de Electricidade (Public Company for Electricity Production)
PRODESI	Program to Support Production, Export Diversification, and Import Substitution
R&D&I	Research, Development, and Innovation
REA	Strategic Food Reserve
REER	Real Effective Exchange Rate

REMPE	Recenseamento de Empresas e Estabelecimentos (Census of Companies and Establishments)
RNT	Rede Nacional de Transporte (National Transmission Network)
SAPP	Southern Africa Power Pool
SIMPLIFICA	Projecto de Simplificação de Actos e Procedimentos da Administração Pública (Project for the Simplification of Public Administration Proceedings)
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
SDG	Sustainable Development Goal
TFP	Total Factor Productivity
TSE	Total Support Estimate
UN	United Nations
USD	United States Dollar
VAT	Value-Added Tax
WASH	Water, Sanitation, and Hygiene
WDI	World Development Indicators
WEO	World Economic Outlook

Overview

I. Introduction

I.1. Angola needs a new economic model that harnesses natural resources, maximizes assets, and unlocks human capital potential

This Angola Country Economic Memorandum (CEM) analyzes the country's economic growth over the past two decades and offers insights into its long-term potential. The aim is to identify the main challenges, opportunities, and policy reforms necessary for fostering a more resilient, inclusive, and sustainable growth path. Therefore, this CEM serves as a diagnostic tool to support Angola's policymakers in advancing the economic diversification agenda outlined in the National Development Plan (NDP) 2023–2027 and the Long-Term Vision (Angola 2050).

The Angolan economy is gradually transitioning from an oil-based growth model. From the end of civil war in 2002 until 2014, Angola enjoyed strong economic growth mostly driven by the oil sector, which did not create the foundation for a more diversified, resilient, and inclusive economy. Consequently, the 2014–2016 decline in oil prices caused a five-year recession, made worse by the COVID-19 pandemic. Angola exited recession in 2021, supported by sound macroeconomic policies and a favorable external environment. Although the end of oil-based growth led to a period of low and slow development, growth in the non-oil sector has been gradually gaining momentum.

Angola has implemented a series of reforms to restore macroeconomic stability and promote economic diversification. The administration of President João Lourenço (elected in 2017, re-elected in 2022) has adopted important political and economic reforms. Included among other significant structural reforms are: adopting a more flexible and transparent exchange rate regime; initiating fiscal consolidation; introducing value-added tax (VAT); reforming fuel subsidies; improving the business environment; introducing competition into the telecom market; resizing the public sector; strengthening the financial system; reforming the country's principal state-owned company (the national oil company, Sonangol); and introducing a cash transfer program.

Despite these efforts by the authorities, excessive dependence on the oil sector remains a key challenge. Oil dependence remains high and, together with a challenging international economic environment, is contributing to high volatility in the domestic economy. The oil sector is in structural decline, with many oil fields maturing and investment falling off. Moreover, with the global energy transition, oil assets are likely to become idle or unproductive, increasing the need to accelerate economic diversification. However, the high dependence on oil, which accounts for approximately 25 percent of GDP, 65 percent of revenues, and more than 95 percent of goods exports, remains significant, while the growth of the non-oil economy remains weak. In addition, oil price shocks have translated into macroeconomic instability and fiscal crisis, slowing down the real economy.

The economic model focused on oil exploitation did not bring sustained and inclusive growth for Angola. Low and declining growth rates, in conjunction with high population growth, have led to significant social vulnerabilities. Approximately one-third of Angolans live below the international poverty line (USD 2.15/day), and economic inequality is substantial, as reflected by a Gini index of approximately 0.51. Additionally, Angola's human capital index (HCI) of 0.36 is among the lowest in Sub-Saharan Africa. Unemployment has a significant impact on young people and women, with roughly one-third of the population unemployed. Moreover, approximately 80 percent of jobs are in the informal economy.

The macro-institutional and business framework poses a challenge to private sector growth and to job creation. Procyclical fiscal policy during the oil boom and high public indebtedness during oil busts has fueled

public wages and transfers, with little accumulation of physical and human capital. Dependence on imports, due to weakened domestic production, puts pressure on the balance of payments and the effectiveness of monetary policy when revenue from oil is low, and this affects macroeconomic stability. High-cost borrowing from international markets has increased the risks of debt distress, due to uncertainties over refinancing capacity. The business environment is constrained by limited access to finance, cumbersome bureaucracy, significant corruption, inadequate provision of basic utilities, and lack of skilled workers. The consequence is low productivity growth in the private sector. Climate change adds to the country's overall vulnerability: Angola is exposed to extreme climate events, such as extreme drought in the south—the most severe in 40 years—and flooding in the center and north.

The extractive nature of Angola's institutions has contributed to poor economic transformation and inclusion.

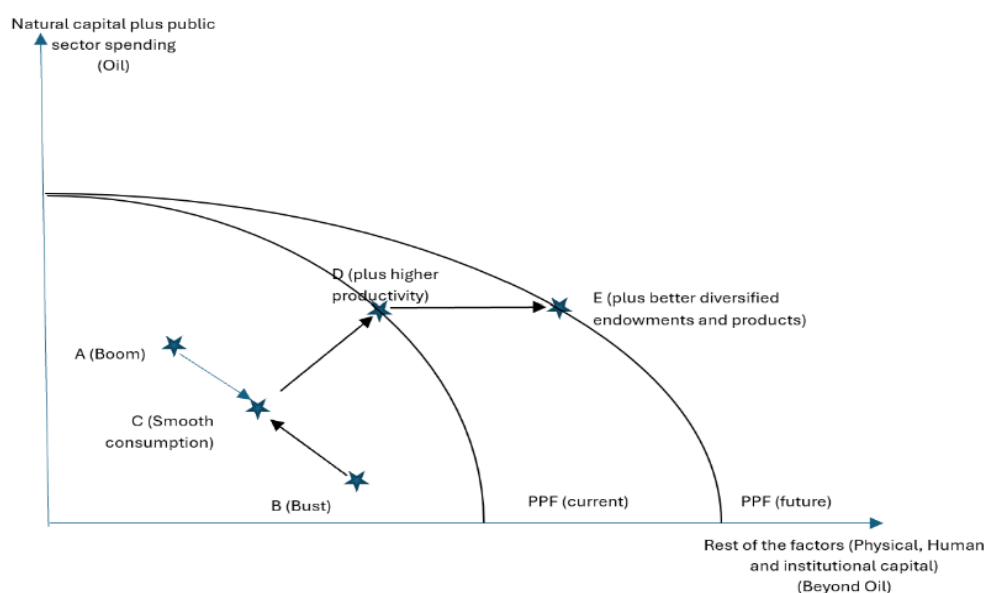
Angola's institutions have been shaped by years of colonial rule, a protracted post-independence civil war, and a post-war period marked by an urgent need to consolidate peace at any cost. After the civil war ended in 2002, political stability was achieved by the redistribution of oil rents, but at the cost of greater government control over the economy and politics. Therefore, stability has relied on a social contract whereby the elite redistributes oil rent to the population, and in return the population accepts rule by the elite. The state-led growth model has hindered private sector development and encouraged rent-seeking by linking major companies to the state. As oil revenues have decreased, this social contract has become unsustainable. Stronger institutions and a new governance framework are needed to enforce a social contract focused on diversified growth, jobs creation, and shared prosperity.

In this context, transforming and diversifying the economy to create jobs is key to unleashing the country's potential. This will also reduce poverty and greater resilience to a variety of shocks. In particular, the development of the Lobito Corridor has the potential to accelerate economic diversification in Angola and promote regional integration.

I.2. An organizing conceptual framework

Overall, Angola's current growth model faces three interrelated challenges, each of which represents a loss in potential welfare and thereby an opportunity for reform. These challenges include: (i) recurrent macroeconomic instability; (ii) negative productivity growth; and (iii) low and underutilized physical and human capital.

Figure 0.1: A PPF conceptual framework for sustainable and inclusive growth in Angola



Source: Adapted from the Mongolia CEM 2020 (PPF = production possibility frontier).

This CEM offers a roadmap to address these challenges and shift Angola toward a more sustainable and inclusive growth model. Such a model makes better use of the country’s existing resources while also laying the foundation for future prosperity. It does so by identifying key policy reforms needed to expand Angola’s production possibility frontier (PPF) and to enable the economy to operate more efficiently within it. These two objectives—expansion and efficiency—are at the heart of the stylized theoretical framework guiding the structure and analysis of this report, as illustrated in the figure above.

The framework (Figure 0.1) illustrates how Angola’s natural capital, particularly oil wealth, has shaped past economic outcomes. The economy has been subjected to fluctuations, oscillating between cycles of boom (point A) and bust (point B), with alternating positive and negative output gaps. Closing the gap and achieving smoother consumption (point C), higher productivity (point D), and ultimately a more diversified and resilient economy (point E), requires moving beyond oil dependency and leveraging the country’s broader resources—its natural, physical, and human capital.

Reducing macroeconomic instability (from point A or B to C) would close the output gap. Improving efficiency would allow Angola to move from C to D and operate at the PPF. Less uncertainty enables companies and households to plan for the long term, boosting investment and growth. This is particularly urgent in Angola, where most households and companies are credit-constrained, and the Government of Angola (GoA)—having spent almost all its oil revenues between 2004 and 2014—has limited capacity to cushion the economy during downturns. Indeed, out of every dollar earned from oil during the 2004–2014 decade, Angola consumed about 92 cents and saved a mere 8 cents. Improving productivity would allow Angola to move from operating inside the PPF to its frontier (from point C to D), leading to higher efficiency and higher income levels. At the same time, a quantitative and qualitative increase in resources would help push the frontier outward (from point D to E). New resources, particularly outside the oil sector, would open new growth paths and enhance economic resilience.

These three parallel transitions form three pillars around which this report is based: stabilization, higher productivity and efficiency, and expansion or diversification of resources.

II. Executive Summary

II.1 Three Pillars: Stability, Productivity, and Resource Diversification

This report aims to provide a thorough analysis of Angola’s three key economic challenges and to propose policies that address them. Stabilization, growth in productivity and efficiency, and expanded diversification of physical and human capital are Angola’s foundational pillars, which this report addresses in its three main chapters. Chapter 1 analyzes volatility in Angola’s growth, the role of macroeconomic policies, and the structural reforms needed to boost long-term growth. Chapter 2 examines company and labor dynamics, identifying key challenges and reforms to boost productivity and efficiency. Chapter 3 assesses the low level and poor quality of Angola’s infrastructure and human capital; identifies cross-cutting constraints that limit productivity and competitiveness in the non-oil economy; and examines the potential of the agricultural sector, including the reforms needed to address the main constraints to unlocking the sector’s fullest possible role in Angola’s structural transformation.

II.1.i Pursuing Macroeconomic Stability

Angola’s economic growth has been slow, unstable, and below its potential. Its oil-based growth model did not lay the foundations for a more diversified and inclusive economy. Consequently, since the end of the oil boom in 2014, growth has dropped from an annual 7.7 percent in 2002–2015 to a negative 0.1 percent in 2016–2024. Furthermore, real income per capita has fallen back to nearly its 2002 level. Despite some recent improvement, growth remains unstable. This is due to continued exposure to the volatility of the oil sector, which still accounts for approximately 25 percent of GDP, 60 percent of revenue, and over 90 percent of exports. Macroeconomic instability has affected economic activity, with large output gaps a deterrent to longer term

accumulation and resource diversification. Equally, structural and institutional challenges have undermined productivity and efficiency; they also prevented the economy from maximizing the production of goods and services given the available factors of production. Key to achieving long-term economic progress in Angola is enhancing macroeconomic stability through sound macroeconomic policy management.

Figure 0.2: Angola: Real GDP growth rate, 2002–2023

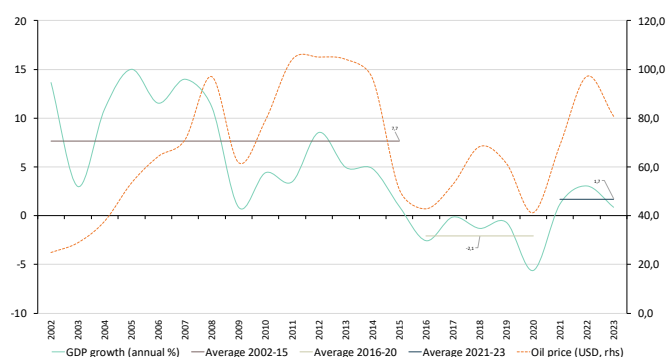
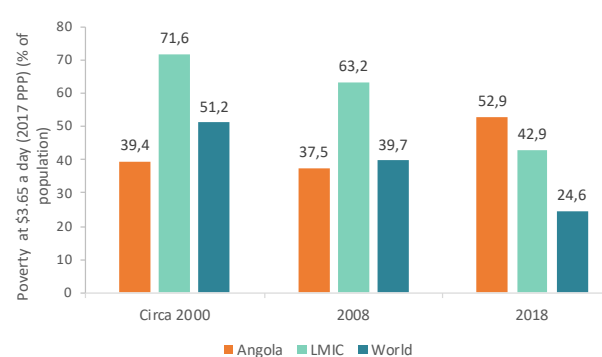


Figure 0.3: Poverty rate at USD 3.65/day



Source: Author's analysis based on World Development Indicators (WDI) data.

Growth has not benefited the poor and Angola faces widespread poverty and extreme inequality. Over half the Angolan population lives in poverty. With a Gini index of 51.3, Angola ranks among the most unequal countries in the world. In addition, 31.2 percent of Angolans experience severe food insecurity, resulting in a child stunting rate of 43.6 percent, the seventh highest globally (2022). Climate change and low human capital severely undermine Angola's prospects for sustained poverty reduction. Low educational attainment and poor health outcomes place Angola among the countries lowest on the HCI, even below countries with lower per capita income.

The macroeconomic policy framework remains vulnerable to oil price fluctuations. Fiscal policy is heavily influenced by oil revenue, which constitutes some 60 percent of fiscal revenue. Moreover, the procyclical nature of fiscal spending indicates limited use of medium-term fiscal frameworks (MTFFs) and savings mechanisms. As a result, public debt is strongly connected to oil price volatility, which is further exacerbated by overreliance on oil-backed loans. Fiscal consolidation, supported by a successful International Monetary Fund (IMF) program completed in 2022, helped reduce vulnerabilities caused by declining oil revenues and expensive external financing following the 2014–2016 oil price shock. Tight monetary policy helped curb inflation and a flexible exchange rate absorbed external shocks, although the overall efficiency of monetary policy remains hampered by lack of economic diversification and heavy import dependency.

Angola adopted a new fiscal framework in 2020 to reduce volatility and improve efficiency in expenditure, but its implementation has been slow. The 2020 Fiscal Responsibility Law introduced clear fiscal rules, multi-year budget planning, and enhanced fiscal and debt transparency. It established targets for medium-term debt (60 percent of GDP) and for the non-oil primary deficit (5 percent of GDP). The framework provided for creation of a consolidated budget stabilization fund to mitigate fiscal volatility—thereby encouraging greater savings in periods of high oil revenue and strengthening of the savings mechanism. However, implementation of these new rules has been delayed, as Angola continues to navigate a transitional phase focused on fiscal consolidation and debt reduction.

Angola has high trade openness and remains vulnerable to external shocks, due to lack of export diversification. From 2002 to 2023, Angola's trade openness averaged 86 percent of GDP, and the current account surplus averaged 5 percent. 96 percent of exports were raw materials. Tariff rates increased from 7.3 percent in 2013 to 13.3 percent in 2025, benefiting some domestic industries but creating an anti-export bias;

Figure 0.4: Angola real fiscal revenues in constant Kz bn and oil price 2002–2023

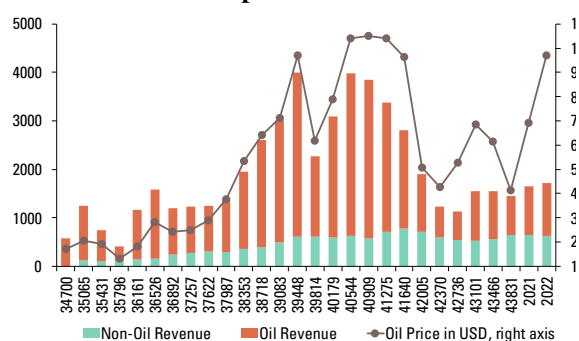
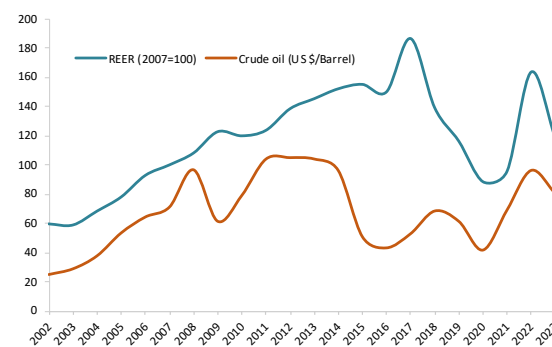


Figure 0.5: Real Effective Exchange Rate (REER)

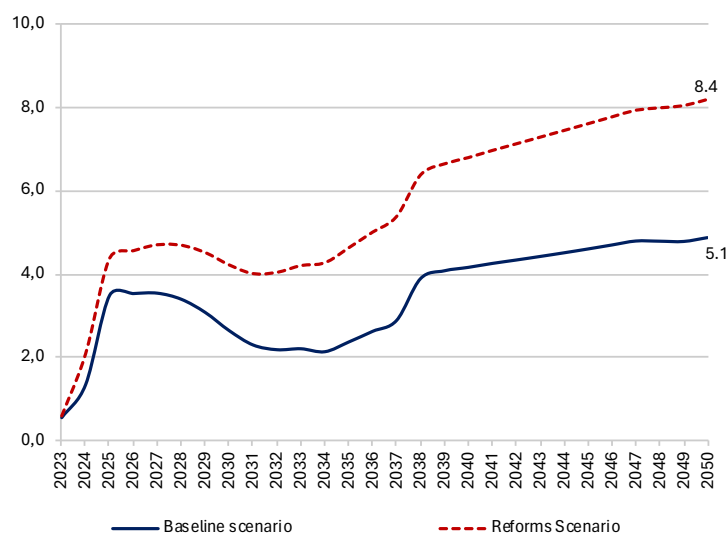


Source: IMF; WEO (lhs); IMF; Minister of Finance; Haver (rhs).

increasing sector inefficiencies; and raising production costs. Accession to the African Continental Free Trade Area may provide advantages for Angola, but this requires macroeconomic stability, a conducive business environment, and robust institutions. For example, if Angola increases intra-African exports 15 percent, real GDP growth is projected to increase approximately 0.6 percentage points (pp).

Key structural reforms would enable Angola to reach upper-middle income (UMIC) status by 2050. Under a baseline, or business-as-usual, scenario, growth is expected to remain at approximately 2 percent in the medium term and accelerate to approximately 5 percent in the long term. Real GDP per capita is expected to grow by an annual average of 2 percent until 2050. This performance is expected to be driven by the non-oil sector as economic fundamentals strengthen; e.g., the increasing number and share of the working age population, improved workforce qualifications, and greater investment. However, in a scenario with rapid structural reform implementation, growth could double by 2050 because of accelerated human capital accumulation; thereby harnessing demographic dividend and bringing improvement to institutional and business environments and infrastructure. The Lobito Corridor has the potential to be a vector for economic diversification and accelerated growth, with an estimated impact on real GDP growth of up to 0.6 percentage points by 2050. However, realizing its potential requires a multifaceted approach to reform. Angola can potentially move from lower-middle income (LMIC) up to UMIC status by 2050, since GDP per capita could reach USD 6,351, up from USD 3,803 (in real 2015 USD).

Figure 0.6: Combined effect of reforms in real GDP growth rate



Source: Author's calculations based on the LTGM-NR model.

II.1.ii Boosting Productivity Growth

Angola's workforce is young and increasingly educated, but productivity remains low. Over 45 percent of Angola's population is below 14 years of age, with significant potential for demographic dividend. From 2009 to 2019, the proportion of the employed population with secondary education (although incomplete) increased from 25 percent to 37 percent. Despite this, value-added per worker decreased 30 percent over the same period, due primarily to decline in oil sector productivity.

Job creation, particularly in services and agriculture, did not lead to structural transformation of the economy or increased productivity. Angola created some 3.5 million jobs between 2009 and 2019; however, most were in subsistence agriculture and informal trade. As a result, new employment in the service and agriculture sectors did not lead to structural transformation of the economy, and labor productivity declined. In commerce and hospitality, 80 percent of new jobs were in the informal sector, where workers are largely either self-employed or family workers.

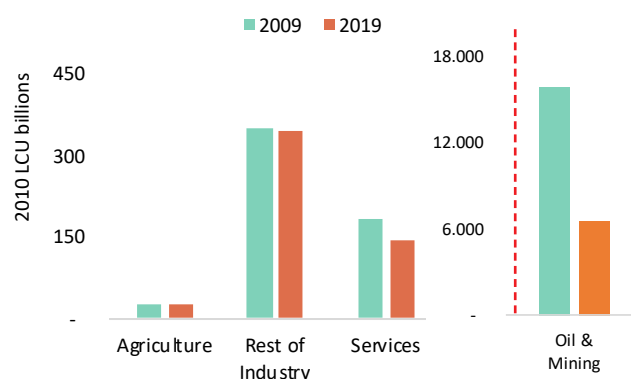
The private sector landscape comprises micro, small and medium enterprises (MSMEs) with low production capabilities. According to the 2019 Census of Companies and Establishments (REMPE—*Recenseamento de Empresas e Estabelecimentos*), 79 percent of companies have fewer than five workers, are relatively young, and operate mainly in services and commerce with low productivity. Only 1 percent are large firms with more than 100 workers. The 2024 World Bank Enterprise Survey (WBES) shows that 53 percent of companies have fewer than 20 workers, and about 80 percent are less than 20 years old. Seventy percent of all companies are sole proprietorships (the least sophisticated form of ownership) but represent only 31 percent of employment. In addition, whereas smaller companies are typically less productive, foreign-owned companies, companies with university-educated owners, and companies with a high proportion of women, are more productive.

Major obstacles to private sector development include poor access to finance, bureaucratic hurdles, informality, and inadequate physical and human capital. According to the WBES, only 9 percent of companies have access to bank loans, forcing 90 percent to rely on self-funding for investment. Excessive bureaucracy and informality hinder competitiveness, with 73 percent of Angolan companies reporting frequent meetings with tax officials and 52 percent facing competition from informal companies. Additionally, 22 percent have experienced bribery attempts, 61 percent have faced electrical outages, and 15 percent of large companies cited an inadequately educated workforce as a major challenge. As a consequence, participation in international trade is marginal, with less than 1 percent of companies exporting. Angola's companies are thus poorly integrated into global value chains and unable to compete globally.

Figure 0.7: Employment 2009–2019 (millions)



Figure 0.8: Value-added per worker by sector 2009–2019



Source: World Bank staff calculations based on IBEP 2008/2009 (*Inquérito Integrado sobre o Bem-Estar da População*) and IDREA 2018/2019 (*Inquérito Sobre Despesas, Receitas e Emprego em Angola*) data.

II.1.iii Expanding Endowments (for Economic Diversification)

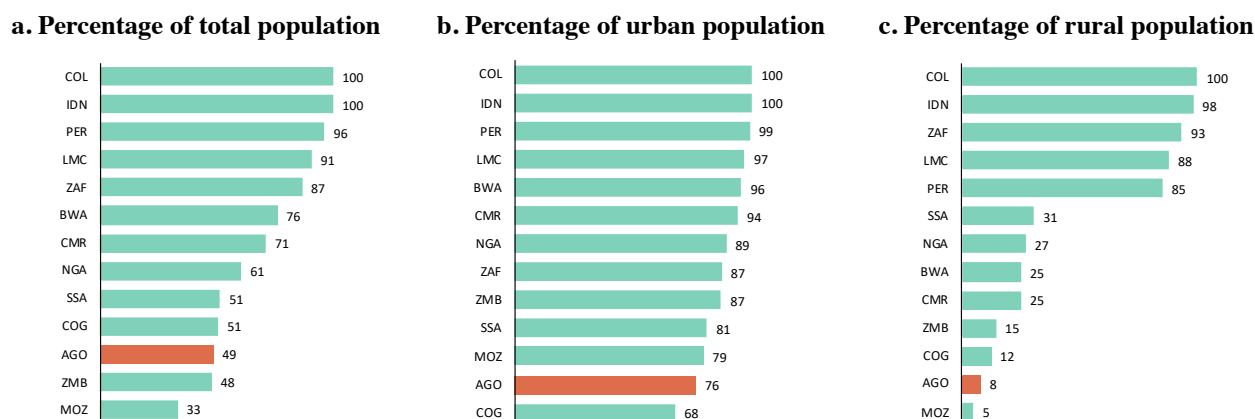
Expanding Infrastructure: Providing basic utilities to promote a diversified and competitive private sector-led growth model.

a. Access to electricity is low due to limited transmission infrastructure

Despite high generation capacity, approximately half the population has no access to electricity because of limited expansion of transmission infrastructure. Some 18 million people (51 percent of the population) had no access to electricity in 2022, and access was unequal between urban and rural areas (76 percent and 8 percent, respectively). The transmission network consists of separate and unconnected grid systems, each with its own challenges.

Electricity access is also limited by low tariffs that fail to cover operational costs and investment requirements of electricity companies. The average electricity tariff of USD 0.014/KWh represents 18 percent of the recovery cost of USD 0.078/KWh. The gap affects the entire electricity distribution network. Moreover, distribution losses routinely exceed 30 percent and collection rates are below 75 percent. To achieve a 53 percent electrification rate by 2030, Angola needs approximately 150,000 new connections per year.

Figure 0.9: Access to electricity (total, urban, rural) in Angola and peers, 2022



Source: (WDI); NDP 2023–27.

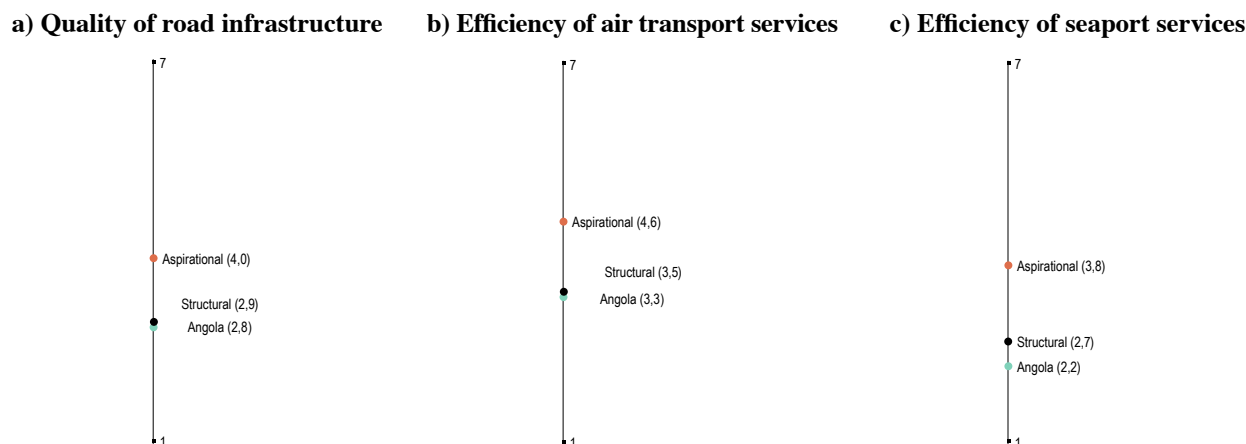
b. Transportation systems are inefficient

The road network is limited and of poor quality. Road network density is about 6 km per 100 sq. km; primary roads, of which only 52 percent are paved, represent 34 percent of the road network. Poor maintenance contributes to rapid road deterioration and funds for road maintenance are approximately half of what is needed. Data on the road network are insufficient and unreliable.

The railway network is unprofitable due to low passenger volume and freight traffic. Railway network density, estimated to be approximately 2.2 km per 1,000 sq. km, is on a par with peer countries. However, passenger volume and freight traffic totaled only 0.07 million units in 2018, making the network unprofitable. There is significant potential to increase efficiency and, eventually, to bring in the private sector.

Urban transportation still cannot meet the strong demand and fails at standards of safety, efficient, and clean transportation. Public transportation is predominantly provided by means of privately operated passenger vans (*candongueiros*). There are no government subsidies, regulations, or standardized operating procedures. The taxi vans

Figure 0.10: Private sector firms believe that transport infrastructure in Angola is lacking in quality and inefficient
Aspirational = average of aspirational peers; structural = average of structural peers



1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world
Source: World Economic Forum 2019, World Bank 2023.

are the main mode of urban transportation. While public management of urban transportation is evolving, greater decentralization, attention to specific local needs, stricter regulation enforcement, and greater integration of urban systems into the National Transport Sector Master Plan (transport overall, including road infrastructure) is necessary.

Several important ports in Angola are undergoing development projects, but the national merchant fleet is out of date. Angola's main ports include Luanda, Soyo, Namibe, and Lobito. Luanda, the principal maritime hub, handles more than 86 percent of imports and over 40 percent of exports. Angola's national merchant fleet consists of 64 ships with an average age of 33 years; the country's eight tankers have an average age of 44 years, significantly exceeding the typical replacement age of 25 years.

c. Limited competition in digital services reduces access and quality

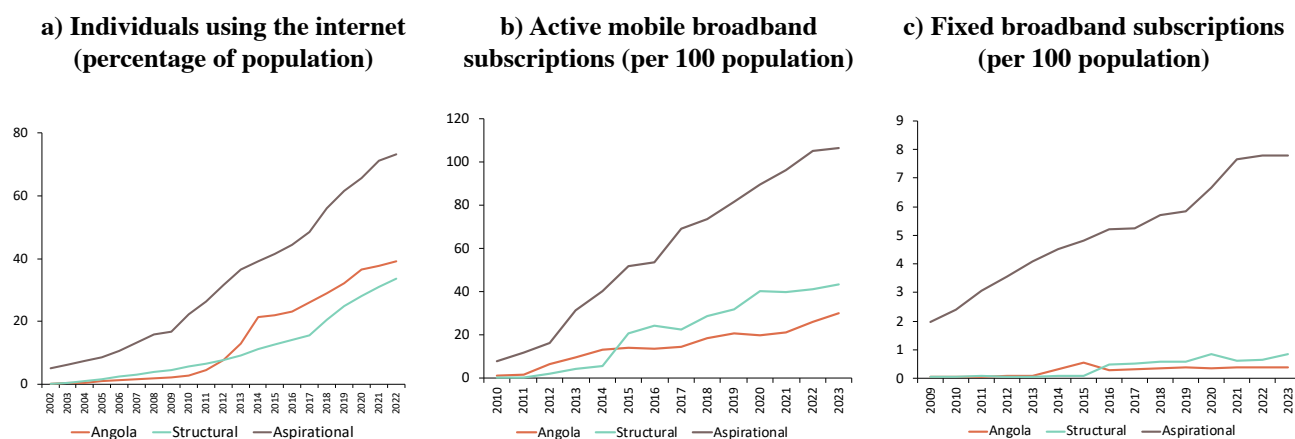
To improve the adoption of digital technologies, Angola needs to increase its Internet penetration rates and reduce Internet costs. The percentage of the population using the Internet increased from 0.3 percent in 2002 to 39 percent in 2022. The expanded use is mainly reflected in increased mobile broadband subscriptions, up from 0.5 per 100 people in 2009 to 30 per 100 people in 2023, although the Internet usage rate remains below that of peer countries. The cost of a fixed broadband Internet basket, at 17 percent of gross national income (GNI) per capita in 2023, continued to be far higher than the 2 percent target set by the United Nations.¹

The main challenge in expanding terrestrial broadband networks is to ensure equitable conditions that promote competition and innovation for all operators. Angola has a high number of state-owned telecommunications operators. These include Angola Cables, Angola Telecom, and Unitel, which own essential infrastructure that is currently underused. This affects the price of services and the pace of network infrastructure expansion, especially in rural areas. The country's largest Internet provider, Unitel, has 14,000 km of fiber, carrying considerable excess capacity, but does not offer a wholesale service to other operators. There are towers covering most urban areas but they are still in early stages of development in rural areas. Meanwhile, because prices for sharing infrastructure are set through bilateral arrangements, smaller operators find it difficult to use national broadband networks.

Angola has well-developed international connectivity infrastructure; however, it faces significantly higher wholesale prices than other countries. A combination of state-owned telecommunications company dominance and inadequate regulation has led to both underutilization of infrastructure and significant operator debt. A wholesale broadband cable from Angola to an international exchange point in Europe costs USD 20 per

1. The United Nations Broadband Commission for Sustainable Development's Broadband Advocacy Target 2 calls for entry-level broadband in LMICs to cost less than 2 per cent of monthly GNI per capita by 2025 (UN Broadband Commission, Advocacy Target 2).

Figure 0.11: Low internet penetration rates in Angola hinder the adoption of digital technologies



Source: ITU DataHub.

megabit per second for long-term usage rights. Higher prices are also due to Angola Cables' attempts to recover the Government's (GoA's) large investment in the digital sector.

Lack of competition in the mobile retail market and access networks has led to underinvestment in infrastructure. Although there are four licensed operators (Unitel, Movitel, Angola Telecom, and Africell) in the mobile market, it is essentially a duopoly. Unitel holds approximately 70 percent share, whereas the new entrant, Africell, licensed in February 2021, has captured around 15 percent. State-owned operators appear to operate in individually designated areas, therefore limiting expansion and price reduction that results from competition. Reducing state involvement on the supply side could help avoid crowding out private investment.

There is urgent need to increase the independence of the regulator, the Angolan Communications Institute (INACOM—*Instituto Angolano das Comunicações*). Updating the policy, legal, and regulatory framework is critical to address emerging challenges in the broadband sector and to achieve the policy objectives of enhancing competition and shifting investment responsibility from the public to the private sector.

Expanding Human Capital: Developing an educated, healthy, and skilled workforce for higher productivity and economic transformation

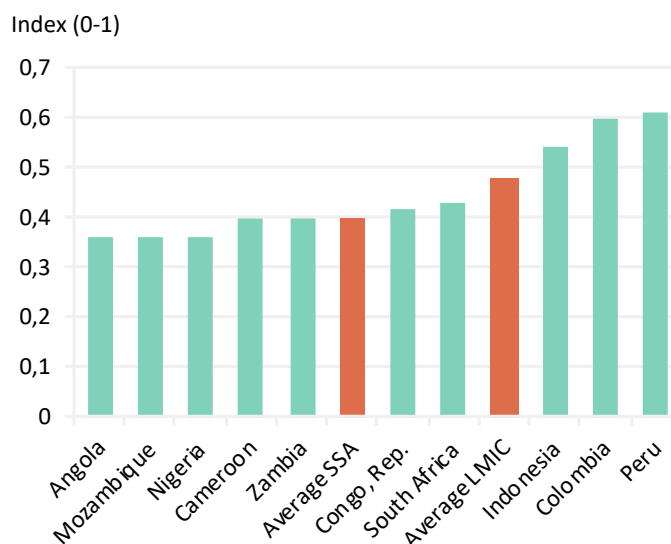
Angolan children born in 2019 will achieve only 36 percent of their full human capital potential by age 18, due to inadequate education and nutritional health. Therefore, the productivity of these future Angolan workers will be 64 percent below what could be achieved with a full, quality education (defined as 14 years of quality schooling by age 18) and nutritional well-being (defined as no stunting and survival to at least age 60) over their lifetime.

Angola's low human capital is due to poor education and widespread malnutrition. Students average eight years of education, 40 percent less than the ideal 14 years. Moreover, adjusted for quality of teaching, Angola's eight years of schooling are equivalent to only 4.2 effective years, a 47.8 percent learning loss (second only to Nigeria). Universal access to education is also declining. Angola's record for child survival and malnutrition is poor, with high child mortality and stunting rates: one out of every 10 children born in Angola does not survive to the age of five. In 2022, the under-five stunting rate in Angola was 43.6 percent. Poor access to water, sanitation, and hygiene (WASH) services and low immunization rates exacerbate these issues, leading to stunting and anemia.

Angola spends less on education compared to its peers. As a share of GDP, public spending on education dropped to 1.7 percent in 2022, down from 3.0 percent in 2012. Compared to its peers, Angola spends 2 pp less of its GDP on education than peer countries: achieving its medium-term goal of increasing learning-adjusted years of schooling (LAYS) from 4.2 to 4.6 may require a two-fold increase in education spending per school-age person.

Angola's workforce faces a skills mismatch. The skills mismatch affects mostly high-skilled positions and those requiring digital skills, with many lacking complete secondary education. A shortage of skills hinders access to better jobs and limits ongoing skills development. Without technical and job-specific skills, young people struggle to find quality employment. Despite higher levels of education, unemployment remains high among youth compared to adults. The labor market favors experienced workers, with adults earning more and securing better jobs than young workers with the same education. Over 70 percent of private sector vacancies require at least three years of experience, emphasizing the importance of on-the-job skills for youth employment prospects.

Figure 0.12: HCI, Angola and peers, 2020



Source: World Bank, The Human Capital Index 2020 Update.

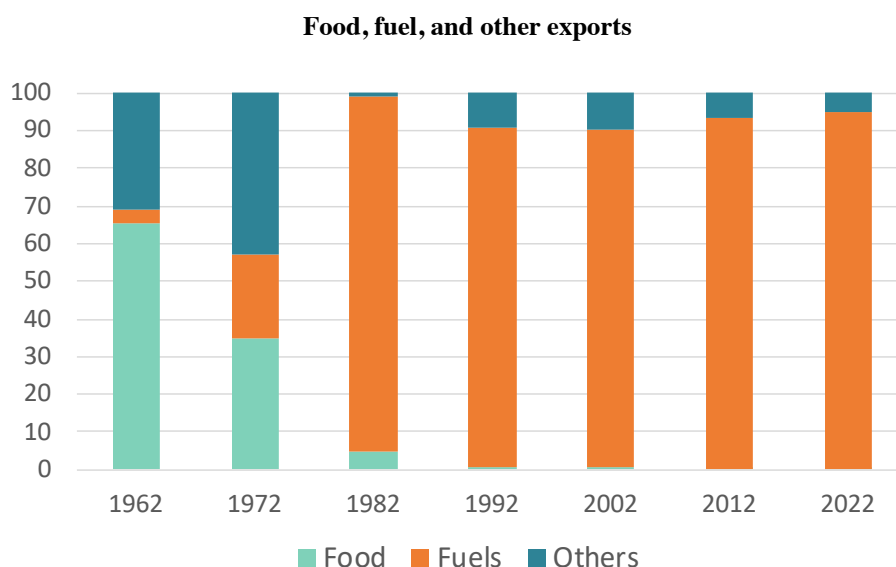
Expanding Agriculture: Agribusiness represents a significant opportunity for economic diversification, but its high potential is underexploited

Angola's agricultural and livestock sectors have great potential given the country's natural terrain and its abundant agricultural land, much of it uncultivated. The country's agricultural and potentially arable land comprises 59.2 million hectares, but only 10 percent is cultivated. Climate conditions are suitable for almost all types of crops. Although water resources are plentiful, only about 0.2 percent of agricultural land has irrigation equipment. The country makes limited use of agricultural inputs, such as fertilizers and pesticides. Local demand for food is expected to expand considerably given population growth and rapid urbanization. Nonetheless, this potential for growth is tempered by the country's vulnerability to climate change and natural disasters.

The main barriers to agricultural growth fall into four broad categories. Barriers to agricultural growth include insecure access to land; insufficient infrastructure; shortage of human capital and low capacity for technological modernization and innovation; and lack of competitiveness.

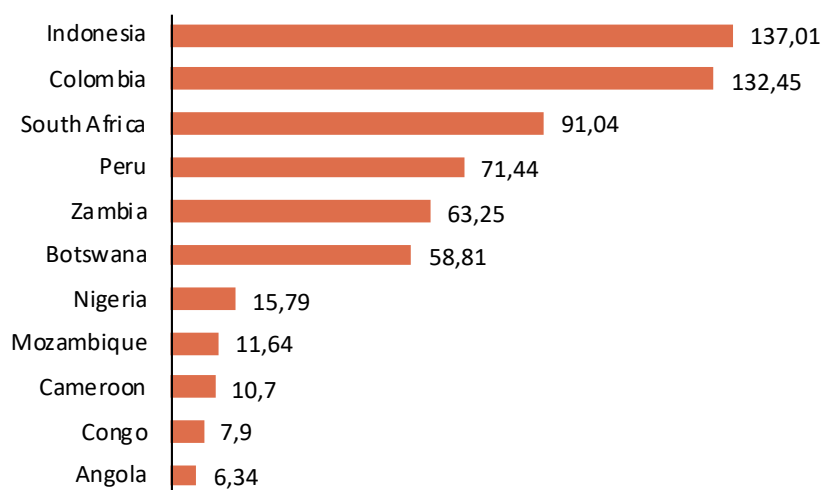
Access to land in Angola is highly informal and thus a major challenge for agricultural development. Secured land titles give farmers incentives to invest in their land and facilitate land sales and rentals, thus ensuring full utilization of land. Although rural land rights can be formalized, the formalization process is restrictive and excludes most land occupants. Moreover, access to land services is limited, due to highly centralized administration.

Figure 0.13: The share of Angola's food exports collapsed in the 1960s and 1970s



Source: Atlas of Economic Complexity; WDI.

Figure 0.14: Kilograms of fertilizers (nitrogen, phosphate, and potash) per hectare, 2021



Source: Food and Agricultural Organization (FAO) 2023b.

Infrastructure—particularly transportation, irrigation, and electrification—is essential for enhancing yield, productivity, and sustainability in the agricultural sector. Transport infrastructure ensures that farmers can carry inputs and outputs from and to markets efficiently and cost-effectively. Rural areas generally lack reliable transport systems. Adequate irrigation infrastructure is crucial for maintaining a consistent water supply for agricultural land and mitigating risks associated with water scarcity due to climate change. Electrification infrastructure has significant potential to increase the productivity of the agricultural sector, including preservation of perishable goods. According to the Agricultural and Fisheries Census 2019/2020 (RAPP—*Recenseamento Agro-Pecuário e Pescas*), 83.7 percent of villages are not connected to the electricity grid and 75.8 percent have

no structure for water storage; taxis are the most common form of transport, yet are available in only 49 percent of villages.

Agricultural research, development, and innovation (R&D&I) contribute to economic development.

Angola lacks several key elements for a successful and effective R&D&I system. These include suitable policies and an enabling regulatory environment; incentives to encourage private sector participation; institutional autonomy; adequate, stable, and diversified funding; performance incentives for scientists; and strong R&D partnerships.

The lack of agricultural extension officers and scientific institutions limits capacity to guarantee access to products and product quality. The business environment does not encourage investment in fertilizer, seed, and agrochemical production. Bureaucracy and certification/licensing, registration, and customs clearance costs add to constraints. Despite the GoA's efforts to increase fertilizer imports, current imports fall short of the estimated annual requirement of approximately 900,000 tons.

Moving Beyond Oil: Laying the foundations for growth and jobs

The oil-driven growth model has failed to foster more diversified, resilient, and inclusive economic development. The 2014 oil price shock and subsequent five-year recession demonstrated the limitations of using oil wealth to boost domestic aggregate demand instead of prioritizing the use of monetized natural assets for accumulating productive physical and human assets. Angola did not establish a foundation for a more diversified and competitive economy or achieve widespread prosperity for the approximately one-third of Angolans living in poverty and with high inequality.

Limited and volatile growth is mainly due to macroeconomic instability, low productivity, and a failure to convert natural assets into productive physical and human assets. Reliance on the oil sector has caused macrofiscal volatility, hampering growth stability, inflation control, and employment. Private sector development is restricted not only by the challenging macroeconomic environment, but also by structural and institutional deficiencies. These include limited access to finance, bureaucracy, informality, weak legal systems, inadequate infrastructure, and lack of skilled labor. To boost its potential to participate in global value chains, Angola must improve the efficient use and accumulation of production factors. It must also provide its young and increasingly educated population with jobs skills. Agribusiness offers a chance for economic diversification, but requires access to inputs, logistics, and markets. Angola can also leverage its geostrategic location through the Lobito Corridor to drive economic growth and diversification.

Angola has the potential to transition to an UMIC by implementing critical structural reforms to address its key economic challenges. Economic growth could nearly double by 2050 if the country accelerated implementation of structural reforms: targeting macroeconomic stability; boosting productivity growth; expanding physical and human capital endowments; and making use of its substantial agricultural potential. The table below provides a summary of key policy recommendations—according to priority and timeline—to

address each of these challenges.

Table 0.1: Moving Beyond Oil: Matrix of key policy recommendations

Policy Areas	Short-Term Actions	Medium/Long-Term Actions
Policy Area 1: Pursuing Macroeconomic Stability		
Priority Area 1.1: <i>Promote fiscal and debt sustainability</i>	• Promote Medium-Term Fiscal Framework development. • Strengthen non-oil tax revenue mobilization by broadening the tax base and improving tax administration capacity. • Remove fuel subsidies. • Improve public financial management efficiency.	• Continue reducing reliance on oil-backed loans. • Introduce effective fiscal savings and savings mechanism by defining clear operational rules. • Adopt a mechanism to mitigate oil price volatility shocks, such as oil price hedging. • Fully implement the 2020 Fiscal Responsibility Law.
Priority Area 1.2: <i>Improve monetary policy effectiveness</i>	• Promote exchange rate stability by improving FX market transparency and predictability.	• Transition to an inflation-targeting monetary framework.
Priority Area 1.3: <i>Promote export diversification and regional integration</i>	• Improve trade facilitation. • Support exports of agricultural and fisheries products.	• Leverage mining and rare earths potential. • Expand the services economy. • Promote integration into global value chains.
Priority Area 1.3: <i>Promote social inclusion</i>	• Increase spending on education, health, and social protection.	
Policy Area 2: Boosting Productivity Growth and Efficiency		
Priority Area 2.1: <i>Strengthen the business environment and promote competition</i>	• Improve the operability of one-stop shops (GUE) and expand its services and geographic reach. • Programs for land tenure regularization, building on existing initiatives. • Support the Angolan Competition Authority (ARC) to implement its mandate.	• Rationalize the licensing regime and expand support for its implementation in the provinces. • Simplify the process for obtaining land rights through streamlining procedures and systems integration. • Reduce compliance costs with import/export requirements; digitalize transactions.
Priority Area 2.2: <i>Strengthen company capabilities and adopt digital solutions</i>	• Improve information availability on MSME support programs. • Apply existing evidence to designing interventions and strengthen monitoring and evaluation. • Promote collaboration between industry, entrepreneurs, and academia.	• Consider cost-effective interventions to provide companies with tailored support to strengthen their managerial capabilities. • Develop interventions that spur technology adoption and digitalization. • Strengthen the foundations for early-stage finance.

Priority Area 2.3: <i>Encourage development of financial services</i>	• Implement the collateral registry. • Strengthen the credit information framework. • Implement the new insolvency law.	• Strengthen the regulatory framework for the supply of digital financial services. • Encourage the development of financial agent networks and mobile payments. • Improve financial literacy and consumer protection.
Policy Area 3: Expanding Endowments		
I. Expanding Infrastructure		
Priority Area 3.1.1: <i>Increase electricity access</i>	• Connect new households through existing or extension of Low Voltage services. • Establish a mechanism to manage electricity sector revenue.	• Adopt regulations to facilitate private sector participation, e.g., the independent power transmission model (IPT). • Connect to the Southern Africa Power Pool (SAPP).
Priority Area 3.1.2: <i>Enhance transport infrastructure</i>	• Establish semi-autonomous road management agencies; delegate road infrastructure management through a contract management approach. • Mobilize private sector investment in the railway sub-sector by exploring new business models and implementing an adequate pricing mechanism.	• Increase private sector participation by stimulating business organization, integrating informal transport modes, and reviewing the bus acquisition program. • Transfer the management of airport infrastructure and services to the private sector.
Priority Area 3.1.3: <i>Enhance access to digital services</i>	• Enhance independence of the telecom regulator (INACOM) and update the policy, legal, and regulatory framework. • Amend the INACOM Organic Law and the Law on Electronic Communications and Information Society Services to promote greater infrastructure sharing.	• Address the dominance of telecom state-owned enterprises (SOEs) through reforms, restructuring, and privatization.
II. Expanding Human Capital		
Priority Area 3.2.1: <i>Fundamentals—health, nutrition, WASH</i>	• Expand community health and nutrition programs. • Launch a WASH coordination platform.	• Scale nutrition programs and WASH utilities. • Adopt WHO/UNICEF targets for child health.
Priority Area 3.2.2: <i>Empowering youth and women</i>	• Incentivize education for girls. • Launch peer education on reproductive health.	• Expand family planning services and community mentoring. • Monitor adolescent fertility reduction.
Priority Area 3.2.3: <i>Education and skills</i>	• Link school funding to learning outcomes. • Improve teacher training. • Boost digital skills programs.	• Fully implement performance-based education funding. • Expand teacher workforce and infrastructure.

Priority Area 3.2.4: Social protection	• Integrate safety nets into plans. • Expand national ID for better targeting.	• Design risk-layered financing. • Increase funding for pro-poor programs. • Build shock response systems.
Priority Area 3.2.5: Implementation and Coordination	• Foster a cross-sector coordination platform. • Prioritize early wins in health and nutrition.	• Align sector budgets and results frameworks. • Institutionalize human capital coordination.
III. Expanding Agriculture		
Priority Area 3.3.1: Solving land issues	• Improve legal and regulatory environment by extending the concession of land rights, relaxing requirements, and adapting the Minha Terra program.	• Enhance land services by integrating various registries, creating a single land cadaster, and promoting decentralization.
Priority Area 3.3.2: Strengthening infrastructure development (irrigation)	• Implement a comprehensive plan to incentivize the use of irrigation practices and technology.	• Involve the private sector in the expansion of large irrigation infrastructure.
Priority Area 3.3.3: Investing in R&D&I and strengthening technical/institutional skills	• Strengthen agricultural extension services.	• Increase investment in agricultural R&D&I and human capital, unlocking private investment.
Priority Area 3.3.4: Enhancing competitiveness	• Strengthen the existing programs targeting agricultural production and export diversification.	• Create a comprehensive plan to promote the use of seeds, fertilizers, agrochemicals, and equipment.

Chapter 1. Pursuing Macroeconomic Stability

Angola's experience demonstrates how mismanagement of great wealth in natural resources can undermine the sustainability of economic and social development. Following the end of 27 years of civil war in 2002, Angola experienced strong economic growth, fueled by substantial oil revenues, and became one of the fastest-growing economies in the world. Between 2002 and 2015, GDP expanded by an average 7.7 percent per year. However, the 2014–2016 slump in oil prices moved the country into a long and painful five-year recession, with an annual average contraction in real GDP of 2.1 percent from 2016 to 2020. Real income per capita also contracted by an average 5.4 percent per year over the same period, returning to near 2002 levels. Furthermore, growth benefits have not been equally distributed. Around a third of Angolans live in extreme poverty—less than USD 2.15 per day in 2017 purchasing power parity (PPP)—and wealth is concentrated in the hands of the few, as indicated by a Gini index of 0.51, one of the highest in the world. Development outcomes are weak. The country's human capital level of 0.36 is below the Sub-Saharan Africa (SSA) average and the child stunting rate is the seventh highest in the world (43.6 percent).

Angola can still leverage its vast economic potential to build a more inclusive, resilient, and sustainable growth model. The country's economic potential is rooted in its extensive arable land, abundant natural resources, favorable climate, young population, and geostrategic location. Angola's agricultural land covers 59.2 million hectares, nearly half the country's total area. A favorable year-round climate enhances agribusiness potential. Additionally, most of the population is young and increasingly educated, representing significant potential for demographic dividend. An extensive maritime coastline can support landlocked countries in the region and facilitate product flow through integration into the African Continental Free Trade Area. Angola can also leverage the potential of the Lobito Corridor, which includes the railway line connecting the Port of Lobito to the Democratic Republic of Congo (DRC) border, facilitating trade with DRC and, potentially, with Zambia. The corridor passes through four important agricultural provinces in Angola. Angola is also the second-largest oil producer in SSA, the third-largest diamond producer, and possesses strategic mining resources. The country has held regular elections since 2008 and maintains relative political stability.

This chapter provides a detailed analysis of Angola's economic growth trajectories over the 2002–2023 period. Section I analyzes the country's growth pattern, including volatility, convergence trends, and key actual and potential growth drivers, in comparison with peer countries.² Section I also includes an assessment of poverty and inequality trends. It compares Angola's post-conflict growth experience with Malaysia and identifies lessons to be learned. Section II examines the impact of a macroeconomic policy framework on economic performance. Specifically, the section assesses the evolution of fiscal, monetary, and trade policies. Section III provides long-term growth projections to assess Angola's growth potential based on a baseline scenario and an alternative reform scenario. Section IV concludes with policy priorities, presenting these priorities in a table, and outlines key areas for accelerating economic transformation, boosting productivity and efficiency, and expanding resources, thereby setting the stage for the following chapters.

I. Pattern of Growth

Growth volatility and convergence patterns

Angola experienced significant economic growth from 2002 to 2014, fueled by an oil boom. Between 2002 and 2008, the country enjoyed a significant oil boom, driven by a surge in global oil prices and an increase in

2. The selected structural peers are Nigeria, the Republic of Congo, Mozambique, Cameroon, and Zambia; aspirational peers are South Africa, Botswana, Indonesia, Colombia, Peru, Malaysia, and Chile.

domestic production. Angola's oil output grew from 0.8 to 1.8 million barrels per day, and Brent crude prices soared approximately 369 percent. From 2002 to 2015, the country's 7.7 percent average annual real GDP growth rate surpassed that of lower-middle-income countries (LMICs), including structural and aspirational peers.

However, after 2015, growth sharply declined due to a steep drop in global oil prices and domestic production. The 2014 oil price crisis marked the end of the oil-based growth era, leading to a prolonged recession from 2016 to 2020, made worse by the COVID-19 pandemic in 2020. Over this period, Angola's real GDP declined an average 2.1 percent per year. The country emerged from the five-year recession in 2021 with 1.2 percent growth, driven by both oil and non-oil sectors. From 2021 to 2023, the average growth rate was 1.7 percent (Figure 1.1).

After a long period of strong real GDP per capita growth, Angola has begun to trail behind its peers. Between 2002 and 2015, Angola's real GDP per capita nearly doubled, growing at an average annual rate of 3.8 percent, above the LMIC and structural peer average. However, this strong performance was almost entirely reversed between 2016 and 2023, with real GDP per capita declining at an average rate of 3.9 percent, falling back to near its 2002 level. Consequently, by 2023, Angola's real GDP per capita converged with the LMIC average, while the gap with aspirational peers widened (Figure 1.2).

Figure 1.1: Angola: Real GDP growth rate, 2002–2023

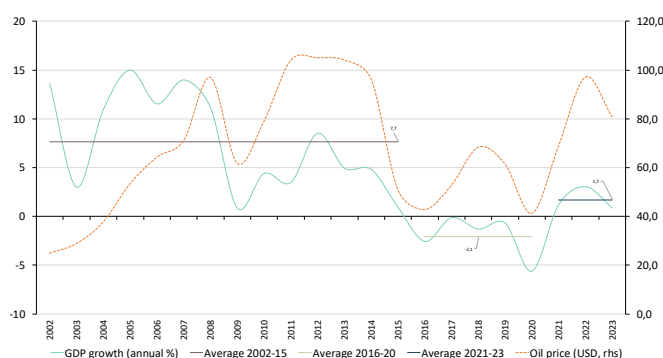
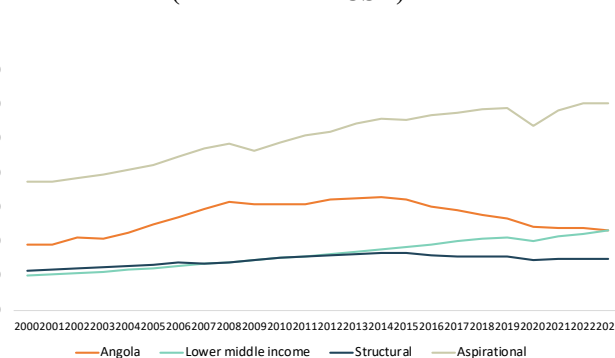


Figure 1.2: GDP per capita: Angola vs comparators (constant 2015 USD)



Source: Author's calculation based on WDI data.

Angola's economic growth is more volatile and less predictable than that of its peers. Over the 2002–2023 period, Angola had the highest standard deviation (0.06) in annual GDP growth when compared with its structural (0.02) and aspirational (0.04) peers, indicating greater economic fluctuation than comparator countries (Figure 1.3). Volatility in Angola's GDP growth was particularly high between 2002 and 2014, coinciding with the oil boom, declining slightly between 2015 and 2023. Volatility is largely driven by the oil sector, reflecting Angola's inability to absorb the impact of volatile oil-export proceeds on fluctuations in domestic aggregate demand.

Due to low growth and excessive volatility, Angola is no longer matching aspirational peers. During the oil boom, Angola's per capita income almost converged with that of South Africa and middle-income countries (MICs). There were temporary gains in productivity, but the dynamic was reversed following the 2014 oil shock, with a sharp decline in total factor productivity (TFP) (Figure 1.2). This highlights the unsustainability of a growth model that relies heavily on the use of natural resource wealth to fuel domestic aggregate demand. Although there were positive contributions from physical capital and labor, these were insufficient to counterbalance the decline in productivity, underscoring the structural fragility of the Angolan economy. As a reference, Angola now needs at least 55 years to catch up with South Africa's standard of living (Figure 1.4).

Figure 1.3: Standard deviation of annual GDP growth (Angola vs. comparators)

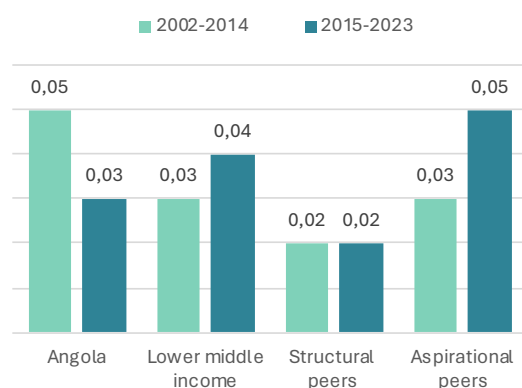
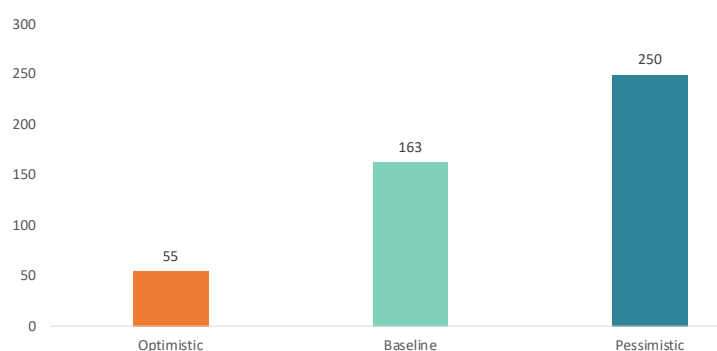


Figure 1.4: Angola's growth convergence relative to South Africa (number of years needed to catch up)



Note: GDP per capita is measured in constant 2017 USD at PPP. The maximum number of years is set to 250.

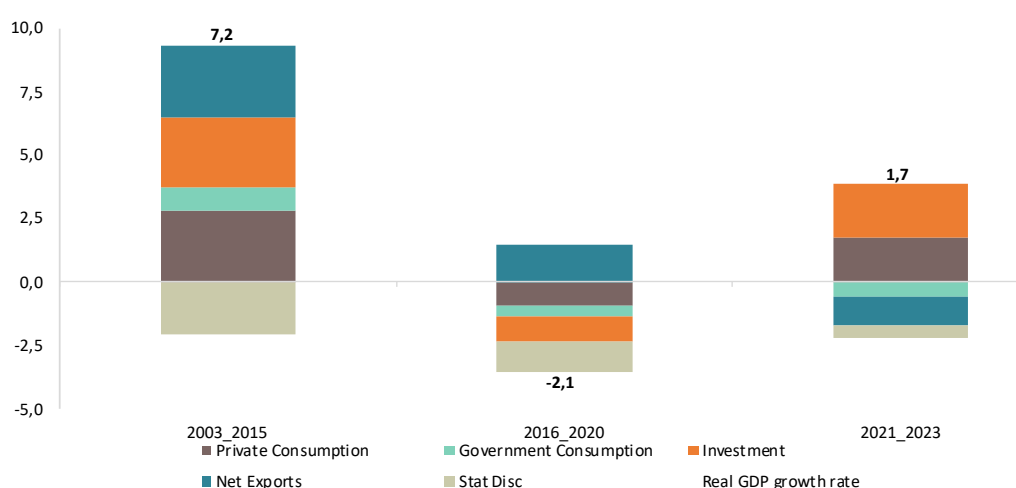
Source: CEM 3.0 Convergence Analysis Tool, WDI, and Penn World Tables 10.01.

Decomposition of Growth Drivers

a. Demand-side growth decomposition

During the oil boom, Angola's economic growth was driven by net exports, private consumption, and investment. From 2003 to 2015, high oil prices financed domestic aggregate demand. Net exports, private consumption, and investment contributed 2.8 pp, 2.8 pp, and 2.7 pp to the average 7.2 GDP growth rate, respectively. Net exports³ were used to finance the country's domestic aggregate demand. However, the oil price crisis of 2014–2016 reversed this pattern: from 2016 to 2020, lower oil prices resulted in a contraction in gross national disposable income and, with it, domestic demand. The average growth rate declined by 2.1 pp due to a slump in investment and consumption (down approximately 1 pp each). The ongoing recovery period (2021–2023) has been driven by strong investment growth (up 2.2 pp) and private consumption (up 1.7 pp), financed by debt since, this time, net exports declined in real terms (down 1.1 pp), owing to diminishing oil production capacity (Figure 1.5).

Figure 1.5: Demand-side decomposition of Angola's real GDP growth rate, 2003–2023 (period average)



Source: Author's calculation based on WDI data.

³ Angola's fiscal revenues amounted to USD 286 billion over the period 2004–2014. Angola Public Finance Review, 2023.

b. Supply-side growth decomposition of factor and sector contribution

On the supply side, capital accumulation was the primary driver of growth until 2015, but a decline in TFP slowed growth from 2016 onward. Between 2003 and 2015, capital contributed an average of 5.2 pp to the real GDP growth rate of 7.2 percent, followed by labor (1.2 pp) and TFP (0.8 pp) (Figure 1.6). From 2016 to 2023, the decline in TFP negatively impacted growth by 2 pp, significantly outweighing the marginal positive contributions of labor (1.2 pp), while capital accumulation was negligible (Figure 1.7). However, it is important to note that, in addition to the productivity of labor and technical progress, TFP also captures overall economic efficiency, including the strong decline in the use of productive capacity.⁴

Figure 1.6: Angola and peers: Solow growth decomposition, 2003–2015 (period average)

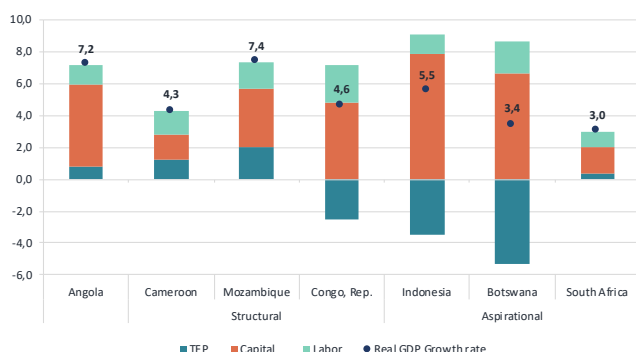


Figure 1.7: Angola and peers: Solow growth decomposition, 2016–2023 (period average)

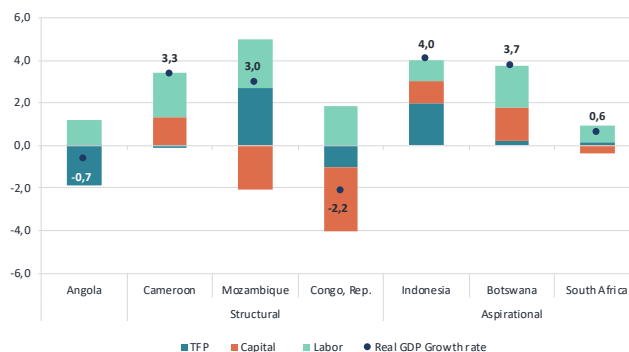


Figure 1.8: Average sector contribution to Angola's real GDP growth rate (pp)

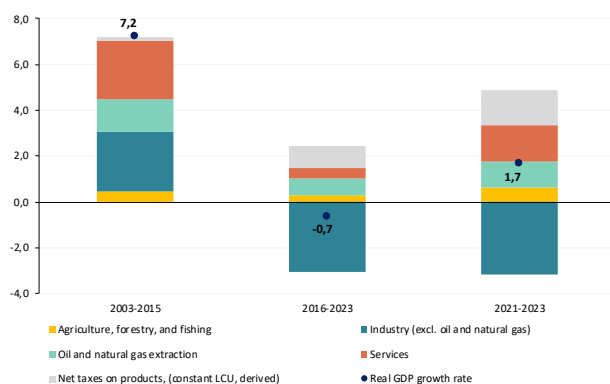
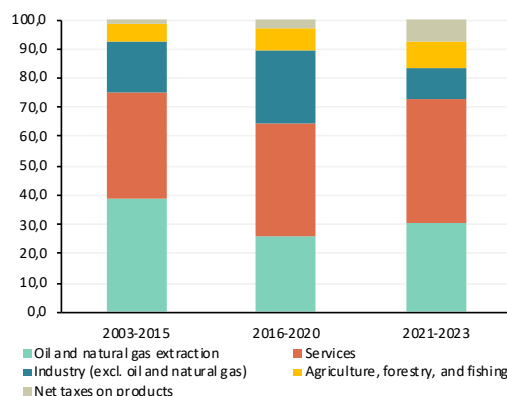


Figure 1.9: Evolution of average sector contribution to Angola's GDP's level (pp)



Source: Author's calculation based on WDI and Penn World Table (PWT) data.

The collapse of oil prices and production reduced the oil industry's contribution to overall economic activity. From 2003 to 2015, industry, particularly oil and gas extraction, was the primary growth driver, contributing an average of 4 pp. (with oil and gas extraction accounting for 55 percent) to the 7.2 percent average growth rate. This was followed by services and agriculture, contributing 2.5 pp and 0.5 pp, respectively (Figure 1.8). However, the 2014–2016 oil price crisis altered Angola's economic structure, reducing the industrial sector's contribution to growth. Between 2016 and 2023, industry contributed negatively, averaging -2.3 pp to the -0.7 percent average growth rate, which outweighed the positive contributions from services and agriculture (0.4 pp

⁴ World Bank Group. 2019d. "Natural Resources and Total Factor Productivity Growth in Developing Countries."

and 0.3 pp, respectively) (Figure 1.9). Consequently, although its contribution in 2016–2023 was lower than in 2003–2015, the services sector has been the main driver of Angola’s economic growth since 2014. The decline in oil prices and in production and the ensuing reduction in oil rents had a further, indirect impact; domestic demand for production from other sectors fell, which explains the decline in the contribution of the services sector from 2.5 pp in 2003–2015 to 0.4 pp in 2016–2023.

Potential Output Growth Decomposition and Output Gap

Angola’s macroeconomic instability has significantly affected its economic activity. The country’s output gap—the difference between actual and potential real GDP—has fluctuated considerably. The output gap remained almost balanced in 2003–2015, then widened to an average negative of around 4.7 percent per year in 2015–2023. The output gap shifted from a positive 8.5 percent in 2014 to a negative 10.5 percent in 2020, due to the prolonged effect of the 2014–2016 oil price crisis and the COVID-19 pandemic (Figure 1.10). This large and volatile output gap shows that poor macroeconomic management failed to reduce fluctuations related to excessive dependency on oil (Figure 1.11), and their impact on aggregate demand, activity, prices, and employment.

Figure 1.10: Output gap (% of potential GDP)

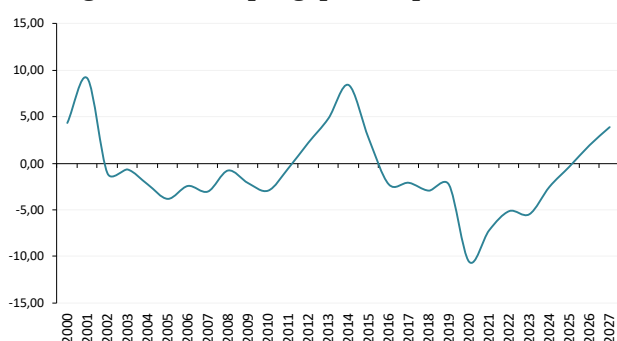
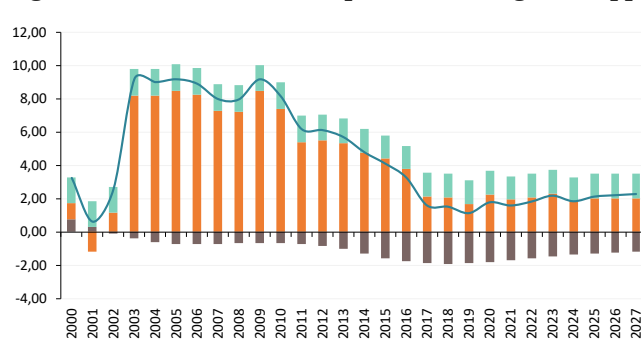


Figure 1.11: Contributions to potential GDP growth (pp)



Source: World Bank Macro-Fiscal Model (MFMOD).

Angola’s economy has been operating below its production possibility frontier (PPF), underutilizing resources and production factors. The economy has yet to reach the maximum level of production of goods and services given its resources in factors of production. Underutilization of available resources to increase the supply of goods and services, and improve the living conditions of the population is reflected in TFP decline.

Suboptimal accumulation of production factors also limits PPF expansion. Economic growth has been subdued by weak expansion of physical and, more specifically, human capital. The GDP growth rate has decelerated from an average of 7.5 percent per year in 2003–2015 to an average of 1.9 percent per year in 2016–2023, and it is projected to remain around this value until 2027. The decline is due to lower capital accumulation and labor growth (2.3 pp and 1.4 pp, respectively). While slow physical and human capital growth has prevented PPF expansion, a further drop (1.7 pp) in TFP has aggravated the already inefficient utilization of existing resources (Figure 1.11).

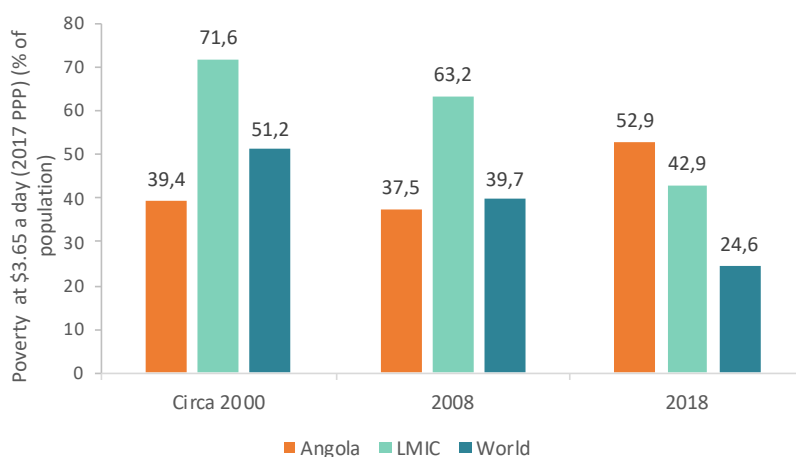
Macroeconomic stability is fundamental to Angola’s long-term economic progress. Large output gaps can permanently affect future potential by deterring savings and investment, hampering predictability, and triggering expectations of volatility. Companies refrain from hiring and investing, and the financial system becomes less inclined to support private investors, due to increased risk. This hampers capital accumulation, reduces investment in innovation and technology, and affects resource allocation and productivity. To achieve its economic potential, Angola should first adopt reforms to improve macroeconomic policy management and reduce volatility; then engage in institutional reform to enhance the efficiency of the economy and increase TFP; and finally, enhance physical and human capital accumulation, including by encouraging labor participation and improving efficiency in public expenditure.

Poverty and Inequality

Angola faces widespread poverty and deep inequality and is among the most unequal countries in the world.

Over half the population lives in poverty and the Gini index is at 51.3. According to the latest available data (2018), approximately 53 percent of the population lives on less than USD 3.65 per day (in 2017 PPP), and about 31 percent (10 million people) below the international poverty line of USD 2.15 per day. This includes roughly one-third of children below age 15. Moreover, 31.2 percent of Angolans are severely food insecure, resulting in a child stunting rate of 43.6 percent, the seventh highest in the world. Declining per capita output, high inflation (especially in food prices), and limited employment opportunities have eroded household welfare, contributing to greater poverty. Projections suggest that by 2025 more than a third of the population could be living on less than USD 2.15 per day. Poverty is deeply entrenched across both rural and urban areas; although particularly severe in rural areas, where 53 percent of the population relies on subsistence farming. Urban residents account for one-third of those living on less than USD 2.15 per day and are especially vulnerable to food price shocks

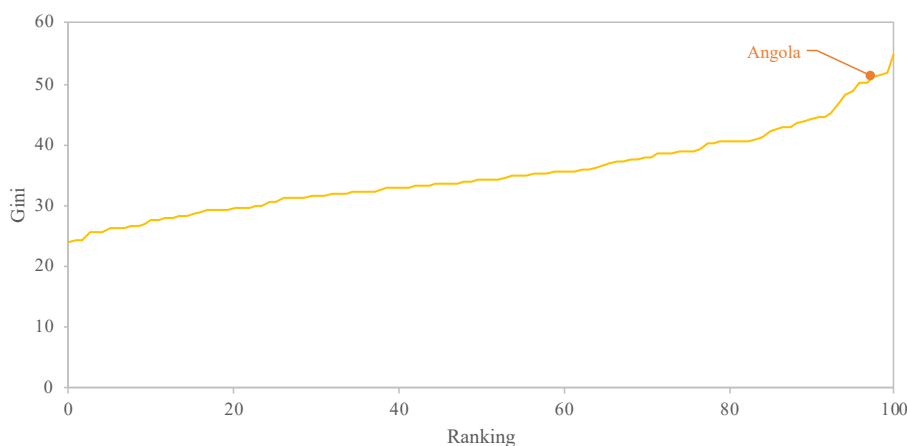
Figure 1.12: Poverty rate at USD 3.65/day



Source: Author's calculations based on WDI.

Note: due to differences in methodology and coverage, there is a lack of comparability between years for Angola.

Figure 1.13: Inequality measured by the Gini index



Source: Author's calculation based on the World Bank Poverty and Inequality Platform (PIP).

Note: these are the most recent data available (2018) for countries with inequality statistics.

The labor market remains fragile, marked by high informality and high youth unemployment. Informality affects around 80 percent of workers, youth unemployment exceeds 56 percent, and gender disparities in job quality are persistent. Angola has made progress in developing a social safety net, including a social protection registry and the Kwenda Program launched in 2020. As of June 2024, this cash transfer program had registered 1.5 million rural households—representing 21 percent of all households; the program is currently expanding to include urban beneficiaries.

Climate change and low human capital severely undermine Angola’s prospects for sustained poverty reduction. The country faces heightened risks from climate-related shocks (floods, droughts, and other extreme weather events), which threaten to exacerbate existing vulnerabilities. With a young and rapidly growing population, Angola’s long-term prospects for poverty reduction depend heavily on investments in human capital. However, low levels of schooling and poor health outcomes place Angola among the countries lowest on the HCI globally, even below countries with lower per capita income.

Post Conflict Growth: the Experience of Malaysia, and Lessons for Angola

In the 1950s and 1960s, Malaysia was a fragile country plagued by conflict. Insurgencies, fueled by ethnic divisions and social grievances and exacerbated by ideological struggles, rocked the country from 1948 to 1960. After independence in 1963, tensions and civil disturbance continued, culminating in large-scale riots on May 13, 1969. The amount of death and destruction threatened chaos. Malaysia’s Government declared a state of emergency. The emergency lasted for two years, during which the New Economic Policy (NEP) was prepared. Launched at the end of the emergency period, the NEP projected a prosperous Malaysia over 20 years. The Malays would have a growing share in the economy: aiding the Malay poor majority economically with an affirmative action program was considered the cornerstone of a solution to Malaysia’s racial tensions.

Malaysia’s NEP aimed to achieve national unity, harmony, and integrity through socioeconomic restructuring and by minimizing poverty. The NEP promoted access to land, accumulation of physical capital, professional training, and the development of public services. The Government has committed to securing full employment, participation in economic activities, and access to ownership in various economic sectors. The NEP aimed to redistribute wealth and foster strong economic growth, growing the pie for everyone to attenuate the impact of wealth redistribution on the losers.

As a producer of natural resources (tin, rubber, and oil) Malaysia took a first step toward natural resource diversification by producing palm oil. The area cultivated for palm oil expanded from 1.9 percent of the country in 1975 to 6.1 percent in 1990. In parallel, building on the country’s rich natural resources, Malaysia created incentives to expand large-scale, export-oriented, manufacturing and energy-intensive industries. The Heavy Industries Corporation of Malaysia (HICOM) was formed to assist in manufacture of pig-iron, aluminum die casting, pulp and paper, steel, cement, motorcycles, and heavy engineering.

By 1990, wealth in the hands of the Malay majority reached 19.3 percent, up from 2.3 percent in 1970. Overall poverty declined to 17.1 percent, down from 52 percent; rural poverty declined 21.8 percent, down from 59 percent; GDP per capita more than doubled, increasing by 4.5 percent on average per year. However, these results were made possible by a regional and international commitment to stabilize Malaysia: 1971 was the year of normalization between China and the USA, which immediately led to de-escalation between the two countries and between China and Indonesia. Thus it was that the combination of domestic action and a positive regional and international environment contributed to the success of the NEP.

A comparison of Angola with Malaysia proves informative. Population sizes are similar: Angola, 37 million; Malaysia, 34 million; although Malaysia has four times less territory than Angola. Both countries went through long periods of conflict and civil disturbance. At the end of the conflict, each benefited from immense natural resources that could aid in achieving prosperity and sustainable economic and societal transformation. Each benefited from a regional and international environment conducive to stabilization. However, Angola’s outcome 20 years after the end of the civil war is radically different from that of Malaysia 20 years after two decades of unrest.

The GDP per capita in Angola in 2021 (two decades post-civil war) was only 22.5 percent higher than in 2002, a mere 1 percent average annual growth over the period. Poverty in 2021 is back to 2002 levels. The economy is still highly dependent on oil, and neither agriculture nor manufacturing have picked up. Interestingly, Angola and Malaysia had a very similar investment ratio to GDP over their respective 20 years: Malaysia, 27.4 percent of GDP; Angola, 26.9 percent. Factors such as absence of natural resources, level of investment, or adverse regional environment do not apply and thus cannot explain the divergent paths taken by the two countries. After long periods of turbulence, Malaysia agreed upon a long-term national strategy to build the nation, economy, and society into a prosperous and cohesive whole. All successive governments and all components of society have supported a strategy that has benefited everyone since.

Box 1.1 Lessons from countries that successfully diversified their exports: Malaysia and Chile

There are several examples of resource-rich, developing countries that have been able to successfully diversify exports. Chile and Malaysia followed two different successful strategies to diversify exports away from their traditional commodity exports: copper for Chile; tin and rubber for Malaysia. In both cases, relatively good governance, a friendly FDI regime, and strong cooperation between the private and the public sectors were essential.

A. Malaysia

Malaysia moved away from its two main exports—rubber and tin—by promoting other commodities, mostly palm oil, and by moving to higher value-added products. The result was a drastic transformation in Malaysian exports: the share of tin and rubber in total exports was reduced significantly, and electronics and telecom components became the largest Malaysian exports.

The Malaysian state-driven model was based on: (i) significant public investment in education to create a highly skilled labor force, including in new economic sectors; (ii) close collaboration between government and the private sector; (iii) gradual economic disengagement from the state through privatization of SOEs; (iv) policies to bolster the Malay majority by reducing the economic gap and social tensions between different ethnicities; (v) an open FDI regime to develop nascent industries and foster a good business climate; (vi) excellent infrastructure development; (vii) an active sovereign wealth fund role in enforcing industrial policy and initiating greenfield seed investment in new sectors; and (viii) an active trade openness policy with signed bilateral, regional, and multilateral trade agreements.

The Malaysian authorities developed a series of targeted tools to support the export sector. For example, targeted export incentives providing tax concessions and exceptions on inputs and export goods; export processing zones (EPZs) with good access to major export infrastructure; international procurement centers to provide services to producers for exporting manufactured goods and purchasing intermediary inputs; instruments to provide export insurance and short-term financing to exporters and input importers; financial regulations with no exchange controls for exporters and access to long-term foreign currency financing.

Continuous adjustment of export policies, through cooperation between the private and public sectors, and the creation of a highly skilled labor force, has also made Malaysia's export model relatively versatile. While priority was placed on the manufacturing sector in 1970–1990, in the 1990s, the authorities created the Multimedia Super Corridor in an effort to make Malaysia a global and regional leader in ICT development and application, understanding that ICT-related export services could become a new source of growth.

Note: On August 1–4, 2023, a delegation of Angolan officials visited Malaysia to study the country's development experience. Annex 11 provides more information on the key lessons captured by the Angolan officials.

B. Chile

For four decades, the Chilean authorities have pursued a very active policy to support the diversification of the Chilean economy and reduce its excessive reliance on copper. Minerals still represent the largest share of Chilean exports, but the growth of non-traditional exports, which has been considerable over the past three decades, provides Chile with a better hedge against the negative terms-of-trade shocks resulting from declines in mineral prices.

The strategy followed by Chile was based on: (i) making the tradable sector a key policy priority, and encouraging public-private cooperation by developing an institutional network linking production support institutions with the export promotion agency; (ii) ensuring a stable macroeconomic environment with predictable fiscal and monetary policies aided by an efficient financial sector and appropriate exchange rate; (iii) active trade openness policy through unilateral liberalization and free trade agreements; (iv) a proactive FDI policy, making Chile one of the largest FDI recipients in Latin America; (v) creation of sound infrastructure to reduce costs; (vi) supporting private sector development through sound business climate regulation; and (vii) using the sovereign wealth fund to manage copper revenue windfalls to promote economic diversification.

Chile's strategy resulted in the internationalization of domestic enterprises and in a dramatic increase in access to world markets. Another key factor in Chile's policy was to base its diversification strategy on exploitation of the country's potential in the agricultural sector and liberalization of lower performing sectors, such as services, where FDI boosted competitiveness and efficiency.

Source: Gijon-Spalla, J. (2010). Extracted from the 2018 Angola CEM.

II. Macroeconomic Policy Framework

Fiscal Policy: Fiscal sustainability improved through fiscal consolidation after the 2014–2016 oil price shock, but risks remain high

Angola's public finances have been heavily reliant on revenues from the oil sector. From 2000 to 2014, oil revenue accounted for roughly 78 percent of Angola's total fiscal income. However, this introduced considerable volatility. The mid-2014 oil price crisis led to a sharp decline in oil-related revenue, reducing its share to 56 percent of total fiscal income between 2015 and 2019. Modest recovery in 2023 to 60 percent (Figure 1.14) followed a rebound in oil prices. Angola's dependency on oil revenue remains high, surpassing most of its peers, although slightly below the Republic of Congo (Figure 1.15).

Figure 1.14: Real fiscal revenue in constant Kz bn and oil prices, Angola (2002–2023)

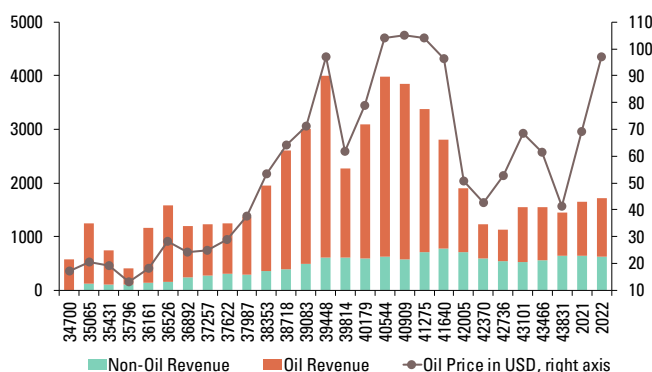
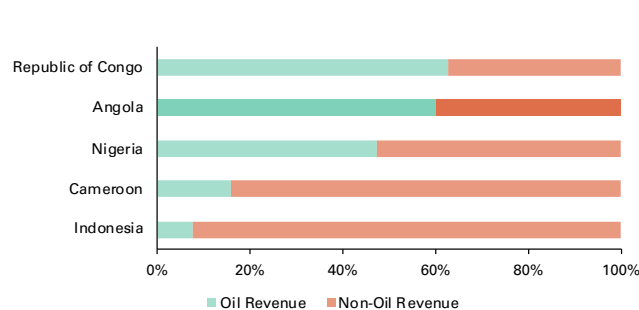


Figure 1.15: Revenue composition of Angola and peers (5-year average, 2018–2023)



Source: IMF; WEO (lhs); Minister of Finance; Haver (rhs).

Expenditures also revealed oil-related procyclicality, indicating deficiencies in medium-term fiscal policy and inadequate savings mechanisms (Figure 1.16). The categories most impacted were goods and services, and capital expenditure, leading to service disruptions such as supply shortages in schools and hospitals, and to inefficient use of resources such as lack of maintenance and unfinished infrastructure projects. This volatility in basic service delivery, maintenance, and public investment discourages private investment and hampers economic growth. Furthermore, a substantial portion of public expenditure during the oil revenue surge was directed toward domestic fuel subsidies to soften the impact of rising oil prices on the economy (Figure 1.17). Conversely, spending on education, health, and social protection remained low, below 6 percent of GDP over the 2016–2023 period.

Figure 1.16: Angola's 2002–2023 fiscal expenditure in constant Kz (billion) and oil price (USD/barrel)

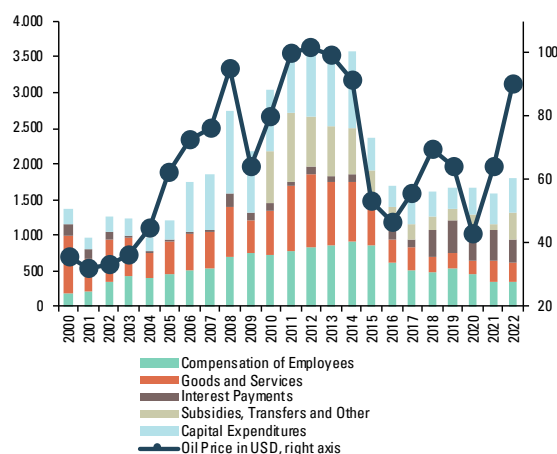
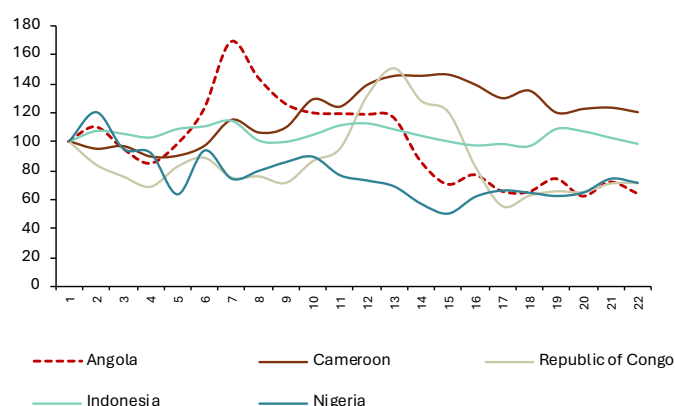


Figure 1.17: General government total expenditure (Angola and peers, 2002=100) (% of GDP)



Source: World Bank staff calculations.

Angola's public debt remains vulnerable to volatile global oil prices, exacerbated by overreliance on oil-backed loans (Figure 1.18). External debt rapidly increased 66 percent in 2002–2008, due to urgent post-war needs. Borrowing slowed in 2009 during the global financial crisis, but picked up again until 2014. The debt-to-GDP ratio kept to an average of 33 percent due to large nominal GDP growth. In the 2015–2023 period, this ratio increased sharply because of reduced oil revenue, economic downturns, fiscal deficits, currency devaluation, and high-yield Eurobond issuances, with debt peaking at 120 percent of GDP in 2019 (Figure 1.19). In 2020, the COVID-19 pandemic further weakened the fiscal situation, driving debt to 136.8 percent of GDP and elevating the risk of default. G20's Debt Service Suspension Initiative helped Angola alleviate immediate financial strain and supported recovery in 2021 as oil prices and fiscal revenues improved. The debt-to-GDP ratio decreased rapidly to 88 percent in 2021; 70 percent in 2022; rising again to 89 percent in 2023, due to currency depreciation.

Angola attempted to save a portion of its substantial oil revenue, yet challenges in the management of oil savings funds resulted in negative net savings. From 2004 to 2014, Angola had USD 286.5 billion in oil revenue. The country set up four savings mechanisms, but, at their peak in 2014, these held only USD 22.7 billion, or less than 10 percent of the total. At the same time, with a growing debt, negative net savings widened. A significant portion of the oil income was directed toward building physical assets (31 percent) and spending on health and education (16 percent).

Figure 1.18: Change in Angola's external debt and oil price

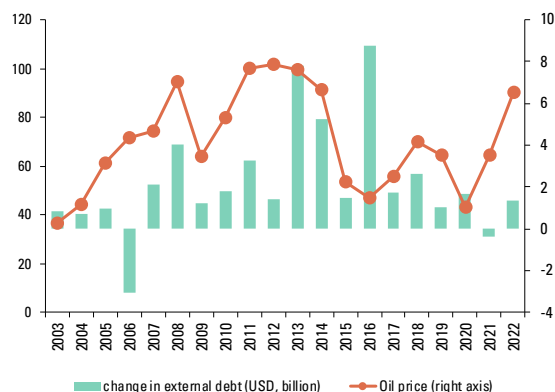
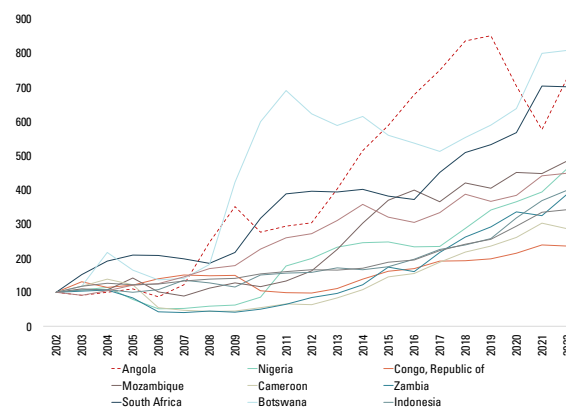


Figure 1.19: General government gross debt in USD (Angola and peers, 2002=100)



Source: World Bank staff calculations.

Box 1.2 Angola's experience with fiscal stabilization and savings mechanisms

Angola established several oil savings funds, yet none has had a significant impact on promoting fiscal smoothing and long-term savings. The Oil Fund (FP—*Fundo Petrolífero*; later renamed *Reserva Estratégica Petrolífera para Infra-Estruturas de Base*—REPIB) was designed to finance infrastructure using a fixed share of oil revenue. At the same time, the National Development Fund (FND—*Fundo Nacional de Desenvolvimento*), transferred to the National Development Bank of Angola (BDA—*Banco de Desenvolvimento de Angola*), supported private sector projects with resources from oil and diamond revenues. Angola's sovereign wealth fund (FSDEA—*Fundo Soberano de Angola*), intended for long-term resource management, was undermined by poor governance and asset erosion. By 2019, the Oil Fund was fully depleted, the FND had lost significant real value, and the FSDEA had failed to deliver on its mandate. Among all instruments, only the Oil Price Differential Account (OPDA—*Fundo do Diferencial do Preço do Petróleo*) had an explicit stabilization function; although it reached USD 4.5 billion in 2014, unclear usage rules and the 2014–2016 oil shock led to its complete depletion. In 2023, the FSDEA's asset recovered to USD 3.8 billion.

Overall, due to poor governance, these mechanisms did not generate sustainable savings or effectively cushion the fiscal impact of oil price volatility. Sovereign wealth funds pursue investment strategies shaped by political and institutional context. Governance quality is key: well-regulated, transparent funds tend to achieve stronger performance, while opaque, politically driven funds raise political economy concerns, especially in the absence of binding international standards. Angola's FSDEA's failure illustrates such challenges: plagued by poor transparency and weak governance under José Filomeno dos Santos (son of the former president, José Eduardo dos Santos), it became embroiled in an embezzlement scandal (Organized Crime and Corruption Reporting Project (OCCRP) 2018).

Since 2018, the authorities have launched major reforms to strengthen Angola's FSDEA. Several reforms have been introduced since 2018 to rebuild FSDEA credibility: appointment of independent investment managers, a revised investment strategy, and partial adherence to the Santiago Principles (International Forum of Sovereign Wealth Funds 2022; Schena and Collins, 2023). In addition, a clearly defined rule on the use of windfall revenue to capitalize the fund is improving its stabilization role. As a result, FSDEA assets recovered from USD 2.8 billion in 2021 to USD 3.8 billion in 2023.

Beyond emblematic models such as Norway, Angola could benefit from observing successful cases in other developing countries—most notably Chile. Frequently cited as a benchmark for sound sovereign wealth fund management, Chile has established the *Fondo de Estabilización Económica y Social (FEES)*

as a key instrument of its fiscal policy. The country is recognized for its disciplined counter-cyclical fiscal strategy and prudent allocation of budget surpluses through the FEES. The fund is widely praised for its high levels of transparency, strong fiscal governance, and its stabilizing role in the Chilean economy (Caner and Grennes 2009; Gelb et al. 2014; IMF 2023). Another relevant example for Angola is the Malaysian Khazanah National Sovereign Wealth Fund, created in 1994 and ranked among the world's largest sovereign wealth funds. Initially tightly controlled by the Government, the fund was transformed in 2004, with new leadership, because of democratic pressure (Lai 2012). This reform resulted in greater transparency, regular publication of performance reports, a broader international investment mandate, and the adoption of international standards (Khazanah Nasional Berhad 2016).

Oil price hedging also offers Angola an opportunity to enhance its fiscal stabilization mechanism. In the medium term, Angola could rely on financial hedging instruments to mitigate short-term fiscal risks arising from oil price volatility. Although such measures have not yet been implemented, they represent a credible option for enhancing the stability and predictability of public finances. Among these instruments, put options (comparable to insurance contracts) provide a guaranteed minimum price in exchange for an upfront premium, thus protecting against revenue shortfalls in the event of price decline. This strategy entails a trade-off: foregoing potentially high but uncertain revenues in favor of more stable and secure income streams. For hedging to be effective, it must be embedded within a robust institutional framework, supported by long-term planning, clear governance rules, and sufficient technical expertise. Assigning this responsibility to a future sovereign savings or stabilization fund could ensure prudent and transparent management in line with fiscal policy objectives. The experience of Mexico provides a valuable reference: its oil-hedging program is fully integrated into the budgetary framework and benefits from strong institutional governance, transparency, independent oversight, and effective public communication (see Yépez-García et al. 2012, for a comprehensive discussion).

Since 2016, Angola has undertaken significant fiscal consolidation in response to major macroeconomic challenges, supported by an IMF program. The country faced dwindling oil revenue, escalating external debt service obligations, restricted access to international capital markets, and severe currency devaluation, all of which threatened its economic stability. Consequently, Angola made drastic fiscal adjustments, reducing total primary expenditure from 34.3 percent of GDP in 2014 to 14.2 percent of GDP in 2021. Angola also improved non-oil revenue mobilization and tax administration capacity, with an emphasis on the introduction of VAT in 2019. Amid continued fiscal adjustments, Angola managed to navigate economic headwinds, recording a primary balance of 4.8 percent of GDP in 2021, 7.3 percent in 2022, and 5.2 percent in 2023, despite slow growth and currency depreciation.

Angola adopted a new fiscal framework, but implementation has remained limited

The authorities also strengthened fiscal sustainability by implementing new institutional arrangements, most notably the 2020 Fiscal Responsibility Law. The Fiscal Responsibility Law reshaped the fiscal framework and introduced clear fiscal rules, multi-year budget planning, and enhanced fiscal and debt transparency. It established medium-term targets of 60 percent of GDP for debt and 5 percent of GDP for the non-oil primary deficit, respectively (World Bank 2021; IMF 2024). The framework encouraged greater savings during periods of high oil revenue, thereby limiting the scope for procyclical and expansionary fiscal policies.

The law also provided for the creation of a budget stabilization fund to mitigate fiscal volatility. The fund is to be supplied only when gross financing needs fall below 5 percent of GDP, underscoring government priority to reduce debt. However, the fund's operational details—particularly the rules for deposits and withdrawals—as well as its coordination with existing fiscal instruments, have yet to be clearly defined. In addition to these instruments, the law mandates the regular publication of budgetary information, including quarterly reports on budget execution and an annual report that retrospectively evaluates the alignment of fiscal policy with the rules and objectives established by the law. It also requires all public entities to submit timely financial data to ensure comprehensive consolidation of public accounts (World Bank 2021).

Implementation of the fiscal responsibility law remains limited, as Angola is still navigating a transitional phase focused on fiscal consolidation and debt reduction. Despite the GoA's commitment, achieving the short-term targets set by the Fiscal Responsibility Law remains challenging. Between 2023 and 2024, the non-oil primary deficit narrowed slightly from 8.3 percent of GDP to 7.4 percent of GDP, reflecting persistent fiscal pressures and limited mobilization of non-oil tax revenues (World Bank 2025). In parallel, public debt is expected to stabilize at around 72 percent of GDP in the medium term, despite accelerated debt repayments, which further constrains fiscal space.

Angola's fiscal consolidation strategy hinges on enhanced mobilization of non-oil revenue and improving expenditure efficiency. Improving non-oil domestic revenue mobilization is critical to ensuring the long-term sustainability of public finances, particularly in the face of persistent oil price volatility. This requires broadening the tax base—primarily through the reduction of tax exemptions—and strengthening tax administration. Furthermore, the authorities have initiated several structural reforms, including lowering the VAT threshold, revising personal income tax brackets, reforming corporate income tax, and introducing a property tax based on a modernized cadastral registry. Concurrently, efforts are underway to broaden the tax base by addressing informality—particularly through the digitization of administrative procedures, the establishment of a tax compliance certificate, and the georeferenced registration of 20,000 informal business entities.

Fuel price subsidy reform is critical to improving fiscal sustainability and efficiency. Angola has historically maintained substantial fuel subsidies (estimated at 3.5 percent of GDP in 2024), which made its fuel prices among the lowest globally. These subsidies are widely criticized for being both economically inefficient and socially regressive. Subsidies also limit fiscal flexibility, constrain investment in essential public services, and encourage overconsumption of fossil fuels. Consequently, in line with IMF guidelines, the GoA began a gradual phase-out of fuel subsidies, with three successive price increases. While a full removal could generate substantial fiscal savings, it may also worsen the vulnerability of poorer households, for whom subsidies represent a significant share of their disposable income. Moreover, subsidy reforms can alter the cost structures of key sectors. In Angola, for instance, the fishing industry is expected to be particularly affected by rising diesel prices, raising concerns about adverse effects on food security and nutrition (Bambe et al. 2024).

A gradual approach to subsidy removal may help build public support while allowing time to strengthen compensatory measures. The GoA could delay the most politically sensitive components while increasing social spending or targeted cash transfers, either prior to or alongside the phasing out of subsidies. The success of this approach also hinges on effective public communication and awareness campaigns regarding the adverse effects of subsidies and the intended goals of the reform (Bambe et al. 2024). Significant progress has been made in subsidy reform, yet key challenges remain, notably the absence of a clear and automatic fuel price-setting mechanism and insufficient transparency in the fiscal compensation process between the national oil company and the Ministry of Finance (IMF 2025).

Achieving the fiscal targets set out in the fiscal responsibility law remains uncertain. Successful implementation of the law hinges on sustained, resolute pursuit of fiscal consolidation efforts. Reforms are already underway, particularly those focused on non-oil revenue mobilization and rationalization of fuel subsidies. However, the GoA has yet to implement a fiscal adjustment strategy centered on targeted reduction of non-essential current expenditure, while also reallocating public resources toward development spending. Accordingly, the IMF has recommended a more stringent fiscal path, equivalent to around 1 percent of GDP per year, to proactively rebuild fiscal buffers. This adjustment could combine an ambitious revenue-raising effort with rationalization of low-efficiency expenditures. The overarching objective is to enhance the sustainability of public finances while creating the fiscal space necessary to support key development priorities (IMF 2025). The state budget for 2025 aims to revise the Fiscal Responsibility Law to further improve the fiscal framework.

The IMF acknowledges improvements in public procurement practices and the development of a MTFF. However, it recommends a more comprehensive approach to address public financial management (PFM) gaps and to enhance transparency in procurement practices, SOE governance, and revenue administration. Furthermore, broadening the tax base, improving the management of public investments, and ensuring transparency in contract procurement will be essential to reinforcing fiscal resilience and development outcomes.

Monetary Policy: A tight monetary policy stance and a more flexible exchange rate regime has mitigated the impacts of external shocks and improved external competitiveness

Angola's economy has consistently faced high inflation, attributed to low diversification, fiscal expansion driven by oil revenue, and exposure to imported inflation. In 2000, inflation was nearly 425 percent, and began slowing down in the mid-2000s, plummeting to about 7 percent in 2014, the lowest in two decades. However, this has given Angola an average annual inflation rate of 25.9 percent between 2002 and 2023, significantly exceeding the SSA average of 10 percent and those of structural and aspirational peers (9.3 percent and 5.2 percent, respectively). The reduction was largely due to stringent monetary policies that curtailed the money supply. It also benefited from a strong appreciation of the nominal exchange rate from 2005, bolstered by increased oil revenue, which helped attenuate imported inflation. Yet appreciation of the real exchange rate continued unabated until 2014.

Figure 1.20: Average inflation rate, 2002–2023

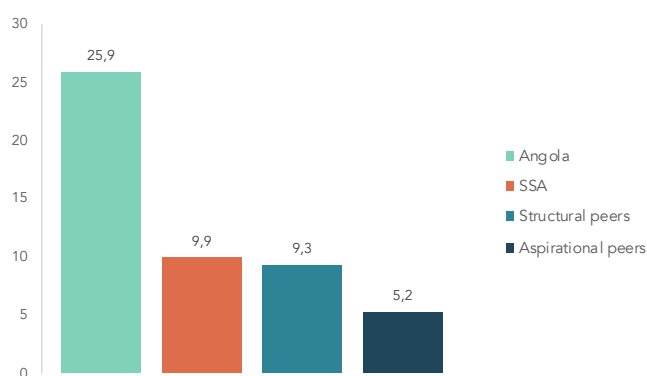
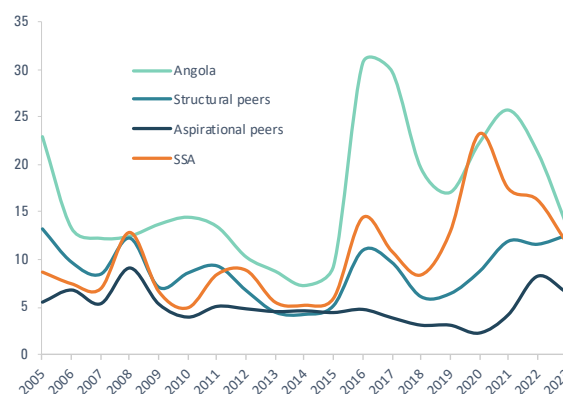


Figure 1.21: Evolution of average inflation, 2002–2023



Source: WDI.

Despite a significant decrease from 2002 to 2014, Angola's double-digit inflation rate has persisted. During this period, the BNA implemented tighter monetary policies and introduced reforms for a more flexible monetary policy framework. The growth of the money supply (M2) fell from approximately 156 percent in 2002 to an average of 41 percent over 2003–2014. From 2009, the BNA prioritized de-dollarization to enhance monetary policy control, and introduced new instruments in 2012, such as the Reference Interest Rate and the Luanda Interbank Offered Rate (LUIBOR). Additionally, the BNA set a target inflation rate of 10 percent.

The 2014–2016 oil price crisis accelerated inflation from 7 percent in 2014 to a peak of 41 percent in 2016. However, strong macroeconomic stability reforms, such as fiscal consolidation and a tighter monetary policy helped contain inflation. Consequently, inflation began to decrease, reaching 13.8 percent in 2022. M2 expanded 24.3 percent in 2020 but then decreased 9.3 percent in 2021 and a further 1.4 percent in 2022, followed by a sharp increase, 37.8 percent, in 2023. The monetary policy effectively contained inflationary pressures despite significant Kz depreciation of approximately 167 percent between 2018 and 2023.

From mid-2023, the removal of fuel subsidies and a sudden, large, currency depreciation triggered a new inflationary surge. Despite the geopolitical global geopolitical turmoil (Russian's invasion of Ukraine), which caused a spike in commodity prices, Angola continued a downward inflationary trend, supported by a rise in oil prices and subsequent currency appreciation (27 percent in 2022). Consequently, the BNA softened its monetary policy, reducing the benchmark interest rate by 250 basis points in the first quarter of 2023. However, a sharp and prolonged decrease in oil production, and lower prices, along with the resumption of debt service payments, led to a critical foreign currency shortage, resulting in Kz depreciation starting May 2023. Moreover, the Government began phasing out fuel subsidies, causing gasoline prices to rise from Kz 160/liter to Kz 300/liter in June 2023. As a result, annual inflation accelerated from about 10 percent in May 2023 to approximately 20 percent by December 2023, alongside a sharp increase in M2, which rose from -1.4 percent in 2022 to 37.8 percent in 2023.

In 2018, the BNA transitioned from a fixed peg/USD to a more flexible exchange rate, while also introducing a monetary targeting regime. Since 2002, the REER had been rising, due to a spending effect⁵ pushing the ratio of domestic prices relative to foreign prices. This real appreciation eroded the non-oil sector's competitiveness. The decline in oil prices and production led to a REER depreciation. Moreover, the BNA's move in 2018 toward a more flexible exchange rate regime led to 167 percent Kz depreciation against the USD by 2023. This shift helped to close the gap between the parallel and official exchange rates and contributed to further depreciating the REER. From 2017 to 2021, the REER index fell sharply from 148.6 to 78.1, and the parallel-to-official exchange rate gap shrank by approximately 96 percent.

Figure 1.22: Official and parallel exchange rate

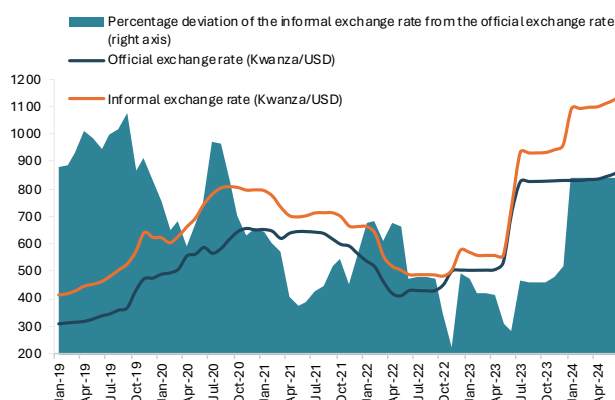
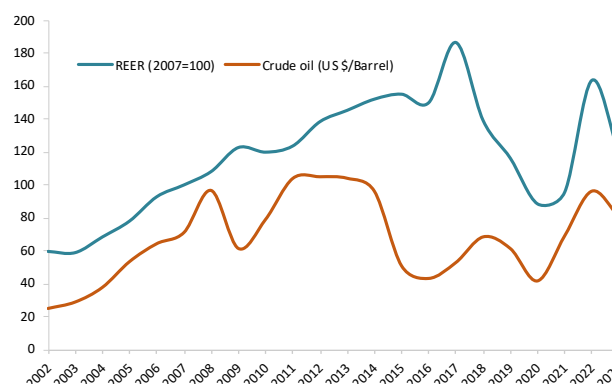


Figure 1.23: REER



Source: BNA. WDI database.

Recent Kz fluctuations have led to further misalignments. The currency appreciated modestly from February to October 2022, buoyed by rising global oil prices, which caused the REER index to surge to 132.1 in 2022. However, starting in November 2022 and escalating from May 2023, the Kz depreciated sharply, due to a downturn in oil production. From May to November 2023, Kz value plummeted by approximately 41 percent, hitting a record low of Kz 828/USD by December 2023, causing the gap between the informal and official exchange rates to widen, reaching about 16 percent in December 2023.

5. According to Coren and Neary, Dutch Disease operates through two effects: (1) a resource movement effect that draws productive resources toward the booming commodity sector and away from other tradable sectors exposed to international competition; and (2) a spending effect that increases domestic demand, leading to higher exports of tradable goods and higher prices for non-tradable goods. The two effects combine to increase domestic prices and costs relative to foreign prices and costs, thus raising the real exchange rate and reducing the competitiveness of the domestic economy.

Trade Policy: Angola has had an increased trade and current account surplus, but low export diversification leaves it vulnerable to external shocks

Angola remains structurally exposed to external shocks, due to its overwhelming reliance on oil exports. Between 2002 and 2023, Angola displayed an average trade openness rate of approximately 86 percent of GDP—significantly higher than its structural and aspirational peers (69 percent of GDP and 57 percent of GDP, respectively). A structural current account surplus averaging 5 percent of GDP was maintained over the same period, in sharp contrast with persistent deficits recorded by comparator groups. However, this strong external performance masks an important vulnerability: the country’s export basket remains heavily undiversified, with raw materials accounting for nearly 96 percent of total exports. This concentration underscores the fragility of Angola’s external sector and highlights the critical importance of diversifying its production and export base to enhance resilience against commodity price shocks.

Angola’s heavy dependence on oil exports exposes it to the high volatility of international oil prices. Between 2002 and 2023, the country reported an average terms-of-trade standard deviation of 37, significantly higher than that observed among structural peers (17) and aspirational peers (13) over the same period. There was a similar REER trend, with standard deviation reaching 35 over the same period, compared with 15 (structural) and 10 (aspirational) in comparison groups. These high volatility levels reflect the Angolan economy’s marked exposure to trade shocks, particularly through fluctuations in international oil prices. In the absence of appropriate smoothing mechanisms, this persistent instability has long hampered the country’s economic performance, fueled recurrent macroeconomic imbalances, and limited the development of a competitive manufacturing sector. This underscores the need for robust macroeconomic buffers and economic diversification strategies to mitigate such vulnerabilities.

Angola’s tariff policy significantly influences trade outcomes, often at the expense of economic diversification and competitiveness. The average tariff rate in Angola has risen from 7.3 percent in 2013 to 13.3 percent in 2025, with agricultural tariffs more than doubling from 9.8 percent to 25.5 percent over the same period. Tariffs for non-agricultural products increased from 6.9 percent in 2013 to 10.4 percent in 2025. While this benefits some domestic industries, it creates an anti-export bias, distorts competition, increases sector inefficiencies, and raises costs. The disparity between tariffs on inputs and outputs has widened, resulting in significant protection for domestically produced consumer goods.

Despite preferential access to markets via the EU’s “Everything but Arms” (EBA) and the US’s African Growth and Opportunity Act (AGOA), Angola underutilizes these schemes due to lack of fully participation or operationalization. Angola receives duty-free treatment in developed countries but does not grant reciprocal tariff terms. Furthermore, regional integration remains incomplete—e.g., participation within the Southern African Development Community (SADC) Free Trade Area and the African Continental Free Trade Area (AfCFTA) is limited. Although Angola is not expected to move from least developed country (LDC) status until after 2030, the economic impact of this transition is likely to be limited. LDC-specific preferences currently apply to less than 1 percent of the country’s exports, and official aid represents only 0.2 percent of GNI, suggesting modest macroeconomic implications. Meanwhile, bureaucratic hurdles and import restrictions continue to limit companies’ access to inputs, holding back industrial upgrading and Global Value Chain (GVC) integration.

Non-tariff barriers (NTBs), a combination of complex regulations, weak infrastructure, and burdensome procedures, continue to represent a major constraint to trade in Angola. Despite some progress, imports can still take up to 96 hours to clear and may incur administrative fees of USD 460, while exports require over 20 documents from multiple agencies. Decree 34/15 obliges importers of certain goods to register and prove logistical capacity, thereby creating technical barriers. Decree 63/21 mandates local packaging for bulk imports, aiming to boost employment but potentially disrupting trade flows. Food and pharmaceutical imports are further delayed by quality checks and multiple ministerial approvals, adding time and costs. Technical standards and customs procedures remain opaque, generating uncertainty for businesses. Reforms are underway to improve customs valuation transparency and reduce transaction costs. As Angola lowers its tariff rates, strengthening

institutional and technical capacity will be key to ensuring that sanitary and technical regulations facilitate rather than hinder export growth.

Figure 1.24: Trade openness (% GDP)

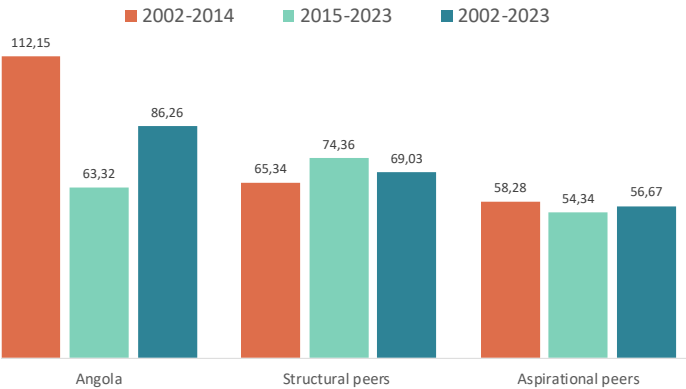
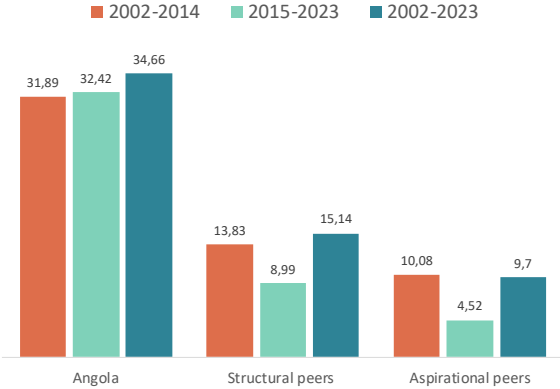


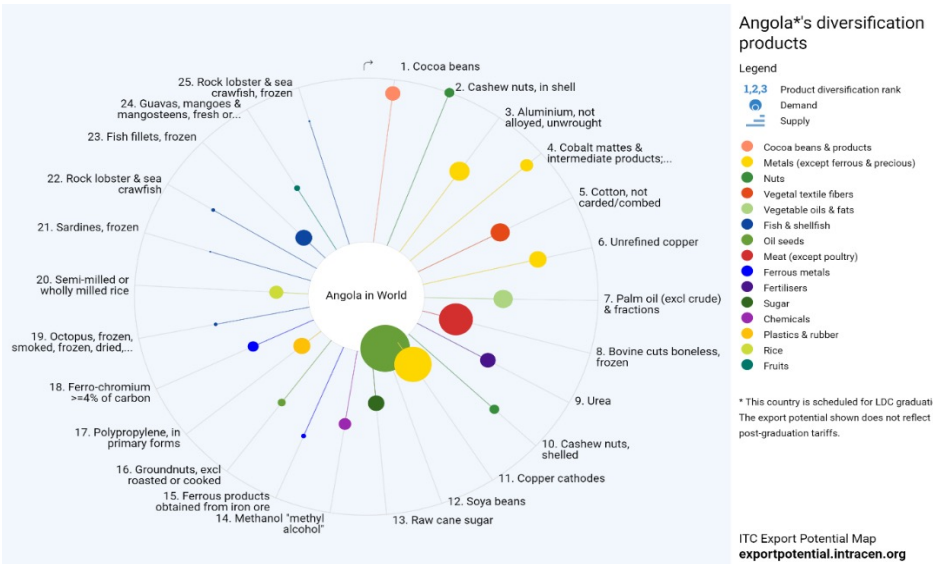
Figure 1.25: REER (standard deviation)



Source: WDI.

The composition of Angola’s export goods has remained largely unchanged over the past two decades, making it one of the most concentrated markets globally. Non-fuel exports increased from 2.1 percent of goods exports in 2010 to 5.1 percent in 2022, averaging 4 percent from 2002 to 2022. This is significantly lower than the averages for structural peers (63.9 percent) and aspirational peers (81 percent) over the same period. The Herfindahl-Hirschman Index (HHI) for product concentration stands at 0.82, one of the highest in the world with only a slight improvement from 0.94 in 2010. While Angola’s export markets are more diversified than its products, they remain concentrated, with an HHI of 0.29 from 2002 to 2021, which is considerably higher than the HHI of structural peers (0.14) and aspirational peers (0.12).

Figure 1.26: Angola’s export diversification opportunities

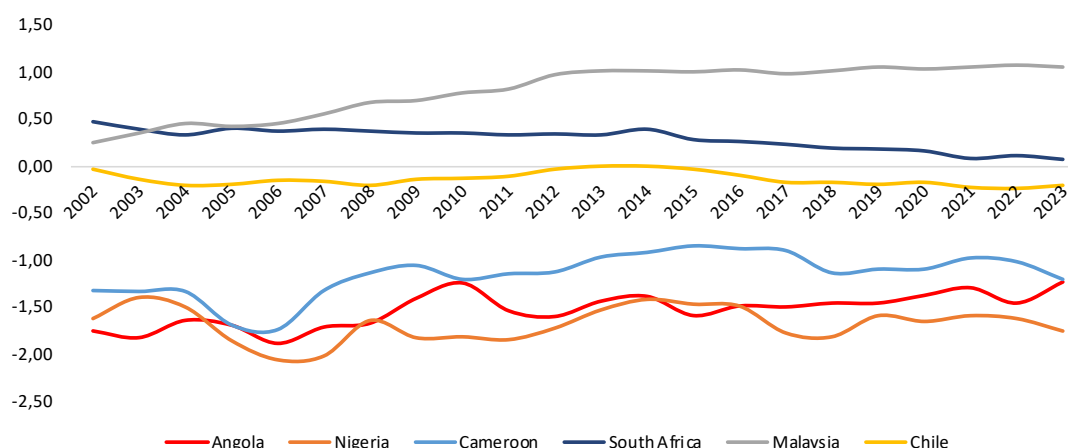


Source: International Trade Centre (ITC).

Note: The ITC Export Potential Map should be used as a starting point in a decision-making process with further research and stakeholder consultations.

Angola's ranking in the Economic Complexity Index (ECI) remains among the lowest globally. It has improved only slightly between 2002 and 2023, moving from -1.74 to -1.23 , and UNCTAD's index confirms persistent productive weaknesses. Only six non-extractive products reveal comparative advantages; for example, wood chips, wheat flour, et al. represent over USD 90 million in untapped export potential and, according to the International Trade Centre (ITC), cocoa, cashew nuts, cotton, refined palm oil, and frozen beef also hold strong diversification potential. The UNCTAD-Eora GVC Index indicates that Angola's GVC participation has been limited, averaging around 45 on a 0–100 scale, over the past two decades. This has been predominantly driven by the forward component, with an index close to 29, compared to only 16 for the backward component, which reflects the country's limited manufacturing capacity and heavy reliance on raw material exports.

Figure 1.27: Angola vs. Comparators: ECI, 2002–2023



Source: Observatory of Economic Complexity.

Angola is taking a decisive step toward regional integration by preparing to join the SADC Free Trade Area and by advancing implementation of the AfCFTA. Angola is finalizing its accession to the SADC Free Trade Area; 90 percent of tariffs to be immediately removed and the rest to be phased out by 2030. Ratification is expected by mid-2025. Once Angola joins, only the DRC and the Comoros will remain outside the SADC Free Trade Area. Angola also joined the AfCFTA in 2020, the 30th country to ratify, and is advancing AfCFTA implementation, aiming for full rollout by end-2025. As an LDC, Angola will liberalize 90 percent of tariffs by 2031, a further 7 percent by 2034, and leave 3 percent excluded. Angola's greater integration into regional economic zones could significantly enhance its currently minimal trade with its neighbors. Indeed, according to ITC data, between 2020 and 2024, Angola's total exports increased from approximately USD 21 billion to USD 37 billion, averaging USD 36 billion annually over the period. However, trade with African peers remains limited, averaging only 3.9 percent (USD 1.4 billion) of its total trade, and is even lower for immediate neighbors: combined exports from Angola to the DRC and Namibia amounted to just 0.3 percent (USD 120 million) of total exports. This highlights Angola's extremely low level of regional trade integration and its untapped potential in intra-African commerce.

Although Angola's accession to the AfCFTA offers promising prospects, major structural challenges may still limit its potential benefits. While efforts to harmonize trade policies under the AfCFTA aim to facilitate the free movement of goods, services, capital, and people, their effectiveness largely depends on the capacity of member states to address internal constraints. Drawing on the conditions identified by Meade (1955) for

the success of a customs union—industrial complementarity, market size, and initially high tariff levels—the African continent meets the latter two. Africa benefits from a large market and relatively high tariffs, which provide room for significant trade creation, especially through the planned elimination of 90 percent of tariff lines over the next decade. However, low levels of industrialization and a heavy reliance on primary commodities significantly weaken the region’s ability to export value-added and non-rentier products, particularly in Angola where oil accounts for 96 percent of total exports.

Other key preconditions for fully benefiting from the AfCFTA agreement include macroeconomic stability, a business-friendly environment, and solid institutions. Angola continues to experience significant macroeconomic volatility, which undermines its long-term development prospects. Greater control of inflation, low fluctuation in activities, and a stable exchange rate allow domestic firms to better anticipate trade-related costs and revenues. This in turn enables them to make more sustainable and less risky investments and improves the country’s attractiveness to foreign investors. Beyond macroeconomic considerations, the broader economic environment also plays a critical role. This includes access to credit for companies, the quality of infrastructure, and human capital development. Weighing heavily on company productivity and competitiveness are Angola’s persistent deficits in key areas: poor educational outcomes, a mismatch between skills and labor market needs, limited access to electricity, and deteriorating infrastructure. Finally, institutional transparency, stronger property rights, greater political stability, and a more efficient regulatory and bureaucratic framework are equally essential for company growth and productivity. These structural challenges represent major barriers to realizing full potential of the AfCFTA, not only for Angola, but also for many other African countries.

Box 1.3. The AfCFTA's potential

Despite the global trend toward trade liberalization and the growing number of regional trade agreements in recent decades, intra-African trade remains limited. International trade has undergone a profound transformation, driven by major technological advances in transportation and communication and by the gradual relaxation of trade policies. This has led to a steady reduction of tariffs and the progressive removal of non-tariff barriers. Alongside major multilateral agreements negotiated under the World Trade Organization (WTO), regional trade agreements have proliferated since the 1990s and now account for over half of global trade. However, the African continent, where regional trade remains relatively modest, has not yet been fully integrated into this global momentum. In 2023, intra-African trade accounted for less than 13 percent of the continent's total trade, in comparison to 66.9 percent in Europe, 63.8 percent in Asia & Oceania, and 44.4 percent in the Americas (Mo Ibrahim Foundation 2023).

To promote intra-African trade, the AfCFTA aims to progressively eliminate customs duties among member states. As part of the African Union's Agenda 2063 for inclusive and sustainable socioeconomic transformation, the agreement establishing the AfCFTA was adopted in March 2018 and became legally effective on May 30, 2019. Its core objective is to reduce trade barriers among African countries. The operational instruments supporting its implementation were launched in July 2019, and the first official trade under the agreement began on January 1, 2021. The agreement provides for the liberalization of 90 percent of tariff lines, which is expected to generate a significant trade creation effect within the continent. At the same time, the simplification of customs procedures, harmonization of technical standards, and unification of rules of origin are expected to significantly reduce logistical costs and border delays, thereby facilitating the movement of goods.

The resulting trade creation effect could stimulate productive specialization among African countries. Such specialization would support integration into regional value chains, with each country focused on segments where it holds a comparative advantage, while benefiting from easier access to locally produced intermediate inputs. This process would enhance industrial cooperation in strategic sectors such as agroindustry, textiles, and natural resource processing. Moreover, the agreement includes a crucial component on services, particularly in transport, telecommunications, and financial services, aimed at supporting trade and improving productivity. The gradual liberalization of these markets is expected to boost economic efficiency by attracting investment in industry, infrastructure, and technology. In addition, it would help diversify economic partnerships and reduce dependence on external markets, thereby strengthening resilience to external shocks (see Fofack 2020; Salami 2022; Tsowou 2024).

III. Long-term Growth Projections

The baseline scenario projects slow medium-term growth accelerating over time

The Angolan economy is projected to experience a medium-term slowdown followed by modest long-term growth.⁶ The real GDP growth rate is projected to average 3.8 percent over the 2026–2035 period and then accelerate to about 5 percent in 2050. Consequently, real GDP per capita will grow modestly, averaging about 2 percent per year between 2026 and 2050, with the population growth rate expected to average about 2.5 percent under a medium fertility scenario. Real GDP per capita is expected to increase from USD 2,299 in 2022 to approximately USD 3,803 in 2050 (real 2015 USD).

The modest expansion will be driven by stronger growth in the non-oil sector, supported by improved fundamentals, which will more than offset the expected decline in the oil sector. Growth in the non-oil sector

6. The World Bank Long-Term Growth Model Natural Resources extension (LTGM-NR) is used to assess Angola's long-term growth prospects and run simulations. See Annex 2 for more details on the assumptions.

is projected to average about 6.1 percent through 2029, remain steady at that level until 2040, and then slightly decline to 5.6 percent by 2050. While medium-term non-oil sector growth may slow due to indirect effects from the declining oil sector, improvement in fundamentals—such as a demographic dividend, higher human capital, and increased capital intensity and productivity—will sustain long-term growth.

In contrast, the oil sector is expected to decline 1.1 percent until 2030 and deteriorate further at an average rate of 5.9 percent by 2050. This structural decline is driven by low investment in new exploration and production, maturing oil fields, and the global shift toward renewable energy. Years of underinvestment and the high cost of exploration and production have already led to an accumulation of inefficiencies in the oil sector. As a result, oil production is expected to remain above 1.1 million barrels per day (mb/d) until 2027, then fall to around 0.77 mb/d by 2030 and to 0.25 mb/d by 2050 (or to potentially half that amount, in a more pessimistic scenario).⁷

Under a reform scenario, structural reforms could more than double real GDP growth, moving Angola to UMIC status

Boosting overall productivity in Angola could raise long-term growth by up to 1.4 pp. This can be achieved by improving key TFP drivers,⁸ such as education, market efficiency, infrastructure, and institutions. A reform scenario projects the impact of increasing the rate of non-oil TFP growth to match the current rates of top-performing peers by 2050. Over the past five years, Angola's non-oil TFP growth rate has averaged –2.6 percent,⁹ while Indonesia, an aspirational peer, achieved 0.6 percent. If Angola reaches this level by 2050, its real GDP growth rate could accelerate by around 1.4 pp, with GDP per capita up from USD 2,299 to USD 4,120 (in 2015 USD).

Accelerating human capital accumulation could boost Angola's long-term growth rate by up to 1 pp by 2050. Over the past 20 years, Angola's human capital growth rate per worker has averaged 0.67 percent, compared with 1.3 percent in Indonesia and 1.8 percent in South Africa. If Angola increases its investment in human capital to match South Africa's current growth rate by 2050, GDP per capita growth is expected to rise by 1 pp.¹⁰

Harnessing Angola's demographic dividend could boost GDP and GDP per capita growth rates and levels, with GDP growth increasing 0.5 pp. The country could accelerate the move from medium fertility to low fertility by addressing adolescent fertility and unwanted pregnancies. The share of the working age population would increase from 60.1 percent to 62.8 percent by 2050, and the dependency ratio would fall from 0.66 to 0.59, with a consequent increase in savings. Should reform foster diversification and employment, and modernize the financial sector, the country could see GDP grow 4.3 percent and GDP per capita 9.8 percent.

Reforms to increase private and public investment could boost Angola's long-term growth rate by another 1 pp by 2050. Investment remains the backbone of sustainable growth and economic transformation (Commission on Growth and Development 2008). Over the past 20 years, Angola's private investment has averaged 19 percent of GDP, higher than Nigeria (15.2 percent of GDP) but below Indonesia (25.9 percent of GDP). Raising private investment to Indonesia's level by 2050 could add up to 0.5 pp to growth.¹¹ Increasing public investment from 7.8 percent of GDP to Botswana's level (9 percent of GDP) could contribute an additional 0.5 pp.

7. National Development Plan 2023–2027. Annex 1 outlines the GoA's plans to boost oil production.

8. TFP measures overall economic efficiency, capturing important factors that contribute to economic growth, including: technological progress, and organizational, economic, and political institutions.

9. The decline in non-oil TFP can be attributed to spillover effects from the declining oil sector, the five-year economic recession exacerbated by the COVID-19 pandemic, and uncertainty over the political transition.

10. See Chapter 3 for more details on human capital policy recommendations.

11. See Chapter 2 for more details on business reforms needed to accelerate private investment.

The combined effects of improved productivity, higher level of human capital, and increased private and public investment could raise long-term growth by up to 3 pp by 2050. Real GDP growth is projected to increase to 8.4 percent by 2050 in the reform scenario, compared with 5 percent in the baseline scenario. Similarly, real GDP per capita growth is expected to increase to about 6.5 percent (reform), compared with 2.8 percent (baseline). As such, GDP per capita could more than double from USD 2,299 to USD 6,351 (in real 2015 USD), potentially moving Angola from LMIC to UMIC status by 2050. The key factors are presented below.¹²

Figure 1.28: Enhancing overall productivity and impact on real GDP growth

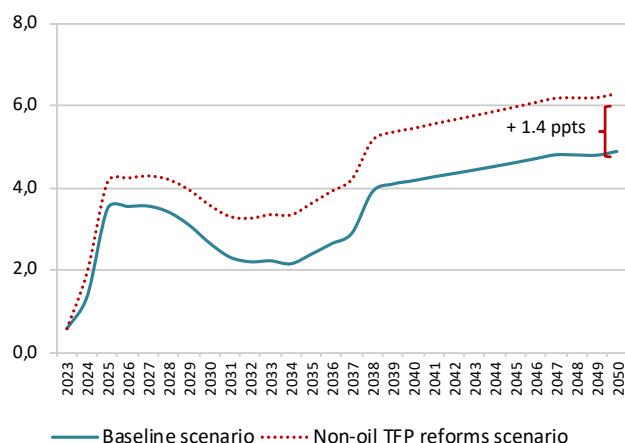


Figure 1.29: Accelerating human capital accumulation and impact on real GDP growth

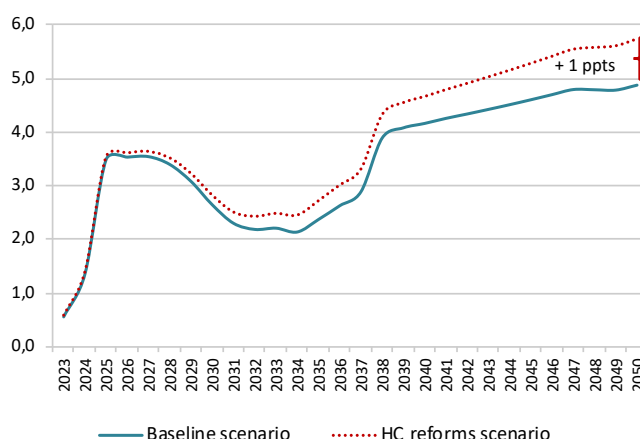


Figure 1.30: Attracting FDI and impact on real GDP growth

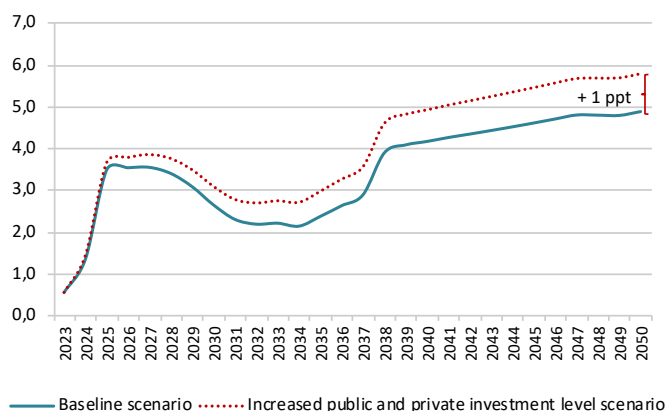
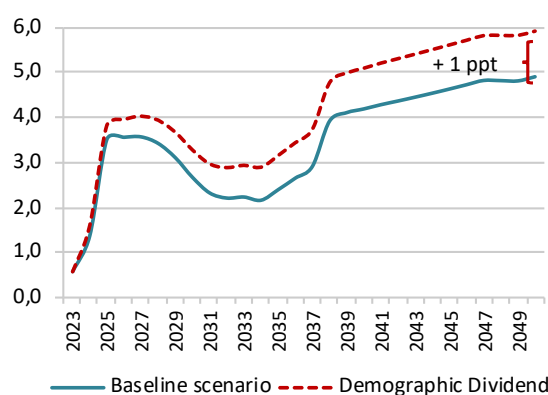
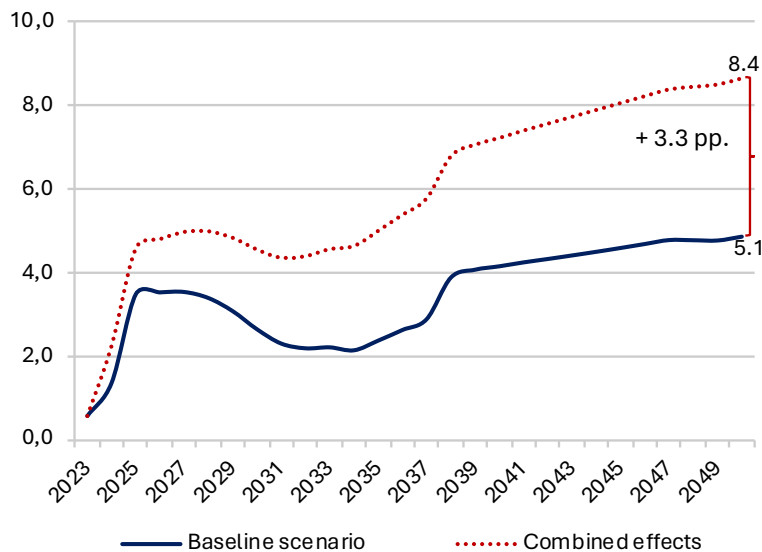


Figure 1.31: Harnessing demographic dividend potential and impact on real GDP growth



12. Besides structural reform's growth effect, demographic dividend has the potential to add 0.5 pp to GDP growth and 0.7 pp to GDP per capita growth (see Annex 3).

Figure 1.32: Impact of key structural reforms on real GDP growth



Source: World Bank staff calculations based on the LTGM-NR.

IV. Conclusion and Policy Priorities

Angola's oil-driven growth model has fallen short of delivering sustained structural transformation. The decline in oil prices in 2014, followed by a production slowdown, triggered a severe economic crisis that lasted until 2020. Although recovery began in 2021, over 90 percent of exports still come from the oil sector, reflecting limited progress in diversifying the structure of the economy and a continued pattern of significant volatility, as seen over the past two decades. Moreover, growth has remained below the PPF, due to inefficient utilization of production factors, with the result that income per capita has grown more slowly than in peer countries. At the same time, poverty and inequality have deepened, driven by falling per capita income and low-quality job creation.

Macroeconomic stability is crucial to reduce Angola's vulnerability to oil price shocks, with procyclical fiscal policies amplifying economic volatility. Volatility in oil revenue has had a direct impact on fluctuations in aggregate domestic demand. Real exchange rate appreciation and rising domestic prices have weakened the competitiveness of the non-oil sector. Despite significant efforts at fiscal consolidation following the 2014–2016 oil price shock, and measures to strengthen the fiscal framework, public finances continue their procyclical pattern. This is due to weakness in the medium-term fiscal policy framework and the limited effectiveness of existing savings mechanisms. Public debt remains vulnerable to global oil price volatility, due to overreliance on oil-backed loans. In response, Angola adopted the 2020 Fiscal Responsibility Law, introducing fiscal rules, multi-year budget planning, and enhanced transparency in fiscal and debt management. However, implementation has been limited. On the monetary side, a tight policy stance and a more flexible exchange rate regime have helped cushion external shocks and improve competitiveness. Further, transitioning to an inflation-targeting framework could strengthen monetary policy and help address persistently high inflation.

Angola has seen a rise in its trade and current account surplus; however, a low level of export diversification leaves the economy highly vulnerable to external shocks. The export basket remains heavily concentrated, with oil products accounting for approximately 96 percent of total exports. This emphasizes the need to diversify exports so as to reduce exposure to international trade shocks. Promising opportunities lie in expanding export of products such as wood chips, wheat meal, crustaceans, and simply-worked wood; and fisheries products like frozen mackerel, frozen shrimp and prawns, and other frozen products. Emerging export items like cocoa beans, cashew nuts, cotton, palm oil, and frozen boneless bovine cuts offer untapped potential.

Angola's rich endowment in critical minerals and rare earth elements presents an opportunity for economic diversification. This can be achieved by leveraging the rising global demand for low-carbon technologies that support the energy transition; advancements in digital innovation, such as artificial intelligence (AI); and the growing need for supply chain diversification driven by heightened geopolitical risks. The recent focus on the Lobito Corridor underscores the role these resources can play in Angola's economic diversification. Additionally, expanding the services economy, particularly in business services, can support export diversification and add value to exports.

To achieve Angola's full potential from export diversification requires abandoning protectionist trade policies and deepening regional integration. Angola is protectionist in its trade, with high average tariff rates. The country needs to accelerate regional trade integration to better explore the untapped potential of intra-African commerce. Although Angola's accession to the AfCFTA offers promising prospects, major structural challenges may limit its benefits. These include low levels of industrialization, heavy reliance on primary commodities, and limited access to basic infrastructure. To fully capitalize on the AfCFTA, Angola must ensure macroeconomic stability, foster a business-friendly environment, and strengthen institutional capacity. If Angola expands intra-African exports by 15 percent, real GDP growth is projected to increase approximately 0.6 pp.

Addressing structural weaknesses is essential to unlocking Angola's long-term growth potential and to reducing its vulnerability to external shocks. By implementing a set of structural reforms, Angola could nearly double its long-term economic growth rate. These include improving the business environment; enhancing infrastructure and institutional quality; investing in human capital; and boosting both public and private investment. Without these reforms, economic growth is projected to stagnate around 5 percent per year in the long term. However, under a reform scenario, real GDP growth could increase to 8.4 percent by 2050, potentially enabling Angola to transition from LMIC to UMIC status by mid-century.

Table 1.1 Summary of Policy Priorities to Promote Macroeconomic Stability in Angola

Policy Areas	Short-Term Actions	Medium/Long-Term Actions
Priority Area 1.1: <i>Promote fiscal and debt sustainability</i>	- Promote Medium-Term Fiscal Framework development. - Strengthen non-oil tax revenue mobilization by broadening the tax base and improving tax administration capacity. - Remove fuel subsidies. - Improve public financial management efficiency.	- Reduce reliance on oil-backed loans. - Define operational rules for the budget stabilization fund. - Adopt a mechanism (e.g., oil price hedging) to mitigate oil price volatility shocks. - Fully implement the 2020 Fiscal Responsibility Law.
Priority Area 1.2: <i>Improve monetary policy effectiveness</i>	Promote exchange rate stability by improving FX market transparency and predictability.	Transition to an inflation-targeting monetary framework.
Priority Area 1.3: <i>Promote export diversification and regional integration</i>	- Improve trade facilitation. - Support agricultural and fishery exports.	- Leverage mining and rare earths potential. - Expand the services economy. - Promote integration into global value chains.
Priority Area 1.4: <i>Promote social inclusion</i>	Increase spending on education, health, and social protection.	

Chapter 2. Boosting Productivity

Productivity is a key driver of sustained economic growth. It explains most per capita income differences between countries. Research¹³ shows that productivity growth is the main source of lasting per capita income growth, which in turn drives poverty reduction. Compared with high-income countries, the productivity gap in SSA reflects significant differences across sectors and production units, with inefficiencies in input allocation (capital, labor, and land) playing a significant role (Calderon 2022). To unlock its potential and improve living standards for its citizens, Angola must strengthen its capacity to transform available and growing production factors into more goods and services.

This chapter examines the main drivers of productivity in Angola, focusing on company dynamics, sector trends, labor market evolution, and key microeconomic constraints. First, it analyzes the slowdown in productivity following the end of the oil boom; the respective labor market changes, including labor productivity evolution; and the key characteristics of Angola's companies. Second, the chapter explores key microeconomic barriers that have hindered private sector growth and export diversification, such as limited access to finance; a weak business climate; poor institutional quality; and limited provision of basic infrastructure and skilled workforce. Third, it presents key reforms to address barriers to greater company productivity, with emphasis on enhancing the business environment, company capacities, the adoption of digital solutions, and the development of financial services. In conclusion, the chapter presents key policy recommendations.¹⁴

I. Pattern of productivity growth: company dynamics and jobs

To benefit from its demographic dividend potential,¹⁵ Angola must create more and better jobs for its growing young population. Over 45 percent of Angola's population is under 14 years of age. Although the country has one of the fastest-growing populations in the world, its average population growth rate (medium-fertility scenario) is expected to decline to 2.2 percent by 2050, down from 3.2 percent in 2020; and the fertility rate is expected to decline to 3.2 in 2050, down from 5.4 in 2020. This would increase the working-age population, with a dependency ratio falling to 0.66 by 2050, down from 0.91 in 2020, and 0.93 in 2000.¹⁶

Angola's workforce is becoming more educated, yet productivity did not improve during the 2010s. Between 2009 and 2019, the share of the employed population with incomplete secondary education increased from 25 percent to 37 percent; and the share of workers with tertiary education doubled from 3 percent to 6 percent. Yet, both labor productivity and TFP fell over the last decade (Figure 2.1). Economic activity slowed, causing value-added per worker to fall by over 30 percent between 2009 and 2019, an average annual decline of 3.7 percent. Labor productivity in the non-oil sectors declined less severely, compared with the oil sector. TFP closely followed oil prices. Whereas TFP grew at an annual average of 6.9 percent during most of the 2000s, the highest amongst its peers, it fell by 11.2 percent overall between 2009 and 2019, with an annual average decline of 1.2 percent.¹⁷ Labor productivity in services fell 22.2 percent over the decade; changes in agriculture and the rest of the industrial sector were negligible (Figure 2.2). Overall, labor productivity in the non-oil economy declined by 0.8 percent per year.¹⁸

13. See, among others: Hiesh & Klenow 2009; Syverson 2011; Caselli 2016; Dieppe 2021; Kim & Loayza 2019; and Calderon 2022.

14. A deeper analysis of Angola's private sector landscape will be discussed in the upcoming World Bank/IFC Country Private Sector Diagnostic.

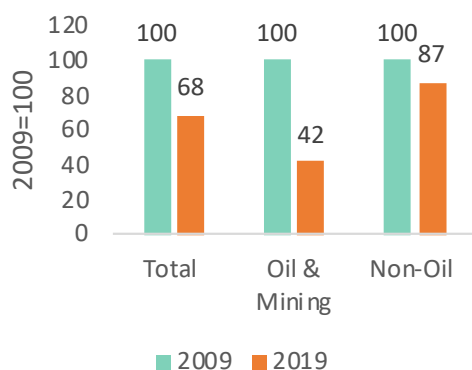
15. Demographic dividend occurs when the share of the working age population is greater than the share of dependents (children and the elderly). As fertility and child mortality rates fall, the labor force temporarily grows faster than the dependent population, freeing up resources that can be used for investment and improved wellbeing. This can facilitate rapid per capita growth (IMF 2006).

16. The dependency ratio is defined as the ratio between the dependent population (between 0–14 and over 65 years of age) and the working-age population (15–64 years of age).

17. TFP is calculated as the standard Solow residual: growth in output minus weighted input growth. It appears to be highly correlated with terms of trade. Following Basu & Fernald (2001), Hiesh & Klenow (2009), and Hamilton et al. (2019), aggregate TFP might not fully capture "true" technical efficiency or technology, as described by Solow (1957). Thus, results should be taken with caution.

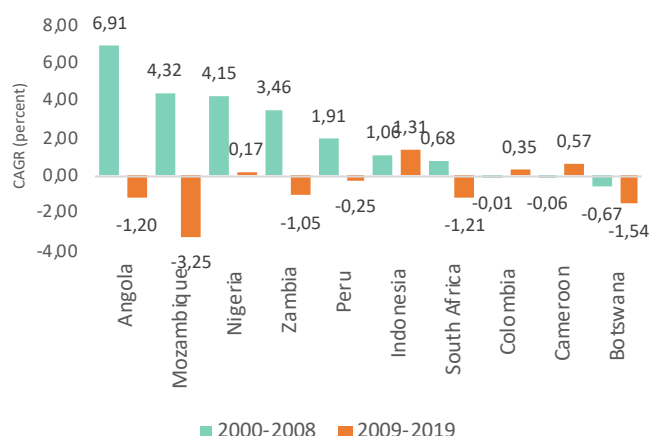
18. The World Bank (2023c) performed a deeper analysis of labor productivity dynamics with IBEP and IDREA survey data.

Figure 2.1: Labor productivity index



Source: World Bank staff calculations based on data from the INE, IBEP, and IDREA.

Figure 2.2: Total factor productivity growth, (%)



Source: Penn World Tables 10.01.
Note: Peer countries with available data.

The end of the oil boom and the overall slowdown of economic activity have dragged productivity growth down over the last decade

Employment improved in the non-oil economy, primarily in the services and agricultural sectors; however, gains from structural change were minimal, with limited productivity increases across sectors. Household survey data indicate that total employment grew at an average annual rate of 5.7 percent between 2009 and 2019. Employment in agriculture and services rose 44.4 percent and 46.4 percent, respectively, with both sectors accounting for 90 percent of all new jobs (Figure 2.3). Since services and agricultural employment grew at a similar rate, there was little change in share of employment. Between 2009 and 2019, the net contribution of structural change to overall labor productivity growth was less than 0.1 pp. Therefore, there was no productivity-enhancing cross-sector labor shift (de Vries, Timmer, and de Vries 2015).¹⁹

Figure 2.3: Employment 2009–2019 (millions)

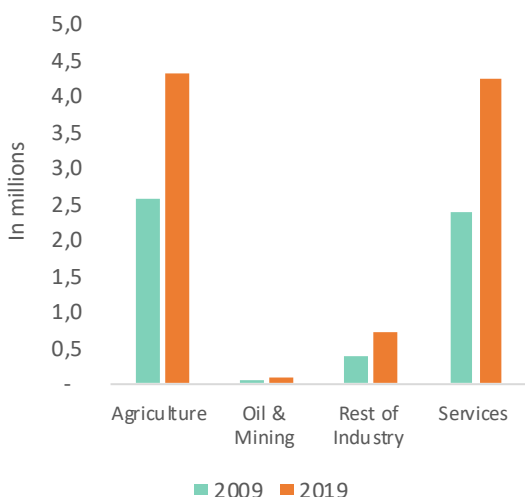
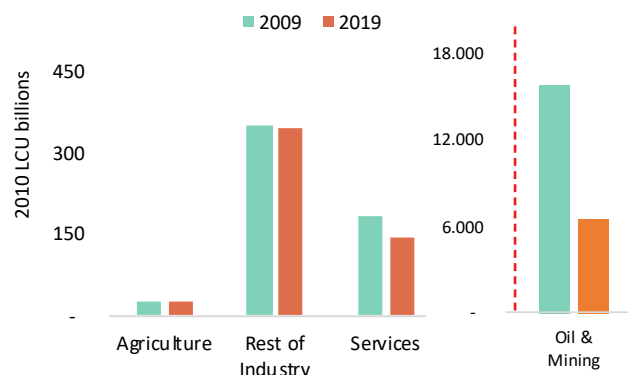


Figure 2.4: Value-added per worker by sector, 2009–2019



19. Typically in LICs, reallocation of labor between sectors accounts for most productivity growth, but in LMICs and UMICs the pattern is reduced (Merotto et al. 2018).

Figure 2.5: Employment share 2009–2019

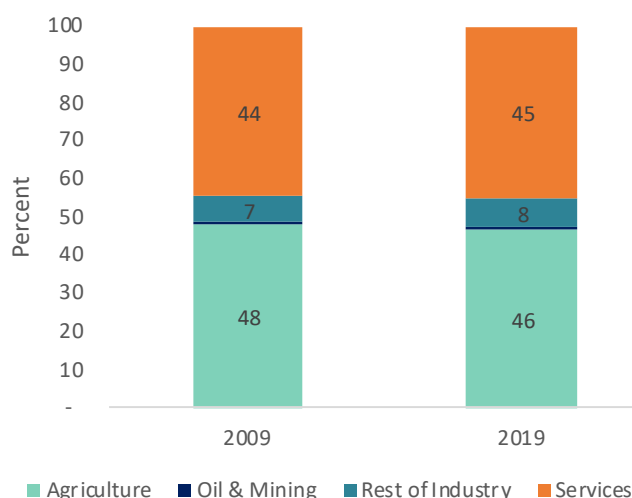
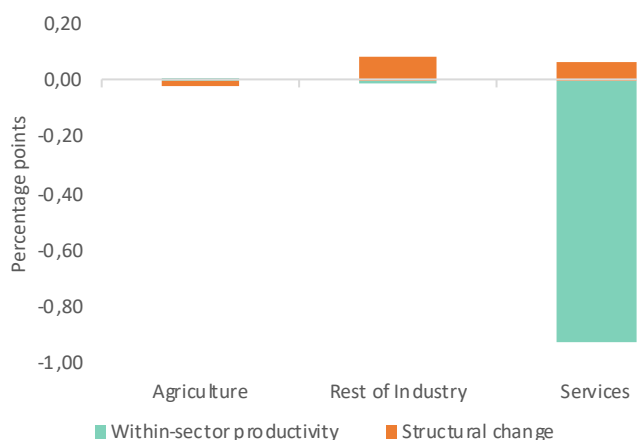


Figure 2.6: Value-added per worker decomposition (non-oil), 2009–2019



Source: World Bank staff calculations based on IBEP and IDREA data.

Within-sector losses in services account for nearly all decline in labor productivity in the non-oil economy.

The within-sector productivity component, which depends on factors such as capital accumulation, technological change, and improved allocation of resources (McMillan and Rodrik 2011), contributed negatively to labor productivity, with the services sector contributing most of the decline (Figure 2.4). In fast-growing economies and countries above LIC status, positive within-sector productivity gains are common (Merotto et al. 2018; Merotto and Jiang 2021).²⁰ In SSA, few countries experience both structural change and within-sector productivity gains, although employment grows rapidly (above 3 percent, Merotto 2017).

Increased urbanization came with new jobs in the services sector, although most workers seem to have joined the informal sector

Urbanization has increased, as has growth of private sector jobs in services; however, most of the new employment is in informal and low-productivity jobs, limiting future growth potential. Angola's urban population rose from 52 percent in 2002 to 67 percent in 2021, close to UMIC levels and exceeding the SSA average (Figure 2.7). However, most new private sector jobs are informal. Commerce and hospitality generated over 942,000 new jobs between 2009 and 2019, with 80 percent in the informal sector (World Bank 2023b). Formal jobs in services, which tend to offer higher wages, were mostly in the public sector and high-skilled services, both of which have a limited capacity for labor absorption (Figure 2.8). The industrial sector follows a similar pattern, with high-productivity sectors contributing little to job creation.

Self-employment, rather than company hires, accounts for 62 percent of jobs in Angola. 52 percent of working Angolans are self-employed, and another 10 percent work for family members. The 2019 REMPE (*Recenseamento de Empresas e Estabelecimentos*) business census confirmed the limited role that established private companies play in job creation: about 88,000 established companies,²¹ registered or with a visible permanent work site, employ about 640,000 workers in a workforce of 9.3 million.

20. Merotto and Jiang (2021) compared growth decompositions from six of the fastest growing economies over 1991–2018. They found that, as workers transitioned from agriculture to the rest of the economy, within-sector labor productivity contributions were positive, and the largest driver of overall income per capita growth.

21. REMPE 2019 does not include informal companies without a fixed establishment, such as street vendors and sellers in open markets. It also excludes oil, financial intermediation, and insurance sectors. Companies in the agricultural and fisheries sectors are included, but individual agriculture producers are not. The discrepancy between REMPE 2019 and IDREA 2018 in the estimated number of private sector employees in Angola is due to the limited coverage of the business census.

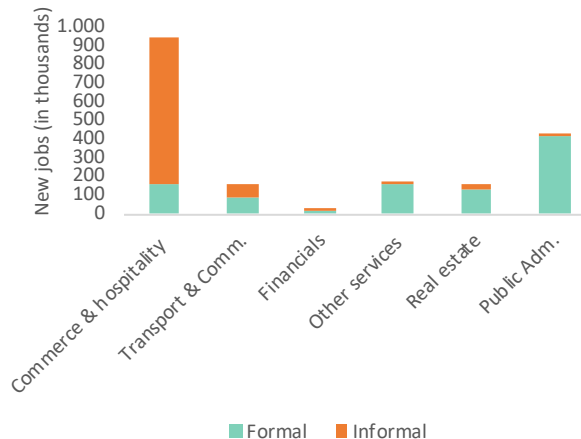
Figure 2.7: Share of urban population and GDP per capita (PPP), SSA and UMIC countries (2021)



Source: WDI.

Note: Includes countries with available data for 2021.

Figure 2.8: New jobs in services, by job status, 2009–2019



Source: World Bank staff calculations based on IBEP and IDREA data.

The private sector landscape is mostly composed of SMES with low productive capacities

Angola's established private sector is dominated by microenterprises, mostly concentrated in the capital, Luanda. According to the REMPE, about 79 percent of established companies employ less than five workers and account for 14 percent of the 640,000 workers. Although the number of microenterprises has more than tripled since 2002, and the number of workers they hire has also increased, most companies are relatively young—85 percent less than 10 years old—and operate primarily in services and commerce, the lowest of all sectors in labor productivity. In addition, the 2024 WBES, which focused on companies in manufacturing and retail, shows that 53 percent have fewer than 20 workers and about 80 percent are less than 20 years old. In contrast, large established companies with over 100 workers represent only 1 percent of the total number of established companies but employ 45 percent of the 640,000 workers in the business census. Between 2002 and 2019, these companies nearly doubled their workforce, tended to be older, and were concentrated in capital-intensive and high-skilled sectors, such as mining and construction (World Bank 2023b). The 2024 WBES also found evidence that large companies account for only 8 percent, and that most are in Greater Luanda (34 percent) and the central region (30 percent).

The type of ownership reflects the prevalence of microenterprises and subsistence entrepreneurs. Sole proprietorships are the most common type of ownership in Angola, representing almost 70 percent of all companies. However, they account only for some 31 percent of formal workers, with 3 employees per company on average. In contrast, limited liability companies (LLCs) represent 15.6 percent of all companies but account for 46 percent of total employment. Joint-stock companies (the most institutionally sophisticated form of ownership) are also the category with the largest average company size (97.1 employees), followed by SOEs (96.7 employees).

Smaller companies tend to have lower productive capacities. Using organized accounting and Internet access as proxies of company capacities, the REMPE found that capital or knowledge-intensive sectors (typically larger companies) had higher average productive capacities. As expected, transport, business services, information and communications, and construction/mining appeared to be relatively high-capacity sectors. Hotels and restaurants fell in the medium range, and, at the lower end, agriculture was the least sophisticated sector; followed by other, predominantly urban sectors such as commerce, manufacturing, and “other services.”

Companies that are foreign-owned, have university-educated owners, or females in management tend to have higher sales and productive capacity. Sales per worker are higher in foreign-owned companies and in companies with university-educated owners; those companies also show high productivity. Sales per worker in sole proprietorships and owner-managed companies tend to be lower. Female-owned companies are typically smaller and have lower sales per worker, although companies with female managers with higher education show higher sales per worker. Females in top management or positions of ownership number around 31 percent, broadly aligned with SSA and LMIC averages.

II. Microeconomic constraints to productivity growth

Limited access to finance undermines private sector growth

Angola’s financial sector is dominated by banks and remains highly concentrated. The banking sector represents approximately 99 percent of the financial sector’s total assets. In 2023, Angola had 23 banks and 60 non-banking financial institutions. The sector is highly concentrated, with the five largest banks accounting for 67 percent of total assets and 64 percent of loans. In 2023, bank assets stood at 38.9 percent of GDP, almost half their 2019 value; this was due to the prolonged recession, banks writing off nonperforming loans (NPLs), and bank closures.

The GoA plays a major role in banking, through direct bank ownership and because a growing share of government debt is on banks’ balance sheets. The Government owns three banks, including two of the top five, and has increased its influence in the sector through SOEs Sonangol and UNITEL, which are shareholders in several banks. The restructuring of a major bank, a former SOE representing 10 percent of banking assets, is in progress, with plans to address capital shortfalls. Increased issuance of domestic securities has heightened bank exposure to government debt; over the 2013–2023 period, debt securities rose from 17.7 percent to 31.3 percent.

Financial inclusion remains small, with little bancarization or use of banking services. Only 36 percent of Angolans have bank accounts; 40 percent use formal financial services. According to the 2024 WBES, although most companies have checking or savings accounts (88 percent of SMEs and 96 percent of large companies), only 6–9 percent access bank loans, regardless of size. Ninety percent of companies finance investments with internal resources, far above the average for SSA (76 percent) and LMICs (74 percent) (Figure 2.9). Only 3 percent of company investments have been financed through bank loans, and a mere 5 percent through equity, with minimal use of supplier credit (Figure 2.10).

Figure 2.9: Sources of financing for purchases of fixed assets

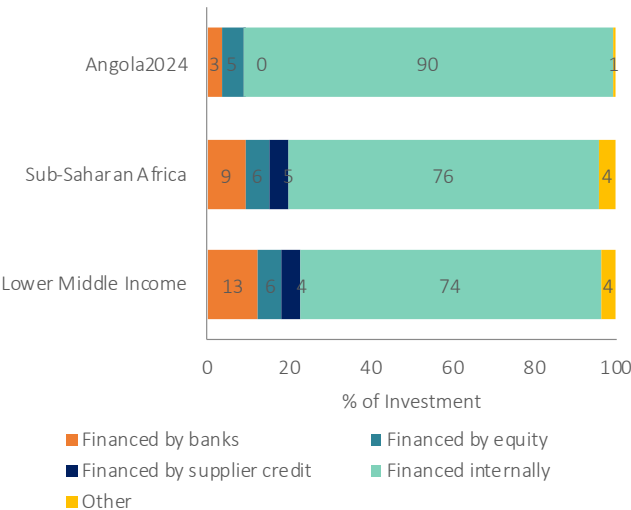
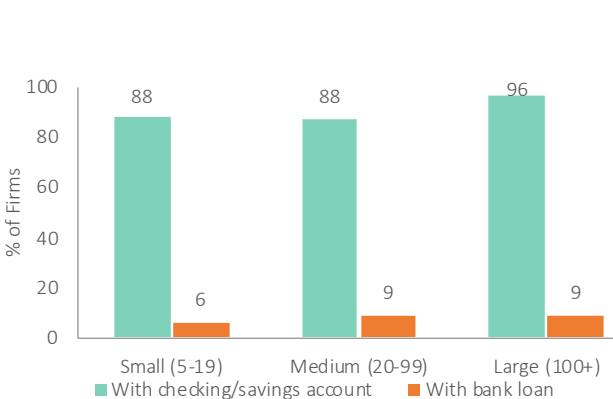


Figure 2.10: Use of financial services



Source: 2024 WBES .

In addition, credit to the economy has been declining, and NPLs are rising. Between 2013 and 2023, credit to the private sector fell from an average 21.8 percent of GDP (51.4 percent of assets) to 8.2 percent of GDP (32.1 percent of assets), well below Angola's main peers (Figure 2.11). In addition to crowding-out by fiscal deficit financing, contributing factors include foreign currency lending restrictions; stricter lending standards; few bankable projects; structural challenges (cumbersome collateral registration and enforcement procedures); and high interest rates. Most private credit went to trade (reflecting Angola's high dependence on imports), households, and construction (Figure 2.12). NPLs rose sharply from 9.8 percent to 15.9 percent, despite the purchase of bad loans from the state's biggest bank by RECREDIT (the government-backed loans recovery agency).

In October 2024, the Financial Action Task Force (FATF) listed Angola as a country with strategic deficiencies in anti-money laundering and countering financing of terrorism (AML/FCT). This is the second time since 2016 that Angola has been listed. As a result, the country is under enhanced monitoring (grey list) to implement reforms by 2027 to strengthen the integrity of the AML/FCT framework. A key potential impact is reduced FDI, as private investor perception of risk grows.

**Figure 2.11: Domestic credit to private sector, 2023
(% of GDP)**

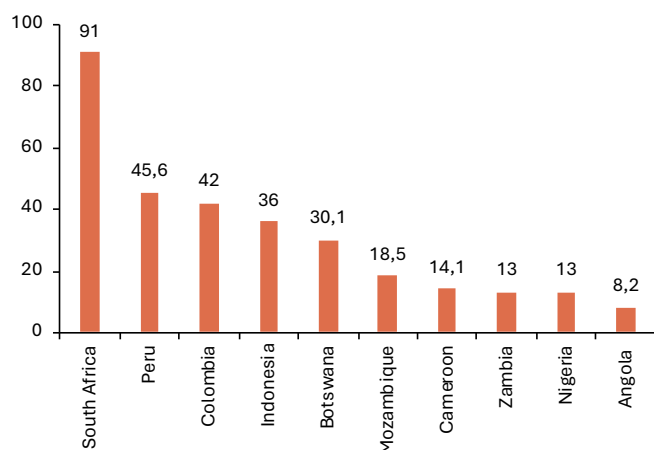
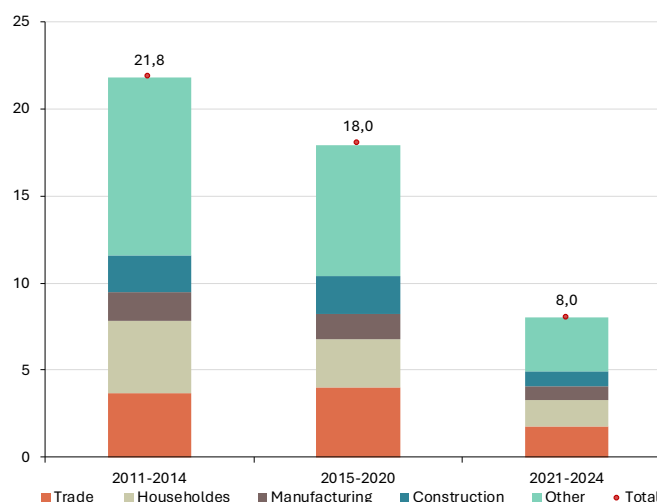


Figure 2.12: Evolution of domestic credit by sector, 2011–2024 (% of GDP)



Source: Author's calculations based on WDI and BNA data.

A challenging business climate has weakened private sector competitiveness

A sound business environment is key to promoting a competitive private sector. Excessive regulation creates distortions for entrepreneurs. A business environment that facilitates private sector activity stimulates entrepreneurship, investment opportunities, and job creation. Reforms that support business start-ups and operations results in greater company creation,²² better access to financing,²³ and higher levels of investment,²⁴ with a more significant impact on SMEs.²⁵

Angola has made significant progress in improving its business environment. The Government has implemented reforms to streamline business registration procedures, introduced a new tax policy framework, and modernized the tax and customs administration. Investment in IT systems and creation of one-stop shops facilitate access to information and processing of administrative procedures. Angola also has a new legal

22. Klapper et al. 2009.

23. Haselmann et al. 2010.

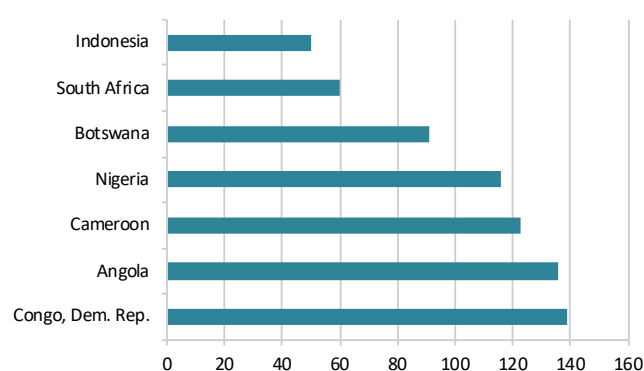
24. Munemo 2014.

25. Aterido et al. 2009.

framework for competition and established an antitrust agency. New legal regimes for insolvency and secured transactions were approved to facilitate reorganization of viable companies with solvency challenges and promote access to finance. In 2021, the authorities launched the Project for the Simplification of Public Administration Proceedings (SIMPLIFICA—*Projecto de Simplificação de Actos e Procedimentos da Administração Pública*) to eliminate unnecessary requirements and consolidate procedures. A privatization and SOE reform program was launched to reduce the state’s presence in the economy.

Despite such progress, Angola’s private sector still faces significant constraints. The country ranked 136 out of 141 economies in the 2019 World Economic Forum’s Global Competitiveness Index (GCI) (Figure 2.13). The low score is explained by institutional weakness, poor infrastructure, restrictive regulations, high public sector intervention, and low ICT adoption. In terms of skills, Angola ranks among the lowest in the SSA region, especially on training, matching to workforce skill sets, and ease of finding skilled employees. A burdensome business start-up process; high tax compliance costs; complex approval procedures for investment proposals; limited access to land; inadequate infrastructure (water, electricity, digital services); limited access to finance; and an inefficient judicial system are key constraints.

Figure 2.13: GCI 2019 ranking



Source: GCI 2019, World Economic Forum.

Figure 2.14: Incidence of informality

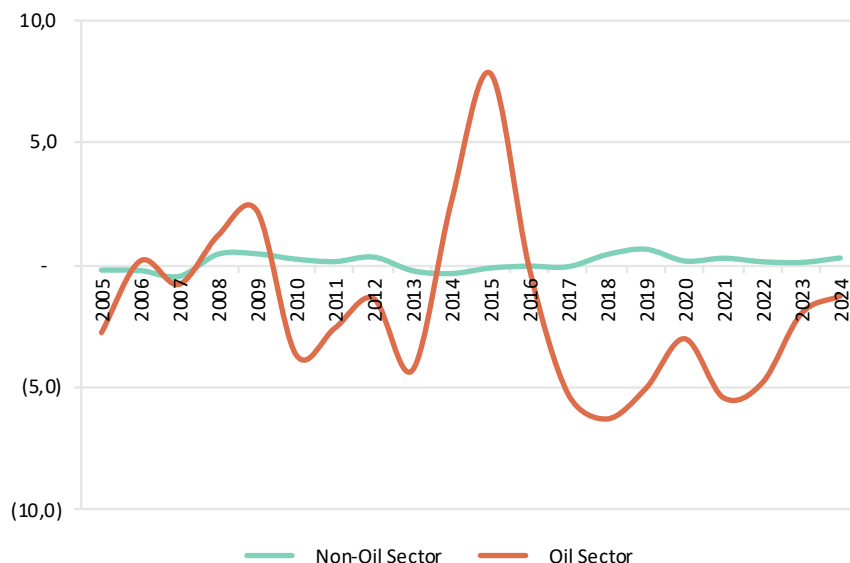


Source: 2024 WBES.

The 2024 WBES shows that Angola’s business climate is administratively demanding. Seventy-three percent of companies in Angola reported having to meet with tax officials, a significantly higher proportion than in SSA (60 percent) and LMICs (54 percent). Angolan companies wait an average of 22 days for an import license, 51 days for a construction permit, and 29 days for an operating license. These times exceed those in SSA (18, 35, and 17 days, respectively) and LMICs (20, 42, and 21 days, respectively). Moreover, informality remains a pervasive challenge, weakening competition, reducing tax revenue, and discouraging formal investment. In line with the regional average, 52 percent of formal companies report competition from unregistered companies or informal enterprises.

Net FDI inflows remain significantly low as a result. FDI inflows are primarily concentrated in the oil and natural gas sectors, which accounted for over 96 percent of inflows between 2005 and 2023. Following the oil price crisis of 2014–2016, net FDI inflows to the oil sector declined significantly as a share of GDP, from a peak of 7.7 percent in 2015 to –1 percent in 2024 (Figure 2.15). However, net FDI inflows in non-oil sectors have remained negligible over the last 20 years, at around 0.1 percent of GDP. This indicates that Angola’s economy, despite its high potential, does not have a sufficiently appealing business environment for private international investors.

Figure 2.15: Net FDI, inflows (% of GDP)



Source: BNA.

The poor quality of institutions has further constrained private sector development

Angola's institutions have been shaped by years of colonial rule, a protracted post-independence civil war, and a post-war period marked by urgency to consolidate peace at any cost. Angola gained independence from Portugal in 1975 after years of national liberation struggle. However, the extractive nature of colonial rule left its mark on the country and its institutions. The prolonged post-independence civil war delayed establishment of a more participatory political system and, combined with the legacy of colonialism, prevented the emergence of effective, inclusive, and development-oriented institutions.

After the end of civil war in 2002, Angola achieved political stability by redistributing oil rents, at the cost of stronger government control over the economy and the political space. Stability was maintained through a social contract: an elite redistributed oil rent to the population and, in return, the population consented to dominance by the elite; additionally, the state-led growth model hindered private sector growth by linking major companies to the state. This social contract became unsustainable once oil windfalls dissipated. An alternative is needed, with stronger institutions and a governance framework that administers a new social contract, centered on sustainable, diversified growth, job creation, and shared prosperity.

Box 2.1 Quality of institutions, growth, and development

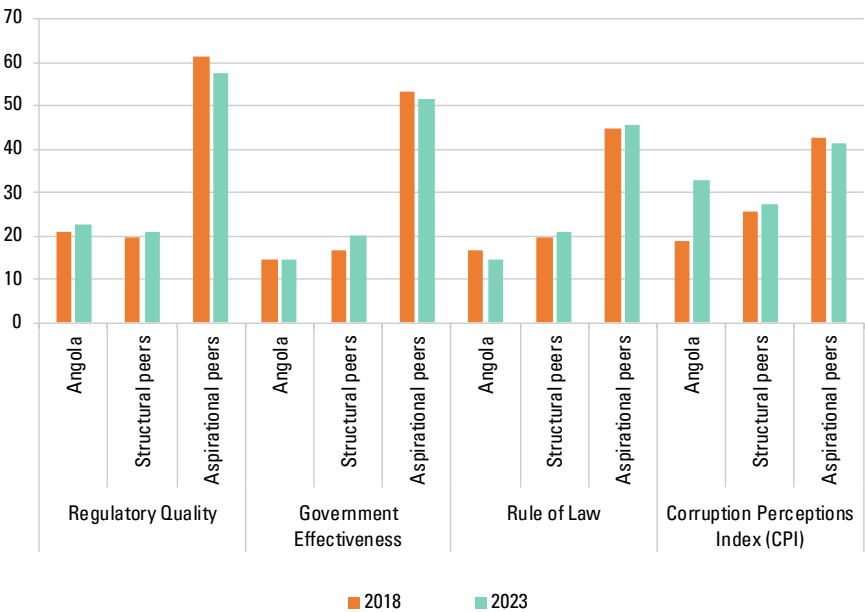
It is widely accepted that the quality of a country's institutions helps to create the right incentives for economic growth and development. North (1990) defines institutions as the rules of the game that shape human interaction and thus affect the mix of incentives that determine the economic, political, and social preferences, and the decisions, of human beings. According to North, institutions embody the formal conventions (constitutions, laws, property rights, rules, procedures) and informal conventions (sanctions, taboos, customs, traditions, and codes of conduct) that constrain political, economic, and social interactions. Greif (2006) defines the nature of institutions as the system of rules, beliefs, norms, and organization that together regulate (social) behavior. Empirical evidence also demonstrates that institutions are important for economic growth. Barro (1991) shows that political instability undermines growth rates. Acemoglu et al. (2005) conclude that economic institutions promote economic growth when political institutions allocate power to groups interested in enforcing property rights, creating effective constraints, and limiting the rents extracted by those in power.

The new administration elected in 2018 and reelected in 2022 has adopted several reforms to address institutional and governance challenges. President João Lourenço initiated a change in the systemic seizure of Angola’s institutions. This led to implementation of difficult and complex economic reforms that challenged vested interests, including the dismantling of several tailored monopolies. These reforms also include improved transparency and oversight of SOEs and of privatization, restructuring of Angola’s Sovereign Wealth Fund, adoption of the Fiscal Responsibility Law, and, recently, the removal of fuel subsidies.

As of June 2024, the Government’s investigations into several high-level officials had led to recovery of an estimated USD 19 billion in corruptly gained financial and real assets. The GoA also adopted an anti-corruption strategic plan and established a dedicated unit to fight corruption. In June 2022, Angola adhered to the Extractive Industry Transparency Initiative (EITI) to improve the transparency of the extractive sector. As a result, governance indicators have improved although they remain low compared with principal peers. According to the World Bank’s Worldwide Governance Indicators (WGI), Angola’s 2023 scores improved in some areas and the country now outperforms its structural peers on regulatory quality. However, it is still behind on effective governance and the rule of law. Angola also remains well below its aspirational peers in all areas (Figure 2.16).

The perception of corruption has receded but remains greater than that of Angola’s aspirational peers. The Corruption Perception Index (CPI) ranges from 0 (high corruption) to 100 (no corruption) and reflects the perceived levels of public sector corruption. Angola’s CPI rating has improved, rising from 19 in 2003 to 33 in 2023. However, its score is still relatively low, and corruption remains a significant concern: Angola scores higher than the Republic of Congo, Mozambique, and Nigeria (structural peers) but lower than Botswana, Indonesia, and South Africa (aspirational peers). The 2024 WBES shows that corruption remains a significant challenge for companies in Angola, as evidenced by the incidence of bribery: 22 percent of companies reported at least one bribery attempt, compared with SSA and LMIC averages of 16 percent and 15 percent, respectively; 30 percent of companies reported being either asked or expected to make extra, off-the-books payments while obtaining construction permits, compared with 22 percent in SSA and LMICs.

Figure 2.16: Angola and selected peers governance indicators (average scores for peers)



Source: WGI and CPI.

Access to basic infrastructure and a skilled workforce remain key constraints

Persistent deficits in utilities infrastructure continue to limit company productivity in Angola. According to the 2024 WBES, some 61 percent of companies reported electrical outages, below the SSA average (69.3 percent) and higher than LMICs (53.5 percent); but the number of monthly power outages (2.3) is significantly lower than in both SSA (6.5) and LMICs (4.4). The process for accessing electricity and water connections is cumbersome. Delays for electricity average 63 days, higher than both SSA and LMICs (38 day and 36 days, respectively); and about 27 days for water, slightly higher than SSA and LMICs (25.5 days and 23.8 days, respectively). Such inefficiencies create production losses, reduce predictability for investment planning, and drive companies into costly workarounds (e.g., backup generators and informal water sourcing). This undermines company-level productivity and erodes competitiveness, particularly in sectors depending on reliable utilities for uninterrupted operations.

Limited skills in the workforce is an additional burden on company productivity. In 2024, 15.1 percent of large companies, compared with 6.9 percent in 2010, identified low levels of education in the workforce as a major obstacle. This was also higher than the SSA average (10.5 percent). Over 2010–2024, the share of companies offering formal training stagnated at approximately 30 percent. Although company-led training is usually provided for proactive skills development. Angolan companies are often compensating for weak foundational education. This contrasts with peer countries who offer company-based training as a complement to, not a substitute for, stronger national education systems. Closing the workforce skills gap is critical to innovation, upgraded production procedures, and gaining efficiencies for sustained productivity growth.

Figure 2.17: Reliability of electricity supply and related losses, 2024

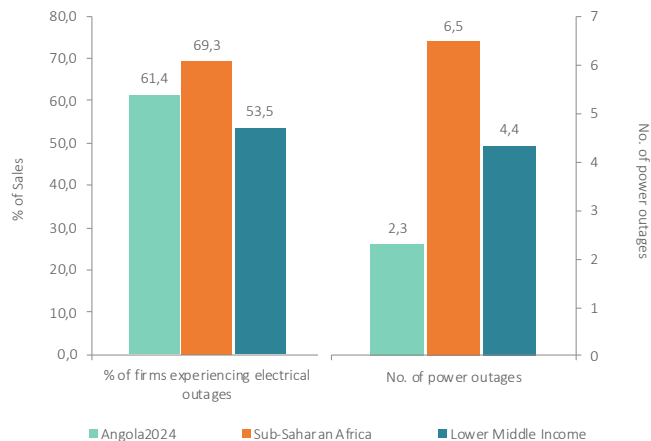
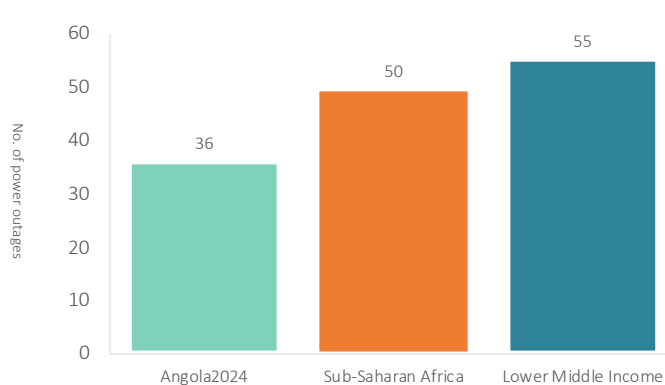


Figure 2.18: Formal training status, 2024



Source: 20224 WBES.

Participation of Angola's private sector in international trade is limited

According to the the 2024 WBES, Angola's companies have very limited engagement with global markets. Less than one percent of companies reported exporting directly or indirectly, well below the average for SSA (7 percent) and LMICs (9 percent). The use of inputs of foreign origin is also low: at around 30 percent, compared with averages for SSA (51 percent) and LMICs (53 percent). This indicates that Angola's companies have limited integration with GVCs, and/or lack the capacity to compete globally. Customs procedures also play a role: it takes an average 17 days for imports (including input imports) to clear customs, higher than the average of 13 days for both SSA and LMICs.

Figure 2.19: Percentage of companies exporting directly (at least 10% of sales)

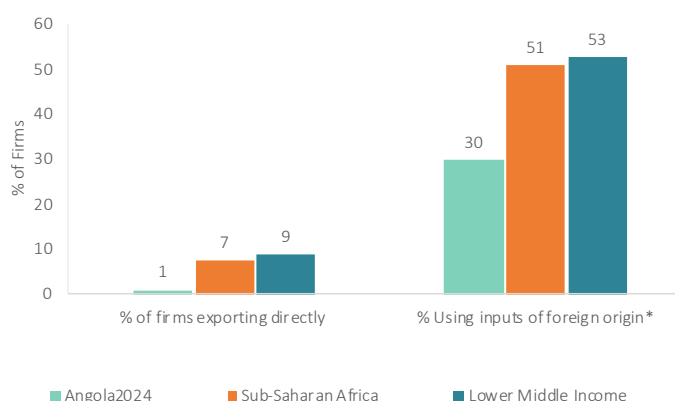
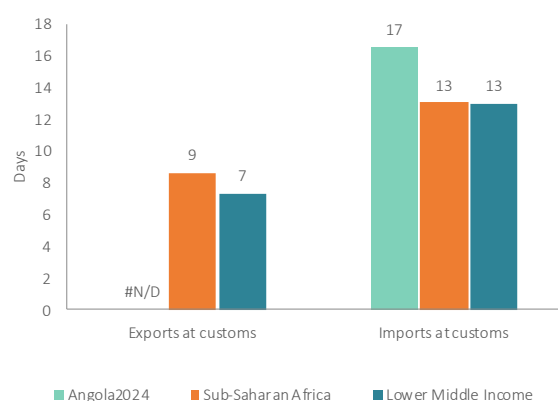


Figure 2.20: Days for exports/imports to clear customs



Source: 20224 WBES.

III. Removing barriers to boost productivity growth²⁶

The GoA is aiming to diversify the economy to reduce reliance on oil and support inclusive growth. Economic diversification in Angola requires a structural transformation that allocates resources more efficiently across and within sectors and thereby leading to higher levels of productivity. Yet Angola, although a country rich in natural resources, faces global uncertainties: the transition away from fossil fuels to address climate change, rapid technological change, and geopolitical shifts that affect trade and investment flows. However, these may also offer opportunities as GVCs reorganize as technology and a transition to low carbon create new business solutions and jobs. Investing the revenue from natural resources into the key pillars for growth and diversification can attract investment and develop new capacities.

The private sector should be at the center of Angola's economic transformation, especially given the country's diminishing oil revenues. Historically, the private sector has not been the engine of growth or job creation. Private investment, including FDI, and entrepreneurship are necessary to improve Angola's productive capacities. Attracting and retaining investment beyond the oil sector can boost export capacity and access to technology and, directly and indirectly, create jobs through forward and backward linkages. In developing countries, many jobs come from innovative MSMEs connected to external markets. While identifying these companies can be challenging, the Government can foster an environment that allows them to emerge, grow, and upgrade.

Angola's business policies have focused on replacing imports with local production, especially for basic goods. While there is large scope for import substitution in the agroindustry and food sectors, regional and GVC participation could benefit more sectors, create better jobs, and reduce poverty. Angola can leverage trade opportunities from the SADC Free Trade Area and the AfCFTA. The AfCFTA could boost FDI by 111 percent in Africa and increase real income by 8 percent by 2035.²⁷ Harmonizing policies on investment, competition, e-commerce, and intellectual property rights would allow Angola to benefit from these gains. Therefore, Angola must improve competitiveness by reducing trade barriers and strengthening company capacities and market access. Building on existing policies and international experience, the Government should focus on three key areas: (a) strengthen the business environment and promote competition; (b) strengthen company capacities and adopt digital technologies; and (c) encourage the development of financial services.

26. World Bank. 2023. "Accelerating Job Creation and Economic Transformation."

27. Echandi et al. 2022.

A. Strengthen the business environment and promote competition

A difficult business environment continues to limit Angolan private sector development. Angola's private sector had been constrained by policies that crowd out private investment; by restrictive sector regulations; and by the potentially anticompetitive practices of dominant players.²⁸ In recent years, the GoA, under the coordination of MINPLAN, has introduced reforms aimed at reducing regulatory constraints, such as the Program to Support Production, Export Diversification, and Import Substitution (PRODESI)²⁹ in 2018. Yet REMPE 2019 revealed that the company landscape continues to be dominated by small companies and subsistence entrepreneurs (70 percent of companies are sole proprietorships). Informal companies make up the large share of companies and are mostly concentrated in Luanda. These results point to constraints on company entry, operation, and growth, and to obstacles for non-viable companies to exit the market with efficient reallocation of resources. They also indicate that more can be done to facilitate company entry and operation in the provinces.

i. Continue to ease business entry and licensing

Recent reforms have eased the process of business entry. However, more can be done to facilitate the process of licensing business activities and obtaining sector licenses. The one-stop shop GUE (*Guiché Único da Empresa*) has still not fully streamlined its back office or integrated licensing for new businesses as part of its service. Licensing continues to be cumbersome and fragmented. Burdensome regulations for business startups are associated with high levels of corruption and informality.³⁰ A simple process for business startup fosters formal entrepreneurship.³¹ Improving accessibility of services, interoperability of business registration and licensing, streamlining licenses, and improving geographical coverage could go a long way to removing regulatory constraints for business entry.

- a. Improve GUE operability and expand its services and geographic reach.** The GUE could improve its interoperability with other government agencies, such as the tax authority, and expand to include business licensing. Increasing its geographical footprint beyond the five provinces where it currently operates could help boost entry beyond Luanda.
- b. Rationalize the licensing regime by eliminating unnecessary licenses and simplifying others, while expanding support for implementation in the provinces.** Providing easily accessible, up-to-date, and accurate information on requisites, costs, and regulations would be a first step in facilitating entry and attracting investors. The authorities have completed an inventory of licenses for use in a risk-based approach to evaluate the licenses still required; those that can be converted to ex post controls and/or simplified; and those that can be eliminated. The roll out of electronic platforms for licensing and other reforms should be accompanied by a permanent support channel for public officials. MINPLAN, the entity mandated to improve the business environment, should coordinate licensing reform, which requires significant political commitment. Commercial activities presenting only small risks to health, safety, security, and other costs should be licensed on a notification-only basis, implemented by municipalities overseen by the Ministry of Industry and Commerce (MINDCOM). This would ease compliance costs, encourage formalization, and free up valuable administrative resources, allowing for ex post control as needed.

28. International Finance Corporation (2019).

29. *Programa de Apoio à Produção, Diversificação das Exportações e Substituição das Importações*—Program to Support Production, Export Diversification, and Import Substitution.

30. Klapper and Love 2016.

31. Klapper et al. 2011.

ii. Improve the process for obtaining and transferring land rights

The Government owns most of the land and can grant title rights. However, many communities have not delineated their land rights, and most smallholders lack formal titles. Land titling is of particular concern for the development of the agricultural sector, where certainty over land rights is imperative for investment. Anecdotal evidence suggests that obtaining land concessions can be time-consuming and costly. Despite recent reforms, improved land administration procedures at national and provincial level are still needed, including ensuring consistency of procedures to obtain and register land rights across provinces. Companies are more likely to invest in economies with strong property rights, where they can be confident that their investment in immovable property will be secure.³² In countries with secure property rights, companies can allocate resources better, and as a result grow faster because returns on different types of assets are more protected against the actions of competitors.³³ A review of the 2004 Land Law (*Lei de Terra de 2004*) is underway. An inclusive consultative process, with proportional representation for women, would broaden the debate on the new land law.

a. Simplify the process for obtaining land rights by streamlining procedures and integrating systems.

The ongoing computerization of land administration services should be accompanied by initiatives aimed at simplifying land concession procedures at every stage. Initiatives under SIMPLIFICA have helped to simplify the registration of land right titles. However, this does not extend to the entire process for requesting land rights and mapping land. Given their role in granting land rights, provincial governments play an important role in simplification efforts. Spearheaded by the Ministry of Justice (MINJUSDH), the Geographical and Cadastral Institute (IGCA), and the tax authority (AGT), significant investments have been made in the development of information systems (land registry, cadaster, and tax), and in the various systems of municipal administrations. These systems and databases should be integrated further, and possibly consolidated. Ideally, platforms of all the institutions involved in land administration should be interoperable.

b. Develop programs for land tenure regularization, building on existing initiatives.

This entails accompanying efforts to streamline procedures for accessing land services with land regularization programs targeted at local communities, small rural producers, and informal slums. In rural areas, expansion and adaptation of the existing program *Minha Terra* (My Land), coordinated by the Ministry of Public Work (MINOPUH), could promote the mass regularization of community and smallholder family lands.

iii. Enforcing competition policy

Angolan markets suffer from both anticompetitive behavior by companies and competition constraints caused by government interventions. Preferential treatment of SOEs, restrictive sector regulation, and anticompetitive practices by dominant players undermine the development of key sectors and harm consumer welfare, productivity, and competitiveness in the economy.³⁴ To create favorable market conditions for a competitive private sector, the Government set up a Competition Regulatory Authority (ARC) under MINFIN to enforce the 2018 Competition Law. Fair market competition spurs economic growth by increasing industry and company innovation and productivity, leading to better products, more and better jobs, and higher incomes.³⁵ In affecting market entry and exit, competition stimulates product innovation and service quality, protects consumers, and forces market operators to provide products and services at marginal cost.³⁶

32. De Soto 2000.

33. Claessens and Laeven 2003.

34. International Finance Corporation (2019).

35. World Bank (2017).

36. Begazo and Nyman 2016.

The ARC has already begun issuing secondary regulations and guidelines to support its operations. A continuous program for capacity building and performance monitoring is needed to ensure that ARC is supported in enforcing compliance and sanctions; conducting investigations and merger reviews; and performing market studies. In addition, the ARC needs support in implementing its strategic plan to boost due process, independence, and efficiency in policy implementation.

iv. Continuing to improve trade facilitation

Over the last decade, Angola has modernized its customs administration and reduced its cost to trade. Activation of the National Committee on Trade Facilitation (NCTF) in 2018 created an institutional structure for advancing trade facilitation reforms to reduce barriers to trade caused by high transaction costs.³⁷ These efforts need to be scaled up, under overall NCTF coordination.

Upcoming implementation of an electronic single window for trade offers an opportunity to eliminate unnecessary procedures. The single window will allow all trade participants to file documents and data, enabling information-sharing and faster clearance of trade transactions. Implementing a single window is a complex project that requires coordination across different areas of government and with the private sector.

Integrated, multi-agency risk management is another way to improve trade facilitation. To enhance governance and crisis preparedness, customs authorities need a risk management committee to coordinate and assist other border agencies when selecting declarations for clearance. AGT implementation of customs procedures, such as the authorized economic operator program and the post-clearance audit, could be expanded.

B. Strengthen company capacities and adopt digital solutions

Entrepreneurship programs are fragmented and do not differentiate between the different needs of companies. More information on government support programs and eligibility criteria could increase awareness and uptake by the intended beneficiaries. Government MSME support programs could be tailored to address specific company needs, and to focus more on digital technology, which is associated with productivity increases, company growth, and better jobs.³⁸ Survey data found gaps in company capacities when it came to management practices. There was also limited adoption of digital technologies, although the COVID-19 pandemic triggered a small increase in the use of the Internet and digital tools: with the right support policies, Angola could spur digital businesses, including digital platforms, unleashing their potential for innovative solutions and new jobs.

i. Improve targeting of MSME support policies and increase the availability of information on support programs

Overall, MSME support programs should focus on encouraging company productivity, entry, and exit, and helping resources to flow from less productive to more productive companies to avoid misallocation.³⁹ Cost-benefit considerations are also important. For example, programs that combine several interventions in support of formalizing informal microenterprises may result in more formal companies, but at a cost in company revenue and jobs that outweighs the benefits.⁴⁰ The National Institute for MSMES (INAPEM) should consider the following recommendations to inform the design and implementation of MSME support interventions.

37. Hummels and Schaur 2013.

38. World Bank (2023b).

39. Medvedev et al. 2021.

40. Benhassine et al. 2018.

- a. **Improve the availability of information on MSME support programs.** As lead agency in charge of MSME support, INAPEM should consolidate information on existing programs and make it available through its website and other channels, especially for companies outside Luanda. This would help improve coordination, reduce overlap, and encourage uptake.
- b. **Use existing evidence in intervention design and strengthen monitoring and evaluation.** A rich body of evidence from impact evaluations on MSME support policies is available.⁴¹ For example, the benefits of general business training can be short-lived, and training combined with additional support (follow-up, mentoring) tends to have more lasting impact but with reduced cost-effectiveness. Personal initiative training, rather than or in combination with traditional business training, has shown promise in improving performance in microenterprises, especially when women-owned.⁴² Evidence from a large business plan competition in Nigeria found lasting impact on company growth and employment.⁴³ Strong monitoring and evaluation mechanisms should be built into any program. Impact evaluations with a counterfactual should track the impact of company support programs as much as possible to understand what works in Angola.

ii. Support improvements in management practices and adoption of technology, especially digital technology

Asymmetric information and constraints in access to finance may prevent companies from investing in skills that are key to business performance and productivity growth.⁴⁴ These include management practices, adoption of technology, and digitization. Interventions INAPEM could consider for MSMEs include:

- a. **Cost-effective interventions to provide tailored support to strengthen company management capacities.** Management consulting services that address specific needs can have a significant impact on sales and profits, even if the highly tailored nature of these programs raises questions of cost-effectiveness. Evidence shows that both individual and group-based consulting approaches lead to similar improvements in management practices. Angola could explore the potential of group-based approaches as a way of improving management.⁴⁵
- b. **Interventions that spur the adoption of technology and digitization.** INAPEM should explore programs that provide extension services that encourage technologies to upgrade MSME productivity: digital technologies that optimize production processes and product quality; e-payment, e-commerce, and e-marketing. Evidence shows that such programs lead companies to undertake innovations they otherwise would not.⁴⁶

iii. Foster the development of a digital business environment

A small number of digital startups have made inroads in e-commerce, transportation, food services, and health. While Angola's nascent digital entrepreneurship environment is dynamic,⁴⁷ the digital economy is constrained due to the inadequate availability and cost of the Internet, and to lack of digital skills. The mapping of policy instruments revealed some that are supporting digital entrepreneurship, such as the BNA's LISPA (*Laboratório de Inovação do Sistema de Pagamentos*), an innovative incubator for payment systems focusing primarily on fintech. To foster development of Angola's start-up environment, the Government should consider the following interventions:

41. For an overview, see Medvedev et al. 2021.

42. Campos et al. 2017.

43. McKenzie 2017.

44. Bloom et al. 2017; Bruhn et al. 2018; Cirera et al. 2022.

45. McKenzie and Anderson (2022); McKenzie and Iacovone 2022.

46. McKenzie et al. 2015.

47. World Bank (forthcoming); Startup Genome (forthcoming).

- a. **Promote collaboration between industry, entrepreneurs, and academia.** The Ministry of Higher Education, Science, Technology, and Innovation (MESCTI) is in a position to facilitate between innovative entrepreneurs, traditional industries (medium-size and large companies), and academia, along the lines of Demola and the Design Factory.⁴⁸ These are platforms that boost open innovation and help students develop practical skills. Partnerships with technology companies and training providers would also develop digital skills.
- b. **Strengthen the foundations for early-stage finance.** The GoA could partner with private sector investors to design programs that address investment preparedness for digital entrepreneurs; develop investor communities (such as angel networks for local businesses); and devise risk-sharing mechanisms that incentivize financing for digital start-ups.

C. Encourage the development of financial services, addressing current gaps

Access to finance leads to diversification and company growth, especially for MSMEs, and has been a key focus of government policies in support of business. The GoA and the BNA have strengthened the regulatory framework underpinning financial services development, and introduced measures to restore financial sector stability. This includes approval of a new legal framework for secured transactions in moveable assets, introduction of an insolvency law, and a new payment system legal framework. Along with improving the macroeconomic framework, the Government can continue its efforts to enhance the reach and depth of the financial sector: measures that strengthen financial sector infrastructure and encourage the development of digital financial services would improve access to finance. To make the most of public resources, government support should focus on crowding in private finance.

i. Strengthen financial sector infrastructure

In recent years, Angola has improved its credit infrastructure through regulatory reform. Further progress in implementing these reforms will give MSMEs credit access and enhanced financial services. Specific areas of focus include:

- a. **Implement the collateral registry.** While a new legal framework for secured transactions in movable assets was approved in 2021, the online collateral registry is still not fully operational. Moreover, to attain the full participation of banks and other financial institutions, training and awareness-raising campaigns are necessary to cover the legal and operational aspects of the collateral registry. Collateral registries can reduce financing gaps between large and small companies by improving information-sharing mechanisms—extending finance access to small companies with credit constraints.⁴⁹
- b. **Strengthen the credit information framework.** Recent improvements in Angola’s credit information system include the upgrade of the BNA’s credit registry (CIRC), and licensing of the first private credit bureau by the Angolan Data Protection Agency (APD). These reforms are expected to reduce information asymmetries in MSME lending and to increase bank competition as lenders reduce their monopoly on credit information.⁵⁰ However, the effective operationalization of private credit bureaus requires updates to the legal framework to align with good international practice, including participation of financial and non-financial institutions, and data sharing. Increased awareness will also be important to achieve the full benefits of credit reporting.
- c. **Implement the new insolvency law.** Angola’s National Assembly approved a modern insolvency regime, which allows viable companies facing financial distress to reorganize. A modern insolvency framework

48. <https://www.demola.net/>; <https://dfgn.org/>.

49. Galindo and Micco 2010.

50. OECD (2012).

fosters entrepreneurship and development of credit markets. Countries with efficient insolvency regimes tend to have higher private credit to GDP, due to stronger creditor rights.⁵¹ To fully implement this reform, it will be necessary to regulate insolvency practitioners; train legal professionals and the business community; and strengthen the specialized chamber for commercial, industrial, and intellectual property at the Provincial Court of Luanda .

ii. Support the development of digital financial services

Banks are concentrated in urban centers, which hinders their ability to reach low-income customers, especially in remote areas. Digital financial services (DFS) increase financial inclusion by alleviating transaction costs and creating new business models. This offers greater economic opportunity to underserved individuals and companies.⁵² These services are still in their infancy in Angola. To enable their development, key priorities include:

- a. Strengthening the regulatory framework for DFS.** Building on the recent National Financial Inclusion Diagnostic, the BNA is preparing the National Financial Inclusion Strategy (NFIS), which will identify priority areas for DFS development. NFIS regulatory reforms will improve market access for payment service providers and foster other fintech. The BNA should focus on communications infrastructure that enables interoperable instant payments; advice for DFS stakeholders on pricing and access; transparency; and long-term market opportunities gained from digitizing government payments.
- b. Encourage the development of financial agent networks and mobile payments.** This includes identifying barriers to and opportunities for expansion, including incentives for agents and their liquidity challenges, particularly in the context of the Kwenda social protection program.
- c. Improve financial literacy and consumer protection.** Carefully targeted financial education entails developing programs based on evidence and incorporating innovative approaches and electronic channels; revamping the consumer protection regulatory framework; and strengthening the BNA's supervisory role on market behavior.

IV. Conclusions and Policy Priorities

Angola's productivity has declined, despite a more educated workforce and rising employment in the non-oil economy. Most new jobs have emerged in low-productivity, informal sectors, and self-employment accounts for 62 percent of total employment. The new jobs are mostly in agriculture and services sectors, and this has not led to significant structural change. Within-sector productivity decline in services reflects the decline in labor productivity. The private sector remains dominated by microenterprises (80 percent employ fewer than five workers), mostly concentrated in Luanda, and has limited capacity to drive productivity. As has been noted, companies with foreign ownership, educated leadership, and gender diversity tend to be more productive, pointing to the importance of enabling high-potential enterprises. To harness its demographic dividend, Angola must focus on expanding formal employment productivity and on strengthening private sector capacities.

Decline in productivity reflects persistent structural barriers to company growth. These include access to finance; a challenging business environment; poor institutional quality; and inadequate basic infrastructure and skilled workforce limiting participation in global markets (less than 1 percent of companies export directly). Limited access to finance, driven by a concentrated, bank-dominated, financial sector with high government involvement, has restricted credit to the private sector. In addition, credit is concentrated in import-dependent sectors. Despite recent reforms, the business climate continues to be challenging: obstacles to opening a

51. Djankov and McLiesh 2005.

52. World Bank (2022).

business, limited access to land, and informality. Weak rule of law and high levels of corruption further impede the emergence of a more competitive private sector.

Key priorities include promoting private sector development, boosting productivity growth, and creating jobs, thereby creating conditions crucial for private investment. This requires a sound macroeconomic management framework (as discussed in Chapter 1) and critical infrastructure (energy, water, transport, digitization), along with investment in Angola’s human capital for a more productive workforce. These fundamental resources are further explored in Chapter 3.

Beyond expanding basic resources, Angola also needs to improve the business environment and competition; reduce trade barriers; and strengthen company capacities, the adoption of technology, and entrepreneurship. Streamlining regulatory barriers, digitizing procedures, and fostering competition will allow new companies entry and scale-up, and exit when companies are not viable. Better access to finance must focus on deepening the financial sector. The Government should also address market failures; these inhibit companies from improving management capacities and adopting productivity-enhancing technologies. Government priorities should also facilitate digital technology and digitized entrepreneurship to drive transformation and job creation. As regards direct support for businesses, the Government should learn from past experience: initiatives offering subsidized loans to MSMEs struggle to attract private finance; and future support programs need clearer eligibility criteria and better alignment with market principles to avoid the funding of low-growth, unprofitable companies.

Table 2.1: Summary of Policy Priorities for Private Sector Growth in Angola

Policy Areas	Short-Term Actions	Medium/Long-Term Actions
Strengthen the business environment and promote competition	• Improve One-Stop Shop GUE operability and expand its services and geographic reach. • Develop programs for land tenure regularization, building on existing initiatives. • Support the ARC to implement its mandate.	• Rationalize the licensing regime by eliminating unnecessary licenses and simplifying others, while expanding support for implementation in the provinces. • Simplify the process for obtaining land rights by streamlining procedures and systems integration. • Reduce compliance costs with import/export requirements, digitize transactions, and increase transparency and predictability of trade-related procedures.
Strengthen company capacities and the adoption of digital solutions	• Improve availability of information on MSME support programs. • Apply existing evidence to designing interventions; strengthen monitoring and evaluation. • Promote collaboration between industry, entrepreneurs, and academia.	• Consider cost-effective interventions to provide tailored support to companies to strengthen their management capacities. • Develop interventions that spur the adoption of technology and digitization. • Strengthen the foundations for early-stage finance.
Encourage the development of financial services	• Implement the collateral registry. • Strengthen the credit information framework. • Implement the new insolvency law.	• Strengthen the regulatory framework for the supply of DFS. • Encourage the development of financial agent networks and mobile payments. • Improve financial literacy and consumer protection.

Chapter 3. Expanding Endowments (for Diversification)

Achieving sustainable long-term growth depends fundamentally on the strategic expansion of both *human capital and infrastructure*. Enhancing human capital, which encompasses skills, education, and health, is crucial for economic transformation, as it fosters innovation, increases productivity, and enhances economic competitiveness. Meanwhile, infrastructure development is also vital for advancing a country's growth and diversification efforts, forming the backbone of economic activities by facilitating trade, improving access to services, and promoting overall efficiency. A recent qualitative review by the World Bank, encompassing more than 300 studies conducted from 1983 through 2022, highlighted the positive impact of expanding digital, energy, and transport infrastructure on employment, growth, structural transformation, and human development outcomes (World Bank 2023).

While Angola has made strides in growth and development over the past two decades, its path forward also hinges on expanding critical endowments. High levels of child malnutrition, low quality of education, and skill mismatches result in low labor productivity, constraining productive economic diversification. Angola's human capital ranks well below its peers, with a Human Capital Index (HCI) score 19 percent below the average. Key issues include a 43.6 percent malnutrition rate among children under 5 and educational quality that is 28.4 percent below the average. The country's poverty level has severely worsened from 14.6 percent of the population in 2008 to 31.1 percent in 2018, falling behind most comparators. Consequently, wealth inequality has also worsened, with the Gini index increasing sharply from 42.7 in 2008 to 51.3 in 2018, ranking the country as one of the most unequal in the region.

The country's infrastructure is falling behind peers, having been severely damaged during the civil war and oil wealth having failed to rebuild and maintain infrastructure. As Tony Hodges, a United Nations (UN) official, noted, "Not only have railway lines, bridges, power plants, transmission lines and water systems been destroyed or damaged during the war, but others have simply decayed because of the lack of maintenance" (Hodges 2001). The 2019 Global Competitiveness Report gave Angola an infrastructure score of 40 out of 100, ranking it 126 out of 141 countries. Angola's infrastructure falls below both the sub-Saharan Africa (SSA) average (45) and the lower- and middle-income country (LMIC) average (55), while aspirational peers rank significantly higher. Although Sustainable Development Goal (SDG) indicators for access to electricity, drinking water, sanitation services, and internet are improving, progress is too slow to meet the 2030 objectives (Sustainable Development Report Dashboard 2023).

This chapter explores the critical importance of investing in human capital and infrastructure as foundational pillars for Angola's future growth. Part 1 presents solutions to boost investment in the digital, electricity, and transport subsectors, highlighting their roles as both enablers of, and opportunities for, private investment and diversification. Each subsection outlines the goals defined in the National Development Plan (NDP), followed by an overview that includes recent trends, current policies, and growth bottlenecks. Strategies are then proposed to increase participation from both the public and private sectors in each infrastructure subsector. Part 1 concludes with a summary of key findings and recommendations.

Part 2 focuses on human capital, starting with a broad overview of the Angolan government's agenda in the NDP 2023–27. It presents the context for and challenges to human capital in Angola, centering around education, water, sanitation, and hygiene (WASH) service provision, nutrition, and job-skill mismatches. Lastly, Part 2 proposes key reforms to build human capital in Angola.

Part 3 of the chapter focuses on agriculture—an underutilized but vital component of Angola's natural endowment potential. With its vast amount of arable land and large rural labor force, agriculture holds significant potential to drive income growth, food security, and employment, especially outside urban centers.

Yet the sector remains constrained by low productivity, limited access to markets and inputs, and vulnerability to climate shocks. Part 3 analyses the structural challenges facing agricultural development and outlines policies to elevate its role in economic diversification. Together, these three pillars — people, infrastructure, and land — form the foundation of Angola’s agribusiness development prospects.

Part 1: Expanding Infrastructure Endowment

I. Electricity Sector

Access to electricity is undeniably a crucial factor for Angola’s development. It boosts the productivity of industries and businesses by powering machinery, lighting, and technology. Electricity also plays a pivotal role in Angola’s economic diversification by modernizing agriculture through irrigation systems, processing facilities, and cold storage. Furthermore, it is essential for Angola’s human capital development, as it extends study hours, improves educational infrastructure such as internet access, and modernizes healthcare facilities. Additionally, modern electrification encourages the use of cleaner energy sources, reducing reliance on polluting fuels such as kerosene and diesel. By fostering business growth and enhancing services in education and healthcare, access to electricity stimulates economic growth and helps alleviate poverty.

The NDP 2023–27 outlines a strategy to expand electricity access, increase generation capacity, and scale up renewable energy, supported by a comprehensive program for Angola’s power sector.

The new NDP sets ambitious targets for electricity access, installed capacity, and renewable energy production. The share of the population with access to the on-grid electricity system is projected to increase from 43 percent in 2022, to 49 percent by 2027, and to 72 percent by 2050. The installed capacity of the electricity sector is set to grow from 6 gigawatts (GW) in 2022, to 10 GW by 2027, and 33 GW by 2050. In addition, the NDP aims to boost renewable energy production from 64 percent of the installed capacity, including hydropower, in 2022 to 73 percent by 2027 and 94 percent by 2050.

To achieve its goals, the NDP outlines the Program for the Expansion and Modernization of the National Electricity System. This program encompasses four key objectives. First, it aims to extend electricity access through the implementation of a rural distribution plan and a distribution network expansion plan. Second, it seeks to rationalize the electricity system by implementing a pre-payment system, reviewing electricity tariffs, and improving revenue management to reduce subsidies and losses. Third, it focuses on expanding the transmission network and installed capacity through the mobilization of private capital. Lastly, it aims to develop and rehabilitate infrastructure for renewable energy production.

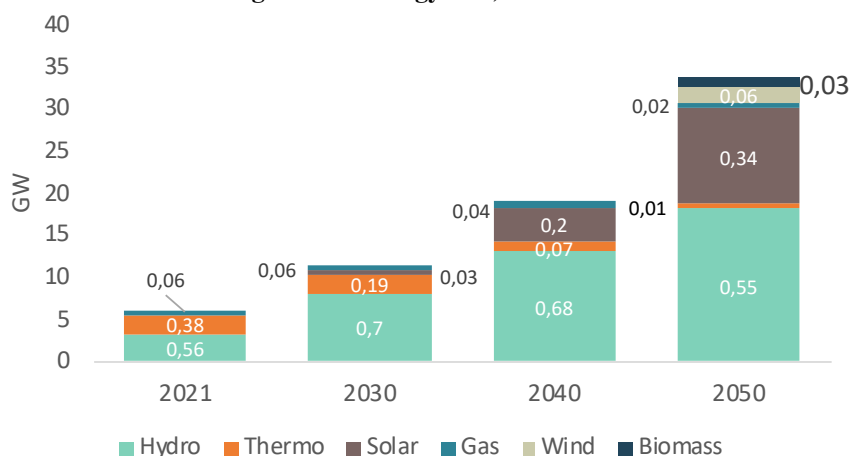
Angola’s power sector has strong growth potential thanks to abundant renewables and rising capacity, but it faces major challenges in access, transmission, and financial sustainability.

Angola has large energy resources and an increasing installed capacity, with the potential for expansion in the coming years. This growth can be achieved through de-risking and enhancing private investments in the sector.⁵³ The country is endowed with abundant hydropower resources and vast solar and wind power potential. Installed generation capacity has quadrupled in only one decade, reaching 6 GW in 2021. Currently, more than 3.36 GW of the total energy supply is hydro-based, followed by 2.28 GW from thermoelectric generation (Figure 3.1). The government, through the Angola 2050 Vision, Power Development Master Plan (PDMP), and additional policy directives, anticipates a sustained increase in generation capacity. By 2050, installed capacity is expected to reach 33.4 GW, with a steady expansion of hydroelectric generation and diversification of the

53. The following analysis is based on the findings published in the Angola National Electrification Analysis (2021), performed by NRECA International and financed by The World Bank.

energy mix to strengthen the reliability of electricity supply in the face of climate change. It is projected that 34 percent of the energy mix will be solar, followed by 6 percent wind.

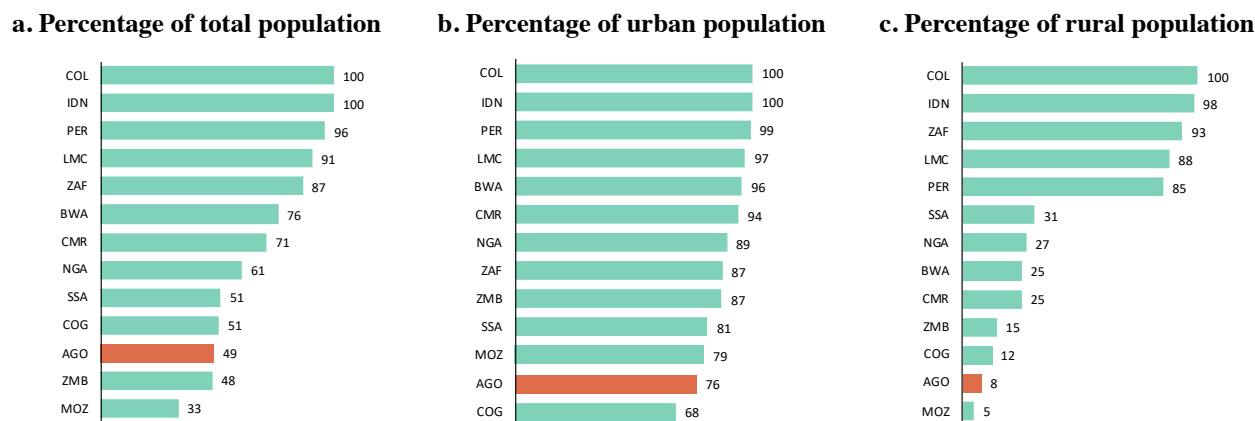
Figure 3.1: Energy mix, 2021–2050



Source: Angola 2050 Vision.

Nonetheless, 51 percent of Angolans—more than 18 million people—lacked access to electricity in 2022. Additionally, there are significant disparities between urban and rural areas: while 76 percent of the urban population had access to electricity in 2022, only 8 percent of the rural population did in 2021. Although electrification rates have increased since 2002, Angola continues to lag behind most structural peers, all aspirational peers, as well as in the averages for SSA and LMICs (Figure 3.2).

Figure 3.2: Access to electricity (total, urban, rural) in Angola and peers, 2022



Note: Percentage of rural population for Angola is from 2021.

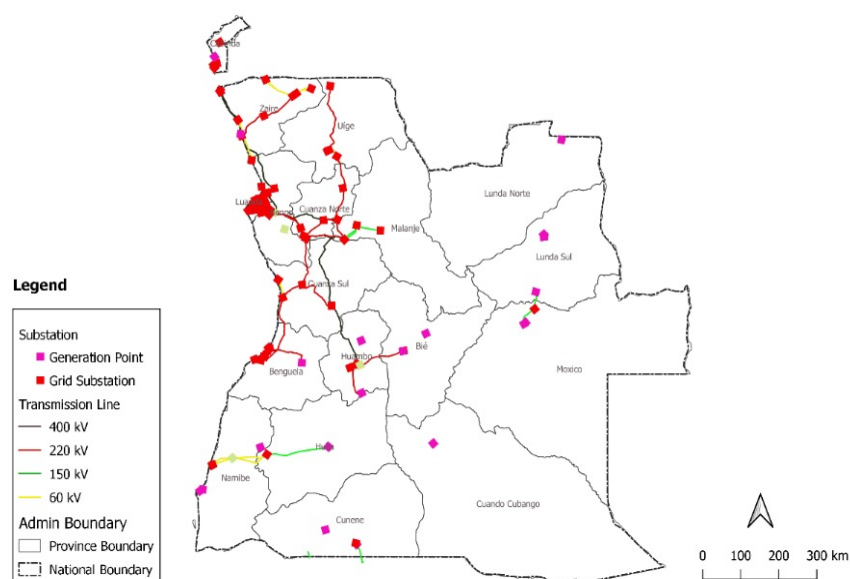
Source: World Development Indicators (WDI); NDP 2023–27.

Angola's power sector is relatively young, following its vertical unbundling in 2014. Before this reform, the National Electricity Company (*Empresa Nacional de Electricidade de Angola*, ENE) was responsible for generation, transmission, and distribution. Since the reform, three public companies have existed under the Ministry of Energy and Water (*Ministério da Energia e Águas*, MINEA): (1) Public Electricity Production Company (*Empresa Pública de Produção de Electricidade*, PRODEL) for generation, (2) National Transport Network (*Rede Nacional*

de Transporte, RNT) for transmission, and (3) National Electricity Distribution Company (*Empresa Nacional de Distribuição de Electricidade*, ENDE) for distribution. Also, power generation has been deregulated, allowing private sector participation, although there are currently only a few independent power producers (IPPs).⁵⁴

Angola has sufficient installed capacity, but its transmission infrastructure is limited. Unlike most countries in the region, which face both inadequate generation capacity and network constraints, Angola has adequate installed capacity but lacks an ample transmission network (Figure 3.3).⁵⁵ Currently, the network is not interconnected and consists of separate national grid systems (northern and central, and eastern and southern), each presenting unique challenges due to their remoteness and generation sources. The northern grid, which includes Luanda, is the most developed and transports 80 percent of Angola’s power supply. In other regions, the coverage significantly drops.

Figure 3.3: Existing transmission line network, Angola



Source: Angola National Electrification Analysis 2021.

Electricity distribution in Angola faces continuous shortfalls between sector revenue and investment needs. Despite a one-time 97 percent increase in the average retail electricity tariff in 2019, it remains among the lowest in the world. The average tariff stands at US\$1.4 c/kilowatt-hour (kWh) (12.8 Kz), which is just 31 percent of the cost-recovery tariff of US\$7.8 c/kWh, resulting in an annual tariff shortfall of almost US\$700 million. This shortfall generates losses across the entire value chain, affecting the ability of operators to properly maintain existing assets or expand their services. ENDE faces challenges in its operational and commercial performance, affecting the financial health of the entire electricity sector. Overall distribution losses have been consistently above 30 percent, and collection rates below 75 percent. With a projected population growth of 2.9 percent per year until 2030 under a medium-fertility scenario,⁵⁶ the country will need to add 150,000 new connections each year to reach the objective of a 53 percent access rate by 2030 (on-grid).

54. IPPs own and operate mainly small thermal plants, which account for less than 5 percent of the generation market.

55. RNT operates approximately 4,700 kilometers (km) of high voltage transmission line at 400 kV, 220 kV, and 60 kV combined with 34 substations located in 13 provinces.

56. Average per year projected population growth for 2022–2030.

Policy Priorities⁵⁷: Angola can expand electricity access and improve grid reliability by leveraging existing infrastructure, attracting private investment, and addressing financial and climate-related challenges.

Electrification access can be increased by using the existing ENDE medium-voltage (MV) infrastructure. The NEA report (2021) indicates that 60 percent coverage is achievable within the current network.⁵⁸ By connecting approximately 2 million new households through existing low-voltage (LV) services or the extension of these services, significant expansion of MV lines can be avoided. This initiative would cost approximately US\$933 million. However, increased access would exacerbate the weak financial position of the sector if tariff adjustments and loss-reduction measures are not implemented.

New distribution infrastructure is needed to extend MV service beyond the current ENDE distribution footprint to new communities and unelectrified housing clusters. As ENDE's substation capacity is already strained, adding consumers could overburden existing distribution transformers, feeders, and power transformers at grid substations. According to NRECA's analysis,⁵⁹ 1.29 million new households could be connected by 2030, with an additional 421,000 through potential densification. The total estimated cost for this 10-year expansion is US\$1.12 billion.

Given the significant investment needs in generation, transmission, and off-grid solutions, private sector financing is critical to supplement public funds. Angola could pilot the Independent Power Transmission (IPT) model, which leverages private sector expertise and has proven successful in developing countries (Box 3.1). To support the adoption of the IPT model, two key recommendations are proposed. First, legal changes should clarify, formalize, and streamline the role of the private sector in the expansion of the electricity transmission network through direct concessions, enabling private developers to build new transmission lines using a build-own-transfer (BOT) model. The role of IRSEA could be expanded to include granting concessions and permits for transmission facilities. In November 2024, the Angolan government amended the General Law of Electricity to permit private sector participation in transmission through direct concessions. Second, establishing a revenue management system is vital to increase transparency and predictability of cash flow to developers and to help determine a viability gap for supporting IPT investments. This system should define methods for reporting, managing, and distributing revenue, with clear definitions for indexing payments in foreign currencies to mitigate exchange rate risks. This approach would encourage private investment in the transmission sector by addressing the inadequate and inconsistently allocated revenue, low tariffs, and high losses that currently deter private investments.

57. These recommendations follow those in the 2021 National Electrification Analysis (NEA) report produced by NRECA International and financed by The World Bank on behalf of the GoA, and the Angola Climate Change Development Report (CCDR).

58. A densification analysis was performed by geographically comparing the number of housing structures within the connection radius of each distribution transformer with the actual number of ENDE consumers served.

59. A grid expansion analysis was performed by evaluating housing cluster locations beyond the existing ENDE distribution footprint using housing structure data layer, the ENDE MV network, energy consumption estimates, and ENDE MV construction cost parametric values.

Box 3.1. Promoting private investment to expand the electric transmission network

IPT is the most prevalent electric transmission model in developing countries. The four main models are privatization, whole-of-grid concessions, IPT, and merchant investments. From 1998 through 2015, IPT tenders in Brazil, Peru, Chile, and India mobilized more than US\$24.5 billion from the private sector, resulting in nearly 100,000 kilometers of new transmission lines. IPT is also well-suited for African countries, as they share similar risks for investors with the IPP model which has been successful in the region. Although there are no IPT examples in Africa, primarily due to regulations that deem the transmission network a public monopoly, the region has attracted more than US\$25 billion in private IPP investments since 1994, adding more than 11 GW of generation capacity.

Angola could adopt a phased approach to pilot the IPT model and expand regulations to scale its impact. Given the significant generation capacity, recent sector unbundling reforms, and a new tariff methodology for establishing annual revenue requirements for utilities, pilot IPTs could initiate private sector participation in transmission in Angola. Initially, this may involve ring-fencing projects due to operational and financial challenges in the sector. Since the transmission component in tariffs is low, the financial impact on the sector will be limited. India's experience shows that overall power sector profitability is not necessary for a successful IPT. Although low tariffs and high losses in some Indian states create problems for funding private transmission, the central government provides support through viability gap funding, with tariffs set up front and bids determining additional funding needed.

Source: World Bank Group 2012a, 2012b, 2017; Besant-Jones 2006; Sanchez and Oguah 2015.

De-risking and facilitating private sector investment is also key to expanding mini-grid and off-grid solutions in remote and small communities. While grid expansion progresses, isolated communities can be served by a mix of large and small isolated grid systems. The NEA analysis indicates that smaller mini-grids (serving 1,000 households or fewer) will use LV distribution systems, while larger ones will require MV systems and more substantial generation-distribution systems. Evaluating 232 mini-grid locations in Angola, primarily in the southern and eastern regions, suggests connecting 930,700 new households over 10 years, with an estimated capital cost of US\$1.15 billion. This will require a blend of government and private financing, supported by market-based incentives, clear policies, and regulatory guidelines, such as the Presidential Decree 78/23 that guides off-grid rural electrification.

Climate change poses significant risks to Angola's electricity system, making adaptation essential. Angola's energy mix relies heavily on hydro generation, which is vulnerable to rainfall variability. Climate impacts on major rivers and their basins could reduce water availability, affecting electricity production (World Bank 2023). In addition, power infrastructure in flood-prone areas could be compromised, further disrupting energy provision. To build climate resilience, Angola needs to improve planning and forecasting systems, strengthen dam and reservoir management, and adapt infrastructure as necessary.

Connecting to the Southern Africa Power Pool (SAPP) could offer Angola the opportunity to become a net energy exporter and strengthen climate resilience. With its abundant energy potential, the country can generate surplus electricity for export, creating additional revenue and advancing its goal of becoming a power hub in Southern Africa. As the largest power trading platform on the continent, SAPP offers Angola access to a regional market, where increasing generation and transmission capacity are top priorities (World Bank 2014). Moreover, integration into SAPP would also enhance Angola's climate resilience by optimizing the use of its hydro storage. This initiative should be a short-term national focus, with concrete milestones set for the next one to two years and full implementation targeted within five years.

II. Transport Sector

Enhancing transport infrastructure is essential for fostering Angola’s economic development. A robust transport system facilitates the flow of goods, services, and labor between firms and households, enabling wealth creation to be transferred within and between economies and maximizing the benefits of trade. For example, enhancing freight logistics through improved transport infrastructure can expand markets by making previously costly-to-reach areas more accessible. Transport also plays a vital role in the development of society. As countries progress, individuals’ needs evolve from basic necessities (food, water, shelter) to more sophisticated demands that require access to distant resources (Cowie 2010). Empirical evidence highlights the importance of lowering the economic costs of transport in developing countries (see Box 3.2).

Box 3.2. Impact of lowering the economic costs of transport on economic development

Research indicates that lowering the cost and time required to transport goods in developing countries can enhance trade, boost productivity, generate employment, raise incomes, mitigate food insecurity, and decrease emissions. As argued by Donaldson et al. (2017), high domestic transport costs have limited, as well as unevenly distributed, the benefits of trade liberalization in Africa. Similarly, Freund and Rocha (2011) found a negative association between overland travel time and African exports. In India, Lall et al. (2022) observed that reducing trucking costs led to an increase in domestic trade flows, while Donaldson (2018) concluded that expanding railways enhanced both interregional and international trade. Duranton and Venables (2018) noted that lower transport costs incentivize firms to cluster, thereby increasing agglomeration, investments and productivity. Blankespoor et al. (2017) found that increased market access in Mexico led to higher employment. Regarding the effects of transportation systems on income, Roberts et al. (2012) observed that the expansion of China’s highway system in the 1990s and 2000s resulted in more domestic trade and higher aggregate real income, while Storeygard (2016) found that lower transport costs in SSA increased income for cities located 500 kilometers from the port. Blimpo et al. (2013) and Stifel and Minten (2017) found that improved road transportation enhanced nutrition and reduced stunting in Africa. There is also substantial evidence that removing transport inefficiencies can reduce emissions (Collier et al. 2019; Díaz-Ramírez et al. 2017; Rizet et al. 2012; Walnum and Simonsen 2015).

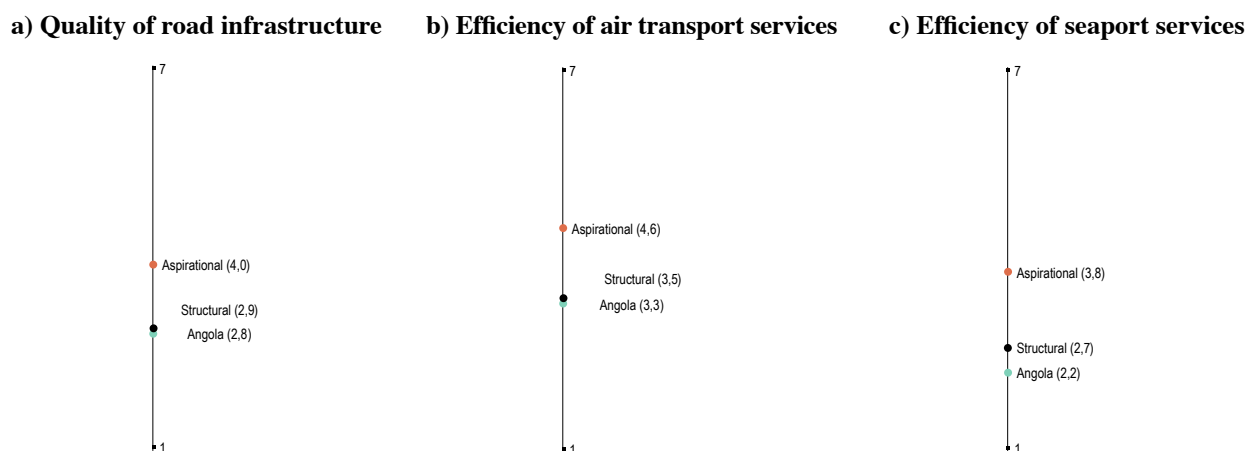
The NDP 2023–27 presents an infrastructure agenda to boost connectivity and economic growth by expanding and modernizing Angola’s road, transport, airport, railway, and port systems.

The NDP 2023–27 outlines a comprehensive plan to enhance infrastructure across various sectors. For roads, it commits to improving and expanding the network, including national, municipal, and rural roads, while strengthening the National Road Institute (*Instituto Nacional de Estradas de Angola*, INEA). Urban mobility would be boosted by improving public transport systems, formalizing current transportation modes, defining routes, integrating all modes into a unified system, building an interprovincial bus terminal, and acquiring interprovincial buses. In air transport, the goal is to more than double passenger numbers (from 2.2 to 4.8 million) by 2027, with new radar systems, more competitive and efficient infrastructure management, new airports, and a restructured TAAG, the national airline. The railway sector aims to increase freight capacity more than sixfold, including the Lobito Corridor, while port volume is projected to increase by more than 70 percent through new constructions and concessions.

Angola's transport infrastructure holds strong potential for supporting development and diversification, but unlocking it requires improved efficiency, investment, and regulation across roads, rail, urban mobility, air, and maritime sectors.

Expanding Angola's road network and improving its quality are key enablers for agricultural development, diversification, and effective service provision to the poor. According to the World Economic Forum's Executive Opinion Surveys, Angola received a score of 2.2 (on a scale of 1 to 7) for the quality (extensiveness and condition) of its road infrastructure in 2019. This placed Angola 135 out of 141 countries and below all of its peer countries (Figure 3.4a). The road network density is low at 6 kilometers per 100 square kilometers, above Mozambique and on par with Botswana but behind all other peers. In 2018, 34 percent of roads were classified as fundamental (of which 52 percent were paved) 23 percent as complementary (of which only 1 percent was paved), and the remaining were unclassified. The low density, coupled with the poor maintenance, affects agricultural logistics and access to services. More than 75 percent of agricultural production cannot reach markets, and half the population lives more than 2 kilometers from any road. Only 37 percent of the population can access hospitals and schools within 2 hours (World Bank 2020).

Figure 3.4: Private sector firms believe that transport infrastructure in Angola is lacking in quality and inefficient
Aspirational = average of aspirational peers; structural = average of structural peers



1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world

Note: Data for the Republic of Congo not available in the Global Competitiveness Report 2019.

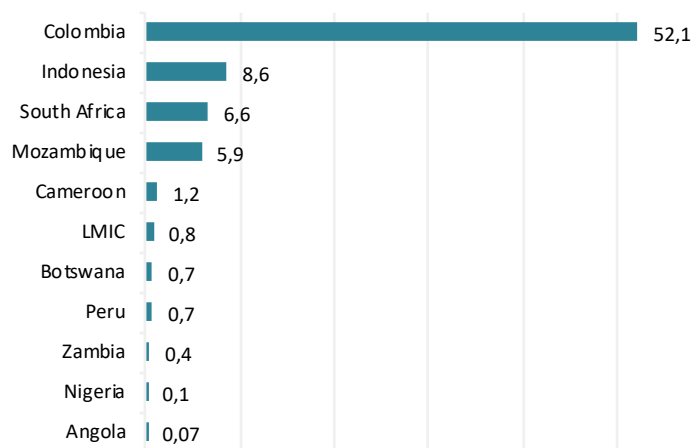
Source: World Economic Forum 2019, World Bank 2023.

Unleashing the road subsector's potential requires enhanced spending efficiency, institutional reforms, more funding, more data, and better road classification. The budget allocation to national roads (fundamental and complementary) averaged US\$2.06 billion in 2008–17, but improvements remain elusive. The Road Fund, responsible for financing maintenance since 2015, lacks technical and financial auditing and clear implementing regulations. At the provincial level, over 182 entities (one for each of the 18 provinces and 164 municipalities) handle sub-national road maintenance, which complicates coordination. Funding for the Road Fund stands at US\$28 million per year, only half of what is needed for maintaining fundamental and complementary roads. Data on the road network is scarce and unreliable, as INEA lacks a road inventory and does not carry out periodic surveys on road conditions. The current road network classification favors fundamental roads, leaving responsibility for complementary roads unclear.

Angola's railway density is on par with most peers, but the volume of passenger and freight traffic is very low, pointing to large potential for efficiency increase and private sector involvement. The railway

density stands at 2.2 kilometers per 1,000 square kilometers, close to most peers except for South Africa (19.1 kilometers per 1,000 square kilometers). The railway infrastructure consists of three separate lines, the Luanda Railway with 500 kilometers, the Benguela Railway with 1,344 kilometers, and the Moçamedes Railway with 856 kilometers. Despite their relatively good state of repair, the volume of passenger and freight traffic reached just 0.07 million traffic units in 2018, lagging behind all peers and the LMIC average (Figure 3.5). Their low traffic makes them unprofitable, and the state-owned enterprises (SOEs) responsible for their operation rely heavily on government subsidies and lack the financial capacity or commercial incentives for long-term planning to increase rolling stock capacity, which is required to sustain higher freight volumes. A 2010 presidential decree allowed private sector participation in the subsector, but only the Benguela Railway (Lobito corridor) has been granted as a concession to a private consortium, which will be responsible for maintaining the infrastructure and operating freight. Passenger transport still falls under the responsibility of the SOE.

Figure 3.5: Angola’s volume transported on the railway network lags behind all peers.
Ratio of combined density (tkm + pkm) to length of railway network, million traffic units, 2018



Source: World Bank’s Global Infrastructure Dashboard.

Note: Data not available for Congo and SSA. The number of ton-kilometers (tkm) is the weight in tons transported multiplied by the distance in kilometers. The number of passenger-kilometers (pkm) is the number of passengers transported multiplied by the distance in kilometers.

Cities in Angola lack safe, efficient, and clean transport options to commuting to work and school or to access other services. Public transport is predominantly operated by private minibus-taxis with no government subsidy and no standard formal rules or operating procedures. Formal bus services have little participation in urban public transport. For instance, Luanda’s Integrated Ticketing System recorded only 400 buses for the entire city in 2023. Although there is demand for a larger bus fleet, operating companies complain that revenue from user fares and subsidies are insufficient to cover operating costs. The government has implemented a program to acquire and transfer buses to companies through financing contracts, but some operators stop functioning over time, citing difficulties in finding spare parts, precarious streets, traffic congestion, and poor-quality fuel. Given the lack of formal bus services, informal collective cabs (“*candongueiros*”) have become the main mode of urban transportation, typically running when and how operators choose, beginning their run when the vehicles are full, without designated formal stops and with no official schedules. Motorcycle taxis also provide last-mile connectivity, contributing to chaotic traffic. Angola’s urban mobility is also far from sustainable, as it remains carbon based and does not promote non-motorized modes like walking or cycling.

Although the public management of urban transport is evolving, it still demands further decentralization, attention to local nuances, stricter regulation enforcement, and better project integration. The responsibility

for planning, managing, and supervising urban public transport is being decentralized from the National Land Transport Agency (*Agência Nacional de Transportes Terrestres*, ANTT) to provincial governments and municipal administrations. However, a lack of human resources and financial capacity in local governments hinders these decentralization efforts. Additionally, as people move across municipal boundaries, decentralization also requires cross-administration coordination. Regarding the regulatory framework, the 2019 transport regulation covers only regular services and may not account for local nuances. Minibus taxis lack specific regulations, while the regulations on road transport concessions for formal buses are only being partially enforced. Most public transport projects are developed in isolation, leading to inefficiencies. Although the National Master Plan for the Transport and Road Infrastructure Sector has proposed master plans for provincial-level public transport for better integration among projects, concrete action is still pending.

Angola's airport connectivity is on par with its structural peers, but there is excess airport capacity and executive surveys highlight inefficiencies. In 2019, before the COVID-19 pandemic, air carriers in Angola served 4.4 passengers per 100 inhabitants, above all structural peers except the Republic of Congo (9.7) but below the SSA average (5.9). The IATA airport connectivity indicator places Angola's air transport integration above most structural peers,⁶⁰ highlighting the role of the aviation sector in connecting the key economic centers of the country with one another and with more remote regions. A new international airport with a capacity for 15 million passengers per year, around seven times the 2022 figure and above the government's projection for 2050 (10.1 million), has been inaugurated recently. In the 2019 World Economic Forum's Executive Opinion Surveys, Angola scored 3.3 in efficiency of air transport services (i.e., frequency, punctuality, speed, price), ranking 129th out of 141 countries and below all peers except Mozambique (score of 3).

Angola's maritime sector features several major ports with significant development projects, but its domestic merchant fleet is notably outdated. The Maritime and Seaport Institute of Angola oversees the country's maritime activities. Angola's major ports include Luanda, Soyo, Namibe, and Lobito. Luanda, the key maritime hub, handles more than 86 percent of imports and more than 40 percent of exports (International Monetary Fund [IMF] 2022b; quoted in IMF Portwatch 2024a). AD Ports recently acquired a large stake in Luanda's port terminal and plans to increase the vessel draught from 9.5 to 16 meters (Labrut 2024; quoted in SeaTrade Maritime 2024), accommodating some of the world's largest container ships.⁶¹ Soyo manages more than 50 percent of oil exports (IMF 2022c; quoted in IMF Portwatch 2024b), while Namibe, serving the south, has recently been refurbished (PMAESA 2018). Lobito connects central Angola to the DRC via the Benguela railway, facilitating Copperbelt commodity exports. Plans for a new port at Barra do Dande are underway. Angola's domestic merchant fleet consists of about 64 vessels with an average age of 33 years. The country's eight oil tankers have an average age of 44 years, significantly exceeding the typical replacement age of 25 years (UNCTADStat 2024a). Nearly 5,000 vessels are beneficially owned by Angolan businesses (UNCTADStat 2024b).

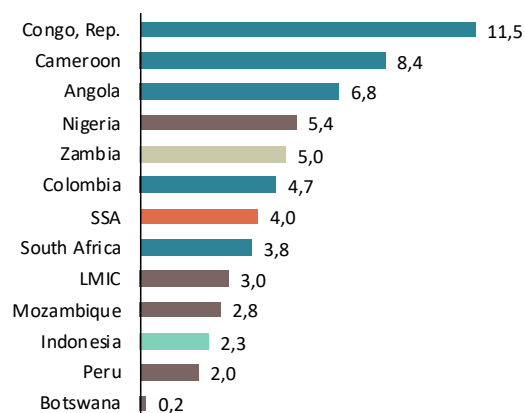
Despite being the primary maritime hub, Luanda underperforms compared to other ports in the region. Port productivity is often measured by the time a vessel spends in port, with quicker turnarounds reducing logistics costs and enhancing supply chain efficiency, as noted by the World Bank Container Port Performance Index 2023 (World Bank & S&P Global Market Intelligence 2024; quoted in CPPI 2024). Despite improvements in port hours in the past two years (Figure 3.6 and 3.7), Luanda has ranked consistently low. In 2023, Luanda ranked 35th out of 40 ports in SSA and 392nd out of 405 ports in the world, below Namibe (302) and only three positions above Pointe-Noire (395) in the DRC. Additionally, a study by the Africa Transport Policy Program (SSATP) on the digital maturity of 39 African ports found that Luanda performs on par with the average port, though slightly below Pointe-Noire. Enhancing cybersecurity and digital services should be a priority for Angolan ports, given their critical role in Angola's international trade.

60. The number of available seats to each destination is weighted by the size of the destination airport (in terms of number of passengers handled). The weighted totals are then summed for all destinations, then for all airports in the country to produce a score. A log transformation is applied to the raw value before converting it to the 0 to 100 score (World Economic Forum 2019).

61. Likely limited to very large container ships (VLCS), not ultra-large container ships (ULCS) of which only a few exist worldwide.

Figure 3.6: The lack of port infrastructure and its poor management result in long border compliance times

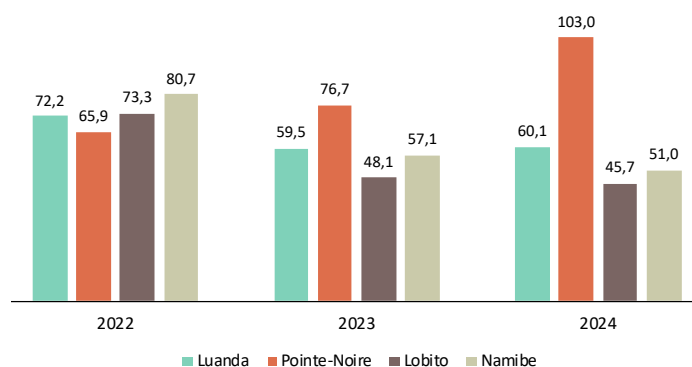
Time to export, border compliance in days, 2019



Source: WDI.

Figure 3.7: Despite the reduction in port hours, Luanda ranks consistently low

Port hours by port



Source: S&P Global Port Performance Dashboard.
Note: Data for 2024 cover through September.

Policy Priorities: Angola's transport sector needs institutional reforms, better planning, and increased private investment to improve efficiency, sustainability, and connectivity across road, urban, rail, air, and maritime systems.

To enhance the road transport sector in Angola, several policy recommendations are proposed. Firstly, implementing financial and comprehensive independent technical audits would improve the effectiveness of the Road Fund. Secondly, semi-autonomous road management agencies could be established at the provincial level to oversee the subnational road network, and municipalities could delegate road infrastructure management through a contract management approach. Thirdly, developing and sustaining a road database and asset management system is essential to improve the collection of data on the road network. INEA could adopt an asset-management approach using an appropriate road-asset-management system. Lastly, reviewing the road network classification is necessary to identify road links, their characteristics, and the role of each road within the network. This classification should be based on population density, land use, and traffic volumes.

Urban transport in Angola requires regulatory reforms to enhance decentralization, better accommodate local characteristics, develop human resources, and integrate various projects more effectively. Decentralizing competencies to subnational governments such as provincial governments or metropolitan entities rather than municipal administrations would facilitate more integrated planning and management. Complementary regulations at the provincial level and specific rules for minibus taxis could better adapt the regulatory framework to local characteristics. The ANTT could develop a comprehensive technical training program for provincial offices and municipal directorates, promote exchange, and hire technical support as needed. Additionally, the ANTT could stimulate, coordinate, and supervise the development of master plans for provincial sustainable transport, providing necessary technical advice.

To increase private sector involvement in urban transport, recommendations include stimulating business organization, integrating informal transport modes into the formal system, and reviewing the bus acquisition program. Stimulating business organization involves ensuring fair remuneration for investments and operational costs by preparing fare regulations that define cost components, subsidy criteria, and adjustment

bases. A new business model for the bus acquisition program should involve selected operating companies with adequate technical and financial capacity mobilizing private capital for fleet acquisition, including electric buses. Empowering operators to make decisions and adjust the characteristics of the acquired vehicles to their business models will also enhance the program's effectiveness. Investing in infrastructure that favors circulation, such as dedicated bus lanes, can make bus transport more attractive and efficient. Integrating *candongueiros* into the transportation system by encouraging them to form cooperatives or companies with operational standards is also recommended.

Enhancing urban transport management and infrastructure involves developing high-capacity transportation systems, implementing bus lanes, improving traffic management, and promoting safer and more sustainable urban mobility. Significant investments in public transport infrastructure, supported by demand studies to ensure technical and financial viability, are needed in large urban centers like Luanda. Improving urban traffic management involves prioritizing bus circulation through exclusive lanes, modernizing traffic signs, and enforcing traffic codes to reduce congestion. Urban mobility policy should also consider road safety and sustainability, promoting collective and non-motorized transport modes, integrating them into provincial transport master plans, developing road safety policies, investing in infrastructure for pedestrians and cyclists, and improving fuel quality.

Increasing traffic volumes on the railway network can reduce logistics costs and emissions from the transport sector. Achieving this requires investments to expand rolling stock capacity, improve signaling systems, and maintain depots to handle higher passenger and freight volumes, thereby maximizing the existing railway infrastructure. The railway sector should continue to explore mechanisms to mobilize private sector investment. New business models should be explored to decide whether unbundling infrastructure from operations and implementing an adequate pricing mechanism could incentivize private sector investment and reduce reliance on government subsidies, while offering transparent and competitive prices to freight generators.

Full compliance with International Civil Aviation Organization (ICAO) standards is a necessary condition to safely accommodate the projected increase in air traffic volumes. In addition, the management of airport infrastructure and services should be transferred to the private sector in a competitive and transparent manner, following good international practices (such as privatization or public-private partnerships, PPPs). To enhance its competitiveness and leverage the new airport infrastructure, the national airline, TAAG, should focus on improving operational efficiency.

Angola needs to expand its port infrastructure and improve management, cybersecurity, and digital services to increase capacity and productivity. The anticipated upgrade of the Port of Luanda will enable it to accommodate some of the world's largest containerships.⁶² These enhancements provide an opportunity to assess and address the high vessel turnaround times. Investments in cybersecurity will contribute to this goal while also enabling more resilient and reliable port operations.

III. Digital Sector

Expanding the use of digital technologies⁶³ is pivotal for Angola's economic diversification and development. The invention of the internet has dramatically reduced the cost of acquiring and using information, thereby lowering transaction costs. According to The World Bank's 2016 World Development Indicators (WDI) report, this shift promotes economic development in three major ways. First, the internet promotes inclusion by lowering search and information costs, making previously unattainable transactions possible. Before the internet, many beneficial transactions did not occur because buyers and sellers were unaware of each other or due to information asymmetry. Second, the internet promotes efficiency by making existing transactions faster, cheaper, and more

62. Likely limited to VLCS, not ULCS of which only a few exist worldwide.

63. Digital technologies include all the tools to collect, store, analyze and share information digitally, such as the internet and mobile phones.

convenient. Firms have replaced traditional factors of production (labor and capital) with cheaper information and communication technology (ICT) capital to automate tasks, also increasing the productivity of the other factors, such as better manager supervision of workers. Third, the internet promotes innovation by facilitating communication and collaboration. Since the marginal cost of an additional transaction is negligible (e.g., e-commerce platform, digital payment system, e-book, streaming music, social media), new participants are attracted, creating a network effect where benefits increase as more users join (e.g., auction site, search engine). This fosters new business models and gives online firms an advantage over offline ones (World Bank 2016).

The NDP 2023–27 outlines a comprehensive strategy to modernize Angola’s economy through digital transformation.

The NDP recognizes the digital sector’s key role in modernizing the economy and outlines a comprehensive program to achieve this. The program’s first objective is to enhance infrastructure, connectivity and digital inclusion by expanding the broadband network, increasing internet access and digital television coverage, modernizing and expanding radio and television infrastructure, developing the space industry, and updating the National Institute of Meteorology and Geophysics. To promote competition and profitability in the digital sector, the second objective focuses on privatizing state-owned communication assets and regulating infrastructure sharing. Strengthening national cybersecurity is the third objective, which will be achieved through the implementation of a National System of Cybersecurity. The fourth objective aims to support the digitalization of public administration services by creating a unified government cloud. In terms of network coverage, the plan aims to increase 4G coverage from 23 percent to 32 percent of the population and 5G coverage to 21 percent by 2027. To meet these goals, the government plans to expand the national broadband network by nearly 2,400 kilometers, including the installation of 1,980 kilometers of new fiber-optic cables and the repair of 413 kilometers of existing ones.

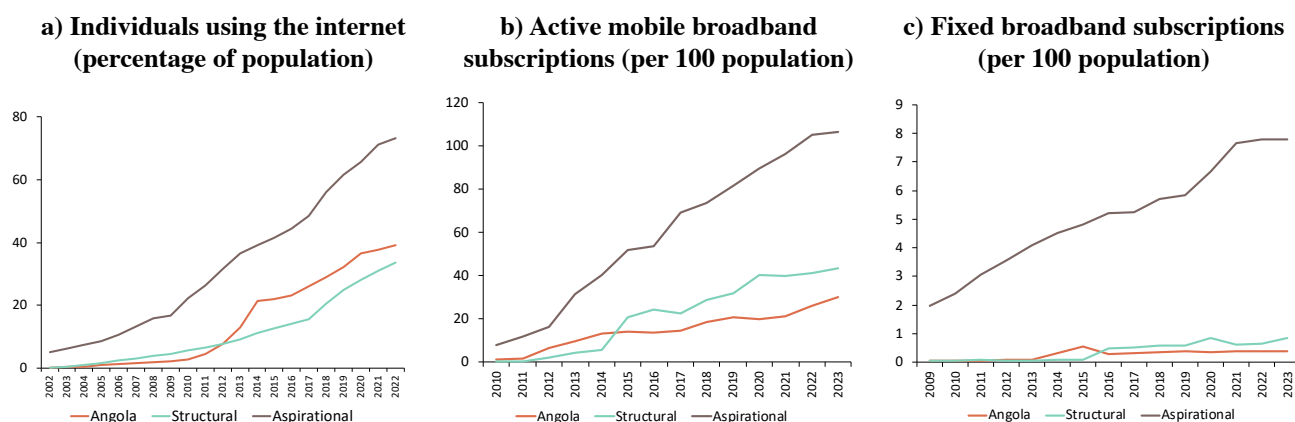
Angola’s low internet penetration continues to hinder digital technology adoption, despite recent growth and falling prices.

To enhance the adoption of digital technologies, Angola needs to increase its internet penetration rates. The share of the population using the internet surged from 0.3 percent in 2002 to 39 percent in 2022 (Figure 3.8a). Most of this expansion is explained by mobile broadband subscriptions,⁶⁴ which went from 0.5 per 100 people in 2009 to 30 per 100 population in 2023 (Figure 3.8b). Despite this surge, Angola’s mobile penetration is below the average of its structural peers (43.6 per 100 population), ahead only of Mozambique, and far below the average of its aspirational ones (106.3 per 100 population) (Figure 3.8b). The 2010 World Bank Enterprise Survey, the latest available for Angola, revealed that only 28.9 percent of firms had their own website, and recent data indicate little progress on internet usage by firms. The penetration rate of fixed broadband internet, which is faster and more reliable and thus more suitable for firms, increased modestly from 0.04 to 0.4 per 100 people from 2006 through 2023. This rate is half of the average of its structural peers, ahead only of Nigeria, and significantly below the average of its aspirational peers (7.8 per 100 population) (Figure 3.8c). Furthermore, data from the International Telecommunication Union (ITU) show that the number of fixed broadband subscriptions for organizations, including businesses, in Angola declined sharply from 97,600 in 2015 to just 8,000 in 2021.⁶⁵

64. Mobile broadband technologies are those technologies where the end user can use the broadband service while on the move and from any physical location subject to coverage by its mobile broadband provider (World Bank 2014).

65. Total subscriptions contracted by public and private organizations, institutions or businesses (i.e., non-residential customers) to access the public internet at a fixed location at downstream speeds greater than or equal to 256 kbit/s (ITU DataHub).

Figure 3.8: Low internet penetration rates in Angola hinder the adoption of digital technologies



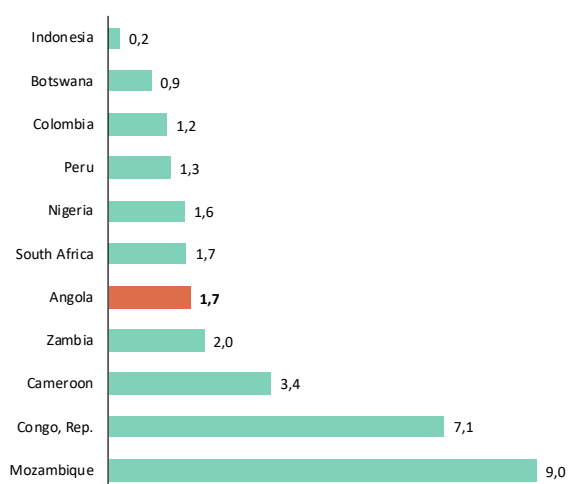
Note: For Mozambique, since the number of mobile and fixed broadband subscriptions is not available for 2023, the 2022 numbers were used instead. For Cameroon, since the number of fixed broadband subscriptions is not available for 2023, the 2022 number was used instead.

Source: ITU DataHub.

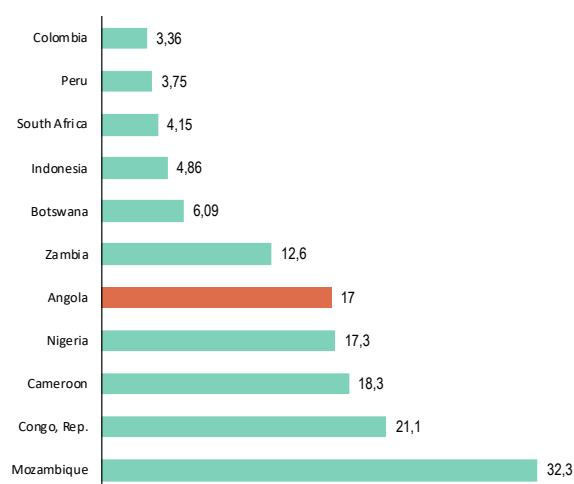
Making the internet more affordable is also crucial for expanding the use of digital technologies. The cost of a data-only mobile broadband basket as a percentage of monthly gross national income (GNI) per capita in Angola has dropped from 33 percent in 2015 to 1.7 percent in 2022, on par with most of its structural peers (Figure 3.9a). However, despite a decrease from 60 percent in 2008, the cost of a fixed broadband internet basket was still 17 percent of monthly GNI per capita in 2023 (Figure 3.9b). This price remains significantly higher than most aspirational peers and exceeds the 2 percent ceiling recommended by the UN (Figure 3.9a and Figure 3.8b).⁶⁶

Figure 3.9: Despite significant progress since the early 2000s, fixed broadband internet prices remain high relative to peers

a) Data-only mobile broadband basket percentage of monthly GNI per capita (PPP), 2023



b) Fixed broadband internet basket percentage of monthly GNI per capita (PPP), 2023



Source: ITU-D ICT Statistics.

66. The UN Broadband Commission's "1 for 2" target is 1GB at less than 2 percent of monthly GNI per capita.

Angola's broadband sector faces limited competition and high infrastructure costs due to market concentration, dominant state-owned enterprises (SOEs), and weak regulation, hindering investment, innovation, and rural connectivity.

The main challenge in the broadband sector today is to ensure a level playing field for all operators to promote competition and innovation. Angola began liberalizing its telecom market in 2001, starting with the mobile segment, which spurred significant growth. Currently, there are multiple network operators across all segments of the telecom market, giving an initial impression of high competitiveness. However, a closer examination of the market structure and interactions (such as market share distribution, interconnections between operators, and infrastructure-sharing practices) reveals that competitive forces are notably limited. For instance, the Herfindahl-Hirschman Index (HHI) for the mobile segment of the market stands at 6,350, indicating a highly concentrated market that does not fully benefit from competition. Angola has a high number of state-owned telecom operators, including Angola Cables, Angola Telecom, and Unitel, which own essential infrastructure that is currently underutilized due to their dominant behavior.⁶⁷ This situation affects service prices and the pace of network infrastructure expansion, especially in rural areas, ultimately leading to digital divides within the country.

There is an urgent need to increase the independence of the regulator, Instituto Angolano das Comunicações (INACOM), and to update the policy, legal, and regulatory framework to foster a more competitive environment. While the Presidential Decree (Law n° 27/21, October 25) promotes the independence of sector regulators, including INACOM, critical steps such as revising the INACOM Organic Law still need to be implemented for the regulator to become truly independent. An independent regulator is critical for the increasingly dynamic broadband market. Updating the policy, legal, and regulatory framework is necessary to address the emerging challenges of the broadband sector and to achieve policy goals of strengthening competition and shifting investment responsibility from the public sector to the private sector.

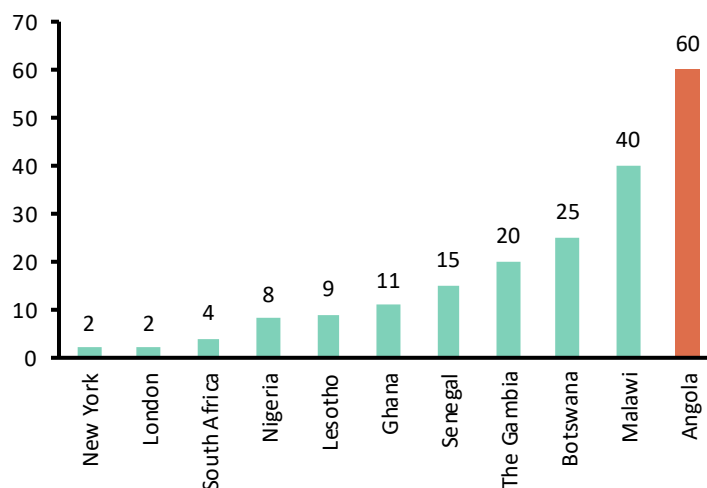
Angola has well-developed international connectivity infrastructure; however, it faces wholesale prices significantly higher than those in other countries, including landlocked Southern African countries. Much of the infrastructure of Angola Cables and Angola Telecom was financed through concessional loans. The combination of dominant behavior by telecom SOEs and a weak regulatory framework has led to suboptimal use of the infrastructure and significant debt for the operators. For instance, while Angola Cables' submarine cable infrastructure has enough capacity to meet the expected growth in broadband consumption, it sells international internet capacity at prices well above the regional average. Wholesale submarine cable bandwidth from Angola to an international exchange point in Europe costs between US\$60 and US\$90 per megabit per second for lease and US\$20 per megabit per second for long-term indefeasible right of use (Figure 3.10). These higher prices are also the result of Angola Cables' efforts to recoup the government's large investments in the digital sector. Although the submarine cable submarket is mostly a duopoly between Angola Cables, with its newer systems, and Angola Telecom, the former operates as a monopoly, setting very high wholesale prices for access to submarine cables. In 2023, Meta's 2Africa submarine cable landed in Luanda, bringing competition into the international segment of the broadband market. While a reduction in prices has yet to be seen, this development is likely to weaken Angola Cables' position to make repayments.

The large number of telecom SOEs and suboptimal market structure are also hindering the expansion of terrestrial broadband networks, especially in rural areas in the east and south of the country. The infrastructure needed for national transmission includes the national backbone and intercity networks, such as fiber and towers. Terrestrial fiber is essential in the transmission segment of the supply chain, and its high cost requires sharing among operators to increase investment efficiency and reduce costs downstream. Although Angola has 32,000 kilometers of fiber inventory, sharing remains underdeveloped. For instance, Unitel, the country's largest internet provider, has 14,000 kilometers of fiber with great excess capacity but does not provide wholesale service to other operators. While towers cover most urban areas, they are still in the early stages of development in rural areas. Although most operators self-provision towers, increased sharing will be necessary to expand coverage in rural

67. Angola Telecom and Unitel are among the six telecom SOEs included in the government's privatization program (PROPRIV).

Figure 3.10: Angola faces significantly higher wholesale internet prices than regional peers

Wholesale international IP bandwidth price over submarine cable (USD/Mbps/m-nth), 1Gbps capacity, 2019



Source: S&P Global Port Performance Dashboard.

Note: Data for 2024 cover through September.

areas. A presidential decree from 2014 was updated in 2022⁶⁸ to reflect international best practices by INACOM, but the secondary regulatory instruments needed to enforce the decree have yet to be developed. These include pricing guidelines for sharing infrastructure, model contracts, and a dispute-resolution mechanism. Meanwhile, setting infrastructure-sharing prices through bilateral arrangements continues to hamper smaller operators from utilizing the national broadband networks. Operators are not required to disclose their offer prices, and small operators complain about excessively high rates.

The lack of competition in the mobile retail market and access networks has led to underinvestment in infrastructure; reducing state involvement in the supply side could help avoid crowding out private investment. Although the market currently has four licensed operators (Unitel, Movitel, Angola Telecom, and Africell), it essentially functions as a duopoly. Unitel holds approximately 70 percent of the mobile market share, while the new entrant Africell, which received its license in February 2021, has captured approximately 15 percent. Movitel, owned by Angola Telecom and once the second largest operator by market share, is struggling to maintain profitability. Although it remains the second operator in terms of infrastructure, Movitel would need to invest around US\$350 million over three years to match Unitel’s network coverage, capacity, and quality. Unitel’s infrastructure is significantly more advanced, with 2.5 times more towers and 13 times more kilometers of backhaul fiber. Although Angola Telecom has not launched mobile services, which its license allows it to offer, it provides fixed internet services in the retail segment. In the fixed broadband market, Angola has 10 separately licensed suppliers (internet service providers, ISPs), with the government owning between 50 percent and 100 percent of seven of them. The state-owned operators appear to operate in their designated areas and do not compete, limiting the expansion and price reductions that would normally result from competition.

68. Presidential decrees 166/14 of July 10, 2014, and 42/22 of February 10, 2022.

Policy Priorities: Angola's broadband growth depends on telecom reforms and a stronger regulator to boost competition, infrastructure sharing, and private investment.

Increasing market competition and addressing the dominance of telecom SOEs through reforms, restructuring, and privatization, coupled with a stronger, more independent regulator will be essential to develop a dynamic broadband market that serves all Angolans. Competition is critical to ensure the market benefits from technological advancements in digital technologies and to enable more Angolans to access affordable internet and digital services such as mobile money and banking. The government has taken important steps toward telecom market reforms, and it is important to maintain this momentum and complete these reforms. This includes making INACOM independent and restructuring telecom SOEs that own essential infrastructure, which should benefit the sector as a whole. Amending the INACOM Organic Law and the Law on Electronic Communications and Information Society Services is necessary to promote greater infrastructure sharing among operators. These amendments are key to classifying infrastructure as essential facilities and mandating that the dominant owners of these facilities provide access to other network operators. Greater sharing will increase investment efficiency and reduce downstream costs, allowing operators to expand internet services, especially to remote and rural areas.

Continuing the restructuring and divesting of telecom SOEs is key to increasing private sector participation and competition. The MINTTICS, together with IGAPE, is currently collaborating within a joint working group as part of the privatization program aimed at restructuring and capitalizing these companies. This initiative presents an opportunity for the government to increase competition in the digital market and address the low uptake of mobile broadband services, which currently stands at 48 percent of the population.

IV. Conclusions and Policy Priorities

Infrastructure development is crucial for Angola's growth and diversification. More than two decades after the end of the civil war, Angola's infrastructure lags behind that of its peers and requires significant improvement. This chapter explored ways to enhance investment in the digital, electricity, and transport subsectors, highlighting their potential to drive private investment and diversification. The NDP recognizes the key roles of digital, electricity, and transport infrastructure in advancing the country's development agenda.

Increasing electricity access, installed capacity, and renewable energy production requires a stronger role for the private sector. Despite the country's abundant energy resources and growing installed capacity, over half of the population still lacks access to electricity, and the sector suffers from persistent gaps between revenue and investment needs. The power sector, relatively young, faces limitations in transmission infrastructure, while distribution struggles. To enhance electrification access, leveraging the existing infrastructure is essential while also developing new distribution networks to extend services beyond the current footprint. Private sector involvement is necessary to expand the grid to remote and small communities. Direct concessions to the private sector and a mechanism to manage sector revenue are key to supporting private investments. Additionally, connecting to the SAPP would offer Angola the opportunity to become a net energy exporter and strengthen its climate resilience.

Enhancing transport infrastructure requires comprehensive reforms across road, urban, railway, maritime, and air transport services. The road subsector is key for agricultural development, diversification, and service delivery. To unlock the potential of this subsector, it is essential to improve spending efficiency, implement institutional reforms, secure additional funding, gather more data, and refine road classification. The low volume of passenger and freight traffic in Angola indicates significant room for efficiency gains and increased private sector participation. Improving urban transport requires regulatory reforms aimed at enhancing decentralization, developing human resources, and integrating various projects more effectively. To boost private sector participation in urban transport, it is recommended to stimulate business organization, incorporate informal transport modes into the formal system, and reassess the bus acquisition program. Enhancing urban transport management and

infrastructure involves developing high-capacity transportation systems, implementing dedicated bus lanes, improving traffic management, and promoting safer and more sustainable urban mobility policies. Angola's air transport sector faces excess capacity and notable inefficiencies, while expanding port infrastructure and enhancing its management practices are crucial to meet international standards for border compliance times.

To boost the adoption of digital technologies, Angola needs to make the internet more available and affordable. To promote competition and innovation in the broadband sector, the primary challenge is to ensure a level playing field by enhancing the independence of the regulator and updating the policy, legal, and regulatory frameworks. The large number of SOEs in the telecom sector and a suboptimal market structure keep wholesale prices significantly high and hinder the expansion of broadband networks. The lack of competition and the crowding out of private investment, caused by state involvement in the supply side, results in underinvestment in infrastructure in the mobile retail market and access networks. To foster a dynamic broadband market that benefits all, it is crucial to enhance market competition and tackle the dominance of telecom SOEs through reforms, restructuring, and privatization.

Table 3.1 summarizes the policy priorities outlined in the previous section, distinguishing between short-term and medium-term actions to support effective prioritization and sequencing.

Table 3.1: Summary of policy priorities for basic infrastructure expansion in Angola

Policy Areas	Short-Term Actions	Medium-/Long-Term Actions
Electricity	Connect new households through existing low-voltage (LV) services or extension of these services. Establish a mechanism to manage the revenue of the electricity sector.	Build a new distribution infrastructure to extend medium-voltage (MV) services to new customers. Adopt regulations to facilitate private sector participation, such as the independent power transmission model (IPT). Build climate resilience by improving planning and forecasting systems, strengthening dam and reservoir management, and adapting infrastructure as needed. Connect to the Southern Africa Power Pool (SAPP).
Transport	Develop and sustain a road database and asset management system. Implement financial and comprehensive independent technical audits of the Road Fund. Establish semi-autonomous road management agencies and delegate road infrastructure management through a contract management approach. Review the road network classification. Mobilize private sector investment in the railway subsector by exploring new business models and implementing an adequate pricing mechanism. Promote full compliance with International Civil Aviation Organization (ICAO) standards. Improve management, cybersecurity, and digital services of ports.	Implement regulatory reforms to enhance decentralization, better accommodate local characteristics, develop human resources, and integrate projects. Increase private sector participation by stimulating business organization, integrating informal transport modes, and reviewing the bus acquisition program. Develop high-capacity transportation systems and promote safer and more sustainable urban mobility policies. Expand rolling stock capacity of the railway network, improve signaling systems, and maintain depots to handle higher passenger and freight volumes. Transfer the management of airport infrastructure and services to the private sector. Enhance the operational efficiency of the national airline (TAAG). Expand port infrastructure.

Digital	Enhance independence of the telecom regulator (INACOM) and update the policy, legal, and regulatory framework. Amend the INACOM Organic Law and the Law on Electronic Communications and Information Society Services to promote greater infrastructure sharing.	Address the dominance of telecom SOEs through reforms, restructuring, and privatization.
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Table 3.2 outlines key knowledge gaps in the electricity, transport, and digital sectors. Addressing these gaps can significantly enhance the design, implementation, and effectiveness of future policies and investment strategies in Angola's infrastructure sector.

Table 3.2: Knowledge gaps

Policy Area: Electricity		
Implications of the change in electricity law for the development of the power market and other measures needed to grow a competitive market.		
Assessment of the viability of concessions to the private sector in the distribution sector.		
Policy Area: Transport		
Expanded understanding of how people and goods move across regions and within urban centers to plan transport infrastructure accordingly.		
Better frameworks and strategies to finance transport infrastructure in a way that ensures long-term sustainability and resilience.		
Policy Area: Digital		
Knowledge Gap	Rationale	References
Drivers of digital exclusion in Angola	Understanding the specific reasons individuals are not utilizing broadband connectivity (e.g., cost of connectivity, device affordability, digital literacy, lack of relevant content, cultural considerations) is key to designing interventions geared toward increasing digital usage.	World Bank. 2025. "What Works to Advance Women's Digital Literacy?: A Review of Good Practices and Programs." Alliance for Affordable Internet (A4AI). 2021. "The Cost of Exclusion."
Regulatory framework and incentive mechanisms to promote broadband investment	Assessment of regulatory environment for a level playing field. The mapping of areas in need of financial incentives to encourage telecom operators to invest in areas characterized by market failure, as well as the specific incentive modalities necessary, is needed prior to designing and implementing incentive schemes aimed at expanding broadband coverage, particularly to rural and remote areas.	International Telecommunication Union, World Bank. <i>Digital Regulation Handbook (English)</i>. Washington, D.C.: World Bank Group; Geneva: International Telecommunication Union. http://documents.worldbank.org/curated/en/099140301092229225 World Bank Group. 2020. Angola Digital Economy Diagnostic Report. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO. http://documents.worldbank.org/curated/en/099021406262319882
Digital skills training capacity: current and projected gap between demand and supply	Understanding (1) Angola's current and future demand for digital skills, (2) the ability of its TVET and higher-education institutions to supply digital skills, and (3) the gap between the two is critical to preparing the country to re- and upskill its population for the digital economy.	OECD. 2022. "Skills for the Digital Transition: Assessing Recent Trends Using Big Data." Brookings Institute. 2023. "Digitalization and Digital Skills Gaps in Africa: An Empirical Profile." International Telecommunications Union. 2020. "Digital Skills Assessment Guidebook."

Part 2: Expanding Human Capital Endowment

Developing a healthy, well-educated, skilled workforce underpins economic transformation. Angola's low level of human capital is a constraint to productive economic diversification, as high levels of child malnutrition, low quality of education, and skill mismatches result in a low labor productivity in a rapidly growing population. Using the World Bank's HCI framework, Part 2 analyzes the main constraints and opportunities to build human capital in Angola.

Part 2 outlines Angola's human capital development agenda; contextualizes challenges based on the HCI; assesses education (including skills), nutrition/WASH services, demographics, and social protection; and proposes key reforms. It is structured as follows: Section I provides a broad overview of the Angolan government's agenda for human capital development in the NDP 2023–27. Section II presents the demographic challenges and opportunities, based on HCI results. The context and challenges to human capital in Angola are presented in Section III. Section IV assesses education (including skills), the dimension where the country underperforms the most. Section V addresses nutrition and the provision of WASH services, given their link to the high prevalence of malnutrition and child mortality, which ultimately hinder the accumulation of human capital. Conclusions and policy priorities for building human capital in Angola are presented in Section VI, followed by knowledge gaps.

I. Angolan Government's Agenda for Human Capital in the NDP 2023–27

Angola's human capital ranks well below its peers with an HCI score 19 percent below the regional average, which is exacerbated by high population growth and weak social protection. Key issues include a 43.6 percent malnutrition rate among children under 5 and educational quality 28.4 percent below the average.

Human capital development is at the center of the Angola NDP 2023–27. Human capital, infrastructure, and economic diversification are the main priorities of the medium-term development plan. The NDP document states that national improvements in education will be measured vis-à-vis The World Bank HCI framework. It envisages improving the quality of education by yielding an increase in learning-adjusted years of schooling from 4.2 in 2022 (2020 data) to 4.6 in 2027 (Table 3.3).⁶⁹

Table 3.3: Human capital long-term goals in NDP 2023–27

	2022*	2023	2025	2027	2050
Learning-adjusted years of schooling	4.2	4.3	4.4	4.6	6.3
Harmonized learning outcomes	326	328	333	337	380
Mortality rate of children under 5 (per 1,000 live births)	69	na	na	51	17
Chronic malnutrition rate of children under 5 (in percent)	38	na	na	27	<10

*Source: NDP 2023–27. *Most recent year available*

The government aims to reduce child mortality through better immunization plans and child nutrition. Improved access to WASH services is expected in the coming years. Measures to improve health access and strengthen immunization and child nutrition in the NDP 2023–27 are expected to reduce the mortality rate of children under 5 (per 1,000 live births) from 69 in 2022 to 51 in 2027 and the chronic malnutrition rate of children under 5 from 38 percent in 2022 to 27 percent in 2027. The NDP 2023–27 aims to increase access to basic drinking water services from 57 percent to 61 percent of the population and access to basic sanitation services from 52 percent to 55 percent.

⁶⁹ This will imply an increase in the Harmonized Learning Outcome from 326 in 2022 (2020 data) to 337 in 2027, on a scale where 625 represents advanced attainment, and 300 represents minimum attainment. The initial values should be read cautiously since the test scores are based on the EGRA 2011 round. The 2021 round data should be published so that the NDP goals can be based on a more realistic and updated baseline.

II. Demographic Dynamics: Untapped Demographic Dividend

Angola's population is projected to keep growing rapidly, with a relatively sizeable school-age cohort putting pressure on the economy and the health and education sectors. Angola's population size doubled in the past 20 years, and it is expected to double again in the next 20 years, reaching 74.6 million by 2050, though the yearly average population growth rate is expected to decline from 3.6 percent in 2000–2020 to 2.7 percent in 2020–2050 under a medium-fertility scenario. High fertility rates and improvements in life expectancy are the driving forces behind the population growth rate. The total fertility rate was 5.1 live births per woman in 2023, led mainly by high adolescent fertility (138 births per 1,000 women ages 15–19 (2021), compared to the world median at 33 births per 1,000), and the gap between total fertility and planned fertility, placing unwanted fertility at 0.3 (5.1 percent of total births, 2016). Angola's population is very young (45 percent under 14 in 2022). Even though the share of the working-age population is expected to grow from 52.5 percent in 2022 to 60.1 percent in 2050, the broad base of under 14 is expected to continue representing a large proportion of dependents, with far-reaching implications for the economy and the health and education sectors.

Figure 3.11: Actual and projected population structure by age group

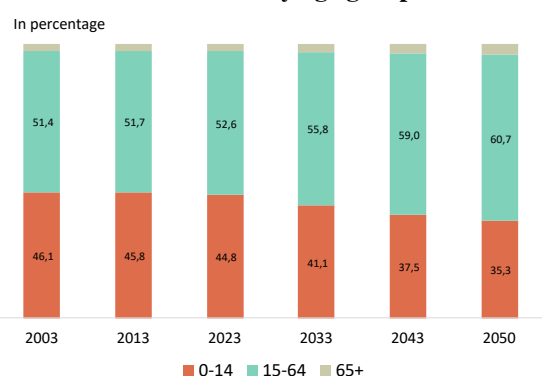
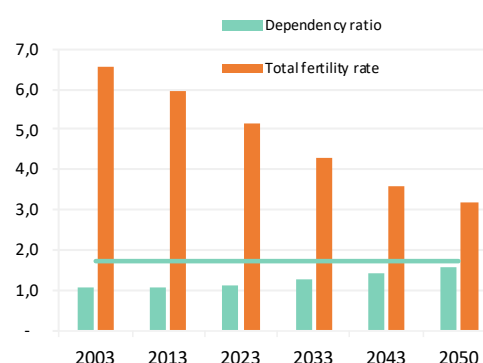


Figure 3.12: Actual and projected age-dependency ratio and total fertility rate (medium-fertility scenario)



Source: United Nations Population Division 2022, medium-fertility scenario.

Angola could benefit from a significant demographic dividend, provided it puts in place the necessary conditions for the dividend to materialize. Countries experience a demographic dividend—that is, an economic boost—in a window of 15–20 years when the ratio of labor force to dependents reaches 0.6—freeing up adults, especially women—to dedicate themselves to the labor market. In Angola, the dependency ratio is expected to be 0.66 by 2050. Currently, with a total fertility rate of 4.8 children per woman, Angola is in the “pre-dividend” stage, which is when the total fertility rate (higher than four children per woman) and dependency rates are generally too high for any demographic dividend to be realized.

The demographic transition can be accelerated by reducing high infant and maternal mortality rates and improving educational outcomes for girls (World Bank 2023a). Under the medium-fertility scenario, the fertility rate is expected to reduce to 3.2 children per woman by 2050. A more rapid decline in fertility from the current levels would change the age structure to one with significantly more working-age people relative to dependents. Associated with increased job opportunities (especially for women), the shift in age structure becomes an opportunity for a 10–15-year demographic dividend that accelerates economic growth (see Annex 3).

To reap the dividend, Angola must accelerate progress in sociodemographic trends, especially reduction in adolescent fertility and infant mortality. The 2023–24 IIMS data shows that the fertility rate is still very high (4.8). High levels of adolescent fertility correspond to a public health problem with pervasive and intergenerational implications. Early pregnancies affect girls' health, education, labor market participation, quality of jobs they get when employed, and the health and education of their children. Reducing adolescent fertility would improve

human capital outcomes in Angola and contribute to the demographic transition, together with reducing high infant and maternal mortality rates.

III. Human Capital in Angola: Overview, Potential, and Constraints

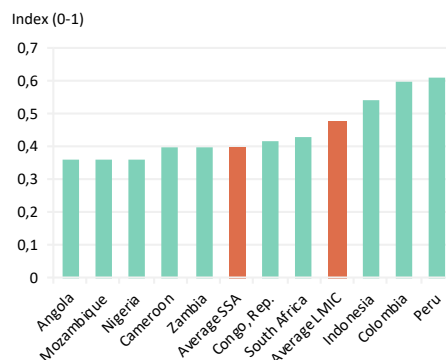
Angolan children born in 2019 will only achieve 36 percent of their full human capital potential by age 18, which is lower than the SSA, LMIC, and aspirational peer averages.⁷⁰ This means that the productivity of Angolan workers in the future will be 64 percent below their potential achievement if they had had access to complete education (defined as 14 years of high-quality school by age 18) and full health (defined as no stunting and survival up to at least age 60) today. Males scored slightly higher than females (0.37 and 0.36, respectively) (Table 3.4). Angola's HCI for 2020 (0.36) is similar to Mozambique (0.36) and Nigeria (0.36) but 24 points below Peru (0.602) (Figure 3.13). Angola's HCI reflects poor outcomes on most of the index's components. Table 3.4 presents the global HCI and subindex estimates for 2020, while Figure 3.13 contextualizes Angola among its peer countries. Angola is in line with its peers only for adult survival rate (73 percent in 2019).⁷¹

Table 3.4: Human Capital Index and subindices, Angola 2020

	Males	Females	Total
Human Capital Index	0,37	0,36	0,36
Survival to age 5	0,92	0,93	0,92
Expected years of school	9,2	7	8,1
Harmonized test scores	327	325	326
Learning Adjusted Years	4,8	3,6	4,2
Adult Survival Rate	0,68	0,78	0,73
Not Stunted Rate	0,59	0,66	0,62

Source: World Bank, HCI 2020.

Figure 3.13: Human Capital Index, Angola and peers, 2020



Source: World Bank (2020). "The Human Capital Index 2020 Update".

70. Note that these figures were collected immediately prior to COVID-19 and are the last snapshot of the status of human capital prior to the pandemic.

71. The adult survival rate measures the probability of survival from age 15 to 60 if current age-specific mortality rates remain unaltered. Its contribution to the HCI is expressed in relation to the 100 percent adult survival benchmark during these years.

Angola's low human capital stems primarily from weak basic education and widespread malnutrition. Skill gaps in the labor market further hinder access to quality jobs. Students spend an average of eight years at school, 40 percent less than the expected maximum of 14 years, and less time than most of its aspirational peers—12 years on average. Adjusted for quality, Angola's eight years of schooling amount to just 4.2 effective years—a 47.8 percent learning loss, the second highest after Nigeria (50.6 percent). Thus, the system struggles to equip young people with foundational and job-specific skills, limiting access to high-quality jobs. Angola ranks among the worst in child survival and malnutrition, with one in 10 children dying before age 5 and 43.6 percent of under-5 children stunted—well above aspirational peers like Peru (10.1 percent). Poor WASH access and weak immunization (only 42 percent DTP3 coverage, 2 million zero-dose children) contribute to high child mortality, mostly from diarrhea. Inadequate sanitation is a major driver of stunting and anemia.

Angola also faces significant challenges in social protection due to high poverty levels, food insecurity, and vulnerability to climatic and price shocks, with more than 31 percent living below the poverty line and half of households reporting insufficient food access. Social protection spending remains low, skewed toward urban, older, and wealthier populations, to the exclusion of many poor and young individuals. Climate disasters and price shocks exacerbate vulnerabilities, while social safety net spending lags behind the SSA average. The Kwenda program has been a key initiative, reaching more than 1.07 million households by mid-2024, predominantly in poorer provinces, and showing the potential to expand coverage during shocks. However, addressing systemic inequities and increasing funding remain critical to building a more inclusive safety net (see Box 3.3).

Box 3.3. Social protection in Angola: challenges and opportunities

Angola's social protection spending is below the SSA average and favors urban, higher-income, and older populations. From 2010 to 2020, social safety net spending declined from 0.6 percent to 0.1 percent of GDP but rose to 0.3 percent in 2022, still below the regional average of 1.2 percent. Most social insurance funds (72 percent) go to the elderly, benefiting wealthier individuals, seniors, urban residents, and men, while many poor and young people are excluded.

Angola has made notable progress in social protection with the launch of the Kwenda program in 2020, a key mechanism to reduce poverty and establish a safety net program to deal with the climate and price shocks. By the end of June 2024, 1.07 million households had received cash transfers, benefiting 5.3 million people of whom 71 percent were women. The program can adapt to climate-related shocks by providing additional support (vertical expansion) to existing beneficiaries and extending coverage (horizontal expansion) to non-beneficiaries affected by shocks. The Cadastro Social Único, has registered 1.6 million households, with detailed information on their characteristics including assets, livelihoods, and location.

To establish a long-term adaptive safety net system, key actions are required: (1) include a provision for adaptive social protection in existing policy frameworks (NDP 2023–27 and the National Social Action Policy 2021); (2) increase public expenditure on pro-poor social safety net programs; (3) develop a risk-layered financing strategy for adaptive safety nets linked to the country's disaster risk strategy; (4) scale up the monitoring of climate shocks and prices at the national and subnational levels, and establish linkages between these shocks and scale-up of safety net programs; (5) scale up the national ID system to improve the targeting of adaptive safety nets and interoperability with other databases; (6) establish a clear institutional coordination mechanism for designing, delivering, and monitoring shock response through safety nets.

Basic Education and the Skills Challenge for Angola's Workforce in Angola: Context, Constraints, and Financing

Progress in universal education has regressed since 2014, with challenges in infrastructure, teacher management, and assessments.

Angola's progress toward universal access to education has been reversed. Despite access to secondary schools having increased from 2014 to 2022, access to primary schools has declined (Table 3.5. Access to education: net enrollment rates (percentage)). According to the Ministry of Education (MED), the primary net enrollment rate declined from 77.7 percent in 2014 to 69.3 percent in 2022. As a result, the ratio of primary school-aged children who were out of school grew from 25.9 percent in 2015 to 39.1 percent in 2022. This negative trend may be largely explained by the significant shortage of classrooms and teachers. In addition, the drop-out rate remains high, although it is declining. Grade repetition, dropouts, and low completion rates are significant challenges. From 2015 through 2022, the national drop-out rate decreased from 12.9 percent to 11.6 percent in primary school, from 11.6 percent to 10.1 percent in lower secondary, and from 13.9 percent to 12.1 percent in upper secondary education.

Table 3.5: Access to education: net enrollment rates (percentage)

Level	2014	2019	2022	2030 Global
Pre-school (age 5)	67.7	48.0	Not available	90
Primary	77.7	63.9	69.3	90
Secondary—1 st cycle/lower	26.0	23.1	29.5	60
Secondary—2 nd cycle/upper	15.2	25.0	16.7	40

Source: MED, Anuário Estatístico 2021/2022 and Banco Mundial 2018.

The lack of resources can explain the weak quality of education. High student-to-teacher and student-to-classroom ratios, as well as insufficient access to water and electricity, pose significant supply-side barriers. The primary student-per-teacher ratio grew from 51.8 in 2015 to 54 in 2022. In 2022, only 26.9 percent of primary schools had access to water, 33 percent to electricity, and 13.3 percent to a library. However, some progress has taken place, as the percentage of inadequate primary classrooms decreased from 15.6 percent in 2019 to 11.4 percent in 2022.

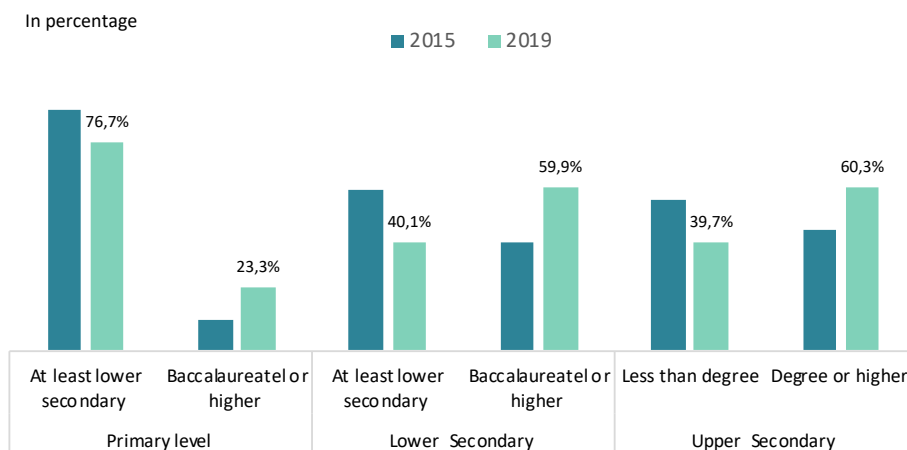
Enhancing the level of the human capital of the teaching staff is a key prerequisite that Angola has been following for better outcomes in the education sector. Angola aims to raise the levels of training of the teaching staff of the national education system in the foreseeable future (NDP 2023–27, 64). Teachers' qualifications have increased from 2015 to 2019 at all levels in Angola, and the share of primary and lower secondary teachers with a bachelor's degree or higher also increased. In upper secondary, the percentage of teachers with a graduate or higher level of education increased. In parallel, while the number of teachers in primary schools decreased, it increased in all secondary levels (Figure 3.14). More should be done to attract and develop an excellent workforce in teaching.

The country has yet to establish teacher management policies and implement comprehensive professional development for teachers. There is no comprehensive policy for how teachers should be observed, evaluated, and provided feedback to allow for improvements in pedagogical practices at the classroom level.⁷² Teacher salaries are largely considered low and are not linked to performance or student learning. Teacher recruitment policies include the application of a *concurso* (competition), but the system needs to be fine-tuned to be made even more merit-based based on regular performance assessments and accompanied by coherent formative strategies and regular salary increments. The way forward requires improvements in four key areas (see Annex 6 for details):

72. The World Bank project (Tertiary Education, Science, and Technology [TEST], P179154) is supporting a teacher training reform to transfer the responsibility for teacher education to the Ministry of Higher Education, Science, Technology and Innovation (MESCTI) by 2027. This reform includes the establishment of new teacher training institutions, curricula revision, and the enhancement of pedagogical practices to improve the quality and relevance of teacher preparation.

- Monitoring and assessing teacher performance based on student performance and learning. This includes verifying if students are meeting goals in basic foundational skills for reading and arithmetic.
- Increasing the number of teachers and attracting the best into teaching, including through scholarships offered on full merit-base for undergraduate studies in pedagogy.⁷³
- Ensuring teachers are led by strong school principals.
- Supporting and motivating teachers to improve instruction and mandating a minimum number of days each year for professional development.

Figure 3.14: Evolution of teacher academic level, 2015–2019, by percentage



Source: MED, Statistical Bulletin, 2019.

A recent learning national assessment for fourth and sixth grades revealed low learning outcomes; the quality of the education system in general is also not regularly assessed. The lack of regular student assessments, both national and international, hinders improvements in the quality of education in Angola. The country does not systematically evaluate learning outcomes or participate in global (PISA) or regional (PASEC) assessments. While Early Grade Reading Assessments were conducted in 2010, 2016, and 2021, the results remain unpublished. A recent learning national assessment for fourth and sixth grades in Angola revealed significant challenges, with students scoring below 50 percent on average across subjects. In Portuguese, the average accuracy rate was 37 percent for fourth grade and 42 percent for sixth grade, with the lowest performance in differentiating facts from opinions (17 percent) and logical-discursive relations (20 percent). In Mathematics, fourth grade students scored an average of 38 percent, while sixth grade students achieved 46 percent, with major difficulties in measures of central tendency (11 percent) and unit conversions (14 percent). Rural students consistently underperformed.

Generating and utilizing statistical data can enhance Angola’s education system by guiding evidence-based policymaking. As such, the system should be aligned around the objective of achieving results that can be translated into tests and inform policymaking. Moving forward, Angola should prioritize three key actions:

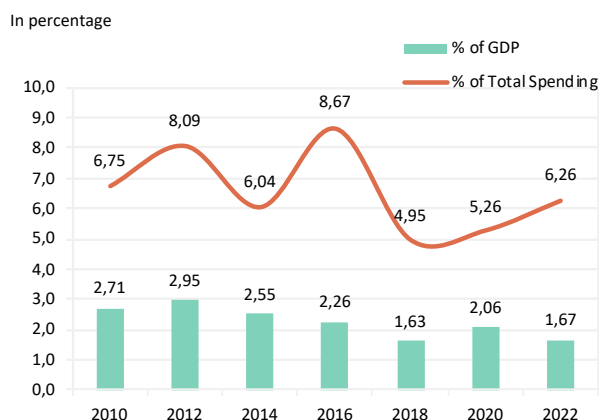
- Allocate regular funding and adequate human resources to implement the exams and develop a culture of testing.
- Adjust the National Large-Scale Assessment to include teacher evaluation, allow remedial measures, and reward excellent performances.
- Participate in International/Regional Large-Scale Assessments, to provide comparable data and foster a culture of testing and learning.

73. The TEST project (P179154) also includes a targeted scholarship initiative aimed at increasing the participation of women in teacher education and STEM disciplines. This component seeks to address the persistent gender imbalance in secondary education, particularly the underrepresentation of female teachers in STEM subjects.

Financing Education in Angola: Low and Volatile Levels of Spending

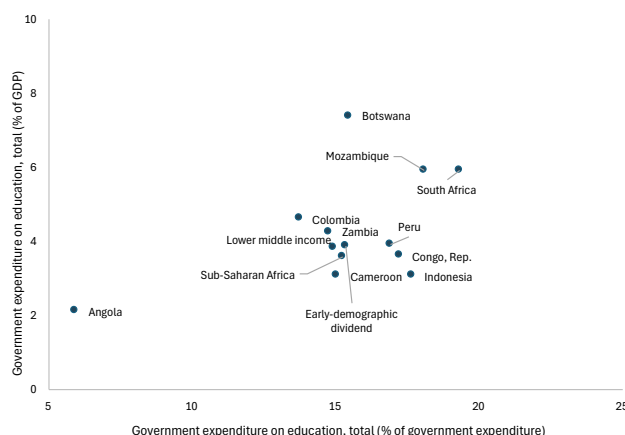
Angola spends less on education than its peers, and the amount has been reduced due to high fiscal procyclicality and high inflation. In real terms, the education sector expenditure fell by 13.3 percent from 2017 to 2022. Over the last decade, as a share of GDP, public spending on education was halved, dropping from 3.0 percent in 2012 to 1.7 percent in 2022 (Figure 3.15). When compared to peers, the country spends 2.0 percentage points less of its GDP on education than its structural peers, 2.6 percentage points less than its aspirational peers, and 1.8 percentage points less than countries with an early demographic dividend (Figure 3.16).

Figure 3.15: Education spending as a percentage of GDP and total spending



Source: MINFIN/BOOST; INE; National Accounts 2012.

Figure 3.16: Education spending as a share of GDP, total spending, average 2018–2020



Source: WDI 2022.

Achieving NDP 2023–27 goals of increasing learning-adjusted years of schooling (LAYS) from 4.2 to 4.6 may require a twofold increase in education spending per school-age population.⁷⁴ Following Al-Samarrai et al. (2019),⁷⁵ we find that with a median LAYS of 4.2 years and a median elasticity of 0.08, the spending per school-age population needs to increase from US\$112.4 (+1.5 percent of GDP) in 2022 to US\$246.8 (+1.9 percent of GDP) in 2027 to achieve the goal set in NDP 2023–27 of 4.6 years. However, considering a higher median elasticity, 0.19, education spending per school-age population will need to be at US\$169.2 (1.3 percent of GDP). While more spending is still needed, the tight fiscal space (see Chapter 1) requires also strengthening efficiency in education to leverage the impact of the available resources. In addition, the governance of the education financing system should be revised and improved, as discussed in the next section.

Governance of the Education Financing System

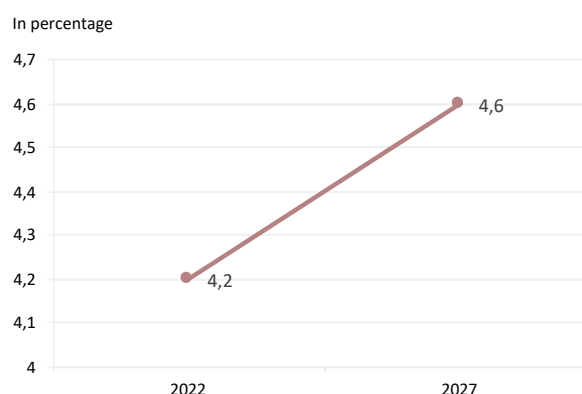
The current funding allocation setup could be improved to enhance the accountability of municipalities and promote a more efficient and equitable flow of funds to schools. Spending is allocated based on the number of teachers (since, on average, wages comprise more than 80 percent of education spending) and political bargaining. Moreover, the focus is on inputs and activities, not the results. Thus, the system is oblivious to local

74. Due to the lack of recent student data, education spending per school-age child was analyzed over time. In 2022, spending per 5-year-old fell 46 percent from 2017 (Kz 181 vs. Kz 332), and per primary student (6–11 years) dropped 65 percent (Kz 42,967 vs. Kz 123,859). In contrast, secondary-level spending (12–17 years) rose 82 percent (Kz 98,430 vs. Kz 54,141).

75. Samer Al-Samarrai et al. (2019) used elasticities to quantify how countries translate additional spending into outcomes, measured by the change in learning-adjusted years of schooling associated with a 1 percent change in spending. Countries are more effective in transforming resources into outcomes when they start from low-spending and low-efficiency levels. On average, a percentage change in spending is related to an increase for LAYS of only 0.08, but of 0.19. Hence, for every 10 percent increase in resources, outcomes improved around 0.8 and 1.9 percent.

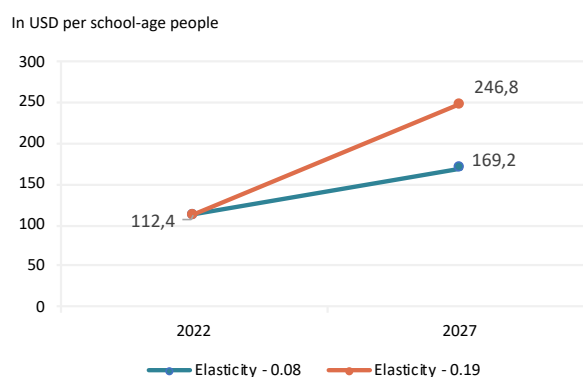
needs and results. Having a publicly disclosed formula to distribute funding across municipalities/schools is a way to improve the effectiveness and equity of public education spending.

Figure 3.17: NDP 2023–27 goal for LAYS



Source: MINFIN/BOOST; INE: National Accounts 2012–2022.

Figure 3.18: Increase in education spending needed to achieve LAYS goal (in USD per school-age population)



Source: Authors.

There is little coordination between the central and local authorities in formulating the education budget. Angola has a single consolidated budget for central and local levels of government. The General State Budget comprises the budget for central government agencies, the MED, other ministries, and all provincial governments. The MED defines the curriculum, hires teachers, defines their career and professional development, buys pedagogical material, etc. Education expenditures are also centralized, since provincial governments submit budget proposals from provincial cabinets of education (*Gabinete Provincial da Educação*) to the Ministry of Finance (MoF). These cabinets are the budget units (*Unidades Orçamentais*) for all primary and secondary schools that distribute discretionary⁷⁶ money to municipalities. The system for managing the finance of the state (SIGFE) is used to manage government’s local education expenditures. The municipal administrations also receive funds for primary education expenditures at the municipal level. However, funds are distributed discretionarily without following transparent criteria for all municipalities. In the 2023 budget, only 15 secondary schools out of 945 appear as budget units and manage their expenditures through the system. Preparing sector-specific quarterly budget execution reports is not a practice or a legal requisite. Consequently, quarterly reports are not prepared for education, as well as for other social sectors.

76. The administrative authority decides the amount of resources that each school needs, but the criteria involved in the transfer of resources to schools are not known.

Reforming toward a results-based weighted formula to allocate education spending would improve the efficient and equitable use of resources for stronger development and economic impact. Key priorities include: (1) linking the student-based allocation model to a results-based approach to schools/municipalities,⁷⁷ making transfers from the central to local governments conditional on standardized student assessment results; and (2) introducing a publicly disclosed weighted formula to distribute funding across schools based on the student enrollment rates (eliminating the need for political bargaining), and the weights should account for scenarios where delivering education is more costly (e.g., rural areas, preschool).

Angola should consider allocating resources on a real per-student spending basis and following established/transparent criteria to transfer resources to provinces/schools. Besides the high and volatile inflation rate and high population growth, the model for education financing (centrally driven and mostly discretionary) seems to constitute a constraint to improving the performance of public spending and the overall education quality in Angola. As inflation is undermining the real budget value allocated to the sector, the allocation should seek at least to maintain the previous level of spending in real terms to avoid setbacks in educational outcomes. Additionally, the allocation should consider each school's enrollments (considering schools' distinct levels of educational achievements). The examples of Peru and Brazil offer valuable insights (see Box 3.4).

Box 3.4. Education budget allocation in Peru and Brazil

In Peru, the education budget is transferred from the MED to the regional governments based on historical criteria and annual negotiations. Despite this, the central level defines objective criteria for transferring school resources. Resources for teaching staff are transferred according to referential class size and enrollment rates, resources for school maintenance are allocated according to an explicit formula, and pedagogical materials are distributed according to forecasted enrollment (Bertoni et al. 2018). Transfers from the central to local governments are conditional on the results of the “*Semáforo Escuela*” and other education quality indicators. Peru also has a standardized student assessment with consequences for schools: test scores on the “*Evaluación Censal*”⁷⁸ determine whether schools are qualified to receive a monetary bonus. Moreover, teachers who score below a certain level in the “*Evaluación de Desempeño Docente*” must undergo professional development training and may be dismissed if poor performance continues.

In Brazil, state fund FUNDEB⁷⁹ receives revenues from specific state and municipal taxes and transfers. This fund is then redistributed to state and municipal governments based on the student enrollment rates with no need for political bargaining. If per-student funds in a state do not meet the national minimum, the federal government transfers additional resources to the state's FUNDEB account (the so-called federal complement). The size of each allocation is calculated based on the enrollment rates recorded in the school census of the previous year. In addition, two municipalities in a given state with identical numbers of students enrolled can get different amounts of transfers because FUNDEB assigns a higher weight to students enrolled in schools where delivering education is more complex and, therefore, more costly. For example, students in preschool and upper secondary education have higher weights than those in lower secondary education, and students in rural and indigenous communities have higher weights, as do students with disabilities. The weight for primary education in urban areas equals 1, while the other weights range from 0.8 to 1.3 (Pinto 2021).

Angola should link the student-based allocation model to a results-based approach to schools/municipalities while ensuring equity.⁸⁰ Allocating funding must go hand-in-hand with ensuring adequate

77. The TEST project has also introduced a results-based financing mechanism to enhance the relevance of academic programs and improve access for poorly served students (women and those in STEM fields).

78. This is a standardized evaluation by the MOE to assess the learning achievements.

79. The Brazilian regional redistributive fund (Fund for the Maintenance and Development of Basic Education and Teacher Appreciation, known as FUNDEB, is a federally mandated redistributive program intended to reduce regional inequalities in spending per student.

80. To do this, measuring the learning levels and publishing the results per school will be paramount.

supplies for learning among all students in the schools in the distinct provinces⁸¹ and with a reward system for outstanding municipalities/school performers. Here again, Peru offers an example of good practices in results-based financing (see Box 3.4). For equity reasons, resource allocation to education should ensure that schools with more students or, for example, students with special needs, receive more funding than others. FUNDEB in Brazil allocates funds based on enrollment and attributes different weights which take into consideration the complexity of education in given levels and areas: primary vs. secondary, urban vs. rural, etc. (see Box 3.3).

Strengthening Workforce Skills

Angola faces a critical skills gap, with youth lacking both foundational and job-specific skills needed to access high-quality jobs.

The workforce in Angola has a skill mismatch, and most of the working-age population has not completed secondary education. Current shortages of early foundational skills affect the possibility of accessing better jobs and limit the workforce's ability to learn additional skills further along the life cycle (Arias et al. 2019). Lack of technical and job-specific skills among out-of-school hinders the youth workforce's ability to find quality jobs. Despite higher educational attainment, youth unemployment is higher than for the entire adult population. Indeed, the labor market seems to strongly reward workers with more years of experience, and adults with the same level of education as young workers will have a higher wage and better-quality job. More than 70 percent of private sector job vacancies in Angola require at least three years of work experience, making on-the-job skills gained while working important for explaining why youth have difficulty accessing more and better jobs.

Figure 3.19: Adult literacy rate (percentage of population ages 15 and above)

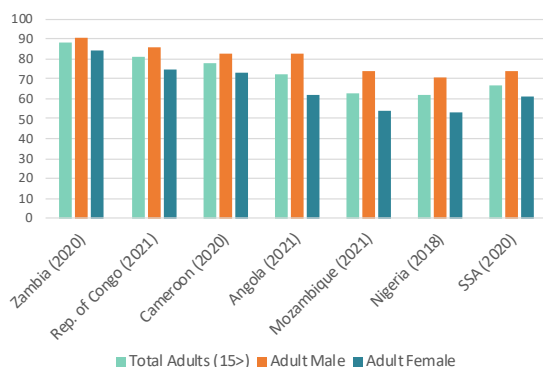
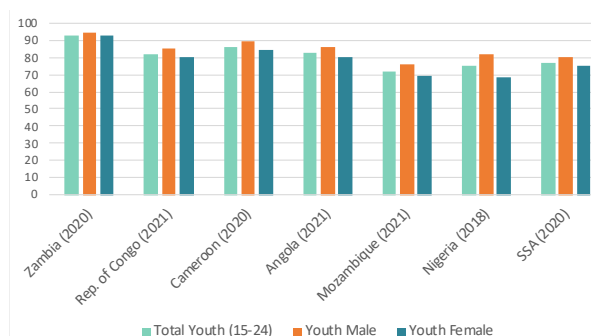


Figure 3.20: Youth literacy rate (percentage of population ages 15–24)



Source: WDI (from UNESCO).

The skill mismatch affects mostly high-skilled positions and digital skills. Approximately 15.1 percent of large firms in Angola identified an inadequately educated workforce as a major or very severe constraint according to the latest World Bank Enterprise Survey (2024). Some firms seem to rely on highly skilled foreign workers, even if unemployment rates are relatively higher for tertiary-educated youth (World Bank 2023a). Almost half of business owners have only completed secondary education, and the country is scoring low on relying on professional management. In addition, as the workforce is lagging in the basic foundational skills, workers as well as owners may further struggle to acquire sufficient digital skills to keep up with the digitization of jobs, which puts them at a disadvantage in global labor markets (World Bank 2023a).

Larger-scale apprenticeship and internship programs would enhance the job-relevant skills of Angola's out-of-school workforce. Consolidating and scaling up the Professional Internship Program (PNEP) and increasing the

81. The Semáforo Escuela (School Traffic Lights) is a school monitoring system that combines robust data collection with monthly data feedback routines, targets, and incentives to engage local authorities while improving decision-making and accountability.

partnership between schools and employers can improve the results of the internship experience. Recently launched in 2021, the program is supporting more than 1,000 job seekers aged 18–25 through an internship grant that pays a salary between 1.5 and 2.5 times the minimum wage over a period of three to six months.⁸² With approximately 11,000 youth on a waitlist, it is important to scale up this program and strengthen the linkages between schools/training centers and employers to help youth transition from school to work (World Bank 2023a).

In order to support economic diversification, training course curricula (including vocational training) should be aligned with labor market demands and with a focus on nascent and new sectors. Training courses could be prioritized toward economic activities with the highest employment potential, such as agriculture and services, and entrepreneurial and managerial skills, which are lacking but essential for new businesses to thrive. Training courses on socioemotional and behavioral skills (e.g., teamwork, leadership, and communications skills) would support the buildup and strengthening of the higher-order skills required to thrive in a competitive business environment (World Bank 2023a).

Upgrading the staffing, facilities, and overall access to training centers will support serving more beneficiaries, especially the most vulnerable populations. The training sector should prioritize expanding and rehabilitating the Public Institute for Vocational Training, INEFOP’s mobile units,⁸³ to reach more municipalities and those where access is more limited, such as in rural areas, which will support increasing access for women. This can be further facilitated by promoting the construction and improvement of homes for students close to schools and training centers. To accomplish these goals, proactive budgeting and fundraising will become fundamental (World Bank 2023a).

Collaboration among different stakeholders within government and with the private sector will be fundamental to strengthening digital skills and enhancing the externalities of digital development. The government could consider incorporating a more specific agenda for digital skill development into the Education Development Plan and continue encouraging digital development programs driven by PPPs. Special consideration can be given to adopting a national skills framework, which would include a digital competency assessment, improving mechanisms for monitoring and assessing the educational data, and developing digital competencies for teachers. Finally, access to affordable and reliable internet and improving access to education and school infrastructure will support these efforts. Digitalizing the education sector itself could help improve the overall quality of education and allow for a more inclusive system (World Bank 2023b).

Child Survival, Malnutrition, and WASH in Angola: Context, Constraints and Financing

a. Poor child survival and high malnutrition rates are major contributors to Angola’s low human capital.

Angola ranks among the lowest in child survival and malnutrition behind both structural and aspirational peers in the HCI. The child survival rate shows that only nine out of 10 children born in Angola survive to the age of 5 (Table 3.4). Thus, Angola ranks in the lowest quartile of the global ranking: similar to Nigeria (88 percent) and below Colombia and Peru (99 percent). In 2022, the under-5 stunting rate in Angola stood at 43.6 percent (up to 31.8 percent in 2012),⁸⁴ far higher than in aspirational countries Peru (10.1 percent), Colombia (11.2 percent), and South Africa (22.8 percent).⁸⁵ Being stunted in early childhood indicates a breach of the basic right to food.⁸⁶ It also reduces schooling attainment, decreases adult wages, and makes children less likely

82. The PNEP supports job seekers who have a profession, medium, or higher technical training.

83. Training schools built on trucks and to allow them to move around the cities.

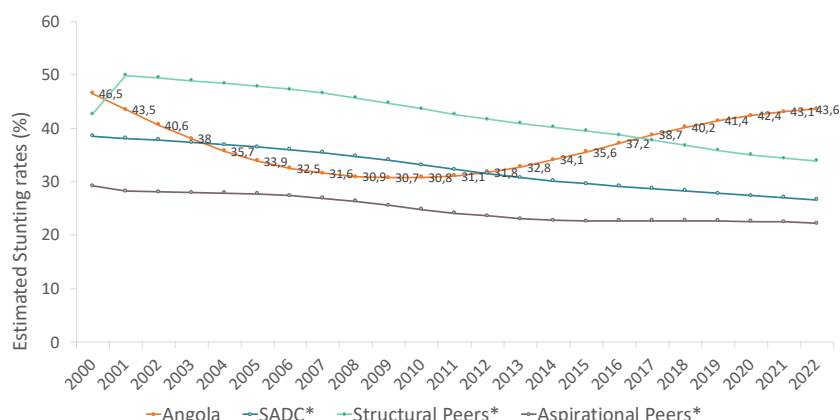
84. UNICEF JME 2023 country estimates. The IIMS 2023–2024 data indicates that 40 percent of children under age 5 suffer from chronic malnutrition—an increase from 38 percent in the 2015–2016 survey. Prevalence is significantly higher in rural areas (51 percent) compared to urban areas (31 percent), and among children whose mothers have no formal education (51 percent), while it is lowest among those whose mothers have tertiary education (12 percent).

85. The stunting rate ranks seventh globally at 43.6 percent in 2022 (37.7 percent in the latest household survey) (see Figure 3.12).

86. World Health Organization. (2023, December 20). Infant and young child feeding. WHO.

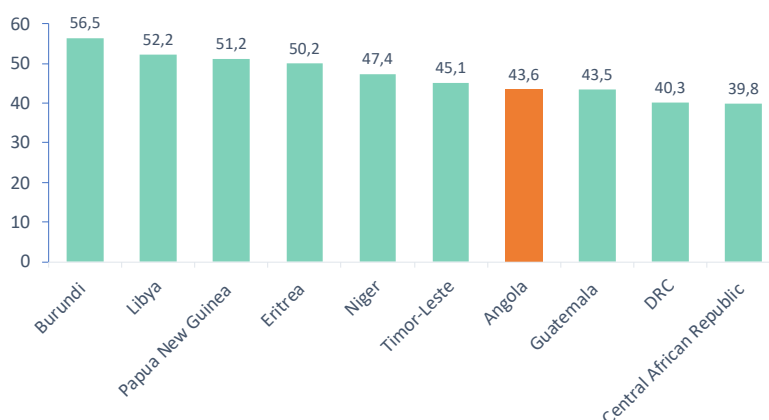
to escape poverty as adults. In Angola, more than 2 million children under 5 suffer from chronic malnutrition. Due to drought and high food prices, this condition may be exacerbated by the ongoing food security crisis in Cunene, Huila, and Namibe provinces.

Figure 3.21: Stunting rates trends in Angola and peers



Source: UNICEF and author's computation.

Figure 3.22: Under-5 stunting rate, global rank



Source: UNICEF/World Health Organization (WHO)

World Bank Joint Child Malnutrition Estimates Database, May 2023.

Limited access to WASH services, widespread malnutrition, and a weak immunization system are major drivers of Angola's poor child survival outcomes. The main cause of death in children under 5 in Angola is diarrheal diseases, the top risk factors for which are unsafe water, poor sanitation, and lack of access to a handwashing facility.⁸⁷ In 2016, two in five children under 5 were receiving oral rehydration and continued feeding to treat diarrhea. Inadequate WASH services can also lead to infectious diseases that cause anemia, of which prevalence among children in Angola is very high. In addition, unimproved sanitation is one of the primary causes of stunting in developing countries (Danaei et al. 2016), which in Angola is estimated to affect 43.6 percent of children under 5. Moreover, WHO estimates for 2022 indicate that Angola ranks fourth globally with the largest number of zero-dose⁸⁸ children, totaling 2 million. The immunization coverage for DTP3 was estimated at 42 percent (the lowest in the SSA),⁸⁹ showing the limited effectiveness of the immunization system. The following two sections provide an in-depth analysis of malnutrition and WASH, respectively.

87. World Bank. 2021. Diagnosing Angola's WASH Sector: An Urgent Call to Action.

88. Children who have not received the first dose of diphtheria, tetanus, and pertussis (DTP1) vaccine are described as zero-dose.

89. See status of immunization coverage in Africa as of the end of 2022. Brazzaville: WHO African Region 2023.

b. Tackling Malnutrition in Angola

Angola's efforts to tackle malnutrition have included two national strategies in a fragmented setup involving multiple ministries but failed to meet its goals. Angola launched two national strategies to tackle malnutrition, (1) The National Strategy on Food and Nutrition Security 2010–2025, aiming to increase agricultural outputs and food supply to enhance households' access to food, and creating national systems focusing on health monitoring and nutritional security activities; and (2) the 2018–2022 NDP aimed at reducing the prevalence of under-5 malnutrition from 19 percent in 2016 to 9 percent in 2022. Despite these efforts, Angola has not met its goals, with high malnutrition rates persisting. The governance of nutrition in Angola is fragmented, involving multiple ministries such as Health, Agriculture, and Social Care. The National Nutrition Program focused on primary healthcare and malnutrition treatment works alongside the National Department for Food Safety. Coordination among these entities remains weak, limiting the effectiveness of interventions.

The budget for nutrition increased from 0.8 percent of public spending in 2017 to 2.6 percent in 2022, though Angola is still spending less than peers. Government nutrition-related spending in Angola averaged 1.2 percent of total spending (0.4 percent of GDP) between 2014 and 2019. From 2020 through 2022, the spending averaged 2.1 percent of total spending (0.6 percent of GDP), mainly due to an increase in one nutrition-specific program (Improving Maternal, Child Health and Nutrition) and one enabling nutrition program (Food and Nutrition Security Program). Nonetheless, Angola's nutrition spending remains lower than its peers at 5.2 percent of total spending on average.

Adequate nutrition of the population has positive large externalities on human capital and economic growth. Early nutrition programs can increase school completion by one year, raise adult wages by 5–50 percent, increase the probability of escaping poverty by 33 percent, and increase GDP by 4–11 percent in African and Asian countries (Shekar et al. 2017). Several countries have successfully reduced stunting over a short period of time; for example, in just eight years, from 2008 to 2016, Peru cut its stunting rate from 28 percent to 13 percent (see Box 3.5). Addressing malnutrition in Angola requires a comprehensive and multifaceted approach involving various stakeholders, including governments, nongovernmental organizations (NGOs), healthcare professionals, communities, and families (see key priorities in Table 3.5).

Box 3.5. A successful high-speed reduction in stunting: the case of Peru

In 2007, Peru undertook serious food and nutrition policy reform and developed a strategic road map for reducing stunting rates. Stunting was regarded as a human development issue and became a sustained political priority. The national nutrition strategy, CRECER (To Grow) helped to focus spending on the poorest communities to improve the health and nutrition of children in the first two years of life. Resources devoted to the CRECER strategy doubled from US\$216 million to US\$495 million, and areas of higher stunting were prioritized, with a focus on results. It also established a results-based budgeting (RBB) system for ensuring money was well spent and produced the results politicians had pledged to achieve. The conditional cash transfer program known as Juntos (Together) was also part of the strategy. Juntos provided cash to mothers while requiring them to take their young children regularly to health and growth monitoring and promotion checkups at the health centers, and for ensuring that their older children attended school. In 2007, Juntos was redesigned to include nutrition-related conditionalities.

c. Improving Water, Sanitation, and Hygiene Services in Angola

Over the past two decades, Angola has improved access to water and sanitation, yet it still lags behind peers in access to safe drinking water and hygiene services. From 2000 to 2022, access to basic drinking water in Angola rose from 41 percent to 58 percent, while basic sanitation access improved from 28 percent to 52 percent, and open defecation fell from 43 percent to 17 percent. Despite this progress, Angola still trails all structural peers, as well as the LMIC and SSA averages, in access to basic drinking water.

In Angola, rapid and unplanned urbanization has strained infrastructure development. Driven by the search for better economic opportunities, rural-to-urban migration pushed the urban population to 68 percent by 2022, well above the 42 percent average in SSA and LMICs. As a result, the share of people living in slums rose from 20 percent in 2000 to 63 percent in 2020, limiting WASH service expansion. In 2022, 4.5 million urban residents lacked access to improved water, more than 1.5 million used unimproved sanitation, and 12 million had no access to a handwashing facility.

Low government investment in WASH infrastructure continues to constrain progress in access to WASH services. From 2009 through 2018, the Angolan government spent an average of just 0.3 percent of GDP on WASH infrastructure—far below spending on transport (1.7 percent) and energy (1 percent). This level of investment covers less than a quarter of the annual funding needed to meet the SDGs. According to the IMF, Angola must allocate 2.1 percent of GDP annually to reach the water and sanitation SDG green thresholds by 2030.⁹⁰ Moreover, spending efficiency in Angola’s WASH sector is low compared to other infrastructure sectors. From 2009 through 2018, less than 40 percent of the approved WASH budget was executed, while transport and energy exceeded 70 percent. More than 90 percent of WASH investment went to water supply, with sanitation receiving limited funding and hygiene receiving none. Sanitation also had the highest share of unexecuted funds—73 percent—during this period.

Angola needs a national WASH platform and a clear service strategy to define responsibilities and improve coordination among government actors. Currently, the sector lacks guiding principles and a comprehensive strategy that integrates water supply, sanitation, and hygiene with measurable SDG goals. Clear role definitions would reduce overlaps, resolve conflicts, and support decentralization. For example, the Ministry of Health could play a greater role in hygiene services. Regulatory bodies like the Competition Authority and IRSEA also need clearer mandates and greater independence to ensure effective oversight. Decentralizing responsibilities would enhance local capacity to tackle WASH challenges.

Angola must create capacity building to carry out a successful reform of the WASH sector and professionalize the water supply and sanitation utilities. The effectiveness of a national WASH strategy hinges on strengthening institutional capacity, particularly within Angola’s 18 provincial utilities. This requires competitive hiring, financial and operational reforms, and a shift to performance-based management to close efficiency gaps and expand services to the poor. Utilities should also improve resource use by reducing non-revenue water, boosting labor productivity, and adopting cost-effective infrastructure. Capacity building will depend on strengthening existing staff and attracting new talent through initiatives like operator certification and technical support programs for provincial agencies.

Increase government funding and leverage private or commercial financing in the sector through a clear sector financial framework. Current government spending on the WASH sector is insufficient to meet the SDGs. Beyond mobilizing more resources, Angola must rethink how to leverage, optimize, and allocate funds effectively to bridge the gap between current sources (tariffs, national funds, and donor financing) and sector needs. A comprehensive WASH financial policy or strategy is essential—focused on performance-based funding, reducing inefficiencies, and enabling private sector participation. While Angola has a PPP framework, it lacks a fully functional PPP model for WASH. Still, efforts are underway, including performance-based contracts, an affermage in Cabinda, and the BITA guarantee in Luanda.

90. IMF. 2023. IMF Country Report No. 23/10, Angola, Selected Issues, March 2023.

IV. Conclusions and Policy Priorities

The Angola HCI remains below its peers, reflecting systemic weaknesses in education, healthcare, and social protection. Angola's 2020 HCI score of 0.36 was below SSA (0.40), LMICs (0.48), and aspirational peers (0.52), reflecting significant gaps in education and child nutrition. The country faces low learning-adjusted years of schooling (28.4 percent below peers), shorter expected years of schooling (18 percent below peers), and high child stunting rates (14.2 percent above peers). With a youthful population set to double by 2050, Angola must invest strategically in education, health, and social protection to boost human capital and mitigate poverty, food insecurity, and climate vulnerabilities.

Angola's progress in universal education has reversed, with declining enrollment, high drop-out rates, and insufficient resources, hindering quality and access. Angola's primary enrollment dropped from 77.7 percent (2014) to 69.3 percent (2022), with 39.1 percent of children out of school and an 11.6 percent drop-out rate. Resource shortages worsened, with student-teacher ratios rising and no regular student assessments. Education financing (1.7 percent of GDP) remains insufficient, while governance issues limit quality improvements. Urgent reforms are needed to restore progress in education.

Angola faces critical challenges in child survival and nutrition, ranking among the worst globally. In 2022, Angola's under-5 stunting rate was 43.6 percent, with one in 10 children not surviving to age 5. Poor WASH services and weak immunization programs fuel high child mortality and malnutrition, with zero-dose children among the highest globally and immunization coverage at just 42 percent. Urgent action is needed to improve nutrition, healthcare, and sanitation.

Improving educational outcomes in Angola requires a holistic strategy targeting financing, teacher management, and learning assessment. A results-based weighted formula for education spending would improve efficiency and equity by linking funding to student performance and enrollment. A teacher management policy should focus on merit-based recruitment, performance monitoring, and professional development. Data-driven policymaking is essential, prioritizing exam funding, teacher evaluations, and international assessments to enhance learning outcomes.

Boosting human capital and reducing health hazards in Angola requires addressing malnutrition and building a sustainable WASH sector. Combating malnutrition in Angola necessitates a holistic approach involving government, NGOs, and communities. Key actions include increasing nutrition funding, strengthening the National Multisectoral Platform, and aligning with WHO/UNICEF targets. School feeding programs and healthcare services must expand, while a national WASH strategy with clear responsibilities and decentralization is essential. Stronger institutions, private sector involvement, and a clear financial framework will improve efficiency and sustainability in WASH services.

To harness the demographic dividend, Angola must accelerate sociodemographic progress, focusing on reducing adolescent fertility and child mortality. Angola should expand maternal health programs, integrate infant care, and offer schooling incentives for girls. Strengthening contraceptive access, peer education, and family planning is essential. Long-term efforts must improve healthcare, data systems, and immunization while promoting mentorship and early marriage discussions to reduce adolescent pregnancies (Table 3.6). Despite ongoing reforms, several critical knowledge gaps limit the effectiveness of Angola's policy capacity in driving human capital development (see Table 3.7).

Table 3.6: Summary of policy priorities for human capital development in Angola

Policy Area	Short-Term Actions	Medium-/Long-Term Actions
Foundations: health, nutrition, and WASH	• Expand community health and nutrition programs. • Launch WASH coordination platform.	• Scale nutrition programs and WASH utilities. • Adopt WHO/UNICEF targets for child health.
Empowering youth and women	• Incentivize girls' education. • Launch peer education on reproductive health.	• Expand family planning services and community mentoring. • Monitor adolescent fertility reduction.
Education and skills	• Link school funding to learning outcomes • Improve teacher training • Boost digital skills programs.	• Fully implement performance-based education funding. • Expand teacher workforce and infrastructure.
Social protection	• Integrate safety nets into plans • Expand national ID for better targeting.	• Design risk-layered financing. • Increase funding for pro-poor programs. • Build shock response systems.
Implementation and coordination	• Foster cross-sector coordination platform. • Prioritizing early wins in health and nutrition.	• Align sector budgets and results frameworks. • Institutionalize human capital coordination.

Table 3.7: Knowledge gaps

Area	Knowledge Gap	Policy Implication
Basic Education		
Learning outcomes	Limited data on student performance across education levels.	Allow evidence-based curriculum review and alignment.
Resource allocation and transparency	Lack of transparency in how education resources are distributed and used across different levels of government (national, provincial, and local).	In-depth data are essential for designing targeted, cost-effective interventions, and allocating resources to high-burden areas.
Expenditure analysis	A need for granular education spending analysis to assess whether public spending aligns with policy priorities and learning needs.	Critical for improving budget planning, identifying funding gaps, and ensuring that investments generate meaningful outcomes in the classroom.
	Limited analysis of teacher compensation compared to other professions and lack of data on trends and future staffing needs.	Inform teacher workforce planning; ensure competitive, sustainable pay; and support evidence-based budgeting and human resource policies.
Skills and workforce development	Insufficient labor market intelligence on skills in demand, sector growth, and how well training programs align with employer needs.	Support targeted curriculum reform, the scaling of relevant vocational training, and employer-school partnerships that support youth employment.
Nutrition	Limited data on the drivers and geographic distribution of malnutrition.	Essential for designing targeted, cost-effective interventions and allocating resources to high-burden areas.

WASH	WASH data are fragmented across institutions and often outdated, limiting the ability to monitor progress or coordinate investment across urban and rural areas.	A national WASH monitoring framework is needed to inform infrastructure planning, prioritize high-need areas, and evaluate service-delivery efficiency.
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Part 3: Expanding Agricultural Endowment

I. NDP 2023–27 Sets Ambitious Targets for the Agricultural Sector

The NDP 2023–27 sets ambitious targets for agriculture and livestock, highlighting their key roles in food security, poverty reduction, and job creation. The NDP projects the agriculture, livestock, and forestry sector to grow at 8.3 percent annually from 2023 through 2027—five percentage points above overall GDP growth—raising agriculture’s GDP share from 9.7 percent to 12.1 percent and livestock from 0.7 percent to 0.9 percent, with commercial farmland expanding from 0.5 to 0.62 million hectares.

To achieve its goals, the NDP includes a comprehensive Program for the Promotion of Agricultural and Livestock Production, built around six key objectives. One, improve access to inputs and irrigation through infrastructure and equipment for small farmers; two, promote producer groups and cooperatives to strengthen value chain integration; three, boost productivity via foreign direct investment (FDI) and support for large-scale producers; four, enhance food resilience in arid regions through coordinated campaigns; five, advance agricultural research and development (R&D) through government–researcher–producer collaboration; and six, increase livestock self-sufficiency by investing in water and energy infrastructure.

II. Agricultural Sector in Angola: Overview, Potential, and Barriers to Growth

Overview of the Agricultural Sector in Angola

Until the 1960s, agriculture was the backbone of Angola’s economy, but it was quickly overtaken by the oil sector. Angola’s civil war (1975–2002) severely damaged the agricultural sector’s infrastructure and capacity, isolating producers and collapsing commercial farming, as much of the rural population either fled or resorted to subsistence farming (Hodge 2004). Food exports fell from more than 60 percent in the 1960s to under 1 percent by 2021, while fuel exports surged to 89 percent from less than 5 percent (Atlas of Economic Complexity 2022). By 2002, agriculture and forestry contributed just 4 percent of GDP.

Nonetheless, the agricultural sector has shown signs of recovery in the last two decades. Since the early 2000s, the value added of agriculture and forestry has expanded at a faster pace than the overall economy and most other economic sectors. The agriculture and forestry sector grew 6 percent on average in 2002–23, compared to 7.3 percent for fishing, 4.7 percent for services, 1.4 percent for the oil industry, and 2.9 percent for the non-oil industry. As a result, the share of agriculture and forestry in the country’s total value added increased from 4 percent in 2002 to 5.9 percent in 2023.

The agricultural sector is critically important to ensure both livelihoods and food security. In 2019, 46 percent of Angola’s workforce was in agriculture, mostly subsistence farming with little surplus for income (World Bank 2023). Small to medium farms produce 80 percent of output, occupy 90 percent of land, and support 90 percent of the rural population (World Bank 2022c). In 2023, Angola spent US\$2 billion on food imports—13 percent of total imports—with 97 percent of rice consumed (500,000 tonnes) being imported. To address food security, the government operates a Strategic Food Reserve to counter price surges and prepare for emergencies (Ministry of Finance and Ministry of Commerce 2019). Still, by late 2023, 5 million people had insufficient food and 1.6 million faced acute hunger (World Food Programme 2023).

Agriculture in Angola faces significant vulnerabilities due to climate change and natural disasters, which could hinder its growth trajectory. The Climate Change Development Report (CCDR) warns that agriculture

in Angola will be among the most affected sectors due to increased rainfall variability and extreme weather, risking major economic losses (World Bank 2022). By the 2050s, crop yields could drop 4–30 percent due to shorter rainy seasons, higher temperatures, more droughts, and water scarcity. While agricultural insurance could help build resilience, coverage remains low. The National Institute of Meteorology and Geophysics began modernizing Angola’s meteorological services in 2018 to better monitor climate change.

Agriculture Growth Potential

Angola’s agricultural and livestock sectors hold strong potential due to the country’s natural endowments, including vast agricultural land, much of which remains uncultivated. Despite abundant water, Angola’s irrigated area remains underused. Input use—such as fertilizers and pesticides—is very low compared to peers, and most production comes from family farms. Combined with vast uncultivated land, this points to significant growth potential. Rising food demand, driven by rapid population growth and urbanization, adds further opportunity. However, this potential is constrained by Angola’s high vulnerability to climate change and natural disasters.

Angola has abundant agricultural land, and climate conditions are suitable for agricultural production in much of the country. The country’s agricultural land (potentially arable) reaches 59.2 million hectares, which accounts for 47 percent of the country’s land area. However, only 5.9 million hectares are cultivated. Most of the country lies within the Guinea Savannah zone, an area with significant potential for highly productive commercial agriculture. The road corridors A and B (Figure 3.23), which link the central highlands with Luanda, are fertile areas with favorable agro-climatic conditions to produce maize, soybeans, beans, coffee,⁹¹ vegetables, groundnuts, and fruits (World Bank 2018c). Angola also has the conditions to produce crops that can ensure food security (corn, rice, sorghum) and high cash value (beans, cassava, bananas, Irish potatoes, and sweet potatoes).

Figure 3.23: Corridors A and B are highly productive areas with favorable agro-climatic condition



Source: World Bank 2018c.

Water resources for agricultural and livestock production are also abundant. The available surface water in Angola was estimated at 145 cubic kilometers per year in 2004. Most rivers come from the highlands and supply the country’s neighbors with 119 cubic kilometers per year. Renewable water is estimated at 148 cubic kilometers per year (Food and Agriculture Organization [FAO] 2023a). A map of Angola’s digital hydrographic network was

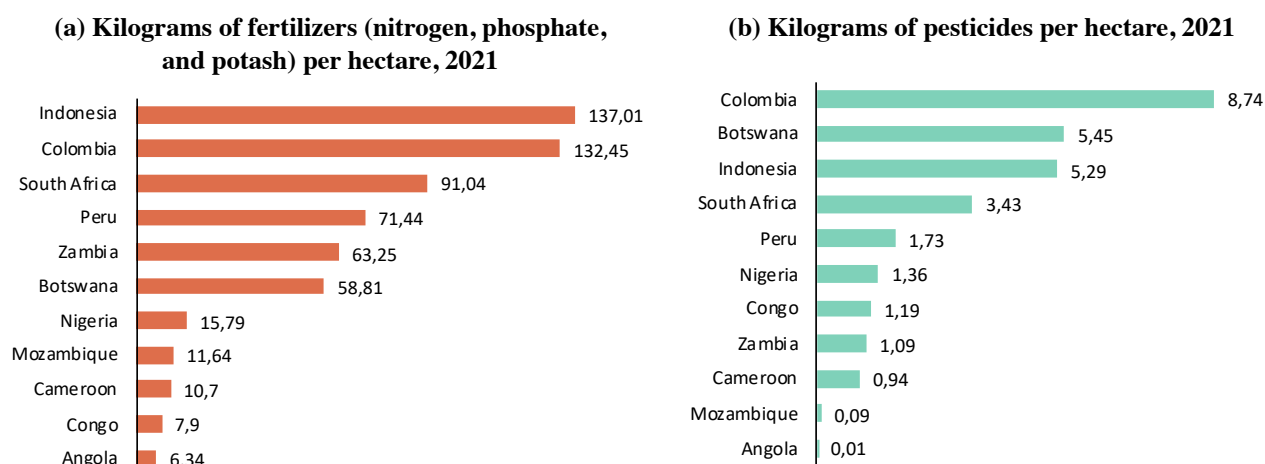
91. Angola has the natural conditions to become a top coffee producer. Coffee production reached a peak of 235,200 tons in 1967 (5.4 percent of the world’s production), ranking third in the world behind Brazil (34.8 percent) and Colombia (10.5 percent). Since then, production declined consistently to 1,260 tons by the end of the civil war in 2002 and has slightly recovered to 10,304 tons by 2021 (0.1 percent of the world’s production) (FAOSTAT 2023).

recently developed, revealing that the country has 6,152 rivers with a total length of 154,035 kilometers (Instituto Nacional de Recursos Hídricos [INRH] 2020). Despite this abundance, the irrigated area is significantly below its potential as only 0.2 percent of the agricultural land is estimated to be equipped for irrigation (FAO 2023b). Water resources are also suitable for livestock production, together with a vast natural habitat for grazing.

Agricultural inputs are underutilized compared to peers. Producers in Angola use 6.3 kilograms of fertilizers per cultivated hectare, the lowest use per area of cropland compared to all its peers (Figure 3.24a). With regard to pesticides, Angola falls behind all peers again with just 0.01 kilograms per hectare (Figure 3.24b). With careful consideration for environmental and health impacts, greater use of fertilizers and pesticides could increase agricultural production.

Increasing the share of agribusiness in national production could boost production and productivity. Agribusiness production, scarcely present in Angola today, is two and a half times as productive in tons per hectare as family farms. In 2020–21, family farms produced 19.3 million tonnes using 4.9 million hectares (3.9 tonnes per hectare), which accounts for 92 percent of Angola’s harvested area. The production of agribusiness farms reached 4.2 million tonnes using just 400,000 hectares, or 10.5 tonnes per hectare (Ministry of Economy and Planning 2023).

Figure 3.24: Angola could increase agricultural production by expanding the use of inputs



Source: FAO 2023b.

Strong local demand also offers an opportunity for the expansion of agribusiness. Given Angola’s high population growth rate, the total population is expected to double over the next 30 years, reaching 74.3 million by 2050 according to the UN’s medium-fertility variant. Eight out of ten people will be living in urban areas by that year (UN 2022). A small agribusiness sector is growing thanks to the rising demand for agricultural products in cities and greater access to agricultural financing, specifically through commercial banks.⁹² Around Luanda specifically, a formal food distribution sector is developing, and distributors of fresh products, supermarkets, manufacturing companies, and hotels express great interest in developing commercial agriculture (World Bank 2019a).

92. One component of The World Bank’s Angola Commercial Agriculture Development Project is the promotion and support for agribusiness development. A total of 57 business plans have been fully financed to date, of which 40 have received bank financing from the private banks Banco Sol and BFA.

Barriers to Growth in the Agricultural Sector

Addressing critical barriers to agricultural growth in a comprehensive manner is crucial for realizing its potential. These critical constraints have been identified and discussed in various analyses and research reporting, including a recent note for the NDP by The World Bank (World Bank 2023b). This study focuses on four barriers for agricultural growth: (1) insecure access to land, (2) insufficient infrastructure, (3) shortage of human capital and capacity for technological update and innovation, and (4) lack of competitiveness.

1. Insecure Access to Land

Access to land in Angola is highly informal, which is a major challenge for the development of the agricultural sector. The government estimates that 70 percent to 75 percent of the country's territory remains unregistered (World Bank 2022a), primarily due to the country's complex historical processes. The Portuguese occupation beginning in the sixteenth century led to the expropriation of land from the native population, which was intensified with the beginning of Angola's inland conquest at the end of the nineteenth century. The armed struggle for independence began in the early 1960s, to which the Portuguese responded by intensifying displacements. Gaining independence in 1975 triggered a massive exodus of Portuguese settlers, including many who abandoned their farms. The new regime nationalized the land, granted some areas to political and military elites, and accepted the informal occupation of their land by rural communities. But the displacement of rural populations continued with the civil war in 1975–2002, which reduced the presence of the state in rural areas to an even greater extent. This lack of formal access constrains the agricultural sector's growth, as research shows that secure land titles give farmers incentives to invest in their land and facilitate land sale and rental markets to ensure full utilization of land.

Although rural land rights can be formalized in Angola, the formalization process has restrictive requirements and excludes most land occupants. The 2004 Land Law provides mechanisms to formalize the land rights of rural communities. Almost 1,600 rural communities in 12 provinces have received mapping and registration support for the formalization of land rights. However, only 643 communities have been given formal titles, and the requirements are not aligned with the reality of rural households. The current legislation requires the existence of a rural development plan and the completion of all exterior and interior construction work. However, rural development plans do not exist or have not been updated in most of the country, and a significant portion of the population accesses housing through self-construction. In addition, those who have used rural land in good faith for years are excluded from the formalization of land rights.

Access to land services is limited, as the administration is highly centralized. Since the 2010 Constitution was adopted, reforms have attempted to decentralize land administration, especially at the municipal level. However, cadaster services at the municipal level are scarce, resulting in the services being inaccessible to most rural populations.

The complexity and high cost of the procedures for granting rights to use land act as barriers to increasing formal access to rural land. The process to obtain a surface right concession on rural land takes a minimum of three months and requires the intervention of various administrations. Although the national government and municipal administrations have invested in developing information systems for registering land, each administration produces its own data, and the different systems are not integrated. Assuming the application does not face any difficulties, it has an approximate cost of half a million Kz (around US\$600 as of May 2024) or 20 percent of the country's GDP per capita in 2022, in addition to registration costs. Except in the province of Luanda, all land rights concessions must be validated by the Institute of Geography and Cadaster of Angola (IGCA). By the beginning of 2022, the IGCA had instructed more than 60,000 land-right concessions, with an average of 1,700 in 2004–20 and a slight increase more recently. Despite this progress, around 400,000 parcels remain to be entered in the cadaster. The low number of concession applications reflects the length and cost of the process.

State capacity also remains a significant challenge in reducing informality in access to rural land. Angola's constitution declares land to be state property but defines ways to transfer it to individuals and collectives for rational and effective use. However, the legislation assigns responsibilities to the state that exceed its capacity to manage the

transfer of ownership rights. Additionally, the collapse of the colonial regime in 1975 and the civil war that followed not only displaced the rural population but also weakened public institutions, affecting the state's land management capacity. Although a proposal is under discussion at the parliamentary level, Angola currently lacks a land-use plan, which is critical for defining the use of national space and formulating agricultural policies.

In recent years, authorities have made efforts to formalize the land rights of rural communities. The government established an Inter-Ministerial Committee for the Registration of Rural Lands for Local Communities in 2018. The committee would carry out a survey of rural or community land, analyze the extent to which the land was being rationally and effectively used, and encourage the allocation of land rights. In October 2019, the committee started the implementation of the *Minha Terra* Program with the goal of increasing the formalization of land rights in local communities. Coordinated by IGCA, the objective was to grant 3,600 titles in 18 pilot municipalities. The program had registered 1,333 rural communities in 12 provinces by March 2021 and issued 606 formal customary land titles.

In 2021, the first legislation in Angola dealing with real estate cadaster was approved. The Legal Regime of the Land Cadaster, for both rural and urban land concessions, signals the government's support for the creation of a national registration system. The Angolan Territorial Information Management System (SAGIT) was developed to produce the cadaster, allowing the digitalization of the entire territory for the first time in the country's history. A real estate cadaster will allow the country to overcome the problem of lack of coordination between the different public institutions involved in land management.

2. Insufficient Infrastructure

Infrastructure, in particular transportation, irrigation, and electrification, plays a crucial role in enhancing activity and sustainability in the agricultural sector. Transportation infrastructure enables farmers to move their inputs and production to markets in a timely and cost-effective manner. Adequate irrigation infrastructure is vital for ensuring consistent water supply to agricultural lands and mitigating risks associated with water scarcity exacerbated by climate change. Electrification infrastructure has great potential to boost the activity of the agricultural sector, including facilitating the conservation of perishable goods.

Expanding and modernizing irrigation infrastructure in Angola is essential not only for boosting productivity but also for enhancing resilience to drought and water scarcity. Historical estimations distinguish between formal irrigation (usually developed and managed by a government body) and small-scale irrigation (controlled and operated by local people in response to their needs) (Serrano and Carter 1991). Both FAO (1987) and the National Directorate for the Organization of Agricultural and Livestock Production (1987) estimated the total area of formal irrigation to be between 40,000 and 50,000 hectares by the end of the 1960s, while Serrano (1988) concluded it would be near 80,000 hectares around the time of Angola's independence in 1975. Small-scale irrigation, mostly traditional and underestimated, was practiced on more than 320,000 hectares in the 1960s, according to the Ministry of Agriculture's field surveys and censuses carried out from 1963 to 1968 (Serrano and Carter 1991). In 2021, the land area equipped with irrigation infrastructure and equipment to provide water to crops stood at 85,000 hectares according to FAO's latest estimations. Today, more than 35 percent of Angola's crop area is exposed to drought, and all provinces will likely have shorter and more concentrated rainy seasons by 2060, which would impact the growth cycles of most crops (World Bank 2022b).

The latest agricultural census revealed important deficiencies in basic infrastructure across villages. The Farm and Fishing Census 2019–20 (RAP in Portuguese) identified 23,832 villages in 159 municipalities. Of these, 83.7 percent are not connected to the electric grid, and 75.8 percent have no structure for water storage such as dams and dikes.⁹³ Approximately one in 10 villages have no access to basic infrastructure at all. In terms

93. This census covered all rural areas of Angola for the first time since the country's independence in 1975 at three different levels: enterprises, households, and villages. Given the goal of outlining the main constraints for production and development across the country, the analysis used the village dataset. Angola's national statistics office has identified "representatives" for each village, thus assessing the availability of infrastructure or constraints for general rural activity. Since villages are not formal administrative divisions, information is generalized to the municipal level to allow for analyses.

of public transportation, although 80 percent have some kind of transportation, this estimation does not consider road density and is a cumulative evaluation of all options available (i.e., cars, boats, taxis, buses/*candongueiros*). Taxis are the most common mode, available in 49 percent of villages, while only 1 percent of villages have access to buses or *candongueiros*. Regarding human capital development, around 64 percent of villages do not have primary schools, and 80 percent identified the lack of technical and specialized assistance as a constraint for livestock activities (Table 3.8).

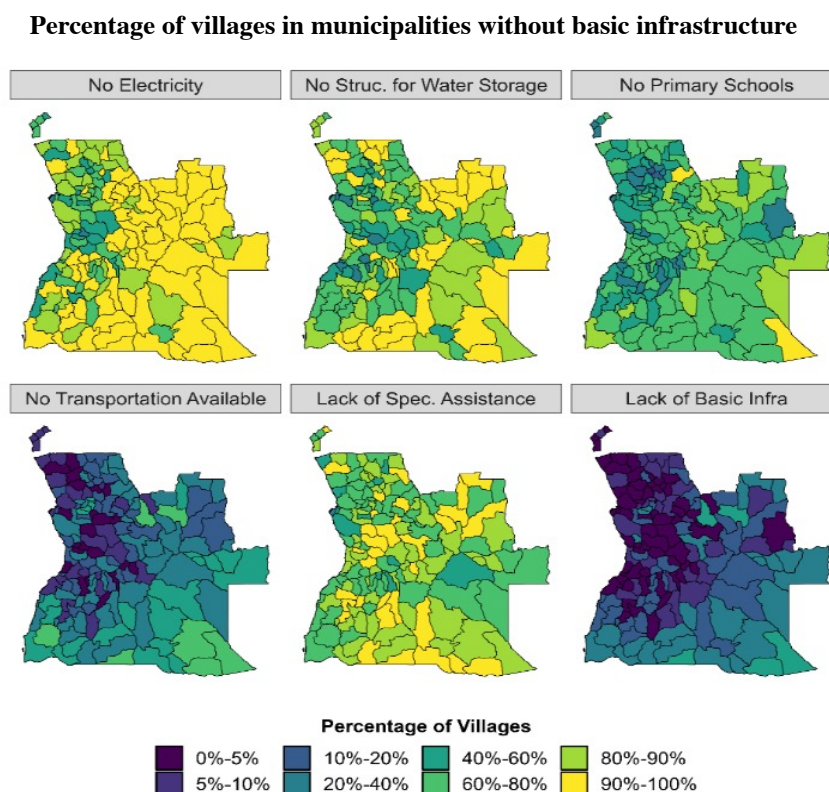
Table 3.8: Share of villages in Angola with no basic infrastructure, by percentage

Indicator	Percentage of Villages
No electricity	83.7
No structure for water storage	75.8
No primary schools	64.1
No transportation available	19.2
Lack of specialized assistance	80.2
None of the basic infrastructure listed above	9.72

Source: RAPP 2019–2020.

The southern and eastern regions of the country suffer from a pronounced lack of access to basic infrastructure. Roughly one-quarter (24.3 percent) of villages that do not have any basic infrastructure are in Huíla and Cuando-Cubango provinces, in the south. Four of the five provinces with the largest number of villages lacking infrastructure (Huíla, Cuando-Cubango, Huambo, Lunda Norte, and Cunene) are located either in the south or east. Of the 18 provinces in the country, just those five account for 52.5 percent of the villages having no basic infrastructure (Figure 3.25).

Figure 3.25: Lack of basic infrastructure shown as particularly severe in the southern and eastern regions.



Source: World Bank staff compilation based on RAPP 2019–2020.

The development of irrigation in Angola faces several bottlenecks in terms of human resources, institutional capacity, business environment, and investment costs. The country has no specialized academic or vocational courses in irrigation engineering, agricultural hydraulics, or irrigation agronomy. All technical work and irrigation design is carried out by foreign companies, but the Ministry of Agriculture and Forestry lacks the capacity to assess the quality of their work. Although an update of the National Irrigation Plan (limited to large perimeters) is now being carried out as part of the Bank-financed Angola Commercial Agriculture Development Project, the country lacks a national policy and strategy to guide the development of irrigation in Angola, as well as a legal and regulatory framework. Currently, there is only a small irrigation section at the National Directorate of Agriculture, and the National Institute of Agricultural Hydraulics (*Instituto Nacional de Recursos Hídricos*, INHR), created some years ago, has not yet taken concrete action. The private sector faces an unfavorable environment due to: (1) insecure and ambiguous land tenure/use/utilization rights that hinder investment, (2) lack of financing options for irrigation investments, particularly for small and micro-scale producers, and (3) insufficient irrigation equipment and technology supply. Lack of data on water resources for the correct design of irrigation works is also a bottleneck for the development of irrigation.

3. Shortage of Human Capital and Capacity for Technological Update and Innovation

Research, development, and innovation (R&D&I) in agriculture contributes to economic development. It creates new opportunities for farmers and agribusinesses to strengthen the technical and institutional capacities required to utilize inputs. Innovative agricultural practices and technologies can lead to the development of new value chains, the creation of jobs, and increased income for rural communities. Additionally, R&D&I can drive the growth of the agricultural sector. It is widely known that agricultural R&D&I leads to higher productivity growth, with social returns to public R&D&I averaging 30 percent to 40 percent (World Bank 2019c).

However, Angola lacks several key elements for a successful and effective R&D&I system. It requires a policy and regulatory enabling environment, incentives to encourage private sector participation, institutional autonomy, adequate, stable, and diversified funding, rewards for performance for scientists, and strong research and development partnerships.

The absence of sustainable funding and effective expert retention strategies poses a risk to the gains in agricultural R&D&I achieved by the government to date. Unlike other SADC countries, such as Mauritius, Zimbabwe, and Namibia, which have been investing substantially in agricultural research (Podisi 2016), Angola has relied on multilateral and bilateral support programs rather than increasing its total support estimate (TSE)⁹⁴ Pinvestments on R&D&I. Financing R&D&I while retaining scientists and technical staff at MINAGRIF is particularly crucial.

Promoting R&D&I in the agricultural sector also needs to be complemented by using digital technologies and data. One such tool is a farmer registry for supporting the design and delivery of targeted policies to smallholder producers and vulnerable rural populations (GIZ and FAO 2023). Farmer registries help ensure efficient management and strengthen the country's institutional management capacities. Farmer registries also promote the sustainability of interventions over the long term, while facilitating integration with other registries in the country, such as social protection information systems and national identification systems. In the case of Angola, while both the social protection information and the national identification systems are well established, the country has only recently been developing its National Registry for Smallholder Producers (*Registo Nacional do Productor Agropecuário*, RNPA) and its National Registry for Animal Identification (*Registo Nacional de Identificação Animal*, RNIA). These two registries are being developed under the World Bank-financed Smallholder Agricultural Transformation project and have taken best practices and lessons from other African countries in the region such as Mozambique, Namibia, Zambia, the Democratic Republic of Congo, and Kenya.

The overall level of support given to the agricultural sector in Angola is high but ineffective. The TSE

94. Total support estimate (TSE) is defined as “the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products” (OECD 2018).

to agriculture from public policies and programs in Angola in 2018 and 2019 averaged US\$1.3 billion per year, which is equivalent to 28.5 percent of the agricultural sector's value added (World Bank 2021). Although Angola's TSE is high compared to other developing countries, the portion of support going to public goods and services was relatively low, including for R&D&I. Nearly 94 percent of TSE went to producer support (largely in the form of market price support⁹⁵), while the remaining 6 percent went to increasing performance and competitiveness through Support to General Services for Agriculture.

Despite recent increases in agricultural R&D&I investments, efforts remain insufficient. According to World Bank data, Angola spent approximately 0.06 percent of its GDP on agricultural R&D&I in 2019, which represented an increase from the previous decade. This level of investment, however, is still low compared to other countries in the region and globally. For instance, the average for SSA was 0.4 percent of GDP, while countries such as Brazil and China spent over 1 percent of GDP on agricultural R&D&I (World Bank 2021; UNCTAD 2021; Ministry of Agriculture and Rural Development of Angola 2018; UNDP 2020).

Strong mechanisms for disseminating knowledge and supporting technology extension and transfer are critical for the sector's development in Angola. The focus of public programs in the country has been on supporting farmers with subsidized agricultural inputs (seeds, fertilizer, machinery, equipment, and irrigation). Equally important, however, is ensuring that these programs are paired with enhanced technical knowledge transfer and human capital-building efforts. Agricultural productivity growth is the primary source of global agricultural output growth since the 1990s, but in Angola it has been in steep decline over the past 10 years. The use of innovative agricultural technologies by farmers could increase productivity, which would help the environment by rapidly increasing overall production while land expansion and the use of inputs progress moderately.

Despite the low levels of agricultural R&D&I investment, Angola has been successful in training farmers to manage grants and build collective capacity. One example is the Farmer Field Schools (FFSs)⁹⁶ model implemented by the Ministry of Agriculture and Rural Development of Angola (MINAGRIF)'s Institute of Agrarian Development (IDA) that evolved over two decades.⁹⁷ With a reformulated methodology and focusing on the institutionalization process of FFSs within MINAGRIF, the recent World Bank-financed Angola Smallholder Agricultural Transformation Project (MOSAP III) was designed with the objective of increasing access to agricultural extension through the FFS approach while promoting the adoption by small producers of climate-smart agriculture (CSA) as well as Nutrition Smart Agriculture practices. Access to improved production technologies, inputs, and extension services is expected to enhance the sector's overall performance, including resilience, productivity, and nutrition, while also promoting climate co-benefits.

The government of Angola is also taking steps to establish a farmer registry using digital technology. The Government will establish a farmer registry based on the experiences of the Democratic Republic of Congo and Mozambique (Box 3.6), with support from MOSAP III. The project will also support the government in the context of livestock farming by establishing a pilot animal identification registry in three southern provinces (Namibe, Huíla, and Cunene) to test the system and provide training to the main stakeholders (World Bank 2022).

95. Market price support (MPS) is defined as "the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level" (OECD 2018).

96. A group-based learning process that has been used to identify and solve specific agricultural issues.

97. The FFS approach was introduced in Angola in 2005 in the context of the transition between emergency and development actions in the joint project between MINADER and the Danish Council for Refugees, with the support of FAO. The process of adapting this approach as an instrument to achieve the specific objectives of IDA was done through the Special Program for Food and Nutritional Security (PESAN). Subsequently, the FFS approach was adopted as a rural extension tool at the end of PESAN in 2012 and later implemented under development partners' financed projects, such as the Small Agriculture Market Access Programme (SAMAP) and the Smallholder Agriculture Development and Commercialization Project I-II (MOSAP I-II).

Box 3.6. How have the Democratic Republic of Congo and Mozambique established farmer registries?

Although farmer registries have a common basic structure, they may differ quite significantly in design. Zambia has established the Zambia Integrated Agriculture Management Information System (ZIAMIS), which is a government-owned e-subsidy program that facilitates the Ministry of Agriculture’s management of various processes such as farmer registration, input feeding, monitoring of farmer activities and reporting. Mozambique and the Democratic Republic of Congo are implementing customized versions of the Identification, Delivery and Empowerment Application (IDEA) system developed by FAO. This provides implementation support of agricultural assistance to the countries by facilitating secure beneficiary registration, identity verification at the point of distribution, entitlement delivery and tracking (including, but not limited to, cash transfers and vouchers), and data reporting and visualization (FAO 2023c).

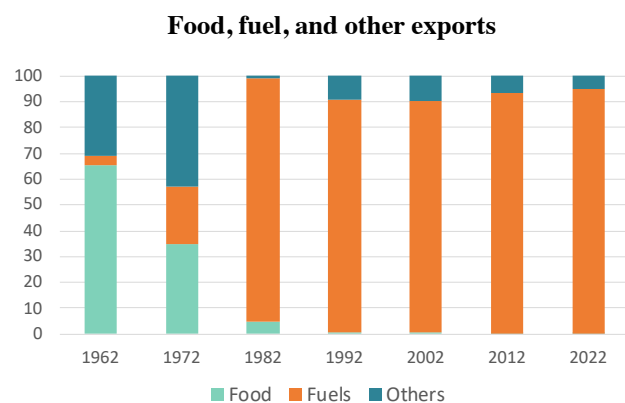
In the case of Mozambique, the government, through its Ministry of Agriculture, has been implementing subsidy programs to boost agricultural production for years. As it gained experience, the subsidy approach has evolved, being more tailored and targeted. The government, with FAO assistance, has thus developed a national registry system to support the distribution of agricultural inputs. Now, IDEA is being introduced to modernize and streamline the Mozambican Management Information System/Registry with the subsidy approach aiming at supporting the demand for agricultural inputs and strengthening private sector supply primarily through vouchers.

4. Lack of Competitiveness

Once the largest component of Angola’s export basket, agricultural products have nearly disappeared from the country’s exports. In the early 1960s, food exports constituted more than 60 percent of merchandise exports (Figure 3.26). But agricultural exports began to decline in the late 1960s due to the destruction of human and physical capital from the war, coupled with the rise of oil production following its discovery in 1955. Since the 1990s, food exports have remained below 1 percent of merchandise exports, while oil exports have exceeded 90 percent. In 2021, Angola’s food exports accounted for just 0.1 percent of the country’s GDP, falling behind all its peers.

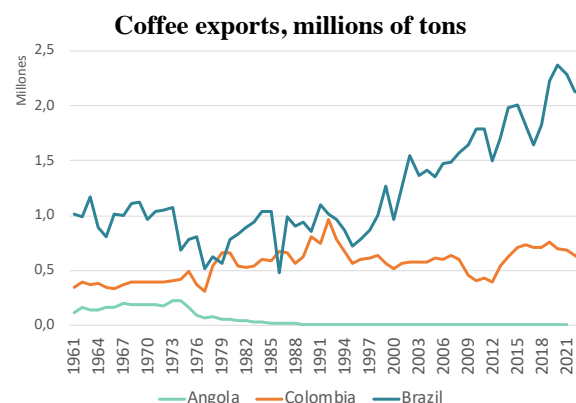
The case of coffee illustrates this trend very well. In 1962, Angola was the world’s third-largest coffee producer and exporter, following Brazil and Colombia. However, while Brazil more than doubled its coffee exports and Colombia increased theirs by 71 percent from 1962 to 2023, Angola’s coffee exports nearly vanished, decreasing by 99.4 percent during the same period (Figure 3.27). In 2023, Angola exported just over a thousand tonnes of coffee, a mere fraction of the 360 million tonnes traded globally, ranking sixty-third in the world.

Figure 3.26: The share of Angola’s food exports collapsed in the 1960s and 1970s



Source: *Atlas of Economic Complexity*, WDI.

Figure 3.27: Angola was once the world’s third largest coffee producer and exporter behind Brazil and Colombia



Source: FAOSTAT.

Given the need to diversify the country's export basket, programs have been put in place to boost agricultural competitiveness. In 2018, the Program to Support Production, Export Diversification, and Import Substitution (*Programa de Apoio à Produção, Diversificação das Exportações e Substituição das Importações*, PRODESI) was announced as the major government strategy to promote private sector development and economic diversification. This group of policies aimed to address macroeconomic and fiscal challenges, attract investment, improve competition, reduce business costs, and increase private sector participation in service delivery (World Bank 2019a). It also contained specific measures to develop clusters with export or import-substitution potential. The list of agricultural products included cereals, legumes and oilseeds, roots and tubers, vegetables, coffee, sugarcane, honey, beef and dairy cattle, pigs, goats, poultry farming and laying, and forestry. The National Institute of Support for Micro, Small and Medium Enterprises (*Instituto Nacional de Pequenas e Médias Empresas*, INAPEM) would provide agricultural producers with services related to credit, training and qualification, and access to the internal and external market, with the aim of increasing production and productivity.

Although policies like PRODESI go in the right direction, its impact on the country's economic diversification is yet to materialize. The Ministry of Planning (*Ministério da Economia e Planeamento*, MINPLAN) is responsible for PRODESI initiatives aimed at improving the business environment and providing capacity building for producers registered in the National Production Portal. As of 2021, MINPLAN was implementing 15 of these initiatives that directly or indirectly supported the business sector (World Bank 2023).⁹⁸ These include reforms aimed at reducing regulatory constraints, modernizing customs administration, and reducing trade costs such as the activation of the National Trade Facilitation Committee in 2018. However, PRODESI reports that between 2019 and 2023 (as of November), credit was approved for a total of 5,725 projects, or just 1,145 projects per year on average. The program faced reluctance from commercial banks to lend to the private sector, as the government's high fiscal needs created crowding-out effects. The BNA intervened in 2020 by requiring banks to devote at least 2.5 percent of their net assets to financing domestic production (IMF 2022a).

Other government efforts like the Strategic Food Reserve (*Reserva Estratégica Alimentar*, REA) were designed to boost the agricultural sector. The primary goal of REA, initiated at the end of 2021, is to address "excess price surges caused by hoarding and speculation" of essential food products and prepare the country for severe natural disasters or other food emergencies. REA was also implemented to stimulate agricultural production by prioritizing purchases from local producers, training farmers, and distributing imported fertilizers.

However, REA may be harming national production by causing market price distortions and delaying payments to national producers. REA imports products under favorable conditions and from more competitive countries, such as Brazil and Argentina, and sells them at prices with which national producers cannot compete. For example, some producers have pointed out that the fair price of maize is around 180,000 to 220,000 Kz per ton, but REA is imposing a price of around 80,000 to 90,000 Kz per ton. According to the Ministry of Industry and Commerce, REA sold its products at 17 percent below market prices in 2022, with the government subsidizing the difference. As the primary buyer from producers, REA disrupts the market's normal functioning, as some producers hold back their production waiting for REA to set the price. Additionally, REA has been paying farmers with significant delays; in 2022, producers waited at least eight months to receive payment.

The government has a short- and medium-term strategy to increase the use of fertilizers. Approved in November 2020 and initiated in 2021, the strategy aims to increase imports of chemical fertilizers and establish a system of monitored prices to reduce the sale price to the public and increase farmers' productivity and production. Fertilizers are imported by a consortium of companies, which distribute them to retailers across the country. In the short term, companies are expected to guarantee the annual import of 280,000 to 400,000 tons of fertilizers.

⁹⁸ World Bank (2023). "Towards a stronger private sector in Angola" (Unpublished).

Despite efforts like REA and the strategy to increase the use of fertilizers, access to agricultural inputs is still limited. The World Bank's Diagnostic Trade Integration Study (DTIS) from 2022 concluded that producers face important challenges in accessing inputs. Producers lack the technical knowledge to use inputs correctly and face high distribution costs due to poor road and rail infrastructure in rural areas. The lack of agricultural extension officers and scientific institutions limits the capacity to guarantee product access and quality. The business environment is not favorable for investing in the production of fertilizers, seeds, and agrochemicals, while bureaucracy and costs in legalization/licensing, registration, and customs clearance constrain access. Despite the government's efforts to increase the import of fertilizers, the estimated need of approximately 900,000 tonnes per year (600,000 tonnes of compounds and 300,000 tonnes of simple fertilizers) is much higher than the current import levels.

Box 3.7. Progress and challenges in trade facilitation in Angola

Angola has made significant progress in trade digitalization, border management, and compliance. Initiatives include automating customs processing through the Customs Management System (ASYCUDA), streamlining import/export licenses with the Integrated System for Foreign Trade (SICOEX), simplifying procedures via the Integrated Platform for External Trade (PICE) and the Single Window for Foreign Trade (JUCE), validating the status of customs declarations in real time with the Integrated Tax Management System, and centralizing all charges via the Centralized State Payment System. Exporters and importers must register in the Register of Exporters and Importers (REI), and risk management processes have reduced the need for border inspections.

However, trade facilitation still has room for improvement. The lack of a coordinated governance structure means that firms often need to submit redundant documentation across different platforms, leading to increased time and costs for exports. For example, JUCE focuses on licenses, permits, certificates, and authorizations, but lacks integration with PICE and advanced features like risk management and cargo logistics interoperability. Angola also lacks formal notification to the World Trade Organization about information publication and contact points for consultations. Border management infrastructure remains insufficient, resulting in paper-based processes and cell phone-dependent communication. Additionally, risk management procedures have yet to be implemented by agencies other than AGT. As a result, Angola's border compliance for exports is both more time-consuming and costly than that of most peers. Exporting firms spent an average of nearly seven days and US\$825 in 2019 complying with customs regulations and mandatory inspections (WDI).

III. Removing Barriers Is Key to Unlock Angola's Agricultural Growth Potential

Solving Land Issues

To address land issues, key policy actions can be organized around the following four areas:

1. Legal and Regulatory Framework

- **Extend the concession of land rights and relax the requirements.** Extending the right to good-faith occupants, in addition to rural communities, would increase formal land access. It could also serve as an opportunity to promote agriculture by requiring investors to present an agricultural development plan when granting them land rights. In Mozambique, land is also owned by the state, but the law grants land rights to people other than rural communities, as those using the land in good faith can also acquire land rights (see Box 3.8). In addition, relaxing the requirement for rural development and construction will give a large part of the population the possibility of formalizing their land rights. These rights could be conditional on less constraining criteria, such as not being located in high-risk areas or environmental protection zones.

Box 3.8. How do rural land rights for good faith occupants work in Mozambique?

In Mozambique, “land is the property of the state and cannot be sold or otherwise alienated, mortgaged, or encumbered.” However, the law defines the Land Use and Benefit Right (*Direito de Uso e Aproveitamento da Terra*, DUAT) to provide security to investors without threatening the interests of communities and local people. The DUAT is renewable, mortgageable, negotiable, transferable, and inheritable, dual registration is allowed so that women can be holders in full equality with men, and nationals and foreigners also have equal access. It can be granted in three ways: local community occupation governed by customary law, good faith occupation after at least 10 years, and state adjudication of a 50-year lease. Investors are required to provide a development plan to the rural community that holds the land right, and then, provided the government approves the plan, a provisional DUAT is granted. The right can be upgraded to a full DUAT of up to 50 years if the development plan is executed as planned.

Source: World Bank 2008.

2. Integration of Land Services

- **Integrate the various registries and create a single land cadaster.** Making the land cadaster and real estate registry interoperable with other registries (the civil identification registry, business registry, and address registry) would increase efficiency in land management. Also, the IGCA could administer a single land cadaster through its Angolan Land Information Management System. Municipal teams in local administrations could provide the data, and the cadaster could be made interoperable with the other cadasters and public registries.

3. Decentralization of Land Services

- **Extend the Angolan Land Information Management System to all municipalities.** The system has been implemented in only seven of the 164 municipalities in Angola. It is a simple, low-cost tool built on free and open-source software that allows for the registration of all types of tenure rights. Implementing this system in all municipalities would be a key step in extending land services across the country and creating a single land cadaster.

4. Land Regularization

- **Adapt the *Minha Terra* program to promote mass land regularization.** The program could be adapted to promote the concession of land rights to all holders who meet certain requirements, in addition to rural communities.

Strengthening Infrastructural Development

Given how underdeveloped irrigation infrastructure is in Angola, expanding it requires significant effort. This includes prioritizing farmer-led irrigation in the short term, increasing private sector participation, and spreading knowledge about irrigation techniques.

- **Strengthen technical and institutional capacity for irrigation development.** Developing irrigation in Angola would require the creation of an institution with the following responsibilities: (1) formulating the country’s irrigation policy and strategy; (2) defining the role of irrigation in national development and economic plans; (3) building relationships with other relevant sectors (public works, water, electricity, environment); (4) defining, preparing, managing, and implementing an irrigation

investment plan; (5) establishing a legal and regulatory framework to support the development of irrigation; (6) preparing technical working tools; (7) preparing a national irrigation inventory; (8) planning and financing; (9) training and educating technicians at various levels and in different specialties (hydraulics, mechanics, agronomics, irrigation design, rural sociology, agricultural economics); (10) coordinating with other institutions such as MINAGRIF and INRH; and (11) monitoring and evaluation.

- **Prioritize irrigation projects based on complexity, execution/implementation time, cost, and available institutional and technical capacity.** Rural infrastructure was seriously affected during the civil war, so expanding the use of irrigation could include the rehabilitation of old perimeters. However, this requires technical expertise that is largely unavailable in Angola currently. Large, centrally managed irrigation infrastructure projects could be complemented by flexible, smaller, decentralized water systems for farmer-led irrigation. Developing the latter through the revitalization of traditional practices and government support for irrigation equipment (MOSAP-3) would increase the irrigated area at a lower investment cost and lower burden on public finances.
- **Involve the private sector in the expansion of irrigation infrastructure.** Through contracted management services, the private sector could play an important role in the rehabilitation, operation, and maintenance of government-funded irrigated perimeters. They could provide financing and technical and management expertise to build and manage irrigation systems through PPPs. For this, the government needs to ensure a regulatory framework that is attractive to private actors and makes a clear distribution of risks between the public and private sectors (World Bank 2022).
- **Implement a comprehensive plan to incentivize the use of irrigation techniques, together with technical support.** Farmer field schools can spread knowledge about irrigation techniques, the use of irrigation equipment and irrigation agronomy, and promote micro- and small-scale irrigation.

Investing in R&D&I and Strengthening Technical/Institutional Capacities

The key policy actions recommended are based on the literature and the policy analysis. At the regional and international levels, relevant experiences exist of effective efforts to strengthen the main research institutions and the global agricultural R&D&I systems, including strengthening the role of the private sector (see Box 3.9).

R&D&I in climate-smart agriculture (CSA) could increase agricultural productivity. Angola's agricultural sector is vulnerable to the impacts of climate change, including droughts, floods, and soil erosion. The country has a diverse range of agroecological zones, with varying climates and soils that require different approaches to farming. Incentives for R&D in CSA technologies, capacity building and extension services, and the development of markets for CSA products can all help promote the deployment of more sustainable farming practices and enhance productivity. These efforts will not only help Angola adapt to the impacts of climate change but also contribute to the country's economic growth and food security.

Further developing R&D&I in Angola, with a focus on CSA and building resilience, requires a multi-pronged approach. It involves public and private partnerships and investments to address structural bottlenecks, such as limited funding for research institutions, a lack of skilled researchers and technicians, a lack of commercially adapted sustainable practices and technologies, and weak coordination among different stakeholders. Some measures that can be prioritized include:

- **Increasing investment in agricultural R&D&I and human capital.** Assessing and repurposing agricultural policies can help address limited funding for R&D&I. By retargeting the support to inefficient sectors, the government can fund research institutions and universities to improve their capacity to develop new and adapt existing technologies and practices that are suitable for local conditions. This could include strengthening the skills of local researchers, building new research facilities, and establishing partnerships with international research organizations for technology transfer and exchange. Additionally, investing in human capital, such as providing scholarships for Angolan students to study agriculture-related fields abroad and supporting vocational training for farmers, would help to build a skilled workforce capable of driving agricultural development in the country.

- **Strengthening agricultural extension services.** Strengthening agricultural extension services is a critical step towards promoting CSA in Angola. Only 3 percent of farmers in Angola receive extension services, with coverage concentrated in a few provinces (World Bank 2018a). To address this issue, and bring the FFS approach at scale, the Angolan government and the development partners could further invest in expanding the reach of extension services, providing training and resources to extension workers, and supporting the development of farmer-to-farmer learning networks. This would enable farmers to access the latest information and technologies related to CSA, such as drought-resistant crops, improved soil management practices, and climate-resilient livestock breeds. Additionally, strengthening extension services could help bridge the gap between research institutions and farmers, facilitating the dissemination of research findings and innovations to the agricultural sector.
- **Unlocking private sector investment.** Promoting PPPs for CSA solutions in Angola could be a key strategy to leverage the expertise and resources of both the public and private sectors to achieve sustainable agricultural intensification. PPPs in the country could facilitate the transfer of knowledge, technology, and innovation to farmers, enhance the capacity of local institutions, and increase access to finance and markets for smallholder farmers. Furthermore, supporting innovative agricultural startups and smallholder farmers is key to unlocking innovative approaches for developing sustainable and competitive agriculture and building resilience to climate change. Governments, NGOs, and private sector players can support startups and farmers by providing access to finance, technical support, and mentorship. For instance, they can provide grants to startups working on innovative farming technologies such as precision agriculture, water-saving technologies, and renewable energy solutions.

Box 3.9. How did Brazil, a global leader in agriculture, promote research, development, and innovation?

With the government's strong commitment to promoting agricultural innovation, Brazil has established a robust agricultural innovation system that includes various actors. The government recognizes the importance of innovation in increasing productivity, improving sustainability, and enhancing competitiveness in the global market. In fact, the Ministry of Science and Technology is a key player in supporting agricultural R&D in Brazil. It has various research programs and initiatives to develop new technologies and processes that can improve crop yields, reduce waste and losses, and enhance the sustainability of agricultural production. The ministry also works in partnership with other government agencies, universities, and private sector organizations to coordinate and support R&D activities in the agriculture sector. In 2021, the Ministry of Science and Technology's budget for agriculture-related research and development was approximately R\$1.1 billion (8.6 percent of the ministry's budget for 2021) (Ministry of Science, Technology, and Innovation of Brazil 2021).

Research institutions are instrumental in promoting the R&D&I agenda in Brazil. Embrapa, the Brazilian Agricultural Research Corporation, is a leading institution (state-owned enterprise) in agricultural research in Brazil and is dedicated to developing innovative solutions for the country's agricultural sector. Established in 1973, Embrapa conducts cutting-edge research in a wide range of agricultural fields, from plant breeding and genetics to soil science and pest management. Embrapa's research efforts are closely aligned with the needs and priorities of Brazilian farmers and agribusinesses. In 2020, Embrapa's budget for R&D was approximately R\$3.7 billion (22 percent of the Ministry of Agriculture and Livestock's budget for 2020) (Brazilian Agricultural Research Corporation 2020).

Brazil's universities also play a significant role in promoting agricultural innovation. Many universities have established agricultural research programs that focus on developing new technologies and practices that can benefit farmers and agribusinesses. These programs often work closely with Embrapa and other research institutions to share knowledge and collaborate on research projects. For instance, the University of São Paulo has several research programs focused on agriculture, including the AgTech Valley program, and aims to promote the development of agtech startups and innovation in agriculture (AgTech Valley).

The private sector is also a critical player in promoting agricultural innovation in Brazil. Companies like Syngenta and Monsanto have invested heavily in developing new agricultural technologies and practices that can improve productivity and sustainability. Brazil has a vibrant venture capital ecosystem, which drives innovation, and agtech startups are receiving significant investments. In 2020, agtech startups in Brazil received a total of US\$302 million in investments, up from US\$70 million in 2019 (AgFunderNews 2020).

Strengthening Technical/Institutional Capacities

Improving agricultural system registries. Establishing agricultural registries and information systems within the sector is the first step to allow for better targeting and more strategic delivery of agricultural policies and services for producers, particularly for smallholders. However, as Angola moves towards the implementation of its registries for crop and livestock producers as well as for animal identification, it remains key that these systems also be used to access a wider range of policies and inform future reforms. Establishing the National Producer Registry and the National Registry for Animal Identification also serves as a basis for strengthening institutional capacities and promoting R&D&I:

- **Angola's National Producers' Registry (*Registo Nacional do Produtor Agropecuário, RNPA*)** will be supported by a Farmer Incentive Management Information System (*Sistema Electrónico de Gestão dos*

Incentivos dos Produtores, SEGI) to identify, target, deliver services and support, authorize transactions, and monitor and evaluate smallholder beneficiaries of the project at a pilot phase—eventually being scaled up to the entire country through other governmental programs. In rural areas with unreliable or nonexistent internet access, climate information services, agricultural extension officers, and/or contracted technical specialists would have access to offline solutions that allow them to access essential data on the various climate-smart technology packages for farmers, local geographical data, and climate information and areas (with offline map technologies).

- **Angola’s National Registry for Animal Identification (*Registo Nacional de Identificação Animal*, RNIA)** will make it possible to control diseases and zoonoses and reduce the incidence of animal theft, a common practice in southern Angola. In addition, the installation of this registry will enhance the value of all livestock value chains, from meat to derivatives and other animal products, thus adding value to the market, reducing imports, and promoting an export-oriented production chain. Animal identification will be done during the annual vaccination campaigns conducted by the Institute of Veterinary Services to reduce the costs of implementing the program.

Enhancing Agricultural Competitiveness

Strengthen the existing programs targeting agricultural production and export diversification. Since its creation, PRODESI has provided training and financial support to producers. However, more efforts to improve the business climate, one of the program’s goals, are needed. Streamlining the licensing process and reducing price controls of goods and services would reduce administrative burdens on investment (IMF 2022a). In addition, the functioning of REA should be revised so that improving people’s access to food does not compromise its supply and price stability. Indonesia, for instance, has set a minimum stock of rice, which has been able to stabilize prices (see Box 3.10). In addition, the role of the Ministry of Agriculture in managing REA should be reinforced, and the decisions should be data-driven. There is neither a crop forecast survey in Angola nor a national food balance sheet that could be used to inform the quantities to be purchased for REA.

Box 3.10. Indonesia’s Agency for Food Security

The Government of Indonesia has established multi-layered national food reserves comprising central, regional, and community levels. Rice was set as the main government food reserve commodity (due to its role in food security, economic security, and national political stability) and is the main dietary commodity for the Indonesian people. As such, in 2018, the Government of Indonesia set a minimum stock of 1-1.5 million tons of central government rice reserve, which proved successful in maintaining the stabilization of national unhulled rice/rice prices at the producer level in 2019-2020. Indonesia’s Agency for Food Security of the Ministry of Agriculture is responsible for managing the program.

Source: Yulianis et al. 2021..

Create a comprehensive plan to promote the use of seeds, fertilizers, agrochemicals, and equipment. Despite REA including agricultural inputs into its stock since 2022, the use of inputs by producers in Angola falls significantly behind that of its peers, acting as an important constraint in raising agricultural productivity. A comprehensive plan would include providing technical training to reduce bureaucratic processes, placing research institutions at the service of quality control and risk assessment, improving MINAGRIF’s information technology infrastructure, prioritizing imports of agricultural inputs in the National Trade Single Window (*Janela Única do Comércio Externo*, JUCE), reviewing the cost structure in the customs clearance process, updating the legislative framework for agrochemicals and fertilizers (which dates from 1965), reducing logistics costs in the import process, and reducing state interference in input markets.

IV. Conclusion and Policy Priorities

Angola's long-term economic growth hinges on its ability to implement structural reforms that enhance productivity, human capital, investment, and demographic potential. While the baseline scenario forecasts modest growth, a reform-driven path could more than double real GDP growth and nearly double GDP per capita by 2050, lifting Angola toward upper-middle-income status. Agriculture, employing nearly half the workforce, is central to this transformation. Improving access to inputs, infrastructure, and markets can unlock the sector's potential, drive job creation, and raise living standards. Targeted reforms across key sectors will be essential to sustain inclusive and resilient growth (Table 3.9).

The NDP 2023–27 positions agriculture as a key driver of Angola's economic growth, food security, poverty reduction, and job creation. Despite Angola's rich agricultural history and vast untapped resources—including abundant land, water, and a favorable climate—the sector remains underdeveloped, facing challenges such as informality in land access, weak infrastructure, underutilized inputs, climate vulnerability, and institutional constraints. While progress has been made in areas like land regularization and farmer training, major gaps persist in irrigation, R&D, and competitiveness. Also, significant knowledge gaps limit policy effectiveness (Table 3.10). Addressing these challenges requires comprehensive reforms: formalizing land rights, expanding irrigation systems, strengthening R&D&I with a focus on CSA, improving extension services, enhancing access to inputs, and fostering private investment. Unlocking this potential will allow Angola's agricultural and livestock sectors to significantly contribute to inclusive growth and economic diversification.

Table 3.9: Summary of policy priorities for agriculture sector growth in Angola

Policy Areas	Short-Term Actions	Medium-/Long-Term Actions
Solving land issues	Improve legal and regulatory environment by extending the concession of land rights, relaxing the requirements, and adapting the Minha Terra program.	Enhance land services by integrating the various registries, creating a single land cadaster, and promoting decentralization.
Strengthening infrastructure development (irrigation)	Implement a comprehensive plan to incentivize the use of irrigation practices and technology.	- Incorporate small-scale solutions to increase the use of irrigation in smallholder agriculture. - Involve the private sector in the expansion of large irrigation infrastructure.
Investing in R&D&I and strengthening technical/institutional skills	Strengthen agricultural extension services.	- Increase investment in agricultural R&D&I and human capital, unlocking private investment. - Strengthen technical/institutional capacities through improving agricultural system registries.
Enhancing competitiveness	Strengthen existing programs targeting agricultural production and export diversification.	- Create a comprehensive plan to promote the use of seeds, fertilizers, agrochemicals, and equipment. - Further improve trade facilitation to reduce border-compliance costs.

Table 3.10: Knowledge gaps

Knowledge Gap	Rationale	References
Incipient mechanization as a method of land preparation and almost nonexistent soil correction levels	Statistical reports from the sector indicate that on average, 70 percent of prepared lands are done manually and 25 percent using draft power. Only around 5 percent is mechanized. With regard to soil correction, given the advantages of limed soils as a factor for increasing productivity for cultivation, a very small group of producers, on their own initiative and resources, manually apply lime or use draft power. Due to the high costs involved in land preparation and soil correction, the emergence of promotion and support programs is imperative; however, the extent of limed lands must be known and accurately evaluated.	Campaign Results Reports, December 2021 and December 2022, pp 26 and 27, respectively.
Very limited technical assistance represents a challenge for rural extension to respond to the growing demand for production, mostly family based.	Data from the Agricultural Development Institute of 2021 indicates that out of 1.7 million diagnosed peasant families, a total of 1.2 million families were assisted, accounting for less than 10 percent of the total number of family members producing in Angola.	Campaign Results Reports, December 2021, p 23; RAPP, Vol. III.
The production of agricultural statistical data in Angola faces challenges such as difficulty accessing data, the need to modernize infrastructure, and lack of resources for the sector.	Difficulty in gathering accurate information about production, especially from small farmers, is a significant challenge. The lack of recording tools and the location of many farmers in rural areas hinder data collection. More investments in technologies aimed at using electronic recording systems and information technologies can help facilitate data collection and processing extensively in the sector, from research to production, marketing, and consumption.	

Annexes

Annex 1: Key macroeconomic indicators

	1980-2009	2010-2024	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Structural Peer Average 2015-2024	Aspirational Peer Average 2015-2024
Real/Income														
Real GDP growth, market prices	5,5	1,6	0,9	-2,6	-0,1	-1,3	-0,7	-5,6	1,2	3,0	1,0	4,4	3,8	4,0
Investment, % change	20,8	1,3	-1,9	-19,5	3,0	-5,5	16,6	-2,0	5,4	8,5	-5,3	7,2	7,3	4,8
Public													9,6	3,5
Private													6,6	5,6
Consumption, % change	6,3	2,3	-0,2	1,8	2,3	-3,1	-3,8	-11,9	2,5	5,0	-5,9	5,0	4,7	4,5
Public	5,1	-1,4	-8,8	-10,5	0,3	-1,7	5,1	-13,9	-1,7	8,4	-36,7	-1,9	8,4	4,0
Private	6,9	3,5	3,0	5,9	2,9	-3,4	-6,2	-11,3	3,7	4,0	3,1	6,2	5,3	4,7
Net exports, % change	-359,9	4,0	14,3	-5,1	46,7	2,9	-9,6	4,9	-11,6	-12,5	-5,6	16,1	-3,0	-66,6
Exports	33,8	-3,3	-14,7	-18,4	24,5	-7,6	-17,4	-7,3	-8,6	3,3	-6,2	5,0	5,5	6,1
Imports	36,2	-6,2	-23,9	-24,7	11,2	-16,0	-25,0	-21,7	-3,8	26,1	-6,8	-6,2	6,6	6,8
Investment, % of GDP	10,3	31,7	31,9	26,3	27,1	26,0	30,5	31,7	33,0	34,7	32,6	33,5	27,4	24,6
Public	6,4	12,9	7,7	3,9	10,4	13,3	16,3	10,7	11,9	14,5	13,5		7,3	4,9
Private	7,2	18,6	24,1	22,4	16,8	12,6	14,2	21,0	21,1	20,2	19,1		21,1	17,0
Consumption, % of GDP	2,6	55,8	56,7	59,3	60,8	59,7	57,9	54,0	54,7	55,7	51,9	52,2	54,5	62,1
Public	19,1	13,4	14,0	12,9	12,9	13,6	12,4	12,1	12,7	7,9	7,5		12,6	13,1
Private	41,5	42,4	42,7	46,5	47,9	46,9	44,3	41,6	42,6	43,0	44,0	44,7	60,2	53,8
Net Exports, % of GDP	0,6	14,2	12,3	12,0	17,6	18,4	16,7	18,6	16,2	13,8	12,9	14,3	-0,8	5,4
Exports	32,7	36,2	38,1	31,9	39,8	37,3	31,0	30,4	27,5	27,6	25,6	25,7	35,9	32,6
Imports	28,4	23,5	25,8	19,9	22,2	18,9	14,3	11,8	11,2	13,8	12,7	11,4	36,9	27,2
Potential GDP growth														
Real GDP growth (LCU)	5,8	3,5	4,1	3,3	1,6	1,5	1,2	1,8	1,6	1,9	2,2	1,9	4,9	4,1
TFP, contribution (ppt)	5,5	1,6	0,9	-2,6	-0,1	-1,3	-0,7	-5,6	1,2	3,0	1,0	4,4	3,8	4,0
Capital accumulation, contribution (ppt)	1,0	-3,6	-5,2	-8,0	-3,9	-5,0	-4,0	-9,3	-3,8	-0,8	-3,0	0,7	-0,1	0,6
Labor, contribution (ppt)	6,0	4,0	4,9	4,1	2,4	2,3	1,9	2,5	2,1	2,2	2,5	2,0	2,7	2,4
	1,5	1,6	1,3	1,3	1,4	1,4	1,4	1,2	2,9	1,6	1,6	1,7	1,5	1,2
Inclusion														
Poverty rate, \$2.15 poverty line		34,7				31,1			35,2	35,4	35,9	35,6	44,9	14,1
Gini Inequality Index	47,3	51,3				51,3							44,1	43,9
Demographics and Jobs														
Age dependency ratio (% of working-age population)	91,0	91,6	92,2	92,2	92,1	91,9	91,6	91,4	91,0	90,6	90,1		89,9	65,8
Employment to working-age population ratio	64,9	64,5	64,2	64,0	63,7	63,6	63,4	63,1	65,2	65,3	65,5	65,5	71,9	57,6
Male	67,8	66,8	66,7	66,2	65,8	65,4	65,1	64,6	66,5	67,4	67,6	67,7	74,2	69,5
Female	62,2	62,3	61,9	61,8	61,8	61,8	61,6	61,6	63,9	63,3	63,3	63,3	69,5	45,6
Labor force participation rate	77,8	76,9	76,9	76,7	76,4	76,2	76,0	75,7	77,4	76,5	76,6	76,6	77,9	64,2
Male	79,4	78,9	78,9	78,7	78,4	78,2	77,9	77,6	78,9	78,8	79,0	79,0	80,3	76,6
Female	76,4	74,9	75,0	74,8	74,6	74,3	74,1	73,9	75,9	74,2	74,2	74,2	75,5	51,7
Unemployment rate	16,6	16,1	16,5	16,6	16,6	16,6	16,5	16,7	15,8	14,6	14,5	14,5	8,2	10,5
Male	14,6	15,3	15,5	15,8	16,1	16,3	16,4	16,8	15,8	14,5	14,4	14,3	8,0	9,8
Female	18,6	16,9	17,5	17,4	17,2	16,9	16,5	16,6	15,8	14,7	14,7	14,6	8,3	11,5
Structural Transformation														
Real GDP growth, factor prices, % change	8,6	1,4	3,1	-2,1	-1,0	-3,0	-1,1	-6,8	-0,1	3,1	0,6	4,4	4,1	4,0
Agriculture	4,7	5,8	10,2	3,9	0,5	-2,5	-1,7	2,8	17,2	3,9	2,7	4,3	4,8	2,6
Manufacturing	10,4	-0,6	8,3	-0,6	-3,2	-6,2	-3,5	-10,5	-8,3	1,8	-1,0	4,5	4,1	3,2
Services	7,9	3,3	-4,6	-5,3	2,1	1,5	2,3	-3,9	6,2	4,2	1,8	4,4	4,6	5,1
Agriculture, % of GDP	6,7	9,1	9,1	9,8	10,0	8,6	7,9	9,9	11,5	13,7	14,9		18,6	9,9
Manufacturing, % of GDP	60,2	48,1	41,9	42,6	42,2	47,9	49,8	45,7	47,5	45,2	45,3		32,9	36,0
Services, % of GDP	33,4	43,2	48,7	47,0	46,8	43,2	42,1	44,4	40,9	41,2	39,8		44,2	49,4
Sectoral composition of employment														
Agriculture	39,5	54,8	56,8	56,2	55,3	54,4	53,4	55,1	56,7	56,3	56,2		54,4	29,1
Manufacturing	8,4	7,2	7,8	7,5	7,3	7,1	6,9	6,3	5,7	5,6	5,6		13,1	21,1
Services	52,0	38,0	35,4	36,4	37,5	38,5	39,7	38,6	37,6	38,1	38,2		32,4	49,8
Employment Structure														
Share of waged employment in total working age population	16,2	21,8	23,3	23,1	22,8	22,5	22,2	21,7	22,6	22,7	22,6		11,4	33,2
Average years of schooling, share of HIC average	14,6	24,7	24,8	24,9	25,1	25,2	25,3						32,0	71,9
External														
Current account balance, % of GDP	8,5	4,7	-8,8	-3,1	-0,5	7,3	6,2	1,6	11,8	10,4	4,6	6,7	-6,7	-1,9
FDI, % of GDP	6,1	-3,1	11,1	-0,3	-10,0	-8,1	-5,8	-3,8	-6,5	-6,3	-2,5		4,3	2,9
Exchange rate, LCU/USD	21,2	317,1	120,1	163,7	165,9	252,8	364,8	575,9	624,1	460,4	685,0	867,0		
REER	81,5	83,2	100,0	88,9	103,4	84,9	66,4	53,4	51,7	81,8	76,7	77,4		
Reserves, months of imports	1,8	6,2	6,5	9,1	5,8	5,4	6,4	8,0	6,9	4,4	5,1		3,4	4,1
Memo Items														
Credit to private sector, % of GDP		15,1	25,2	21,1	17,0	14,9	15,3	13,7	10,4	8,6	9,6		12,8	88,5
Interest rate, annual average		15,2	11,0	16,0	18,0	16,5	15,5	15,5	20,0	19,5	18,0	19,5	8,0	8,1
Inflation, CPI	19,7	18,8	10,3	32,4	31,7	24,8	17,1	22,3	25,8	21,4	13,6	28,2	10,7	12,4
Fiscal deficit, % of GDP	6,6	0,3	-6,1	-5,6	-6,8	1,8	1,6	-1,1	2,3	6,5	1,3	-1,5	-1,0	-2,7
Public debt, % of GDP	34,8	68,5	55,8	74,9	65,0	88,6	119,6	139,5	87,9	69,5	88,7	70,9	73,8	42,3
-of which external, % of GDP	23,4	46,2	33,8	44,3	35,6	55,1	84,5	102,9	63,7	50,3	67,0	53,5	68,4	14,1

Source: WDI, ILO, MPO and CEM 3.0.

Annex 2: Natural resource management, climate change, and Angola's overall economic performance

The impact of abundant natural resources on economic growth has been extensively discussed in the literature. One key impact is Dutch disease, which posits that resource booms lead to appreciation in the real exchange rate. Appreciation undermines external competitiveness, reduces investment, and ultimately hampers economic growth (Corden and Neary 1982; Sachs and Warner 1995). Empirical studies generally support the notion that natural resources tend to impede economic growth (see Havranek et al. 2016 for a meta-analysis). However, some research suggests that the impact may depend on institutional quality, itself highly influenced by natural resources (Mehlum, Moene, and Torvik 2006).

Angola's strong dependence on natural resources has led to significant economic distortions. From 2002 to 2014, natural resources accounted for 36.2 percent of GDP, 77 percent of tax revenues, and almost 98 percent of goods exports. As a consequence, the significant increase in international commodity prices contributed to appreciation in the REER,⁹⁹ undermining the external competitiveness of the non-oil sector and worsening the trade balance and the economy's overall performance. This is clear evidence of Dutch disease.

A fiscal policy and measures to further strengthen the fiscal framework are key tools for addressing the negative effects of Dutch disease. Angola has not been able to stabilize its fiscal policy or to manage Dutch disease. Improving implementation of mechanisms (such as sovereign wealth funds) for channeling rents from natural resources into long-term savings and investments may help reduce pressure on the local currency and attenuate negative impacts on non-oil sectors. The use of fiscal frameworks—a budget balance rule targeting the non-oil primary balance to help anchor fiscal policy; financial hedging instruments; better domestic resource mobilization; and reform of the public investment framework—will help reduce the fiscal risks associated with short-term oil price volatility, promote better management of fiscal policy, and effectively channel oil revenues into high-yield public investments. The 2020 Fiscal Responsibility Law provides a strong basis for prudent fiscal management.

Climate change is a further major challenge for the Angolan economy, making growth prospects highly vulnerable. According to the Country Climate and Development Report (CCDR), climate change could reduce Angola's economic output by 3 percent by 2050; and by 2100, direct economic losses in agriculture due to droughts could rise from USD 100 million a year today to more than USD 700 million. Annual temperatures in Angola have warmed by an average 1.4°C since 1951; and the country was the 41st most vulnerable in the world in 2021 according to the Notre Dame Global Adaptation Index (ND-GAIN). Climate change leads to increased climate variability, rising temperatures, storms, floods, and more abundant rainfall, with severe repercussions for agriculture, fisheries, and hydroelectricity production, on which Angola is heavily dependent. Unstable rainfall jeopardizes the availability of year-round freshwater, leading to lower production of essential crops, which hits the income of many rural households and compromises food security. It is estimated that, in 2021, 3.81 million people in Angola's six southern provinces lacked food, and more than 1.2 million people were still lacking water due to drought. This underscores the need for urgent action on climate change, particularly with climate risks expected to intensify in coming years. Estimates are that most of the country will experience warming from 1.5°C to 2.5°C over the 2040–2060 period.

Greater economic diversification is key to insulating the Angolan economy from international oil price shocks and the adverse effects of climate change. This entails moving the extractive sector away from oil toward minerals critical to the global energy transition; strengthening the non-extractive sector's competitiveness; and improving productivity in agriculture, manufacturing, and energy. Greater economic diversification would also promote climate resilience in the most promising non-oil sectors, which are generally extremely sensitive to climate. Transition to a low-carbon economy, with a greater supply of green, climate-resilient energy (hydroelectric, solar, wind) and better management of climate change risks and opportunities, would allow Angola to promote more sustainable and inclusive growth.

99. Angola's REER index rose from 59.8 to 151.9 over 2002–2014.

Annex 3: Angola's 2018 CEM—key findings and policy recommendations

Angola's 2108 CEM highlighted macroeconomic instability and social exclusion as major challenges to the country's growth. Dependence on oil hindered the development of a competitive, diversified non-oil economy that could provide jobs and harness economic potential. High poverty and inequality pointed to the weakness of an economy focused on natural resources and to the need for shared prosperity. Other challenges included inadequate workforce skills, weak institutions, regulatory issues, and macroeconomic imbalances. The 2018 CEM emphasized restoring macroeconomic stability and promoting an inclusive economic model as priorities for accelerating growth in Angola.

Following a political transition with the 2017 elections, the new administration recognized these challenges. The new administration demonstrated strong political will at high level to implement a bold policy reform agenda to restore macro-fiscal stability and introduce a more diversified and inclusive growth model. This was supported by a three-year IMF Extended Financial Facility (EFF) of USD 3.7 billion (2018–2021), and World Bank Development Policy Financing (DPF) of USD 1.7 billion (2019–2022). The reform program was anchored in the Government's macroeconomic stabilization plan (PEM—Programa de Estabilização Macroeconómica) and in the 2018–2022 NDP, which targeted: (i) a more flexible exchange rate regime; (ii) a monetary anchor to inflation; (iii) fiscal consolidation and debt sustainability; and (iv) improved macro-financial stability.

The GoA implemented several key exchange rate, monetary, fiscal, and governance reforms. The reforms included a more flexible and transparent exchange rate regime; fiscal measures such as adoption of VAT; adjustments in utility pricing; anti-money laundering reform; and enhanced transparency in public investment. The Government adopted a fiscal responsibility law, a new public procurement law, and a debt management strategy, and began drafting annual borrowing plans. In addition, the Government introduced a medium-term fiscal and expenditure framework, and began producing timely general government accounts and fiscal and debt bulletins. The Government also initiated full budgeting and reporting of fuel subsidy costs and fuel price adjustments; a new BNA law to reinforce its independence and reduce its fiscal dominance; and a new financial system law.

Reforms aimed at improving the business environment included approval of a new private investment law. The law removed local shareholder requirements for foreign investors. In addition, enactment of a competition law that facilitated establishment of a competition authority. An ambitious privatization and SOE reform program reduced the state's presence in the economy. To improve transparency in the extractive sector, the Government joined the EITI.

To promote greater social inclusion, the Government launched the Kwenda Program, Angola's first nationwide cash transfer program. This targeted approximately 1.6 million beneficiary households.

Despite considerable effort to reform policy and gain high-level political support, positive impact on economic diversification and equity remained limited, due to institutional weaknesses and external challenges. Poor institutional capacity is a significant challenge to implementation of a complex reform program, which requires strong coordination across different sectors, effective communication, transparency, monitoring, and accountability. Uncertainty over the political transition deterred many investors. Public fatigue with the impact of change on living conditions and with the election cycle slowed the pace of structural reform. Moreover, the limited involvement of key social partners in shaping the reform agenda (civil society, political opposition, academia, etc.) may have undermined the Government's credibility in executing a program that required deep reform in the state's modus operandi.

Externally, the country faced successive exogenous shocks that limited the impact of reform on economic growth. A prolonged fall in oil prices strained public finances and increased the cost of international financing amid high indebtedness. The prolonged social and economic impact of COVID-19 redirected government efforts toward its mitigation. The adverse global economic environment also led to a reduction in FDI flows, particularly in the oil sector, while non-oil FDIs remained insignificant.

The limited implementation of enacted policy reform offers key lessons for success in future structural reform. Deep transformation is required to achieve a more stable macro-fiscal environment and support economic diversification. Box 3.1 presents some of the best international practice for designing and implementing structural reforms. These include securing strong political leadership; using crisis to stimulate reform; good sequencing and timing; careful selection of technocrats and the reform team; institutionalizing reform; monitoring and evaluation systems; the role of civil society; and external commitments.

Box 3.1: Best international practice for reform programs

In many countries, the development agenda requires implementation of a wide range of macro-structural reforms to remove barriers to higher, more resilient, sustainable economic growth. Global evidence from successful reform demonstrates the key political economy drivers for adopting, implementing, and sustaining an effective reform agenda:

- 1. Political leadership:** Regardless of other drivers, political leadership is the yeast that makes them rise. Opportunities for reform are maximized when crisis leads to political shake-up.
- 2. Use of crisis to stimulate reforms:** Economic, social, or political crisis, or a sense of impending crisis, can be significant triggers for reform and can provide an opportunity to stimulate action.
- 3. Importance of sequencing and timing:** The sequencing of reform is crucial. Understanding the drivers of change and their sequencing increases the chance of successful and sustainable reform: initial bold reforms can create momentum for further changes by building new forces and alliances.
- 4. Technocrats and the composition of reform teams:** Reform can be driven by technocrats, such as politicians and senior civil servants trained in economics or other fields, who develop rational policies to lead the country forward. The success of reform projects often hinges on the technical credibility of the team involved.
- 5. Institutionalization of reform:** Reforms become sustainable only when they are institutionalized into the machinery of government. This involves building constituencies for change and including them in policy processes. Successful reforms often involve creating new institutions that give technocrats more power and influence.
- 6. Monitoring and evaluation (M&E) systems:** Effective M&E systems are essential for tracking reform progress and overall performance. Indicators should be clear, concise, and reasonable. They should facilitate early capture of changes in laws and policies, and of more implementation-driven data such as budget and expenditure. This information should be useful and relevant to policymakers and government officials.
- 7. Changes in civil society:** Reform is not a task only for governments, even in countries with weak civil societies. Other stakeholders, such as companies and workers, can help build and sustain support for reform.
- 8. External commitments:** External commitments are often essential to reform, even in developed countries. External obligations allow reform-minded governments to shift responsibility, and thus the political costs of reform. Therefore, support from multilateral institutions like the IMF and the World Bank can catalyze reform programs.

Source: IFC; Multilateral Investment Guarantee Agency (MIGA); Lessons for Reformers: How to Launch, Implement, and Sustain Regulatory Reform (World Bank, 2009).

Annex 4: Table of key policy recommendations

Objective	Relevant government reforms	Policy recommendations to deepen reform
<i>Address macroeconomic imbalances: fostering macroeconomic stability through appropriate economic and financial policies is a prerequisite to development of a viable and diverse non-oil sector.</i>		
<i>Reduce volatility and procyclicality from commodity dependency and ensure public debt sustainability</i>	Review of existing oil funds and consolidation into a single sovereign wealth fund, with the dual objective of fiscal stabilization and long-term investment.	Adopt a MTFF with fiscal targets on the non-oil budget balance to induce reduction of public debt, with strong public financial management and fiscal stabilization buffers.
		Develop the domestic capital market to create access to long-term, local-currency finance and reduce dependency on FX debt.
<i>Sustain gradual fiscal consolidation</i>	Increase of efficiency in tax audits and monitoring of large taxpayers (2017–2018), preparatory for adopting VAT (2019).	Broaden the non-oil tax base through greater tax compliance, elimination of tax exemptions, and introduction of VAT. Ensure long-term debt sustainability.
	Reform of price subsidies (fuel sector and utilities). Expected savings intended to fund well-targeted programs (social protection, health, education) (PEM, December 2017).	Increase efficiency of social expenditure and capital investment to enhance the availability of social and production services, including human capital, energy, connectivity, and knowledge-intensive services.
<i>Adopt a more flexible exchange rate regime and ensure a fair value exchange rate</i>	Base money targeting in preparation of a managed float (November 2017).	Establish a coherent and transparent FX market intervention policy.
	Replacement of the currency peg with a managed float (January 2018).	Develop a well-functioning FX market by adopting a clear strategy for eliminating FX restrictions and multiple currency practices.
	FX sales to priority sectors discontinued (October 2018).	
	Clearance of FX backlog (expected by end-2018).	
<i>Ensure macro-financial stability</i>	Completion of a crisis simulation exercise to strengthen crisis preparedness (August 2018).	Enhance supervisory effectiveness and move to risk-based supervision.
	Update the National Risk Assessment (NRA) (expected by end-2018).	Develop a multi-disciplinary, risk-based AML/CFT strategy that enhances prevention, detection, and repression.
	A revised Financial Institutions Law (expected by end-2018).	
<i>Improve competitiveness and private sector development: cross-sector policies will support private sector-led growth and economic diversification.</i>		
<i>Improve the business environment</i>	Adoption of the Private Investment Law to ease constraints on private investment and attract FDI (June 2018).	Simplify government procedures (e.g., streamlining, online platforms).
	Several business reforms to improve the 2018 World Bank Doing Business ranking, e.g., improved registration procedures and elimination of paid-in minimum capital requirement (2017–2018)	Reform the investment policy and framework for promoting investment.
	Launch of the PRODESI program for diversifying exports and substituting imports, focused on strengthening production in priority goods and services and cross-sectional initiatives (including easing constraints on doing business) (November 2017).	Strengthen public-private sector dialogue by engaging the private sector in identifying reform priorities and implementing monitoring (e.g., agriculture).
		Promote ICT as a catalyst for efficiency and economic diversification.

<i>Strengthen human capital and skills</i>	Planned fiscal decentralization to improve the fiscal viability of local government and strengthen social services delivery (NDP, April 2018).	Strengthen governance and management mechanisms in the education sector; streamline the education sector’s budgeting and planning processes; improve coordination between line ministries, provinces, and municipalities; improve the quality of expenditure.
	Reforms to improve the quality and accessibility of technical and vocational education and training (TVET) (adopted 2017–2018).	Increase access to quality skills development and training programs to match the needs of the labor market in priority sectors, including agriculture.
<i>Improve infrastructure</i>	Develop a comprehensive transport strategy and investment plan (2017–2018).	Establish an operational framework to promote PPPs in infrastructure; assess and deal with the potential fiscal costs and risks arising from PPP projects.
	NDP-emphasized infrastructure development (transportation and logistics, energy, water and sanitation, communications), including the promotion of PPPs (April 2018).	Develop rural infrastructure to unlock agricultural potential: electrification, tertiary roads, rural water management/irrigation, storage facilities, ICT.
<i>Increase access to finance and financial inclusion</i>	Reforms to increase financial inclusion and improve credit information infrastructure (e.g., savings and financial education campaigns; financing schemes extending credit lines and guarantees to small businesses) (adopted 2017–2018).	Strengthen the regulatory and institutional framework for access to credit (broaden the credit information infrastructure; improve the insolvency regime).
		Modernize the payment system and facilitate retail electronic payments (especially mobile payments).
		Improve consumer protection and financial literacy.
		Expand access to microfinance and SME finance, particularly to the agriculture sector (e.g., crop and weather-based index insurance).
<i>Strengthen regulatory and institutional frameworks: effective and enabling institutions are critical to increasing private investment and economic diversification; trade openness can be an important catalyst for economic diversification.</i>		
<i>Promote market-oriented policies and strengthen competitiveness</i>	The Competition Law to foster competition in domestic markets and curb monopolistic practices (May 2018).	Promote competition by adopting an effective competition policy framework.
	An SOE oversight agency mandated to resize and restructure the SOE sector (established June 2018).	Address potential market distortion in existing government programs (e.g., for credit, SMEs, or priority sectors).
		Reduce the share of state ownership in the economy, including privatization of SOEs and the ongoing restructuring of Sonangol.

<i>Improve institutional framework</i>	Creation of an anti-corruption agency to prevent and repress corruption (March 2018).	Review the role of regulatory agencies and promote a regulatory regime that offers space to investors in a dynamic market environment (as opposed to a risk-averse, controlling approach). Increase transparency and emphasize communication and accountability through stakeholder consultation and increased access to administrative data.
	Launch of the PRODESI program to support private investment (November 2017).	
<i>Increase openness to trade and investment</i>	Simplification of visa issuance procedures (March 2018).	Improve the quality and competitiveness of trade and transport infrastructure, and logistics, which is essential to reduce cross-border transaction costs.
	Implementation of the ASYCUDA system at the Port of Luanda (April 2018).	Leverage regional integration initiatives and preferential trade agreements to increase economic diversification and integration into global and regional value chains.
	Establishment of the National Trade Facilitation Committee (July 2018).	

Source: Angola 2018 Country Economic Memorandum

Annex 5: Long-Term Growth Model-Natural Resources (LTGM-NR)

The World Bank's Long-Term Growth Model (LTGM) is a useful tool for assessing Angola's long-term growth prospects. The LTGM was developed by the World Bank to analyze future long-term growth in developing countries. It provides valuable insight into how current growth fundamentals will impact future economic growth. The LTGM specifically evaluates the influence of key growth drivers (e.g., investment trends, productivity, population) on economic growth. Additionally, it assesses how other important factors (e.g., human capital, demographic changes, labor market participation, improved business environment, and institutions) impact future economic growth. This tool addresses several important questions that guide policymakers in implementing initiatives to accelerate economic growth. It assesses the impact of specific policy interventions, estimates the time required to achieve a particular growth rate, and compares a country's expected growth performance with its peer countries, among other relevant issues. In sum, the LTGM captures the main dimensions that contribute to understanding and improving key factors to boost economic growth in developing countries.

The LTGM's natural resources (NR) extension applies to Angola on account of the country's high dependence on oil extraction. The LTGM-NR extends the standard LTGM by considering various growth dynamics in developing countries that rely heavily on natural resources. Commodity-exporting developing countries are exposed to additional growth drivers that significantly impact long-term economic growth—commodity price shocks, natural resource discoveries, depletion of reserves, and the fiscal management of resource revenue. Additionally, the LTGM-NR analyzes how these commodity-related growth drivers interact with standard growth fundamentals to determine the growth path of resource-dependent countries. Therefore, the LTGM-NR divides the economy of these countries into two main sectors: the resource sector and the non-resource sector. Given Angola's significant dependence on the oil sector, the LTGM-NR is particularly suited to analyzing its future long-term growth dynamics.¹⁰⁰

Two scenarios are developed to assess potential long-term growth trajectories: a baseline, or business-as-usual, scenario and an alternative, or reform, scenario. The baseline scenario assumes that fundamental growth drivers will continue their current trends until 2050:

1. The population is expected to continue growing, although decelerating, to 2050 at approximately 2.2 percent; and the country is expected to benefit from DD as the share of the working-age population increases to 60.1 percent, and labor market participation to 79 percent;
2. Human capital is expected to grow a modest 0.3 percent over the same period;
3. TFP of the real non-oil sector is expected to improve gradually by 1.8 percent over the period, based on the observed historical 20-year average.

As regards oil sector trends, the baseline scenario assumes:

1. Oil reserves of about 9.5 billion barrels, which corresponds to about 9 years of reserves at current production levels;
2. An increase in the oil price to about USD 95.9 per barrel in 2050;
3. A gradual increase in production toward the end of the current decade, followed by a return to structural decline, reaching about 250,000 barrels per day in 2050, as projected by the authorities.

The reform scenario assumes an impact from potential policy reform on fundamental growth drivers and future growth trajectories.

¹⁰⁰ Being a supply-side model, the LTGM-NR does not weigh the impact on aggregate demand of the short-term effects of price and discovery shocks.

Annex Table 5.1: Growth-driver assumptions for baseline and alternative scenarios

Average annual change in %, unless otherwise indicated	2023–2030		2030–2040		2040–2050	
	Baseline	Alternative	Baseline	Alternative	Baseline	Alternative
Non-oil sector assumptions						
Population	2.9	2.9	2.6	2.6	2.2	2.2
Working-age population	53.5	53.5	56.1	56.1	60.1	60.1
Labor market participation	77.9	78.1	77.9	78.4	77.9	78.8
Human capital	0.5	0.7	0.5	1.1	0.5	1.5
TFP	-1.3	-0.7	-0.2	0.5	0.6	1.3
Private investment (% of GDI)	20.2	21.1	20.2	22.8	20.2	24.9
Public investment (% of GDI)	3.5	4.4	3.5	6.3	3.5	8.4
Oil sector assumptions						
Oil production (mbbl/day)	1.07	1.08	0.66	0.69	0.35	0.38
Oil price (USD/bbl)	80.6	80.6	85.7	85.7	92.4	92.4
Oil reserves (billions of barrels)	7.3	7.3	4.7	4.6	3.0	2.8
Source: Author's calculations based on the LTGM-NR model; authorities' data; British Petroleum; International Energy Agency.						

Annex 6: Angola's Demographic Dividend (DD) potential

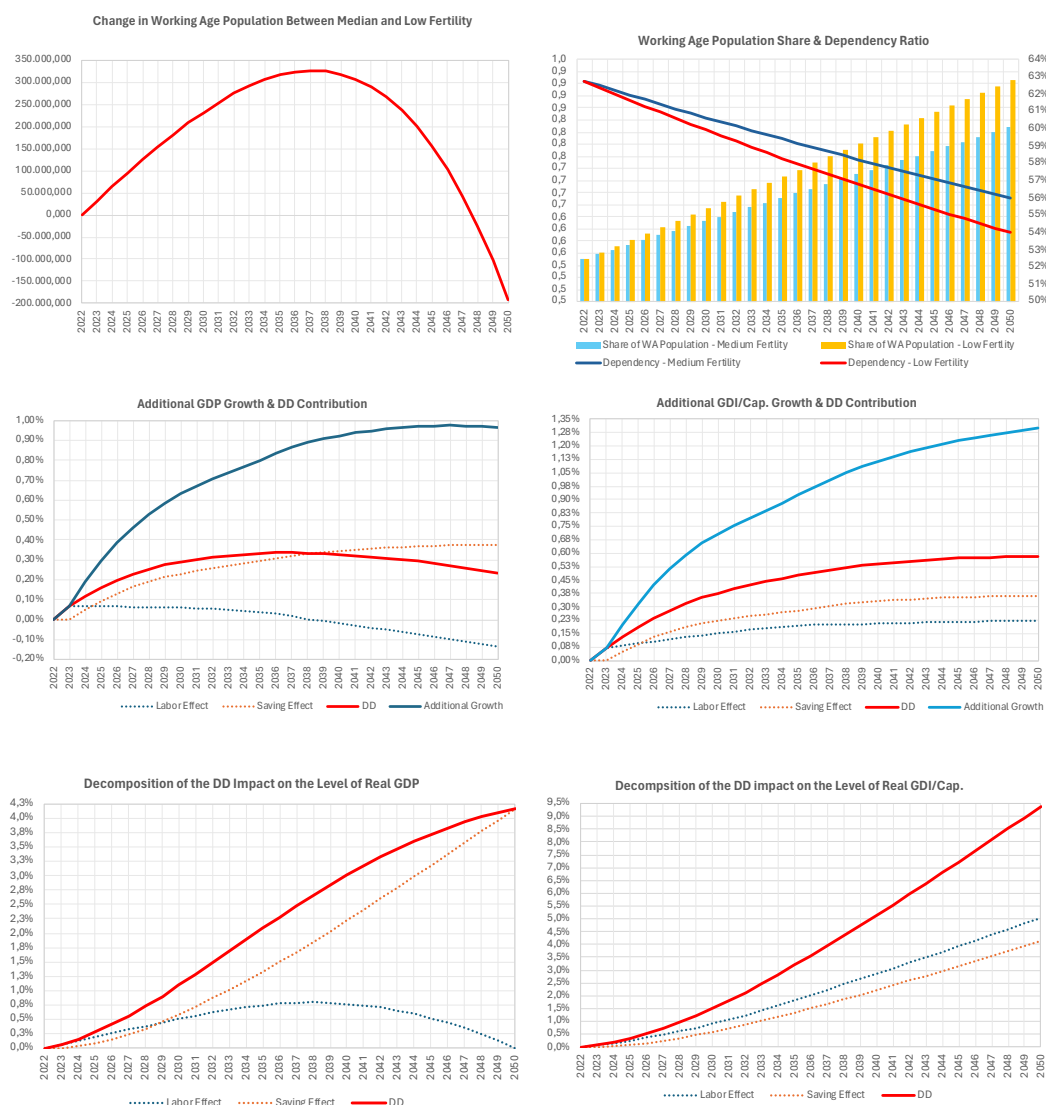
Angola can benefit from DD if the trends of the past 20 years continue, additional workers find jobs, and new savings are invested. Angola's fertility rate has been declining, down from 6.57 in 2002 to 5.21 in 2022. Population growth projected over the next 20 years in the UN population division database, for a medium-fertility scenario, conforms with the trend observed over the past 20 years. Baseline growth uses the medium-fertility population projection for 2023–2050. Consequently, the baseline implicitly includes growth impact from medium fertility. Growth impact works through two channels: the labor channel and the savings channel. Decline in fertility increases the share of the working-age population, which boosts GDP if the growing workforce finds productive jobs. With declining fertility, the dependency ratio (i.e., the proportion of those under age 15 and over age 65 to the working-age population) also declines. With fewer dependents, workers can save more, which can boost investment and GDP as long as there are investment opportunities and the financial sector is able to intermediate additional resources efficiently.

Provided Angola creates the conditions needed to harness its DD, this can substantially boost GDP and GDP per capita growth. Assuming Angola is able to accelerate moving from medium fertility to low fertility by reducing unwanted adolescent pregnancies, the share of the working-age population would increase from 60.1 percent to 62.8 percent, and the dependency ratio would decrease from 0.66 to 0.59; this would allow an increase in savings. Assuming that reform fosters diversification and employment, and modernizes the financial sector, the country would have a 4.3 percent higher GDP and a 9.8 percent higher GDP per capita. The GDP growth rate would be 3.14 pp higher (0.51 pp from DD). The GDI per capita growth rate would be 3.45 pp higher (0.86 pp from DD).

The two DD channels work together to boost growth and income but the labor channel loses steam earlier, highlighting the need to invest in skills. Decline in fertility is already taking place in Angola. Therefore, the window for benefiting from a DD quantitative labor effect will close relatively quickly. The excess workforce in a low- rather than medium-fertility scenario is capped at 331,000 in 2037. After 2037, the slower overall demographic dynamic lowers the share of the working population and the excess starts to decline, becoming negative from 2047 onward. Therefore, it is crucial that Angola invests in the skills and quality of its working population to compensate for the projected decline in numbers in 20–25 years. In parallel to the labor channel, the savings channel continues to work over the projection period as the dependency ratio declines, with a growing differential between low- and medium-fertility dependencies. However, from 2046, the savings effect dynamic slows down, indicating that DD is about to end, probably over the following decade. Usually, along with this comes a change in dependency (moving toward old-age dependency) followed by an overall increase in dependency, due to a greater number of elders. Therefore, in 30 years, Angola will have to create a sustainable system to provide for its elders (currently of working age).

Were Angola's baseline to be high fertility rather than medium fertility, then a low-fertility projection would lead to greater DD. At high fertility, the working-age population would reach 57.6 percent by 2050, and the dependency ratio would be 0.74. By accelerating toward lower fertility, the country's GDP would be 8 percent higher and its GDP per capita 19.2 percent higher. This could move the country from one income category to another.

Annex Figure 6.1: Medium- to low-fertility DD



Source: Angola LTGM-NR. Author's simulation.

Annex 7: Reform in Angola's oil sector

To mitigate the medium-term decline in oil production, the Government implemented a set of regulatory reforms to enhance the oil sector's competitiveness. Over the 2018–2022 period, the GoA adopted a comprehensive reform package to improve the oil industry's legislative and regulatory framework and address the structural decline in oil production (Annex Table 7.1). Key reforms included creation of the National Agency for Petroleum, Gas and Biofuels (ANPG— *Agência Nacional de Petróleo e Gás*), which took over responsibilities from the national oil company Sonangol for regulating upstream operations, such as awarding concession blocks for onshore and offshore exploration and production fields. The Government also restructured Sonangol to focus the company on its core business of oil and gas exploration and production. To improve transparency in the oil sector, Angola joined the EITI in June 2022. These and other initiatives are part of Angola's action plan for the oil sector, which aims to boost and intensify discovery of oil reserves to mitigate the sharp decline in oil production.

The Government foresees that oil production will remain above 1 mb/d by 2027 as new oil fields start production. In the long term, the GoA plans to: (i) maximize the potential of current oil resources by promoting investment by local, regional, and independent actors, with a focus on marginal oil fields; (ii) promote the exploration of new oil resources by revising current contractual agreements and the production sharing contract (PSC) model; (iii) align the oil sector with the energy transition mandate; (iv) remove contractual barriers; (v) boost efficiency by promoting coordination; and (vi) review the legal and fiscal framework.

Annex Table 7.1: Regulatory reforms in Angola's oil and gas sector 2018–2022

Decree	Objective
Presidential Decree N°. 86/18, of April 2, 2018.	Defines the rules and procedures for public tenders for acquisition of national concessionaire membership, and for contracting goods and services in the petroleum sector;
Presidential Legislative Decree N°. 5/18, of May 18, 2018.	Defines the rules on additional exploration activities in petroleum concession development areas;
Presidential Legislative Decree N°. 6/18, of May 18, 2018.	Defines the incentives and procedures for adapting contractual arrangements and fiscal terms applicable to Qualified Marginal Zones;
Presidential Legislative Decree N°. 7/18, of May 18, 2018.	Establishes the legal and tax framework applicable to prospection, exploration, appraisal, development, production, and sale of natural gas in Angola;
Presidential Decree N°. 91/18, of April 10, 2018.	Defines the rules and procedures for well abandonment and the dismantling of oil and gas installations within national territory.
Decree N°. 52/19, of February 18, 2019.	Approves the General Strategy for the Allocation of Petroleum Concessions for the period 2019–2025.
Presidential Decree N°. 1/20, of January 6, 2020.	Creates the ANPG and approves its Organic Statute.
Presidential Decree N°. 282/20, of October 27, 2020.	Angola's Hydrocarbon Exploration Strategy 2020–2025.

Source: ANPG

Annex 8: Successful development of the Lobito Corridor can support economic diversification and growth in Angola

The Lobito Corridor is crucial to Angola's economic diversification. The corridor includes the Benguela railway line connecting the Port of Lobito to the DRC border, facilitating trade with DRC and potentially with Zambia should the railway be extended into Zambia's copper belt. It also traverses four important agricultural provinces in Angola. The USD 300 million World Bank Economic Diversification and Job Creation Project in Angola (*Diversifica Mais*, P178035) is aimed at increasing private investment and climate-resilient growth of MSMEs in non-oil value chains by funding infrastructure projects and private sector development, particularly in the Lobito Corridor.

Geopolitical aims, particularly in the United States and Europe, to secure critical minerals, have reignited interest in developing the Lobito corridor. Because of its potential to be the fastest route for channeling copper, cobalt, and other minerals from the DRC and Zambia to the West, the US and the EU are supporting development of the corridor, including feasibility studies for a new railway line between Angola and Zambia. Several agreements and memorandums of understanding have been signed to promote the corridor's development objectives.

The focus on 'infrastructure first' in developing African economic corridors has yielded limited results and uneven benefits for local communities. Analyses of various economic development corridors in Africa and their impact on regional growth indicate that, driven by the need to export raw minerals and to import commodities, corridors often focus on infrastructure development, neglecting economic integration and broader development objectives. However, based on international experience, successful development of transport corridors requires a multi-pronged approach, including spatial development, integration of economic activities, and promotion of agglomeration economies (Annex Box 8.1).

Box 8.1: Key considerations in the development of integrated corridors

The successful development of an integrated transport corridor requires the following:

1. **Political support and regulatory frameworks:** Strong political backing and robust regulatory frameworks, including cross-border enforcement, are essential to ensure that the corridor can operate smoothly across different jurisdictions.
2. **Trade liberalization agreements and regional cooperation:** Formal trade liberalization agreements help create a conducive environment for trade and economic activities. They should precede hard infrastructure investments. Cooperating with other regional bodies with similar objectives and encouraging implementation of ongoing bilateral and regional projects are also important factors in the corridor's success.
3. **Infrastructure development:** Viable anchor projects and feasible infrastructure upgrades are crucial. This includes not only transport routes but also power, telecommunications, and other non-transport supporting infrastructure to ensure the corridor's viability.
4. **Soft infrastructure:** Policy harmonization and regulation are necessary to support the implementation of hard infrastructure. This includes harmonized regional road traffic laws, policies, standards, and regulations, as well as improved trade and transit customs procedures.
5. **Maintenance and upgrades:** Sustained maintenance, upgrading, and development of the corridor's infrastructure, such as ports, roads, rail, and border posts, are essential to meet current and future user requirements.
6. **Efficiency and competitiveness:** Maintaining open, competitive environments and reducing costs for freight and passengers are important. Effective data collection and analysis should also support planning and operations.
7. **Partnerships:** Creating strategic partnerships between government officials and business leaders, and facilitating mutually beneficial business partnerships, are key to the corridor's success.
8. **Safety, security, and health:** Joint programs to promote safety, security, and health along the corridor are necessary. This includes addressing issues such as communicable diseases, road safety, and gender issues.
9. **Service improvement and tourism:** Improving services and facilities along the corridor can boost commercial and tourist activity, enhancing transport efficiency and traffic conditions in these sectors.
10. **Data collection and analysis:** Transparent information and data sharing are critical for monitoring and evaluation. This helps in lobbying for necessary access, and amendments and improvements to legislation, processes, and procedures.
11. **Economic diversification and spatial development:** Targeted infrastructure development that emphasizes the impact of spatial development can help diversify an economy. Sector-focused economic corridors can promote and develop international comparative advantages, and establish new industries as future growth drivers.

Source: Background note on the Lobito Corridor (World Bank 2023): Accelerating Economic Diversification and Job Creation Project (P178035).

In January 2023, the Lobito Corridor Transit Transport Facilitation Agency (LCTTFA) Agreement was signed between Angola, DRC, and Zambia to accelerate trade along the corridor. LCTTFA objectives are to: (i) promote the corridor as an efficient transport route; (ii) enhance infrastructure and development; (iii) improve trade facilitation and harmonize regulations; (iv) foster partnerships between governments and businesses; (v) ensure safety, security, and health along the corridor; (vi) improve services and boost tourism; and (vii) strengthen regional cooperation. Successful implementation of the LCTTFA Agreement will require addressing operational challenges; building credible and transparent data sharing mechanisms to support monitoring and evaluation; involving the private sector; and ensuring integrity (including by addressing corruption and promoting accountability). The LCTTFA Agreement should ensure meaningful private sector participation at all levels, including in executive and technical committees. The success of the Lobito corridor development will require strong commitment, collaboration, and a focus on addressing both hard and soft issues. The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) provides a model for cluster-based development, value chain optimization, and private sector engagement (Box 8.2).

Box 8.2: International examples of transport corridor development

Vietnam's National Highway N^o. 5 (NH-5), industrial anchors, and local spillovers: NH-5 is a 106 km national road connecting Hanoi with the international port of Hai Phong and serving as an important socioeconomic route. The road, which links four existing industrial parks, reduced transport time between the two regions from 5 hours to 2 hours. The development of the NH-5 transport corridor aimed to enhance trade, industry, and living standards in northern Vietnam. In addition to investment in physical infrastructure, NH-5 also involved significant institutional reform. The foreign investment and company laws are notable examples. NH-5 had broader economic impacts, such as increased investment, job creation, income growth, and structural change. A key lesson from the NH-5 corridor is that providing transport infrastructure alone does not automatically result in economic benefits. For positive outcomes to occur, complementary measures are needed, such as providing adequate incentives, establishing a legal framework to reduce operational costs for companies, ensuring high-quality education to supply enough entrepreneurs and factory workers, and maintaining public health to sustain the labor supply for factories.

LAPSSET Corridor (Kenya): The Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) corridor in Kenya is an example of a development corridor acting primarily as a transport route, thereby supporting mostly established and large business supply chains. LAPSSET has had uneven benefits, with trade-offs and negative impacts for local communities, such as displacement and land insecurity. In addition, the construction of Kenya's Standard Gauge Railway (SGR) is undermining local transport businesses as they struggle to compete with larger economies of scale promoting the SGR, exacerbating poverty and social tensions. The corridor's focus on infrastructure without adequate economic integration and support for local communities undermines its sustainability and success.

Northern Corridor (East Africa): This is one of Africa's oldest corridors, linking the Port of Mombasa in Kenya to Uganda, South Sudan, Rwanda, DRC, and Burundi, and extending to northern Tanzania, Ethiopia, and Somalia. It is a multimodal corridor, covering road, rail, pipeline, and inland waterways, handling approximately 35 million tons of cargo annually. The Northern Corridor Transit and Transport Coordination Authority (NCTTCA) was established in 1985 to oversee and implement an efficient, cost-effective, and sustainable transport system. Despite improvements, logistical costs remain high, and the corridor has had a limited impact on the economic growth and development of surrounding regions.

Border Post (Kenya/Uganda): The Busia One-Stop Border Post is a successful example that demonstrates how combining infrastructure development with reform to reduce logistical costs—e.g., customs information sharing, digital tracking, cargo tracking systems, and one-stop border posts—can unlock economic potential. The Busia One-Stop Border Post has reduced crossing times by 80 percent and customs processing times by up to 98 percent, illustrating the significant impact of soft measures on hard infrastructure development.

Southern Agricultural Growth Corridor of Tanzania (SAGCOT): SAGCOT aims to increase the adoption of new technologies and marketing practices by smallholder farmers by expanding and creating partnerships between smallholder farmers and agribusinesses in Tanzania's southern corridor. The experience of SAGCOT demonstrates how to attract private investment in a way that maximizes social benefits and enables smallholder farmers to become profitable producers and entrepreneurs with access to regional and international markets. SAGCOT is a model for cluster-based development, value chain optimization, collaboration, climate change mitigation, institutional support, and private sector engagement in agriculture. It emphasizes comprehensive planning, integrating economic activities, and fostering agglomeration economies for successful corridor development.

Source: World Bank. 2023. Background note on the Lobito Corridor. Accelerating Economic Diversification and Job Creation Project (P178035). World Bank; Asian Development Bank, Department for International Development, Japan International Cooperation Agency, and the World Bank. 2018; The WEB of Transport Corridors in South Asia. Washington, DC: World Bank.

The Lobito Corridor presents several economic opportunities for Angola's economic trajectory. First, mineral resource potential in corridor member states presents a significant development opportunity. The corridor is strategically positioned to service mineral transit cargo from DRC and Zambia, and Angola's own mineral resources. In addition, the agriculture and livestock sector present key opportunities for domestic needs and export potential, e.g., the development of the avocado cluster in the Huambo region. In particular, the AfCFTA presents Angola with opportunities to expand its export market, especially for agricultural products. The Lobito Corridor has the potential to service a large and growing market in the DRC, particularly in Kolwezi and Lubumbashi, which includes inputs and equipment to the mining industry. Finally, the corridor also offers opportunities for industrial growth, particularly in the agribusiness and beverage sectors, which have been major drivers of Angola's diversification over the last decade.

For Angola to benefit fully from these opportunities, the country will need to address key structural constraints. These include the limited electricity supply specifically, a major deterrent to investment. Success of the Lobito Corridor hinges on addressing challenges in human capital development and access to education; water security and access to clean water and sanitation; access to healthcare; productivity; quality data; the business environment; the financial sector; land ownership; and trade facilitation. Supporting SMEs and ensuring logistical support are key. Investment in logistics platforms and rail and road transport infrastructure, especially in rural areas, will improve connectivity, reduce production losses, and enhance competitiveness.

The GoA is developing a strategic climate resilient masterplan for the economic diversification of the Lobito Corridor (Climate Resilient Master Plan for the Lobito Economic Corridor). Angola's National Transport Sector Master Plan (NTSMP) has already outlined priorities for enhancing transport infrastructure and services, but its focus on transport ministry overlooks the crucial role of trade and finance ministries in border operations. This broader masterplan, supported by the World Bank's Public-Private Infrastructure Advisory Facility (PPIAF), will adopt a spatial development approach, integrating economic activities through diverse infrastructure, economic incentives, market development, and strong institutions. It will also prioritize human capital development, improve the business environment, enhance infrastructure, and promote sustainable development. The masterplan will address crosscutting issues impacting economic growth and diversification, including human capital development, infrastructure, and the enabling environment.

Annex 9: Attracting and developing an excellent teaching force: the details

Angola must set clear student achievement standards to guide teachers' activities and expectations. Monitoring and assessing teacher performance based on student performance and learning includes verifying whether students are meeting goals in basic foundational skills for reading and arithmetic. Teachers receive overall guidelines on learning objectives, curriculum structure, curriculum design standards, learning materials, and evaluation across all subjects. However, they also need curriculum standards that specify the knowledge areas and skills students need to acquire each year, with quantifiable indicators and competency descriptions. Moreover, learning expectations should be adapted to a child's context; for example, achieving literacy can take longer in an area where pre-school coverage is poor.

To improve the education system's quality, Angola must attract and retain the best teachers by implementing a new teaching career path based on merit. Merit-based scholarships for undergraduate studies in pedagogy would increase numbers and attract the best into teaching. It would signal that teaching is not a second-class career and attract good students into the profession. Entrance into the teaching profession should be based on effort and performance (concurso); retention and promotion on performance, tenure, and age.

Ensuring teachers are led by strong school principals

Adequate data to inform teaching and policy at any level of the education system are unavailable in Angola. Even upstream, there are no data on a school principal's job description or appointment criteria. Angola needs to establish stringent selection criteria for principals and link salary to performance. Further downstream, data availability would serve the diagnostic purpose of encouraging teachers to identify areas for improvement in instructional practice. It would allow a school to analyze the strengths and weaknesses of its teachers and to target professional development activities. Teacher performance must be monitored through a comprehensive monitoring and evaluation process, based on student test results, moral ethics, competence, and contribution to the school. Municipalities should organize regular supervision at every school.

The Government can support and motivate teachers to improve instruction by mandating a minimum number of professional development days per year. Professional development is an essential part of a teacher's responsibilities. Angola should develop a nationwide professional development plan for teachers, specifying the number of training hours required per teacher per year. In the example of Shanghai, all new teachers in basic education must complete 360 hours of professional development during the first five years of their teaching careers (equivalent to nine days a year). Teachers receive most of the training free of charge, and are also reimbursed for transportation and accommodation expenses (Liang, Kidwai, and Zhang 2016). Among multiple professional development options in Shanghai, lesson observation (Annex Box 9.1) is noteworthy because it exposes teachers to best instructional practice and leverages every teacher's knowledge and skills to improve the collective teaching community.

Annex Box 9.1: Lesson observation, Shanghai

In Shanghai, lesson observation takes place throughout a teacher's career. Within the school, junior teachers engage in regular lesson observation of senior teachers to learn best practice. Reciprocally, senior teachers observe the lessons of junior teachers and provide feedback.

Teachers of the same subjects observe each other's practices to provide peer feedback and benefit from one another's experience. This model serves as a support mechanism and brings new or struggling teachers up to the level of their peers. Lesson competitions are held at school, district, and city level. Teachers prepare a lesson and showcase it to the school community, or to a larger audience at district or city level. Those with the best instructional practice are rewarded, and the lesson is shared with the teaching community. Participation in lesson competitions is also an essential part of teacher evaluation.

Source: Liang, Kidwai, and Zhang 2016.

Annex 10: Improving the student assessment system: the details

Angola should allocate regular funding for exams and for developing a testing culture. A testing culture must be developed and should include financial support (covering all aspects—design and administration, reporting and evaluating results, and research activities), strong organizational structure, and wide public awareness and support for exams. Effective human resources for exams should also be guaranteed, including adequate numbers of full-time staff dedicated to exams and experts invited from across the country to engage in their planning and design.

Large-scale national assessment must be adjusted to include teacher evaluation, inform remedial measures, and reward excellence. Assessment subjects should be primary and lower secondary students (in compulsory education) and, because of scarce resources, age groups where effective remedial action is still possible: the middle years of primary level (grades 3–4) and the final year of lower secondary level (grade 9) are ideal, rather than the current grades 6 and 12. Assessment tools must include (i) academic tests (for primary students, Portuguese language and mathematics; for lower secondary students, Portuguese language, mathematics, foreign languages, and sciences); and (ii) questionnaires (for students, teachers, and principals). In Peru, the transfer of funds from central to local government is conditional on quality indicator results. Test scores also determine whether schools qualify for a monetary bonus. Moreover, teachers who score below a certain level must undergo professional development training and may be dismissed if poor performance persists¹⁰¹.

Finally, Angola must participate in international and regional large-scale assessments that provide comparable data and help to foster a culture of testing and learning. Cross-national learning results resonate with policymakers and the public in ways that national assessments cannot. Seeing a neighboring country make faster learning progress can be a wake-up call. Therefore, Angola should inform the public of the results of the most recent Early Grade Reading Assessment (EGRA) and plan to participate in the Program for International Student Assessment for Development (PISA-D)¹⁰² and/or the Education Systems Analysis Program (PASEC—Programme d’Analyse des Systèmes Educatifs).

¹⁰¹ Ibid.

¹⁰² Launched by the OECD, the PISA-D aims to encourage and facilitate the participation of interested LMIC and MIC countries. Eight countries are participating: Cambodia, Ecuador, Guatemala, Honduras, Panama, Paraguay, Senegal, and Zambia.

Annex 11: Key lessons from Angola's exchange experience in Malaysia

On August 1–4, 2023, a delegation of Angolan officials visited Malaysia to study the country's development experience. The delegation gained insights into Malaysia's key public policy decisions, planning strategies, and institutional mechanisms that enabled the country to achieve a high growth rate and transition from a resource-dependent LIC to a HMIC. In meeting with the World Bank, Secretary of State for Public Investment Ivan dos Santos highlighted the following key lessons:

1. Human capital as a foundation for development: The Secretary noted Malaysia's long-term investment in education, both academic and technical (TVET), as a central pillar of its industrialization. He emphasized Angola's significant challenges in aligning its education system with economic needs, particularly in engineering, science, and vocational training. Lessons from Malaysia show the importance of building a skilled workforce as a prerequisite for attracting quality investment and driving innovation. The Secretary also emphasized the importance of investing in primary education as the first block to establishing a skilled workforce.

2. Regional integration as an economic lever: Malaysia's strategic position in the Association of Southeast Asian Nations (ASEAN) and its integration into regional supply chains were seen as key enablers of its growth. The Secretary noted that Angola must explore opportunities for deeper integration within the SADC region, including harmonization of trade procedures, development of cross-border infrastructure, and active participation in regional value chains to unlock economies of scale and attract foreign investment.

3. Institutional coordination—the PEMANDU model: The Secretary praised Malaysia's establishment of its Performance Management and Delivery Unit (PEMANDU), a centralized entity responsible for coordinating, implementing, and monitoring national development priorities. He identified a similar need in Angola for an institutional mechanism that ensures policy coherence, performance tracking, and results-oriented implementation, particularly in multi-sector reforms. He highlighted the Malaysian culture of learning-by-doing and also noted that a monitoring committee at high level (e.g., the Council of Ministers) is used to evaluate progress on National Development Plan implementation.

4. Foreign investment with local impact: Malaysia managed to attract FDI while simultaneously developing domestic capabilities with local content policies, supplier development, and skills transfer. The Secretary observed that Angola's FDI, particularly in oil and infrastructure, has not always translated into local economy spillovers. A more deliberate strategy is needed to foster backward linkages and empower local businesses.

5. Penang as a model for special economic zones (SEZs): The Penang industrial zone was cited as a reference in terms of effective spatial planning, investment facilitation, and public-private coordination. Penang's success is attributed to clear governance, strong infrastructure, and integration with education and innovation systems. The Secretary acknowledged that Angola's SEZs (such as Luanda-Bengo) could benefit from similar strategic planning and management models.

6. Coherence between investment promotion and zone development: In Malaysia, the investment promotion agency (MIDA) is closely linked to the development of economic zones, facilitating coordinated efforts to attract and retain investors. In Angola, the roles of AIPEX and the SEZs remain institutionally fragmented. Greater integration between national investment strategy and territorial development plans could significantly enhance investment outcomes.

7. Ethics and anti-corruption through education: The Secretary underscored that Malaysia's progress in fighting corruption was not only limited to enforcement, but also included a strong emphasis on education, values, and civic responsibility. He identified this cultural and educational dimension as essential for Angola's long-term institutional integrity and sustainable development.

8. Strategic opportunity—the Lobito Corridor: Drawing directly from the Penang example, the Secretary proposed the creation of a SEZ or Free Trade Zone (FTZ) along the Lobito Corridor, as a flagship initiative to leverage Angola’s logistics infrastructure and promote industrial investment. This zone would serve as a catalyst for global and regional trade and economic diversification and could be included in the forthcoming Lobito Corridor Master Plan. The integration of logistics, industrial policy, and investment facilitation in this corridor could mirror the territorial success seen in Penang and other Asian growth zones.

The Secretary reiterated the GoA’s interest in working closely with the World Bank to extract actionable lessons from Malaysia’s experience. He encouraged the World Bank to propose context-sensitive reforms, particularly in the areas of human capital, infrastructure development, business facilitation, financial inclusion, digital development, informal economy, investment strategy, and institutional coordination.

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