

# Angola:

## Country Economic Memorandum

*Towards Economic Diversification*

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### **List of Background Papers for this Report:**

Calderon, C. and C. Cantu (2018): "Foreign trade and growth in Angola: Intensity and Concentration".

Chandra V., and Mishra S. (2018): "Options for Export Diversification in Angola".

Fiess, N. and R. MacDonald (2018). "Real Effective Exchange Rate Assessment of Angola and Currency Regime Issues."

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Lindbjerg-Sperling, L. (2018): "Development impacts of resource gains - the case of Angola"

## ACRONYMS AND ABBREVIATIONS

AU	African Union
BEER	Behavioral Equilibrium Exchange Rate
CBRs	Correspondence Banking Relationships
CEN-SAD	Community of Sahel-Saharan States
CET	Common External Tariff
CFTA	Continental Free Trade Area
CIT	Corporate Income Tax
DGF	Deposit Guarantee Fund
ECCAS	Economic Community of Central African States
EPA	Economic Partnership Agreement
EU	European Union
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FIL	Financial Institutions Law
FSA	Financial Sector Assessment
GD	Growth Diagnostic
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVC	Global Value Chain
HDI	Human Development Index
IMF	International Monetary Fund
ICT	Information and Communication Technology
LPI	Logistics Performance Index
MFN	Most-favorable Nation
MPC	Monetary Policy Committee
NRA	National Risk Assessment
NDP	National Development Plan
NPLs	Non-Performing Loans
NTMs	Non-Tariff Measures
OPDA	Oil Price Differential Account
PFM	Public Financial Management
PRODESI	Program for Support to Production, Diversification of Exports and Imports Replacements
PTA	Preferential Trade Agreement
SIPS	Systemically Important Payment Systems
SMEs	Small and Medium Sized Enterprises
SSA	Sub-Saharan Africa
TBT	Technical Barriers to Trade
TFA	Trade Facilitation Agreement
TFP	Total Factor Productivity
VAT	Value Added Tax
WGI	Worldwide Governance Indicators
WTO	World Trade Organization

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## Executive Summary

- 1. The Angolan economy is at a significant juncture.** The current growth model based on oil wealth is nearly exhausted and has not delivered inclusive growth and shared prosperity. The challenge for the administration of President João Lourenço, who came into office in September 2017, is to restore macroeconomic stability and lay the foundations for a new and more inclusive growth model that can support a young and growing population. The government has taken important steps towards restoring macro-stability and the new medium-term National Development Plan (NDP) lays out a road map for a more diversified and inclusive growth model.
- 2. Angola faces two broad policy challenges that need to be addressed urgently: macroeconomic stabilization and a more inclusive economic growth.** The internal and external imbalances following the adjustment to lower oil prices pose a challenge to macro-stabilization. The prospect of volatile oil prices and potentially diminishing oil reserves over the medium and long-term call for a new sustainable and inclusive growth model that promotes economic diversification, a model that is less dependent on natural resource exports.
- 3. The first priority is to restore and preserve macroeconomic stability.** The sharp and prolonged decline in oil prices since mid-2014 has reduced oil revenues and caused GDP growth to decelerate. The current account deficit stood at 8.8 percent of GDP in 2015; large fiscal deficits have been recorded during 2014 and 2017; and public debt has doubled over the last three years. There is also an urgent need to safeguard financial system stability: the undercapitalization of systemically important banks; the loss of a direct U.S. dollar correspondent banking relationship; and non-performing loans (NPLs). Inflation escalated in 2016, reaching a peak of 41 percent in December 2016, before retrenching to 19 percent in August 2018. While the government's policy response between 2016 and 2017 was able to contain a downward spiral in the short-term, sustained economic adjustment is needed to restore the macroeconomic balance and to lay the foundation for a sustainable, long-term macro framework.
- 4. The second priority calls for a new and more inclusive economic growth model to achieve sustained growth and to improve human development and poverty outcomes.** Up to now, Angola has relied on the oil industry and high oil prices to drive economic growth and to rebuild a large part of its infrastructure. Inequality remains high, with a Gini coefficient of 0.43 in 2016. In 2015, Angola ranked 150 (out of 188) in terms of Human Development Indicator. In 2016, about 30 percent of the Angolan population remained below the international poverty line (that figure rises to 55 percent if \$3.1/day is used). The high capital and skill intensity of the oil industry partly explains why a large share of the population has not benefitted from the oil boom; developmental benefits from oil wealth are limited and Angola remains a highly unequal society. The poor development outcomes of the current oil-driven growth model, in terms of poverty reduction and shared prosperity, make a more inclusive growth model essential. Furthermore, even if oil prices were to recover over the medium-term, oil reserves will likely be exhausted by 2032 at current oil production levels.
- 5. The new administration is aware of these challenges and has started to implement muchneeded reforms.** The current reform agenda is embodied in three policy documents released since the new administration took office: (i) the *Plano Intercalar* in October 2017 - a six-month interim plan; (ii) the macro stabilization program (*Programa de Estabilização Macroeconómica PEM*) for 2018; and (iii) the NDP for 2018-2022. The policy documents are aligned, and the overall objectives are: to achieve macroeconomic

stability; to create an environment conducive to economic growth and job creation; and to address the most pressing social problems.

6. **Angola is right to focus on reforms that lay the foundation for long-term macroeconomic stability and economic diversification.** Analyses conducted as part of this report indicate that there are significant gains to be had from such reforms. Macro-economic stability and effective natural resource management are identified as important drivers for growth, while export diversification could increase per capita GDP by about 3.3 percent over the longer term, thereby not only mitigating the expected adverse growth impact from depleting oil wealth, but also amplifying growth through increasing productivity.

7. **The objective of this Report on Angola is to support policy makers in their reform efforts. The Report is organized as follows:** *Chapter 1* takes stock of recent trends and determinants of growth in Angola, highlighting the importance of natural resource wealth and volatility for growth outcomes. *Chapter 2* presents the findings of a growth diagnostic for Angola, and highlights low human capital, access to finance, weak institutions and macroeconomic instability as critical and binding constraints for the non-oil economy. *Chapter 3* uses product space analysis to evaluate Angola's current and future potential for economic and export diversification, drawing attention to products and services sectors in which there is potential for export upgrading and/or product innovation. *Chapter 4* provides an overview of the agriculture sector and assesses its potential for economic diversification; a deep-dive into agriculture is provided in the forthcoming *Angola Country Private Sector Diagnostics*, a joint Bank/IFC report that complements this Report with a greater focus on private sector development and sector analyses. *Chapter 5* sets out the way forward, identifying: critical reforms for macroeconomic stability; a fiscal framework for natural-resource wealth management; and macro-financial stability. Chapter 5 also highlights sector-specific policies to support private sector-led growth and economic diversification and lays out a complementary agenda, including for trade policy and governance reform. More detailed information on sector-specific policies, in support of long-term growth and economic diversification, including timing and sequencing, can be found in *Republic of Angola: Selected Policy Notes for Upcoming Administration*.

## Growth Diagnostics: Trends and Constraints

8. **Growth in Angola has been driven by natural resources since the 1980s.** Angola's economy and exports had been relatively diverse, but this changed with the prolonged civil war and the discovery of oil. Currently, oil accounts for about 90 percent of total exports with diamonds being the second largest export product. Coffee, which accounted for almost half of Angola's exports in the 1960s, has all but disappeared as an export product. Angola shows the largest degree of concentration by export products in Sub-Saharan Africa.

9. **While natural resources have contributed significantly to growth, the management of natural resource wealth has not been effective.** Without natural resource wealth, Angola's per capita GDP growth since the 1990s would have been about 1.5 percentage points lower than what it is. However, Angola's oil reserves are depleting and will possibly be exhausted by 2032. In addition, Angola's adjusted net savings rate has been negative until now, indicating that the country has not efficiently converted its natural resource revenues into productive capital, thereby not adding to its wealth. A more efficient natural resource wealth management and a more effective investment of natural resource revenues are critically important.

10. **The dependency on natural resources hinders diversified growth.** Export diversification could increase per capita GDP by about 3.3 percent over the longer term and could not only mitigate the adverse growth impact of depleting oil wealth but also amplify growth through increasing total factor productivity (TFP). The analysis of the linkages between different trade variables and growth clearly shows that a decrease in product concentration would have the largest effect on growth in Angola; a reduction of the dependency on natural resources would have the second largest effect on growth.

11. **Oil dependency subjects Angola's finances to the volatility of commodity prices.** Countries that are dependent on a narrow export basket suffer from export volatility due to unstable global prices or demand. Domestic institutions and economic powers are often shaped and leveraged by natural resource results; institutional quality is often lagging in other sectors. Moreover, the pro-cyclicality of fiscal policy stemming from volatile oil prices is a challenge for policy makers. Sudden changes in public spending, and pro-cyclicality in fiscal policy contribute to macroeconomic volatility and uncertainty.

12. **In addition to natural resource dependency, Angola faces several other binding constraints to growth.** The main binding constraints identified by the growth diagnostic framework of Hausmann, Rodrik and Velasco, are low returns to economic activity. Angola faces infrastructure bottlenecks and a poorly educated workforce; weak institutions, a difficult regulatory environment and macroeconomic imbalances. These factors severely constrain private sector development and growth.

## The Way Forward

13. **However, Angola has potential to diversify its economy and exports.** Based on different methodologies, several industries or product clusters that are promising for Angola have been identified: (i) preserving or building on older comparative advantages including in agricultural products, diamonds, and fisheries; (ii) business opportunities in relatively complex minerals and derivatives such as quartz and mica; and (iii) light-manufacturing and medium-technology merchandise exports to support broader structural transformation. The construction of a modern service economic hub is also important for Angola's long-term planning. Actual export potential will however depend on how binding sector-specific constraints to investment and diversification are.

14. **Agriculture in particular has substantial potential to positively impact growth, economic diversification, employment, and social inclusion.** Angola has a history of successful commercial agriculture, which came to a halt with the civil war. The coffee sector was particularly well developed and accounted for a large share of exports. Currently, however, productivity in the agriculture sector is low and Angola is dependent on imports of several key staples. Too much land is not under cultivation as a result of inadequate infrastructure and insecure land rights, which do not attract private investors.

15. **Specialization in more complex activities increases competitiveness and returns, but the ability to specialize depends on the relative ease of gaining such specialization.** In 2018, Angola adopted the Program for Support to Production, Diversification of Exports and Imports Replacements (PRODESI), which targets capacity improvements in food and in the agricultural industry, resources minerals, oil and natural gas, textiles, clothing and footwear, as well as tourism and leisure. A mapping of PRODESI-identified products onto the complexity-feasibility space shows that low-tech products, such as furniture and textiles, and certain resource-based products, such as cement, wood or iron, are fairly complex, yet potentially relatively easy for Angola to specialize in. Financial and travel services are also relatively complex but also within the sphere of Angola's current capability structure; export potential will however depend on how binding sector-specific constraints to investment and diversification are.

16. **Macroeconomic stability and diversification are important pre-conditions for future growth.** Reducing the volatility and pro-cyclicality from commodity dependency can have important growth effects. Empirical evidence shows that countries with a diversified economic structure are more resilient to exogenous shocks. Growth-friendly fiscal consolidation would require broadening the non-oil tax base and increasing expenditure efficiency.

17. **The resulting economic and export diversification can be expected to support macro-economic stability and inclusive growth.** In Angola, economic diversification would greatly enhance growth per worker and would therefore be part of a strategy to promote inclusive growth. Economic diversification would act as a buffer against commodity price volatility and would reduce macroeconomic volatility from adverse export and fiscal revenue shocks. It would also increase employment in the non-resource sector, with the potential to develop new skills with long-term benefits for the domestic economy.

18. **To ensure the benefits of the natural resource wealth in the long term, Angola urgently needs an effective long-term strategy to manage its natural resources.** A key challenge is to reconcile long-term strategic, national objectives with the need to manage the volatility and uncertainty of resource revenue. Policy makers need to decide how best to leverage this wealth for economic development; how to allocate finite natural resource wealth across generations; and how best to insulate the economy from large and unpredictable commodity price swings. Fiscal institutions to manage the uncertainty surrounding its oil wealth should be linked to a long-term fiscal framework consisting of a long-term fiscal anchor, short and medium-term fiscal targets, strong public financial management and financial stabilization buffers.

19. **A solid and well-supervised financial sector would be able to significantly contribute to economic diversification.** Currently, the financial sector in Angola is vulnerable: NPLs are high, and several banks need recapitalization and/or restructuring. Banks' significant exposure to government debt further exposes them to sovereign risk. A well-supervised financial system and a deep and liquid kwanza-denominated capital market would contribute to financial sector stability and would help to provide long-term financing to the private sector.

20. **Cross cutting policies are needed to support economic growth and diversification. These policies include:**

- a. **The creation of an enabling business environment.** Despite steady progress since about 2015, Angola ranks poorly in the Doing Business indicators, reflecting that the private sector would benefit from deepening regulatory and institutional reforms to reduce red tape and from consistent adherence to laws and regulations. Reforms to trade facilitation; an effective competition policy framework; and further improvements to the investment climate would support private sector development.
- b. **Improved infrastructure.** The lack of infrastructure, especially electricity and roads, is seen as one of the main constraints to doing business in Angola, affecting virtually every sector. The following would be required to support economic diversification: affordable and reliable energy; efficient transport and logistics systems; and adequate access to water and sanitation.
- c. **Easier access to finance and improved financial inclusion.** Access to and cost of finance are seen as another binding constraint to private sector development and diversification. Critical steps in this regard would be additional incentives for SMEs, such as savings and education campaigns or financing schemes for SMEs that focus on economic diversification.

- d. **Improved outcomes and access to education.** Angola has fallen behind its peers with similar levels of education spending in terms of access to education and education outcomes. Greater investment in teacher training is essential. In addition, skill-development programs should be expanded and alternative forms of service delivery, such as online programs or PPPs, should be considered.
- e. **Using the potential of ICT to be a catalyst for economic growth and diversification.** A digital economy in Angola has the potential to: create jobs; generate economic output; increase export revenue; and support social inclusion. The ICT sector relies on access to mobile phones, high-speed internet, and digital clouds. Angola's mobile sector has shown remarkable growth in recent years, but availability of high-speed internet is limited. Ensuring effective competition in the telecom sector and improving the country's digital infrastructure will be essential for the success of the sector.

## The Complementary Agenda

21. **Effective and enabling institutions are critical for increasing private investment and economic diversification.** While the government has taken important steps in recent years to reform the regulatory and institutional framework, Angola still presents a challenging regulatory and institutional environment for businesses, as illustrated by its 173<sup>th</sup> ranking out of 190 countries in the Doing Business 2019 report. In the past, economic management in Angola has favored large-scale planned projects and state-owned enterprises, and these dominate key sectors of the economy. To support economic diversification, countries need to attract investors who seek to use countries as an efficient production base to enter new markets and link up with global value chains. This often requires a paradigm shift in terms of the regulatory role of the government towards a regulatory regime that allows investors to operate in a dynamic market environment, while safeguarding legitimate societal objectives.

22. **Insertion into Global Value Chains (GVCs) can be an important catalyst for economic diversification.** GVCs provide an opportunity to increase economic diversification and export complexity as countries can develop products around the chain through trade and FDI. According to several studies, Angola has potential in regional value chains for cassava, and fish and fish products, ferrous metals (iron and steel) and diamonds. Angola is reportedly already part of an emerging regional value chain for steel roofing and is well placed to participate in regional value chains for phosphate-based fertilizers and some metals.

23. **Greater involvement in GVCs requires openness to trade and investment.** Angola's borders are currently among the most restrictive and dismantling formal and informal barriers to trade and investment are key for promoting trade and GVCs. More open borders would not only increase global and regional exports, but also generate larger agglomeration economies and attract foreign investment. Regional integration initiatives and preferential trade agreements, ideally negotiated as a regional block, could be an important stepping stone for insertion into regional and global value chains. Angola should leverage its membership in several regional integration initiatives, including the African Continental Free Trade Area (AfCFTA), for this effect.

## Summary of Policy Recommendations

Table 1: Table: Summary of Policy Recommendations and Status

Status	Objective	Relevant Government Reforms (completed/ ongoing)	Policy recommendations to deepen reforms
<p><b>Address macroeconomic imbalances:</b> Fostering macroeconomic stability through appropriate economic and financial policies is a <i>prerequisite</i> to the development of a viable and diverse non-oil sector.</p>			
	Reduce the volatility and pro-cyclicality from commodity dependency and ensure public debt sustainability	<ul style="list-style-type: none"> <li>Review of existing oil funds and consolidation into a single Sovereign Wealth Fund with a dual objective of fiscal stabilization and long-term investment (PEM, Dec '17).</li> </ul>	<ul style="list-style-type: none"> <li>Adopt a medium-term fiscal framework (MTFF) consisting of fiscal targets on non-oil budget balance to set public debt on declining path, strong public financial management and fiscal stabilization buffers.</li> <li>Develop the domestic capital market to reduce and create access to long-term, local-currency finance and reduce dependency on forex debt.</li> </ul>
	Sustain gradual fiscal consolidation	<ul style="list-style-type: none"> <li>Efficiency of tax audits and monitoring of large taxpayers was increased in 2017-2018; preparatory step for VAT adoption in 2019</li> <li>Reform price subsidies (fuel sector and utilities). Expected savings are intended to fund well-targeted programs (social protection, health, education programs) (PEM, Dec '17)</li> </ul>	<ul style="list-style-type: none"> <li>Broaden non-oil tax base, through greater tax compliance, elimination of tax exemptions, and the introduction of VAT, and ensure long-term debt sustainability.</li> <li>Increase efficiency of social expenditures and of capital investments to enhance the availability of social and productive services, including human capital, energy, connectivity, and knowledge-intensive services.</li> </ul>
	Adopt more flexible exchange rate regime and ensure fair-valued exchange rate	<ul style="list-style-type: none"> <li>Base money targeting was adopted in preparation of managed float (Nov '17)</li> <li>Currency peg was replaced with managed float (Jan '18)</li> <li>FX sales to priority sectors were discontinued (Oct '18)</li> <li>Clearance of FX backlog (expected by end-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Establish a coherent and transparent FX market intervention policy.</li> <li>Develop a well-functioning FX market by adopting a clear strategy for eliminating FX restrictions and multiple currency practices.</li> </ul>
	Ensure macro-financial stability	<ul style="list-style-type: none"> <li>Crisis Simulation Exercise to strengthen crisis preparedness was completed (Aug '18)</li> <li>Updated National Risk Assessment (NRA) (expected by end-2018)</li> <li>Revised Financial Institutions Law (expected by end-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Enhance supervisory effectiveness and move to risk-based supervision.</li> <li>Develop a multi-disciplinary risk-based AML/CFT strategy that enhances ML/FT prevention, detection and repression.</li> </ul>
<p><b>Improve competitiveness and private sector development:</b> Cross sectoral policies will support private sector-led growth and economic diversification.</p>			
	Improve the business environment	<ul style="list-style-type: none"> <li>Private Investment Law to ease constraints on private investment and attract FDI was adopted (Jun '18)</li> <li>Several business reforms helped improve 2019 WB Doing Business rank, e.g. improved registration procedures and elimination of paid-in minimum capital requirement; made exporting and importing easier (implemented during 2017-18)</li> <li>Launched program for diversifying exports and substituting imports (PRODESI) that focuses on strengthening production in priority goods and services and cross-sectional initiatives (including easing constraints to doing business) (Nov '17)</li> </ul>	<ul style="list-style-type: none"> <li>Simplify government procedures (e.g. streamlining, online platforms).</li> <li>Reform the investment policy and investment promotion framework.</li> <li>Strengthen public-private sector dialogue by engaging the private sector in the identification of reform priorities and implementation monitoring (e.g. agriculture).</li> <li>Promote ICT as a catalyst for efficiency and economic diversification.</li> </ul>

	Strengthen human capital and skills	<ul style="list-style-type: none"> <li>Plans towards fiscal decentralization to improve the fiscal viability of the local government and strengthen social service delivery (NDP, Apr '18)</li> <li>Reforms to improve the quality and accessibility of Technical and Vocational Education and Training (TVET) education (adopted during 2017-18)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen governance and management mechanisms in the education sector; streamline the education sector's budgeting and planning processes and improve coordination between line ministries, provinces and municipalities; improve the quality of expenditure.</li> <li>Increase access to quality skills development and training programs that match the needs of the labor market in priority sectors including agriculture.</li> </ul>
	Improve infrastructure	<ul style="list-style-type: none"> <li>Develops a comprehensive transport strategy and investment plan (during 2017-18)</li> <li>Emphasis on infrastructure development in NDP (transportation and logistics, energy, water and sanitation, communications), including the promotion of public-private partnerships (NDP, Apr '18)</li> </ul>	<ul style="list-style-type: none"> <li>Establish an operational PPP framework to promote public-private partnerships in infrastructure; assess and deal with the potential fiscal costs and risks arising from PPP projects.</li> <li>Develop rural infrastructure to unlock agricultural potential, including electrification, tertiary roads, rural water management/irrigation, storage facilities, and ICT.</li> </ul>
	Increase access to finance and financial inclusion	<ul style="list-style-type: none"> <li>Reforms to increase financial inclusion and improve the credit information infrastructure (e.g. savings and financial education campaigns; financing schemes that extend credit lines and guarantees to small businesses) (adopted during 2017-18)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen the regulatory and institutional framework for access to credit (broaden the credit information infrastructure; improve the insolvency regime).</li> <li>Modernize the payments system and facilitate retail electronic payments (especially mobile payments).</li> <li>Improve consumer protection and financial literacy.</li> <li>Expand access to microfinance and SME finance, particularly to the agriculture sector (e.g. crop and weather-based index insurance).</li> </ul>

**Strengthen regulatory and institutional framework.** Effective and enabling institutions are critical for increasing private investment and economic diversification, while trade openness can be an important catalyst for economic diversification.

	Promote market-oriented policies, and strengthen competitiveness	<ul style="list-style-type: none"> <li>Competition Law to foster competition in domestic markets and curb monopolistic practices (May '18).</li> <li>SOE oversight agency with mandate to resize and restructure the SOE sector has been set-up (Jun '18).</li> </ul>	<ul style="list-style-type: none"> <li>Promote competition by adopting an effective competition policy framework.</li> <li>Address potential market distortion in existing government programs (e.g. for credit, SMEs or priority sectors).</li> <li>Reduce the share of state ownership in the economy, including the privatization of SOEs and the ongoing restructuring of Sonangol.</li> </ul>
	Improve institutional framework	<ul style="list-style-type: none"> <li>Anti-corruption agency to prevent and repress corruption crimes was created (Mar '18).</li> <li>PRODESI program to support private investment (launched in Nov '17)</li> </ul>	<ul style="list-style-type: none"> <li>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, control approach. Increase transparency and emphasize communication and accountability through stakeholder consultations and increased access to administrative data.</li> </ul>
	Increase openness to trade and investment	<ul style="list-style-type: none"> <li>Simplified visa issuance procedures (Mar '18)</li> <li>Implementation of Automated System for Customs Data ASYCUDA system) at Port of Luanda (Apr '18)</li> <li>National Trade Facilitation Committee (established in Jul '18)</li> </ul>	<ul style="list-style-type: none"> <li>Improve the quality and competitiveness of trade and transport infrastructure and logistics that are essential to reduce cross-border transaction costs.</li> <li>Leverage regional integration initiative and preferential trade agreements to increase economic diversification and integration into global and regional value chains.</li> </ul>

Source: WB staff elaboration.

Note: status is based on WB staff interpretation of progress in achieving each objective. Cursive text reflects planned activities/reforms outlined in the Macroeconomic Stabilization Plan (PEM) 2017-2018 and National Development Plan (NDP) 2018-2022; the list of reforms is not exhaustive and highlights key reforms in the view of WB staff.

## Chapter 1. Growth in Angola: Determinants and Prospects

**1.1 This chapter analyzes drivers of growth in Angola over different time periods and based on different methodologies.** The average annual growth rate of GDP per worker in Angola was lower than for the average in Sub-Saharan Africa (SSA) between 1961 and 2014; the volatility of economic growth was higher than in SSA and fragile states. The purpose of this chapter is to evaluate what has driven and what has potentially hindered growth in Angola over the last half century or more. It starts by looking at drivers of growth since 1961 and then focuses on a more detailed analysis of determinants of growth between 2000 and 2016. The chapter also examines the importance of trade for growth. Trends in international trade integration and the effect of trade on growth and productivity in Angola and SSA are examined; this is followed by an estimation of the growth effects of the different dimensions of foreign trade: (i) the extent of trade openness; (ii) the diversification of exports; (iii) and the importance of natural resources. The potential benefits to growth of improving trade openness and diversifying exports are also estimated.

### A. Drivers of growth over the longer term

**1.2 Average growth for 1961-2014 was lower than in other resource-rich countries in the region, and growth has been more volatile.** The average annual growth rate of GDP per worker in Angola during the period 1961-2014 was 0.7 percent, lower than that of the SSA region (1.1 percent) and resource rich countries (0.95 percent), but higher than fragile countries in the SSA region (0.3 percent) Conversely, the volatility of the rate of growth per worker in Angola was higher than in SSA countries, resource-rich countries, and fragile countries (see Figure 2).

Figure 1. Growth of real GDP per worker, 1961-2014 (annual growth rates, population-weighted averages, percent)

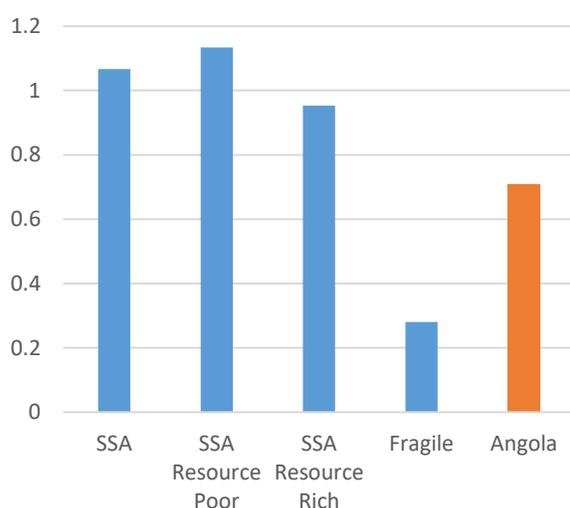
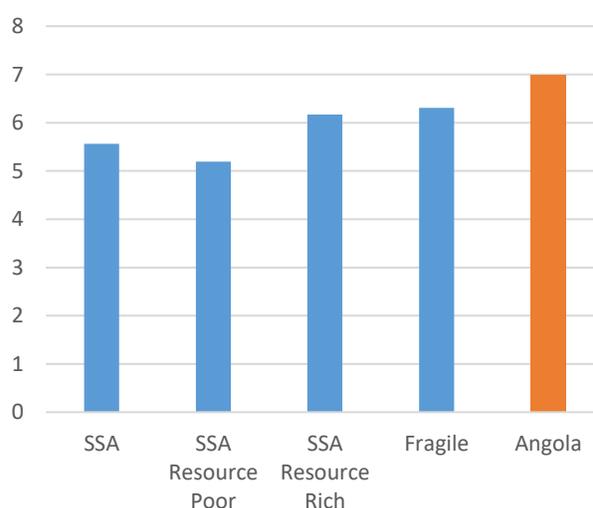


Figure 2. Volatility of growth per worker, 1961-2014 (standard deviation, population-weighted averages)



Source: PWT 9.0 (Feenstra, Inklaar and Timmer 2015).

**1.3 Growth in Angola has been driven more by factor accumulation than total factor productivity (TFP).** From 1960 to 2014, average human capital growth in Angola was comparable to regional averages, but physical capital growth was substantially lower (see Figure 3); this is partly explained by the long civil

war period (1975-2002), which destroyed Angola’s infrastructure and still is being rebuilt. Total factor accumulation has been one of the main contributing factors to growth, accounting for 0.2 percentage points of the 0.7 percent growth; the remaining components are physical capital: 0.1 percentage points, and human capital: 0.4 percentage points, (see Figure 4). The contribution of TFP to growth per worker in Angola exceeds that of SSA overall.

Figure 3. Growth of output per capita and factor accumulation, 1961-2014

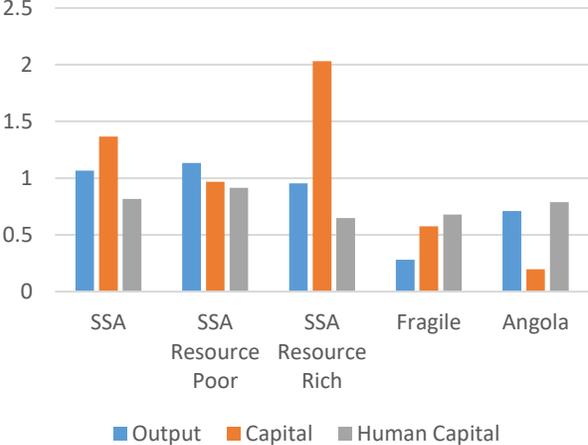
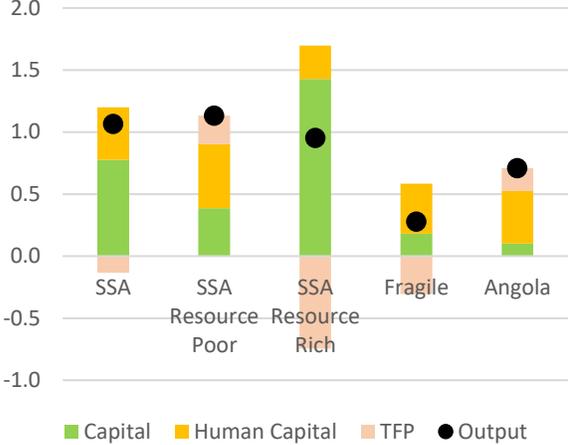


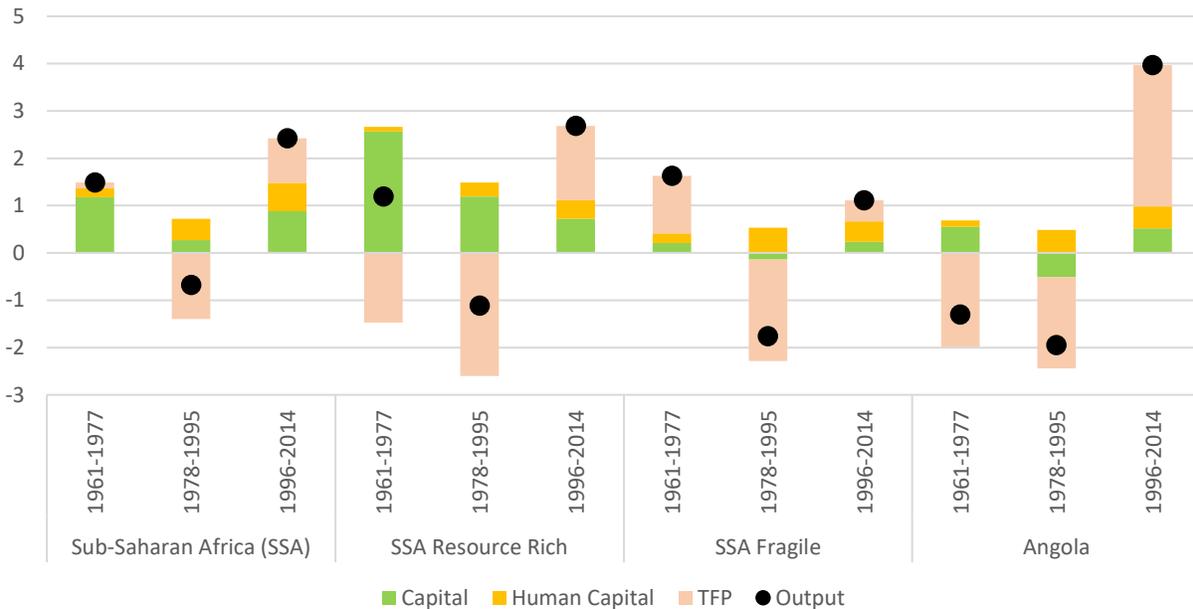
Figure 4. Source of growth, 1961-2014



Notes: Population weighted annual average growth rates. Source: The data has been collected from PWT 9.0 (Feenstra, Inklaar and Timmer 2015).

**1.4 The evolution of growth per worker and its sources (factor accumulation and TFP) changed significantly over time.** The contribution of TFP to growth per worker in Angola was negative during the periods 1961-1977 and 1978-1995 but became positive and grew substantially from 1996 to 2014 (Figure 5). Resource rich countries in general, exhibit strong growth in physical capital per worker in 1961-1977 but the contribution of physical capital to growth per worker decreases slowly over time. The evolution of capital accumulation in Angola has been more erratic than for SSA or fragile states: it displayed a positive contribution to growth per worker in 1961-1977 and negative in 1978-1995. Physical and human capital both contributed positively to growth per worker in 1996-2014.

Figure 5. Source of Growth, 1961-2014: By sub-periods  
(annual growth rate, population weighted averages)

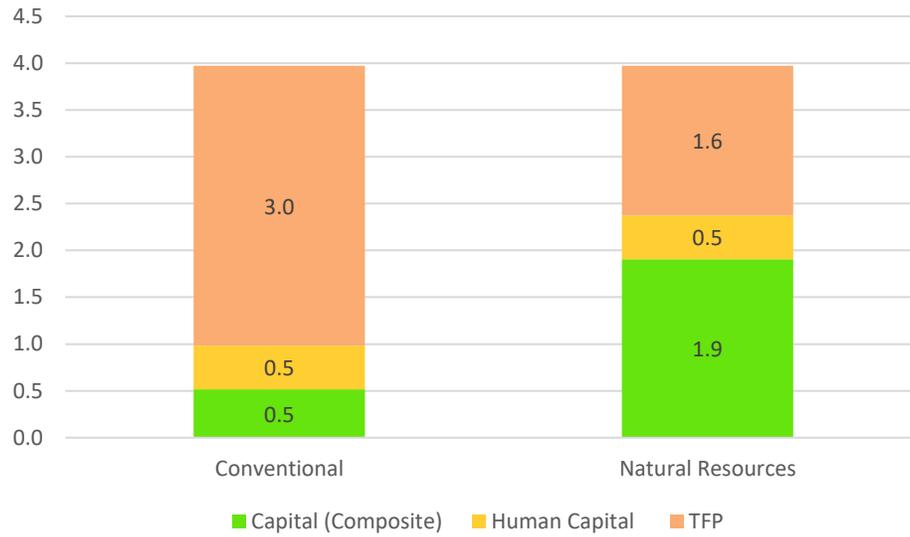


Source: The data has been collected from PWT 9.0 (Feenstra, Inklaar and Timmer 2015).

**1.5 Natural resource wealth is a significant driver of growth in Angola.** Productivity growth is typically measured as the difference between output growth and growth in factor inputs. Traditional measures of TFP only consider capital and labor as inputs. Brandt et al. (2017) show that recognizing natural resource wealth as an input may change measured productivity growth and the assessment of the sources of economic growth. Measuring the growth distribution of natural capital provides a clearer idea about the extent to which the growth contributions of other production factors would need to increase to maintain similar levels of output growth when the natural capital stock declines. Calderon and Cantu (2018) find that the SSA resource rich countries, fragile countries in the region and Angola record the largest impact of natural resources on growth per worker between 1996 and 2014. Physical capital continues to play an important role in most groupings, except for fragile countries where destruction of physical capital might be associated with civil conflict and wars.

**1.6 Without natural resources, growth per worker would have been significantly lower in the last decade.** Figure 7 compares the conventional growth decomposition (which only accounts for physical capital and labor) with a growth decomposition augmented for natural capital. When accounting for natural resources as an additional type of physical capital, the contribution of TFP shrinks to 1.6 percent compared to 3.0 percent in the conventional model. The contribution of physical capital on the other hand increases to 1.9 percent annual growth compared to 0.5 percent (for conventional growth accounting). Without natural resources, annual growth per worker would have been about 1.5 percentage points lower between 1996 and 2014.

Figure 6. Contribution of TFP to output per worker growth in Angola, 1996-2014  
(sensitivity to different growth accounting specifications)



Source: The data has been collected from PWT 9.0 (Feenstra, Inklaar and Timmer 2015).

### Box 1: Angola's natural capital

**Natural capital is defined as the non-manufactured physical endowments of an economy, such as land, oceans, and subsoil resources, and is the most significant form of capital in Angola.** It includes non-renewable resources (such as oil, natural gas, coal, and minerals), cropland, pastureland, forested areas, and fishing grounds. Low-income countries tend to be highly dependent on natural resources. The value of natural capital can be decreased through direct exploitation or environmental degradation. The value can be increased through positive interactions with other forms of capital, such as greater mechanization boosting crop yields. If resource rents are invested effectively, natural capital can be transformed into other forms of capital.

**Angola is the second largest oil producer in SSA, but its proven reserves are limited.** In 2017, oil production reached 1.64 million barrels per day, almost on par with Nigeria's 1.66 million barrels per day. Although oil exploitation has been a major boon to the Angolan economy, its contribution is not sustainable. Proven oil reserves in 2016 were 9.52 billion barrels, compared with 37.45 billion in Nigeria. Angola's petroleum endowment is expected to be exhausted by 2032 if the current rate of production is maintained. The country also has significant natural gas deposits, although the economic contribution of the commodity is much smaller than that of oil. Angola's proven natural gas reserves in 2016 were 308.1 billion cubic meters, compared with 153 billion in Cameroon, 115 billion in the Republic of Congo, and 5,475.2 billion in Nigeria.

**Angola has considerable mineral resources that are still underexploited.** In 2016, the country was the world's fourth largest diamond producer by value and the sixth largest by volume. Despite Angola's significant diamond resources, their economic importance is dwarfed by fossil fuel extraction. The contribution of the entire mining subsector (including diamonds, and excluding oil and gas) to Angola's GDP was only 1 percent in 2013. Diamonds are Angola's second biggest export after oil, and export volume of has grown considerably since the early 1990s, usually surpassing US\$ 1 billion per year. The diamond industry has major potential for growth, as only 40 percent of the diamond-rich territory of Angola has been explored. Subsoil resources in the country include iron, gold, copper, zinc, lead, manganese, and phosphate. Despite this wealth of deposits, Angola is not currently mining precious and industrial metals. Non-diamond mining products include only quarried building materials such as granite, gypsum, and marble, as well as manufactured cement. These products were not being exported prior to 2015, but by 2016 exports of cement, granite, and marble totaled US\$ 76.6 million.

**Angola possesses major agricultural resources, but they are severely underutilized.** Of Angola's 57.4 million hectares of agricultural land, only about 8 to 14 percent is currently being used. In the 1990s, Angola was producing less than 1 percent of the volume of coffee it had produced in the early 1970s, and the production of cotton, tobacco and sugar cane had ceased almost entirely. Angola has several important rivers and river-basins with a strong potential for developing irrigated agriculture, but very little infrastructure has been constructed for this purpose. Agricultural output declined dramatically during the decolonization and civil war periods, shifting towards subsistence agriculture and away from cash crops. The total value of Angola's agricultural exports in 2013 was only 8.5 percent of the value of its exports in 1974, the year the country won its independence. Until recently, the Government of Angola had not been committing significant resources to the development of the agriculture sector in the postwar era. Agriculture represented only 1.1 percent of the national budget in 2013, and this fell to 0.4 percent in 2015.

**Commercial and artisanal fisheries make a significant contribution to the Angolan economy, but most fish stocks in Angola are thought to be already fully exploited.** Marine resources include sardinella, horse mackerel, deep water shrimp, crabs, sea breams, croakers, snappers, swordfish, squid, and octopus. The main commercial species from inland fisheries are tilapia and catfish, exploited primarily by artisanal fishing. Fishing is a major source of livelihood for Angolans, with 150,000 people working in the sector, including jobs in fishing, gathering, processing, and selling. An estimated 80 percent of small-scale fish traders and processors in Angola are women. The stock of Cunene horse mackerel is currently estimated to be severely overexploited, and the government has imposed strict management rules concerning this stock. Marine biomass reserves dropped from roughly 700,000 tons in 1974 to 200,000 tons in 2011. Expected sea temperature rise associated with climate change and modifications to the Benguela Cold Current may have an impact on future productivity, and evidence suggests that some fish stocks may have already migrated out of Angolan waters for this reason.

## Box 2: Adjusted Net Savings

**The changes in the wealth of a nation can be measured by adjusted net savings.** Adjusted net savings (ANS) is a measure of gross national saving minus depreciation of produced capital, depletion of natural capital, plus public expenditures for education. Put differently, ANS measures the efficiency of converting natural resource rents into produced capital. Negative adjusted net savings suggest that a country is running down its capital stocks and thereby possibly reducing future social welfare. Positive adjusted net savings indicate that a country is adding to its wealth and thereby future well-being. Adjusted net savings measure the portion of national income that is not consumed by the private and public sectors, adjusted to reflect investment in human capital, depreciation of fixed capital, resource depletion and pollution damages.

**Angola's adjusted net savings rate is negative and lags that of resource-rich SSA.** In resource-rich SSA, over the last two decades, the adjusted net savings rate has improved substantially. Although still just below nil, the average is up from a negative 10 percent in 1997, a significant improvement. This compares with a relatively steady positive 8 percent average in resource-rich OECD countries and a 2.5 percent positive average in resource-rich Eurasia. Resource-rich SSA has more to do to improve efficiency, but the steady advances it has already made should support further progress. There are substantial differences in the adjusted saving rates of individual economies. The average rate for Botswana, Tanzania, and Zambia is almost 20 percent; those of Nigeria and South Africa have oscillated near zero; that of the Republic of Congo is a negative 30 percent; and Angola's is a negative 40 percent.

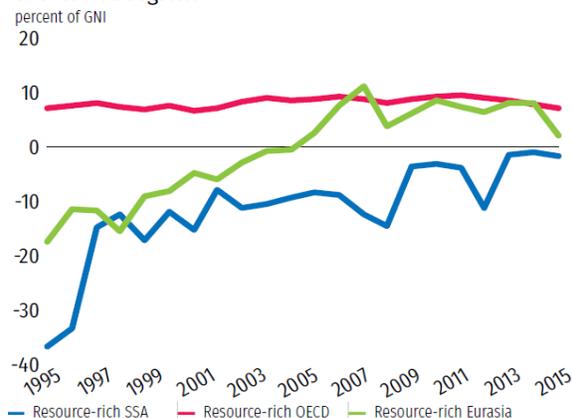
**Pressures for public spending in resource-rich countries often explain the low annual net savings.** Typically, greater resource revenue can create a deficit bias and reduce public savings. Examples of spending pressures are energy subsidies, unproductive public-sector jobs, and higher public-sector wages. Most energy subsidies are not only inefficient, but also regressive in countries where the less wealthy do not own cars or consume or have access to electricity. Public sector employment is typically large in resource-rich countries in the region. Evidence shows that pay increases for government employees given during a boom are almost impossible to reverse. More generally, spending that leads to increases in consumption is hard to reverse, because habits have formed and political resistance is high. By contrast, fluctuations in investment are easier to manage.

**Resource-rich countries are not destined to low annual net savings.** For example, Botswana is often mentioned as an example of a resource-rich economy that has been highly successful in promoting long-term growth and poverty reduction. It has successfully recovered and invested rents, including for building human capital. While there have been challenges in diversifying the economy and building a business-friendly environment to promote investment, Botswana has sound macroeconomic policies that have helped reduce short-term pressures to increase public spending inefficiently.

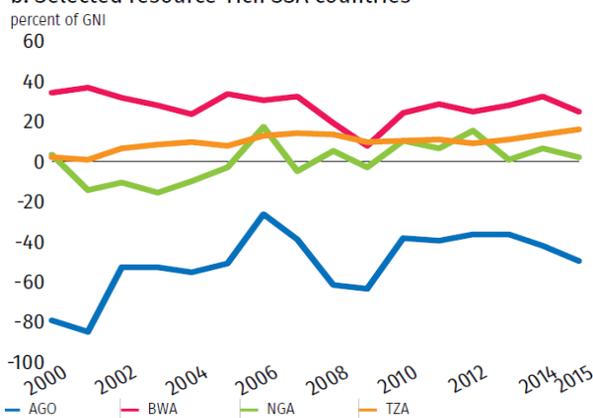
**Raising the adjusted net savings rate could provide a significant boost to produced capital.** Izvorski et al. (2018) estimate that raising the adjusted saving rate in resource-rich SSA to OECD levels would release an additional \$77 billion of investment in produced capital in resource-rich SSA. This is almost five times more than the annual inflows of FDI, and more than three times the annual inflows of remittances. To capture this substantial resource will require governments to improve both their institutions and their policies.

Figure B2.1. Adjusted Net Savings, Resource-Rich SSA and Comparators

### a. Selected regions



### b. Selected resource-rich SSA countries



## B. Angola's structural growth determinants

**1.7 This subsection investigates the key determinants of economic growth in Angola during 2000-2016.** It examines whether, and to what extent, per capita growth can be traced to structural factors (infrastructure, financial intermediation, trade, education, government size, institutions), stabilization policies (inflation, exchange rate misalignment), and external conditions (terms of trade, export commodity prices). Infrastructure development is proxied by a composite index that is constructed as a weighted average of three individual indices that measure progress in: power generation capacity; roads; and phone lines. Human capital is controlled for by secondary school enrolment. The trade-to-GDP ratio is included to capture the growth impact of openness to international trade. Government consumption (percent of GDP) serves as a measure of government size. Institutional quality is proxied by the Polity index. A regression model, developed to explain long-term growth, was applied (see Araujo et al. (2014), Moller and Wacker (2017), and Haile and Moller (2018, forthcoming)).<sup>1</sup> Growth predictions are made by combining cross-country estimates of the growth impact of the above-mentioned determinants and country-specific values of the variables for 2000-2016.

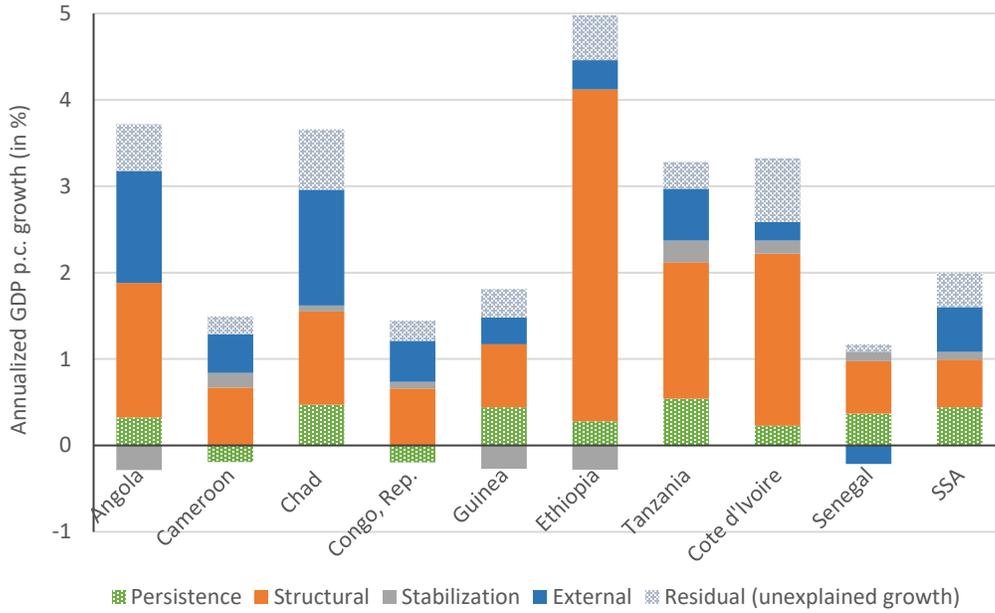
**1.8 Economic growth in Angola between 2000 and 2016 was primarily driven by structural improvements and external tailwinds.** Structural factors accounted for about 1.6 percentage points of economic growth, nearly half of the 3.4 percent growth per capita over 2000-2016 (Figure 8). This is high, compared to SSA overall and to most comparators except for Ethiopia and Cote d'Ivoire; for SSA structural factors accounted for only 0.6 percentage of per capita growth. External tailwinds, largely attributable to the demand-driven upsurge in global oil prices, added about 1.3 percentage points to per capita growth in Angola, while inflation and exchange rate misalignment have reduced growth by about 0.3 percentage points; this is in contrast to SSA, where economic policies provided some growth impetus. Economic policies also reduced growth in the Central African Republic, Guinea and Ethiopia.

**1.9 Among the structural drivers of growth, financial deepening and government spending were the most important ones.** Financial deepening and increased government spending accounted for 43 and 39 percent of structural growth between 2000 and 2016, respectively (Figure 9). The contribution of financial deepening to growth appears to be significantly higher in Angola than in SSA overall, comparable to Cote d'Ivoire, but lower than in Tanzania. Government spending also added significantly to growth. While the contribution of government consumption by far exceeded that of most comparators, the contribution of infrastructure investments remained more limited in Angola (0.3 percentage points or 16 percent of structural growth) compared to several SSA countries and SSA overall. The contribution of education in Angola was small and trade had a negative impact.

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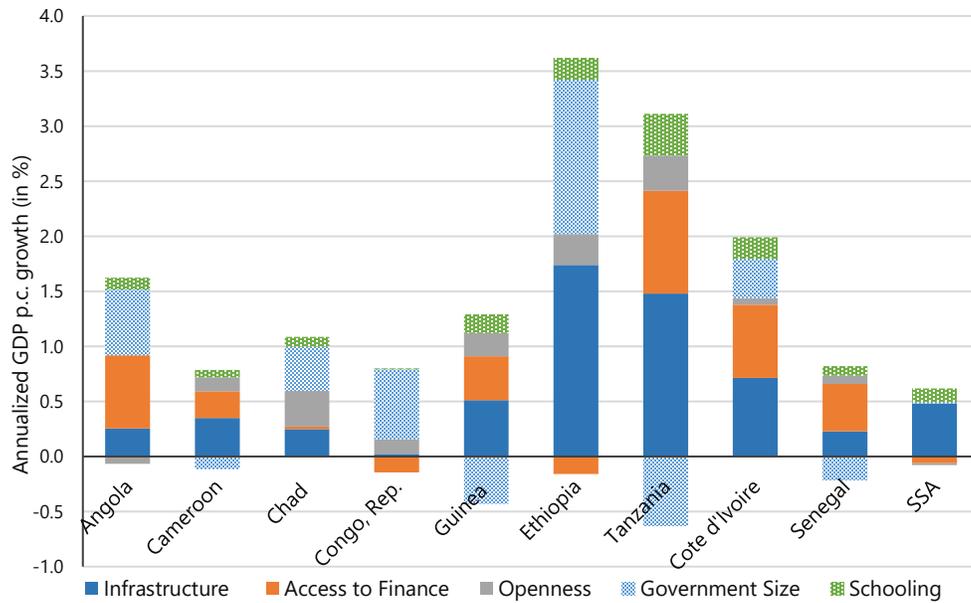
<sup>1</sup> The empirical analysis mainly uses the cross-country growth regression model in Brueckner (2014). See also Moller and Wacker (2017) and Araujo et al. (2014), and Haile (2016) for applications in the context of Ethiopia, Latin America, and Tanzania, respectively.

Figure 7. Key growth drivers in Angola and comparators, 2000-2016



Source: Haile and Moller (2018)

Figure 8. Structural drivers of growth in Angola and comparators, 2000-2016

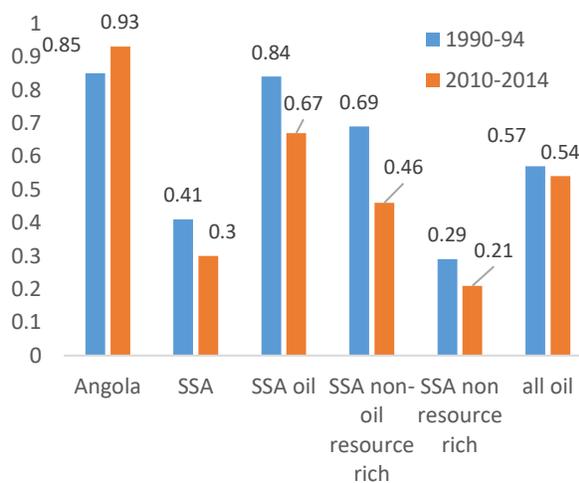


Source: Haile and Moller (2018)

**1.10 The end of the oil price boom in 2014 exposed the unsustainability of the natural resource driven growth model.** Previous sections showed that growth in Angola is closely linked to natural resource wealth and favorable commodity price developments that fueled government spending and credit growth, thereby contributing to strong growth performance. However, the end of the commodity prices boom in 2014/2015 exposed significant macro-financial vulnerabilities. Prospects of persistent low oil prices and depleting oil reserves call for a new growth model that needs to be built on a sustainable macro-economic framework; broadened economic diversification; and strengthened regional and global economic integration. The fact that Angola’s net adjusted savings rate has been negative suggests that the country has not been investing its natural resource wealth efficiently for future development (Box 2).

**1.11 Angola’s level of trade openness is comparable to other oil exporters, but Angola is second to none in terms of export concentration.** From 2010 to 14, the volume of trade, defined as the total of exports and imports over GDP, was about 100 percent. This is slightly down from 106 percent of GDP in 1990-94, but still comparable to the levels of openness of other oil exporters. In terms of export concentration,<sup>2</sup> Angola shows the largest degree of concentration by export products in the region, and export concentration has also increased over time (Figure 10 and 11); this sets Angola apart from other countries in the region, where trade diversification appears to have increased. Angola has made some progress in terms of diversifying exports by destination, as the Herfindahl index of market concentration has declined over time. Calderon and Cantu (2018) show that growth in Angola would benefit from greater trade openness, lower export product concentration, and reduced dependence on natural resource exports (Box 3).

Figure 9. Trade diversification, product concentration



Note: Herfindahl Index for product Index ranges from 0 to 1, lower values reflect less concentration.  
Source: Calderon and Cantu (2018)

Figure 10. Trade diversification, market concentration

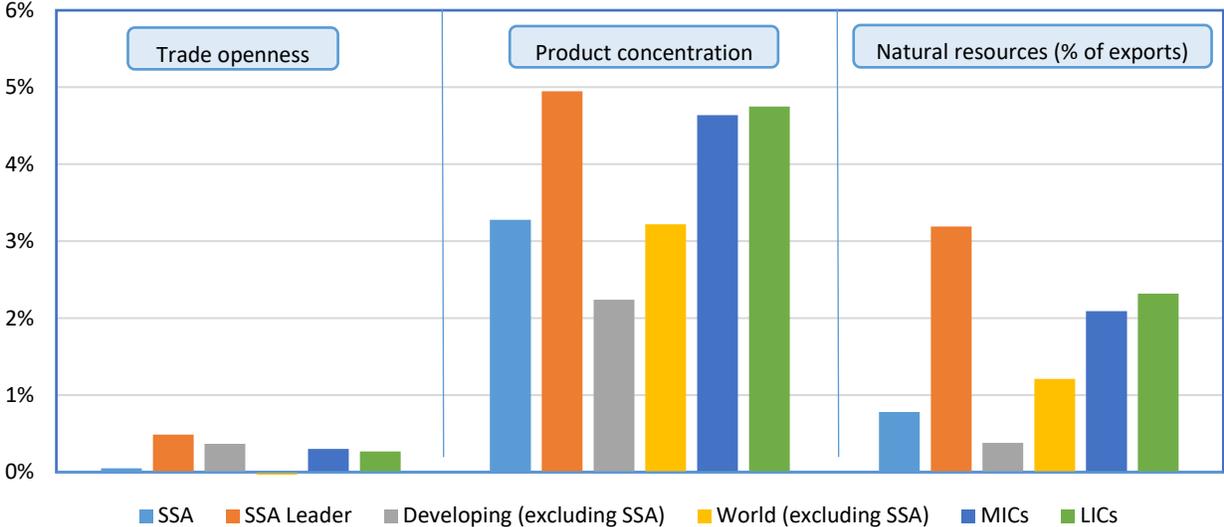


Note: Herfindahl Index for market concentration. Index ranges from 0 to 1, lower values reflect less concentration.  
Source: Calderon and Cantu (2018).

<sup>2</sup> The Herfindahl index is used to measure the concentration of exports by product and markets, it is an inverse measurement of export diversification. Higher values of the index imply a greater concentration of exports while lower values imply a greater diversification. The index is calculated at a 4-digit disaggregated level from the SICT 1<sup>st</sup> revision.

**1.13 Simulations show that Angola stands to gain considerably from trade diversification.** Calderon and Cantu (2018) compute the growth benefits of closing Angola’s gap in terms of trade openness, product diversification and share of natural resources in total trade with respect to the top growth performers. Growth benefits could be quite substantial, particularly with regards to product concentration, which is high in Angola (see Figure 12). Closing the gap for product concentration to the regional SSA average would increase growth per worker by about 3.3 percent per year, while closing the gap to the SSA level could bring growth gains of close to 5 percent per year. Natural resource exports display somewhat lower effects from closing the gap to SSA on output growth of 0.8 percent for Angola. As Angola is already relatively open, additional gains from trade openness would be more limited.

Figure 11. Comparative statistics, growth  
(time corresponds to 5-year average from 2010 to 2014)



Source: Calderón and Cantú (2018); Coefficients: trade openness = 0.0137, product concentration = -0.0147, natural resources = -0.0154.

**1.15 Reducing product concentration would have a significant impact on TFP.** Once more, product concentration has the highest effect on TFP growth. If Angola were to close its product diversification gap with SSA, TFP would increase by 2.2 percent, the highest gains would be achieved by catching up with the SSA leader. TFP growth percentages from closing the natural resources gap with the region are relatively modest. Closing the gap in trade openness, where Angola is already close to the SSA average, would only lead to an increase of 0.03 percent in TFP for Angola.

### Box 3. Trade in natural resources and growth

Calderon and Cantu (2018) investigate the effects of trade openness, diversification, and the role of natural resources on growth in Angola. The following findings emerge from their analysis:

- *Growth per worker.* Trade openness —proxied by the ratio of exports and imports to GDP— has a positive, significant and causal relationship with growth. Product concentration has a negative and significant relationship with growth per worker, and market concentration has a small positive and significant impact on growth. The share of natural resource exports in total exports also exhibits a negative and significant relationship. This implies that growth is fostered by higher trade integration, a more diverse basket of products to export, and lower dependence of natural resources in the structure of exports.
- *Channels of transmission.* Trade openness has a positive impact on both growth of capital per worker and TFP when natural resources are not controlled for. A more diverse structure of exports would lead to greater growth in capital stock and TFP —especially natural resources are accounted for in the regression analysis. The structure of trading partners, on the other hand, does not exhibit a robust relationship with the sources of growth. Finally, a greater dependence on natural resources in the export basket hinders the growth of capital stock and TFP.

Calderon and Cantú (2018) further use scatterplot analyses to assess trade-income and trade-growth elasticities on a global scale. Three indicators of trade in natural resources are used to explore their link with GDP per capita and growth: (1) natural resources as a share of GDP, (2) natural resource exports per worker, and (3) natural resource exports as a share of total exports. For Angola, natural resources as share of GDP increased substantially from 33.6 percent for 1990-94 to 57.1 percent for 2010-14 (see Annex 1: Natural Resources in Angola). Equally, natural resources as share of the labor force increased from 0.8 percent to 7.0 percent during the same time frame while the share of natural resources of total exports remained at almost 100 percent.

Angola's performance is compared to the world mean and countries with similar level of trade openness, export concentration and natural resource wealth are identified for comparison:

- Trade openness, measured by the volume of trade, has a positive relationship with GDP per capita and a slightly negative relationship with GDP growth. Angola's trade-income elasticity is above the world mean and Angola's level of trade openness is comparable to Singapore and Austria, which both countries have a notably higher GDP per capita and higher GDP growth rates.
- The Herfindahl index by products has a negative relationship with GDP per capita and a slightly negative relationship with GDP growth. Angola's product concentration elasticity with respect to income and growth again exceeds the world mean. Angola has a similar Herfindahl index by products to Bulgaria and Croatia, both countries have however significantly higher incomes.
- The Herfindahl Index by markets is negatively correlated for GDP per capita, but positively with growth. Angola's Herfindahl index by markets is comparable to Cambodia and Guinea, which both have lower incomes than Angola, but higher growth rates.
- Natural resource exports as a share of GDP have a slightly positive relationship with GDP per capita and growth. Angola's elasticities are above the global mean and similar to Iraq, which however has higher GDP per capita and growth rates.
- Natural resources as a share of total exports are negatively associated with income, but slightly positively with growth. Angola is below the world mean for income and at the world mean for growth. Angola elasticities are similar to Madagascar and India.

## C. Conclusion

### **1.16 Growth in Angola was mainly driven by capital accumulation, especially from natural resources.**

The evolution and determinants of growth per worker in Angola has changed significantly over time, but overall since 1961, capital accumulation has been the most important factor. For an oil dependent country, such as Angola, it is important to account for natural resources; accounting for natural resources as an additional type of physical capital means that the contribution of TFP shrinks to 1.6 percent compared to 3.0 percent in the conventional model. Conversely, the contribution of physical capital increases to 1.9 percent annual growth compared to 0.5 percent (for conventional growth accounting).

**1.17 External developments and structural factors have underpinned per capita growth.** This chapter has described the structural determinants of growth in Angola from 2000 to 2016. It shows that structural improvements, particularly financial deepening and government spending, and external tailwinds (notably high oil prices) were the key contributors to growth since 2000. Infrastructure and education contributed little to growth, and trade had a negative impact on growth. Sub-optimal economic policies, most notably high inflation and REER misalignments, also reduced growth.

**1.18 Effective natural resource management, macro-stability and export diversification would greatly benefit growth in Angola.** Without natural-resource wealth, Angola's per capita GDP growth would have been about 1.5 percentage points lower. Given Angola's depleting oil reserves and Angola's negative net adjusted savings rate, this is a concerning message which calls for increasing the efficiency of natural resource wealth management and more effective investment of natural resource rents. Reducing the volatility and pro-cyclicality from commodity dependency is also expected to improve macro-stability and lead to important growth effects. Export diversification is also important for growth and it is estimated that diversifying exports to the level of the average SSA country could increase per capita GDP by about 3.3 percent over the longer-term. This is good news as economic diversification can give Angola the potential to mitigate the adverse growth impact of depleting oil wealth and the opportunity to amplify growth by increasing TFP.

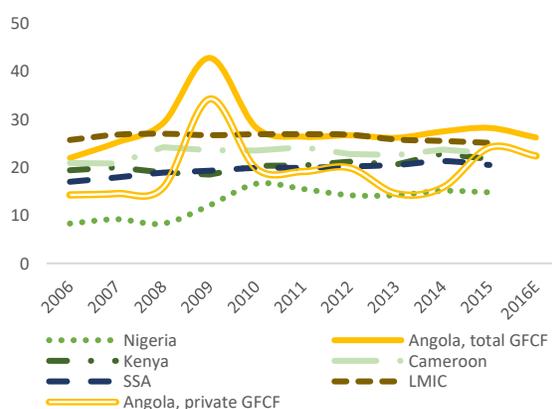
## Chapter 2. Binding Constraints to Economic Growth in Angola

### A. Introduction

**2.1 This chapter aims to identify the most binding constraints to economic growth in Angola using the Growth Diagnostics framework.** Chapter 1 showed that growth in Angola is largely driven by natural resources and that natural resource dependency hinders diversified growth. However, the growth accounting and natural resource wealth accounting of Chapter 1 do not provide a framework for identifying priorities for growth. This chapter applies the Growth Diagnostic (GD) framework of Hausmann, Rodrik and Velasco to determine the causes behind Angola’s current growth challenges and to highlights factors that may be constraining diversified growth. It also seeks to identify the most binding constraints to growth in the short-run, in the sense that their removal would generate a growth spurt. In the GD approach, low levels of private investment and entrepreneurship are considered to be the key constraint to economic growth.

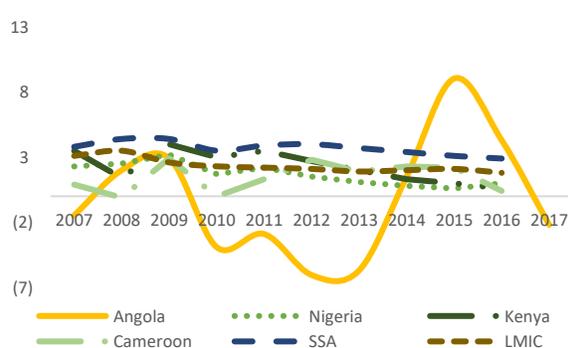
**2.2 While private investment in Angola is high, it reportedly is mainly foreign, concentrated in oil and gas, and has limited spillover to the rest of the economy.** As a percentage of GDP, total gross fixed capital formation (GFCF) averaged about 28.2 percent during 2006 and 2015, compared to an average of 19.5 percent for SSA countries and 26.3 percent for low middle-income countries (Figure 13). Private sector GFCF stood at 24.1 percent of GDP in 2015, compared to an average of 15.3 percent for SSA countries in 2015. While no sectoral breakdown of private investment is available, informal evidence suggests that the majority is concentrated in the oil-sector, with non-oil private investment accounting for a small share. Most private investment is foreign and FDI data confirms that the oil sector is the main destination of the FDI inflows<sup>3</sup>. The fact that a large share of the FDI flows to and from Angola reflect liquidity management by oil companies due to the lack of local capital markets,<sup>4</sup> seems to support the low developmental impact and limited spillover effects of FDI to the domestic non-oil economy.

Figure 12. Total GFCF (percent of GDP)



Source: INE, 2018

Figure 13. FDI, net inflow (percent of GDP)



Source: INE, 2018

<sup>3</sup> During 2003-2017, 82 percent of FDI in Angola was focused on oil and gas, while 6 percent was in agribusiness investments, and the bulk of the remainder went into construction (WB CPSD, 2018).

<sup>4</sup> IMF, 2018; UNCTAD’s 2018 World Investment Report.

**2.3 Removing constraints to domestic investment in the non-oil economy seems therefore critical for diversified growth.** When growth is concentrated in few sectors, the GD framework can be modified with an analysis of constraints to growth in slow-growing sectors, which, in the case of Angola is the non-oil sector. A systematic assessment along the decision tree of the growth diagnostics (see Box 4) identifies access to credit in Angola and low returns to economic activity as critical binding constraints for private investment; insufficient human capital, infrastructure bottlenecks, weak institutions, a difficult regulatory environment, and challenging macro environment contribute to low economic returns in the non-oil economy.

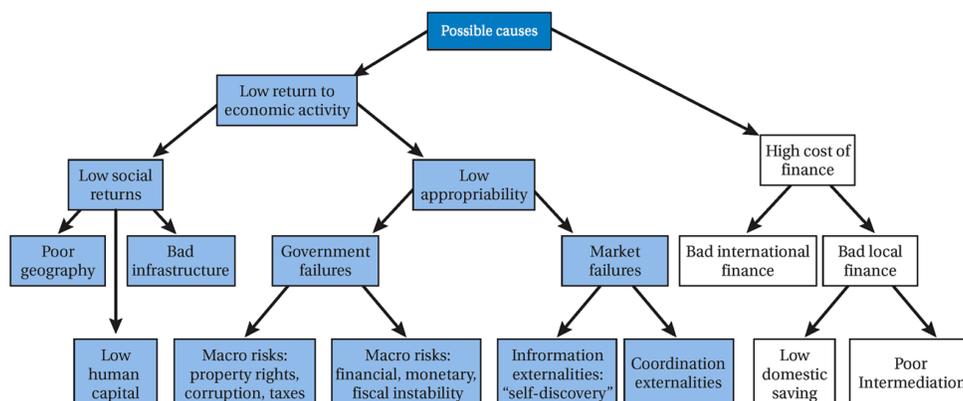
**Box 4: Growth Diagnostics Methodology**

**In the GD approach, faster growth will take place if the private returns to asset accumulation, net of the cost of financing it, are high.** This is expressed as  $g = \sigma \{[(1-\omega) \times \Theta] - r\}$ , where  $[(1-\omega) \times \Theta]$  is the private return to accumulation adjusted by the risk of appropriation,  $\omega$ , and social returns,  $\Theta$ ; and  $r$  is the cost of financing.

**Figure B4.1 shows the decision tree involved in the approach.** Constraints to growth in the GD framework come under three categories: high cost of finance (high  $r$ ), low private appropriability of social returns to capital (high  $\omega$ ), or low social returns to capital (low  $\Theta$ ). The private appropriability of social return  $(1-\tau)$  includes micro risks, macro risks and market failures. The high levels of micro and macro risks, as well as large market failure, may lead to a low level of private appropriability and hence to low private investment. The interest rate ( $r$ ) consists of factors such as savings, domestic finance and external financial markets.

**The diagnostic process starts by assessing which of these three constraints are the most binding on private investment,** then looks for specific distortions causing the constraint to be binding. If the level of private investment is low, is that because the returns on economic activity are low and/or because the cost finance is high? If the cost of finance is identified as a binding constraint, the second step is to look for distortions causing it to be high (e.g. inefficient financial intermediation, capital controls on external financing etc.). If the returns on economic activity are low, is this due to low social returns (geography, education and infrastructure) or high risk of appropriability of private returns due to government failures including micro (weak institutions, e.g. enforcement of contracts and property rights) and macro risks (macroeconomic stability: fiscal, financial, monetary and exchange rate), or market failures? The underlying idea is that removal of a small number of binding constraints will have a larger impact on growth than a long list of reforms aimed at removing all constraints at once, which may or may not be binding<sup>5</sup>.

Figure B4.1. Growth Diagnostics Decision Tree



Source: Hausmann et al. (2018).

<sup>5</sup> AfDB, 2008.

## B. Key messages from the growth diagnostic

**Message 1: Low access to credit is a binding constraint for private investment.** *Access to credit remains poor in Angola, especially for micro, small and medium sized enterprises (SMEs) in rural areas. Angolan banks have been cautious of lending to the private sector, partly because of poor legal protection and lack of credit information on borrowers.*

**2.4 The observed elasticity of private investment to interest rates is low.** The cost of financing to businesses – the real lending rate – has been volatile and high in the past, mainly due to volatile inflation (see Figure 16). The average real lending rate fell from 9.4 percent in 2015 to -5.9 percent in 2016. Since movements in the real lending rate do not appear to produce significant movements in private investment (Figure 17) and bank credit, this would suggest that the cost of finance may not necessarily be a binding constraint for investment. However, lending rates for specific firms and economic sectors would be needed to ascertain this claim. The low elasticity of investment to real interest rates may also be explained by other factors, such as availability and access to credit.

**2.5 Access to finance is low.**<sup>6</sup> The private sector reports that access and cost of finance is one of the most binding constraints. According to the 2014-2015 Global Competitiveness report<sup>7</sup>, Angola ranks 143<sup>rd</sup> out of 144 in availability of financial services. The World Bank's 2019 Doing Business Report ranked Angola 184<sup>rd</sup> out of 190 on the getting credit indicator and 168<sup>th</sup> out of 190 on the resolving insolvency indicator. In the 2010 World Bank Enterprise Survey, firms cited access to finance among the top three constraints, after corruption and access to land.

**2.6 Private credit remains low compared to comparator countries.** Angolan banks have remained very cautious about lending to the private sector and kept more than a half of their domestic assets either at the BNA or invest in high-yield government bonds. While banks' net claims on the central government almost tripled as a share of GDP between 2011 and 2016 (from 5.4 to 14.4 percent), claims on the private sector remained stable at around 22 percent of GDP. The lack of access to finance coincides with high liquidity in the banking sector, which increased significantly over the same period. Between 2010 and 2016, the ratio of liquid to total bank assets grew from 32 to 41.3 percent, while the ratio of liquid assets to short term liabilities grew from 38.6 to 52.3 percent (BNA, 2018).

**2.7 Legal, regulatory and institutional factors hinder broader access to credit by the private sector.** Compared to peers, Angola has the lowest share of firms with a line of credit (Figure 18). The Angola Financial Sector Development Strategy (2017–2022)<sup>8</sup> identifies lack of corporate transparency, lack of legal protection, and high credit risk as factors that discourage banks to lend to the private sector. A lack of bankable projects has also affected the growth of the credit market. The inability of banks to accurately assess borrowers' creditworthiness implies that most loans to micro, small and medium sized enterprises

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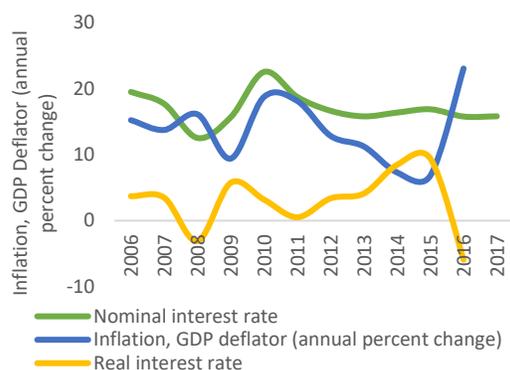
Chapter 1 showed that financial deepening was one of the key structural drivers of growth in Angola between 2000-2016, and its contribution to growth was significantly higher than in SSA overall. The fact that despite financial deepening, access to finance is identified as a critical binding constraint to growth may seem as a contradiction. It can be reconciled by the fact that if the allocation of credit is concentrated in a small number of firms, overall private sector access to finance would still be low. The perception that Angolan banks restrict lending to certain sectors (e.g. oil and oil-related activities) and tend to ration credit to SMEs would seem to be aligned with this interpretation.

<sup>7</sup> WEF, 2014.

<sup>8</sup> Government of Angola Financial Sector Strategy (developed with World Bank technical assistance).

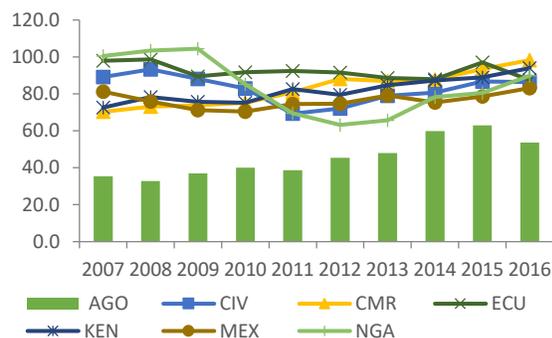
(SMEs) require high, liquid collateral levels. Since most SMEs lack sufficient collateral, loan request rejection rates are very high (86 percent)<sup>9</sup>. In addition, complementary financial services that elsewhere provide credit information about borrowers, such as insurance, capital markets, accounting, or a credit bureau, are either underdeveloped or non-existent in Angola.

Figure 14. Interest rates and inflation (%)



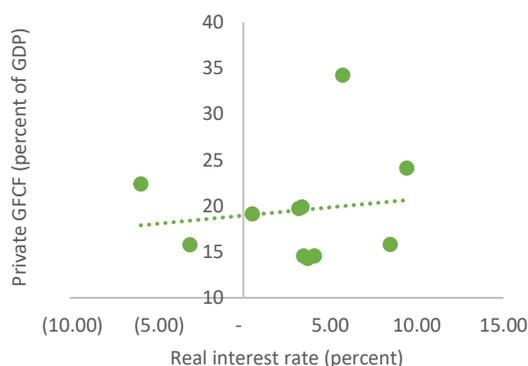
Source: WDI and BNA, 2018

Figure 16. Proportion of Private Credit to Deposits (%)



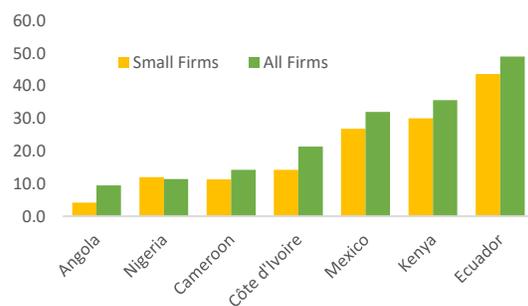
Source: WB FinStats database, 2018

Figure 15. Private GFCF vs Real Interest Rate



Source: World Bank estimates, BNA, 2018

Figure 17. Percent of Firms with a Line of Credit



Source: WB FinStats database, 2018

**2.8 Private bank lending is concentrated in few economic sectors and favors certain borrowers.** As of 2015, more than three-fourths of credit was concentrated in trade, real estate, construction, services, and consumer loans. Only 20 percent of credit went to the other sectors: manufacturing received about 10 percent, agriculture and forestry 5 percent; electricity, gas and water 0.5 percent; and fishing about 0.2 percent.<sup>10</sup> Due to imperfect creditor information, Angolan banks have shown a clear preference for certain borrowers. The 2010 WB Enterprise Survey for Angola shows that larger and older companies in urban areas enjoy considerably better access to credit than smaller companies in rural areas. Almost all loans to SMEs required collateral, compared to 72 percent of loans to large sized companies.

<sup>9</sup> US Department of State, 2017

<sup>10</sup> Specifically, credit is concentrated among six sectors: wholesale and retail trade (20 percent), building activity and other services (14 percent), construction (12 percent), other service activities – social and personal (14.4 percent), households (18 percent), and manufacturing (9 percent). Key sectors' shares of gross credit changed very little between 2010 and 2015.

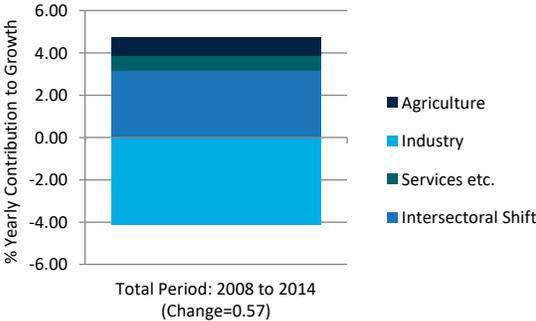
**2.9 Recent developments and foreign exchange restrictions have further reduced access to credit for the private sector but the government has been implementing reforms to increase financial inclusion and improve the credit information infrastructure; the BNA has also been easing foreign exchange restrictions.**

*Message 2: Low returns to economic activity in the non-oil sector are the main impediment to private sector investment. Returns to investment improved over time, however, this was mainly attributable to between-sector shifts of workers. Productivity remains highest in the highly capital-intensive resource sector, which has limited production links with the rest of the economy. As a result, productivity in other economic sectors has stagnated.*

**2.10 The contribution of total factor productivity (TFP) to growth is low when controlling for natural resource wealth.** Chapter 1 showed that growth is mainly driven by capital accumulation, especially from natural resources (for the period 1996-2014). The contribution of TFP, when controlling for natural resources as an additional type of physical capital, is relatively small, and below the contribution of physical capital.

**2.11 Labor productivity vary widely by sectors, and productivity is currently the highest in the extractives sector.** While labor productivity increased at an annual rate of 0.57 percentage points, this growth did not originate within sectors, but rather resulted from employment shifts between sectors, specifically the movement of workers out of agriculture and into services. Between-sector shifts contributed to 3.1 percentage points of annual growth in the value added per worker over this period, but this was offset by poor growth in within-sector productivity (Figure 19). Labor productivity in the industrial sector decreased by 4.1 percentage points, while agriculture and services experienced a positive but small change in productivity: 0.85 and 0.69 percentage points per year, respectively. In 2014, labor productivity was lowest in agriculture and services. Value-added per worker is, however, significantly higher in the highly capital-intensive industry sector—including the extractive industry (WB, 2018).

Figure 18. Productivity change decomposition, annual contribution to per capita value-added growth by economic sector, 2008-2014



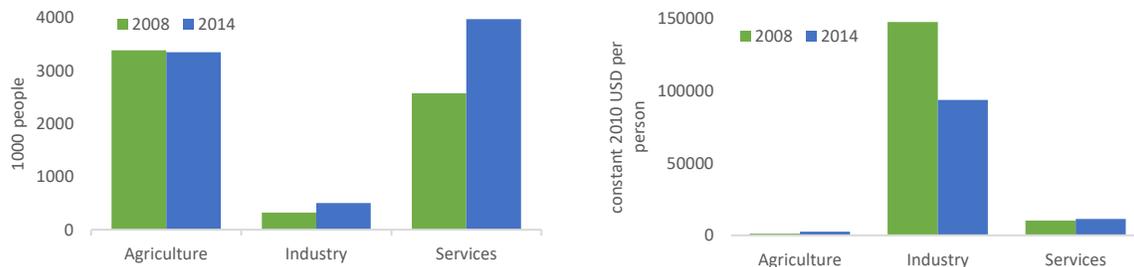
Source: Jobs Diagnostic, World Bank (2017)

Figure 20. Total employment by sectors of economic activity, 2008-2014

Figure 19. Value added and employment growth, 1992-2014



Figure 21. Value added per worker and sectors of economic activity, 2008-2014



Source: Jobs Diagnostic, World Bank (2017)

**2.12 The limited spillovers from the oil sector to other sectors are also contributing to the stagnating productivity in non-oil sectors.** The oil sector has limited production linkages with the rest of the economy and the direct employment creation in the resource sector is minimal (WDR, 2017). Experience from other countries shows that oil investment also crowds out investment in other sectors. Angola’s recent growth experience between 2002-08 is a case in point. It was driven by the extractives, but growth had low employment intensity in terms of job creation. Lindbjerg-Sperling (2018) also shows that the oil industry in Angola does not correlate positively with structural transformation in Angola (see Box 5).

**Box 5: Diamonds, economic diversification and urban development**

African countries have seen urbanization without industrialization, causing a less productive sectoral composition with a commensurate lower productivity per worker, leading to lower pay than what is seen elsewhere in the world (Gollin et al., 2016). The cause may be that high levels of natural resource exports can lead to urbanization without industrialization, as the natural resource income is used for imported goods leading to so called *consumption cities*<sup>11</sup> with low labor productivity, limiting competitiveness and development, and ultimately (productive) opportunities.

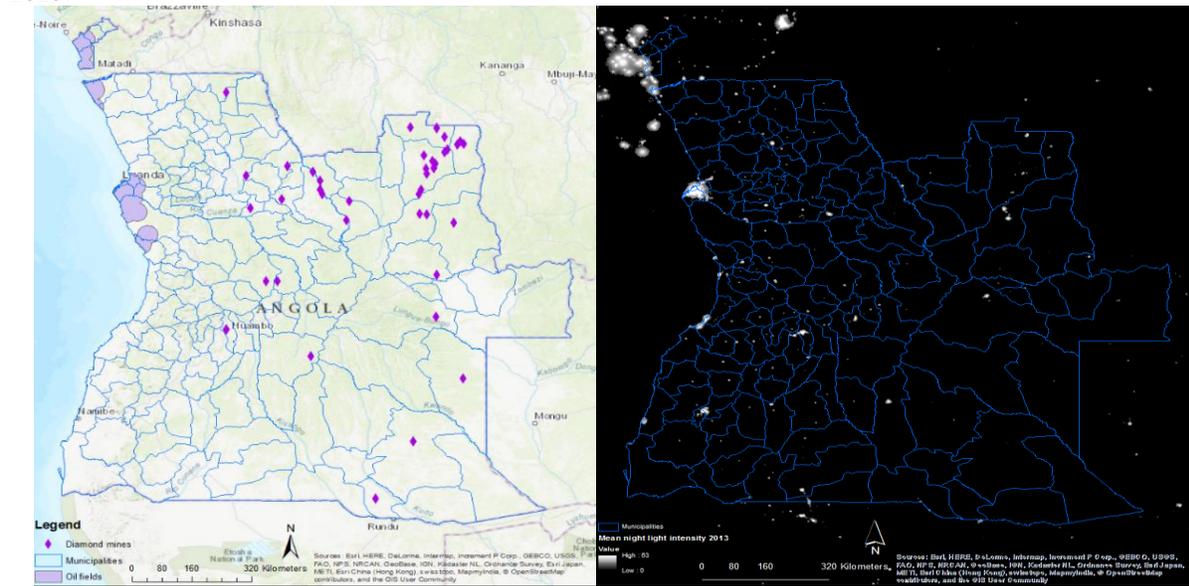
Economic research suggests that institutional capacity, ownership and management of the natural resources affect whether the natural resource windfall has positive or negative long-term development effects. Michaels (2011) analyzing the developments in the southern United States concludes that institutions, also at the local level, are key for turning the resource windfall into development. Domenech (2008) confirms the possible positive effects, analyzing the effects of mineral resources in Spain on the local effects. Caselli and Michaels (2009) found in Brazil that if the local population extracts diamonds informally, it is more likely to have an effect on income at the household level.

Econometric analysis of oil and diamond export data in combination with measuring wealth creation, urbanization dynamics and night light in Angola (Lindbjerg Sperling, 2018) shows the differential effects across the two types of extractive resources. Whereas increased activity in diamond mines has a positive effect on both wealth and urbanization, there are no significant effects from oil production. This indicates that although hydrocarbon production generates significant revenues for the Angolan state, the population is seemingly not much affected by the oil sector as the sector does not create jobs, and thereby does not spur development directly. Diamond mines on the other hand are employing both formally and informally and may therefore have a larger and more direct effect on the local population (see also Udelsmann, Rodrigues & Tavares, 2012).

<sup>11</sup> Gollin et al. (2016) differentiate between (i) countries that follow the standard pattern, where urbanization occurs with structural transformation and cities are *production cities*, with a mix of workers in tradable and non-tradable sectors; and (ii) countries that rely on natural resource exports, where urbanization has increased at an equally rapid pace, but has taken place in *consumption cities* where the mix of workers is heavily skewed towards non-tradable services.

Summarizing the results from the econometric analysis of Lindbjerg-Sperling (2018), the oil industry in Angola does not correlate positively with urbanization and with structural transformation providing impetus for developing a local agricultural sector, larger manufacturing, and/or service employment. The diamond industry on the other hand correlates positively with all measures of development and increased diamond revenues have a positive effect on the development of the municipality. As the service sector in the diamond municipalities is also markedly larger (13 percent versus 20 percent), the consumption city theory is also valid here, despite the differential impact on the local income level. Enhancing diamond development in Angola could have a positive impact in terms of employment and economic diversification, however there are challenges that need to be addressed, including governance and transparency, tax collection, management of diamond revenues, environmental policies and corporate social responsibility.

Figure B6.1: Municipalities with extractive resources Figure B6.2 Night light intensity across Angola, mean levels 2013



Source: PRIO, Lindbjerg-Sperling (2018).

**Message 3: Social returns to human capital are low.** Angola’s low-skilled workforce is a key constraint to private investment and diversified growth. Economic diversification requires highly skilled labor force and productivity improvements in the non-oil sector. There are also signs of a skills mismatch in the Angolan labor market, as young and educated Angolans are not finding good jobs and businesses rely on expatriate workers to overcome the skills shortage.

**2.13 Angola lags behind its peers in terms of human capital.** Human capital consists of the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society (WB, 2018). Chapter 1 showed a small contribution of human capital to growth during 1996-2014, relative to capital and TFP. Angola’s human capital contribution to growth was also found to be lower than the SSA average. The Human Capital Index (HCI) measures the amount of human capital a child born today can expect to attain by age 18<sup>12</sup>, Angola’s HCI is below the average of

<sup>12</sup> The HCI measures the amount of human capital that a child born today can expect to attain by age 18. It conveys the productivity of the next generation of workers compared to a benchmark of complete education and full health. It is made up of five indicators: the probability of survival to age five, a child’s expected years of schooling, harmonized test scores as a measure of quality of learning, adult survival rates (fraction of 15-year-olds that survive to age 60), and the proportion of children who are not stunted. WB, 2018.

SSA and that of comparable income groups. A child born in Angola today will at age 18 only be 36 percent as productive as child that enjoyed complete education and full health.

**2.14 Despite significant long-term achievements in improving health outcomes, Angola underperforms peers in a range of areas, including life expectancy, and maternal, infant and under five mortality rates.** These results reflect systemic failures in the delivery and access to health care services and medicines in a complex and decentralized system. Quality-related issues, such as a scarce supply, the uneven regional distribution of trained health staff, and low quality pharmaceutical products also undermine health care outcomes. These challenges are magnified in poor communities and rural areas.

**2.15 Access to education and educational attainment continues to lag most countries.** Angola has made impressive strides in improving its education system since the civil war. School enrollment increased sharply from 2.2 million in 2004 to 10 million in 2016, and Angola's literacy rates are better than many of its regional peers<sup>13</sup>. Gross achievement rates are however not indicative of educational quality. Also, greater gains have been made in primary education, while secondary and tertiary levels remain to lag comparators (Figure 21)<sup>14</sup>. **Labor market outcomes reflect skill, gender and age differences.** The Angola jobs diagnostic shows a strong correlation between years of education and participation in paid employment<sup>15</sup>. Paid employment is significantly higher for men (47.2 percent) than for women (25.9 percent). Better paying and more secure jobs are found in services and industry and employment in the industrial sector is largely dominated by men (92 percent). Women are mostly self-employed (63 percent) and predominately work in agriculture; only 24 percent of non-agricultural wage employees are women. Skilled-labor and wage employment opportunities are mostly concentrated in the public sector, while most labor-intensive sectors such as agriculture and other services employ very few skilled workers. Angolans aged 20-24 are more likely to finish primary education and to continue with secondary education than Angolans aged 50-54, but despite attaining higher levels of education, a considerable share of younger Angolans are not finding decent jobs<sup>16</sup>. Youth unemployment is also high and persistent, at 16.7 percent in 2011 according to the latest reading.

**2.16 There are signs of skills mismatches in the Angolan labor market.** One in four firms identified an inadequately educated workforce as a major constraint to expansion (WEF, 2014). Anecdotal evidence suggests that skill-intensive sectors in Angola are heavily relying on expatriate workers. Technical jobs, for instance in engineering, IT, medicine, consulting and commercial farming are mostly held by expats. Some companies have put in place intensive training programs for local recruits to address the skills shortage, including sponsoring some recruits to study abroad at the post-graduate level.

Figure 22. Human Capital Index (HCI) Angola, 2017    Figure 23. Benchmarking HCI, 2012 vs. 2017

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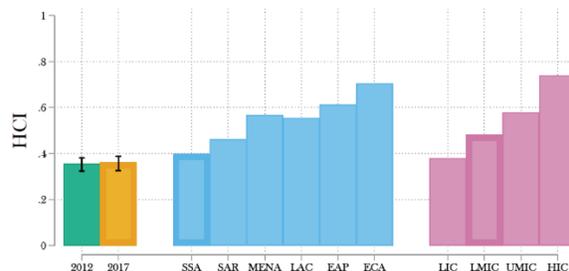
<sup>13</sup> For a discussion of Angola's education sector see World Bank Policy Notes (source) and Public Expenditure Review (source).

<sup>14</sup> Please consult the Policy Notes and the Public Expenditure Review for a broader discussion of the education sector in Angola.

<sup>15</sup> Include footnote.

<sup>16</sup> Young Angolans aged 15-24 are much more likely (11 percent) to be unpaid workers compared to Angolans aged 25-64 (4 percent).

Component	Boys	Girls	Overall
HCI	0.37	0.36	0.36
Survival to Age 5	0.91	0.93	0.92
Expected Years of School	8.7	7.1	7.9
Harmonized Test Scores	327	325	326
Learning-adjusted Years of School	4.5	3.7	4.1
Adult Survival Rate	0.73	0.8	0.76
Not Stunted Rate	0.59	0.66	0.62



Source: HCI, World Bank (2018)

Figure 24. Primary school enrollment (net, percentage of primary school age children, 2011)

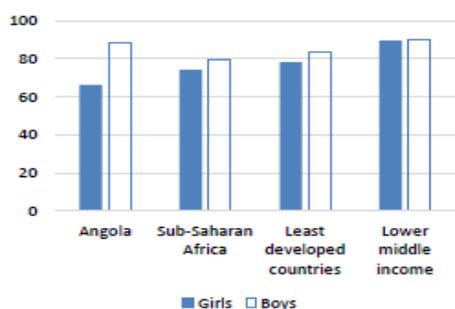
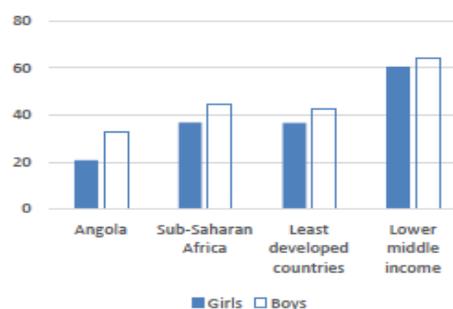


Figure 25. Secondary school enrollment (gross, 2011)



Source: Angola SCD, World Bank (2018)

Figure 26. Employment and education, 2014

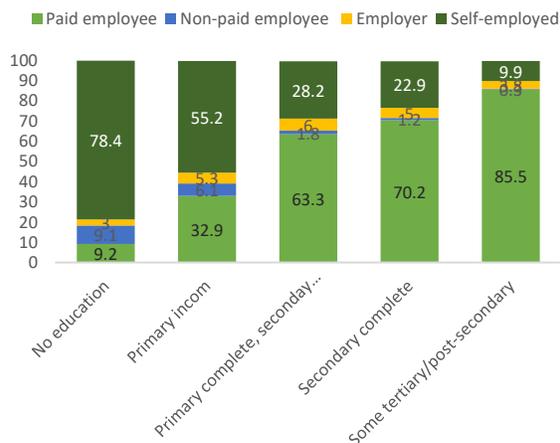
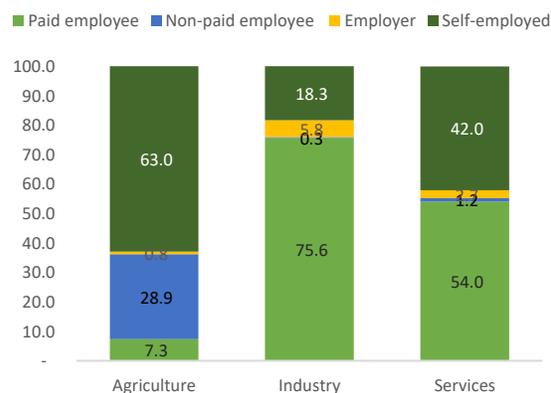


Figure 27. Employment by sector, 2014

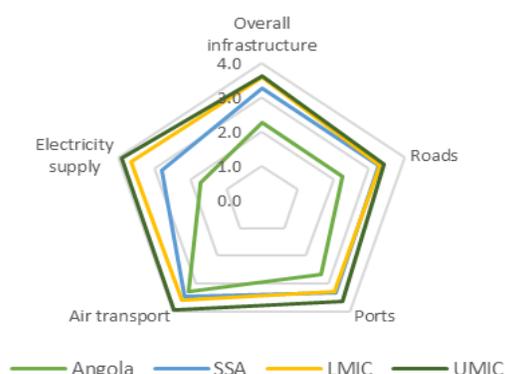


Source: Jobs Diagnostic, World Bank (2017)

**Message 4: Low social returns are due to infrastructure bottlenecks.** Low quality infrastructure is a binding constraint to private investment and growth. Availability and quality of productive services in Angola is relatively low, which translates into high costs for businesses, including for electricity, transport, and logistics.

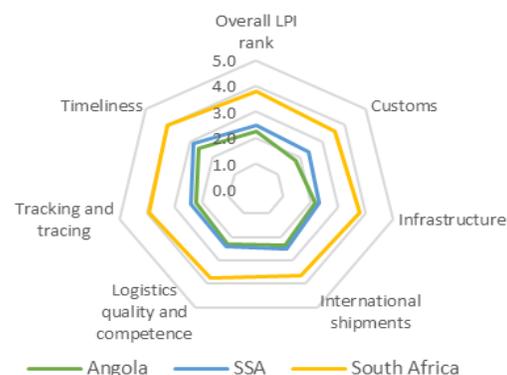
**2.17 Despite substantial improvements, Angola’s infrastructure is insufficient in coverage and quality and the infrastructure gap remains substantial compared to peers.** Infrastructure development contributes to growth through increased spending and by creating efficiency gains in other sectors (WB, 2018). As a post-conflict country, Angola has shown strong commitment to financing the reconstruction and expansion of its infrastructure, supported by a strong revenue windfall from mineral exports. Despite this effort, the infrastructure gap remains compared to peers. Chapter 1 showed that the contribution of infrastructure investments to growth has remained more limited in Angola compared to several SSA countries and SSA overall. Massive public investment programs did not generate the productivity gains expected as a significant portion of infrastructure that was constructed has not been of the highest quality and complementary investments were delayed. Angola’s infrastructure score stands at 2.2 out of 4 and ranks 141<sup>st</sup> out of 144 countries according to the Global Competitiveness Report 2014–2015<sup>17</sup>; this is well below the SSA average (Figure 27). Inadequate supply of infrastructure is identified as the third largest constraint for doing business, after access to financing and an inadequately educated workforce. Angola ranks 139<sup>th</sup> overall and 129<sup>th</sup> in infrastructure<sup>18</sup> in the 2016 Logistics Performance Index (LPI)<sup>19</sup>, which assesses a total of 160 countries (Figure 28). While the quality of overall infrastructure has improved in recent years, the LPI score deteriorated despite significant investments<sup>20</sup>.

Figure 28. Global Competitiveness Index (GCI), Infrastructure Pillar



Source: Global Competitiveness Index: World Economic Forum

Figure 29. Logistics Performance Index (LPI)



Source: World Bank and Turku School of Economics Logistic Performance Index Surveys

**2.18 Power supply stands out as a particular constraint to private sector development.** Despite investing substantially in the power sector and electricity-generation infrastructure, the supply-demand balance remains precarious. Power outages are common, and most businesses rely on diesel generators for power, which makes manufacturing prohibitively expensive. The quality of electricity supply<sup>21</sup> (Figure 27) and access to electricity is low when compared with LMIC and UMIC and lags the SSA average. In the 2019 WB Doing Business, Angola ranked 152<sup>th</sup> out of 190 countries in access to electricity, this reflects the

<sup>17</sup> WEF, 2014.

<sup>18</sup> Defined as quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology).

<sup>19</sup> WB, 2016.

<sup>20</sup> For more information on the infrastructure sector, please consult the Angola Policy Notes.

<sup>21</sup> Quality of electricity supply, Global Competitiveness Index (GCI): How would you assess the quality of the electricity supply in your country (lack of interruptions and lack of voltage fluctuations)? From 1 = insufficient and suffers frequent interruptions to 7 = sufficient and reliable. Angola scored 1.7 in 2014/15.

number of procedures, the time and the cost to get connected to the electrical grid, as well as the reliability of the electricity supply, and the transparency of tariffs<sup>22</sup>.

***Message 5: Weak institutions and corruption are binding constraints to doing business in Angola.** While the government has taken important steps to reform the regulatory and institutional framework, inefficient government bureaucracy and corruption continue to present a challenging environment for businesses.*

**2.19 Angola has an unfavorable regulatory and institutional environment.** Poor institutional quality is reflected in high costs of doing business. Angola ranked 173<sup>rd</sup> (out of 190 countries) in the World Bank Doing Business report for 2019 and performs poorly on indicators related to the legal framework, including the institutional framework for resolving insolvency and enforcing contracts; processes to obtain approvals and permits are burdensome. A heavy bureaucracy further opens opportunities for discretionary application of regulations and corruption.

**2.20 Corruption remains a major impediment to businesses.** According to Transparency International's corruption index and the Worldwide Governance Indicators (WGI) Control of Corruption indicator, Angola improved in recent years, but remains within the lowest decile and well below the SSA average (Figure 30)<sup>23</sup>. In 2016, Angola underwent its first United Nations Convention against Corruption (UNCAC) Peer Review<sup>24</sup>. The review affirmed that the basic legal framework to combat corruption is in place, but important gaps remain: legislation that criminalizes bribing public officials needs to be brought into line with the UN Convention; the scope of corruption-related crimes needs to be widened; and provisions for the protection and anonymity of witnesses needs to be introduced.

**2.21 Weak governance may hinder investment and growth through multiple channels.** IMF (2018) analyses the link between governance and economic performance in Angola and finds that improving the quality of governance to the SSA average could increase real GDP per capita growth by about 0.75-1.25 percentage points per year, while a reduction in Angola's corruption perceptions index to the SSA average could increase real GDP per capita growth by about 1.5-2 percentage points.

**2.22 The government has already taken important steps to reform the regulatory and institutional framework that underpins private sector activity.** Significant progress was achieved in reducing the cost of business registration. Efforts are underway to reform property registration; to register the state-owned housing stock; to improve the cadaster and link it to the property registry. The corporate tax rate and the number of advance payments were reduced, alongside other improvements in tax policy and administration. The time to obtain construction permits has dropped due to an improved online application system. Overall investments in infrastructure and ICT systems have improved the availability of information and the efficiency of complying with regulations. The new administration is committed to fight corruption and increase accountability and has set up a specialized anti-corruption unit to address and prevent corruption-related crimes.

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<sup>22</sup> The indicator including procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs. Procedures to obtain an electricity connection (number) for Angola (SSA) is 7 (5.3); Time required to complete each procedure (calendar days) is 121 (115.3); The reliability of supply and transparency of tariffs index (0-8) is 0 (0.9).

<sup>23</sup> In the 2017 Transparency International Corruption Perceptions Index, Angola ranks 167th out of a total of 180 countries,

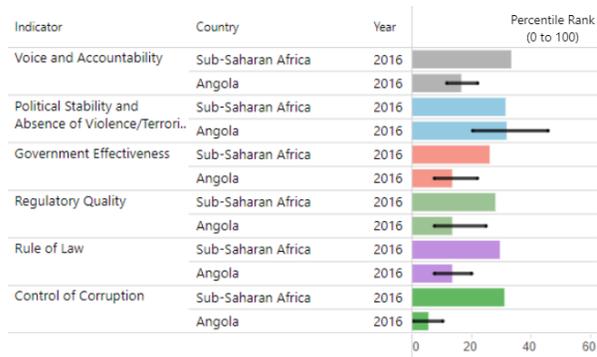
<sup>24</sup> Phase I reviews focus on the legal framework

Figure 30. Angola's ease of doing business 2015 vs. 2019, (rank out of 190 countries)



Source: Doing Business, World Bank

Figure 31. Angola's governance indicators (percentile rank 0-100)



Source: World Governance Indicators 2017.

**Message 6: Macro instability contributes to low private returns.** Oil price dependency poses a threat to long-term macro-financial stability, and this has been a binding constraint to growth in the past. Lower oil prices since 2014 have exposed significant macroeconomic imbalances, and resulting currency inconvertibility, high inflation, and negative interest rates have been a binding constraint to growth between 2016 and 2017.

**2.23 The 2014 oil price decline has severely affected macro-fiscal outcomes in Angola.** Growth declined to -2.6 percent in 2016, and fiscal balances have deteriorated in response to lower oil and non-oil revenues. Oil revenues declined from 23.8 percent of GDP in 2014 to 8.2 percent of GDP in 2016, turning previous fiscal surpluses into deficits and pushing up total public debt, including Sonangol, from 35.4 percent of GDP in 2014 to 64.5 percent of GDP in 2017. Chapter 1 showed that economic policies, including inflation and exchange rate misalignment have contributed negatively to growth (for the period 2000-2016).

**2.24 High inflation and negative interest rates since 2015 have introduced market distortions.** Inflation increased from a low of 7.4 percent in January 2015 to a peak of 41.9 percent in December 2016. Nominal interest rates increased, but not at the same pace as inflation, turning real interest rates negative. To preserve the value of their assets, firms and households turned to real assets and foreign exchange as insurance against inflation. This fueled demand for FX in the parallel market and caused supply shortages of durable goods.

**2.25 Restrictions on access to foreign exchange affected investment decisions and reduced availability of goods.** In an effort to control inflation and to protect international reserves, Angola introduced a fixed exchange rate regime and imposed restrictions on FX access, which prevented companies from obtaining FX to import goods, remit profits, pay expatriate workers, or pay for services rendered abroad. Initially, companies halted investment decisions, but over time this reduced the supply of imported and locally produced goods. FX controls also increased the unpredictability of doing business in Angola, as it was not clear when and if FX requests would be processed. It also increased financial costs to the firms, as matching local currency needed to be held in a bank account until an FX request was met. As a result, the gap between the official and parallel exchange rate widened to more than 200 percent.

**2.26 The government has started to address macroeconomic imbalances and to safeguard macroeconomic stability.** Since September 2017, the government devalued the currency, tightened monetary policy, and resumed fiscal consolidation. It also made new policy announcements and took the first steps to reform prices of public utilities and fuels, reduce subsidies, and privatize or liquidate some state-owned companies. Water tariffs have been increased already, a new SOE surveillance unit was created, and a policy paper on the privatization program was presented to the cabinet.

**2.27 Angola is moving gradually towards a more market-based, floating exchange rate regime with a nominal monetary anchor.** Angola's exchange rate was significantly overvalued by end-2015, but the overvaluation has been largely corrected in 2018 (see Box 6). The BNA allowed for a large currency devaluation at the beginning of the year and has been promoting small monthly devaluations and eased currency controls. The backlog in FX demands has also been reduced and is expected to be cleared by the end of this year. BNA also adopted a formal monetary target to replace the fixed peg as an anchor for inflation. The effective compulsory deposit rate has been raised, tightening the monetary policy stance. The local currency has devalued by 56.7 percent in relation to the US dollar in 2018 and the gap between the official and the parallel exchange rate has narrowed to 30 percent. Despite the currency devaluation, inflation slowed to 19 percent in August 2018 from 26.3 percent in end-2017; inflation is expected to remain below 20 percent by end-2018. A fair-valued real effective exchange rate and adequate access to foreign currency are essential for economic diversification and private sector development.

**2.28 Fiscal consolidation has resumed through both tax and expenditure measures.** The 2018 budget resumes fiscal consolidation and expects to reduce the budget deficit from 5.3 percent of GDP in 2017 to 3.4 percent of GDP in 2018. The reduction in the deficit is underpinned by higher oil revenues and lower expenditures, especially on personnel and public investments. On the expenditure side, the government stopped payment to nearly 20,000 civil servants that a civil service census identified as ghost workers; the government has also not granted any pay increases in 2018. Expenditures on foreign service offices abroad and on public investments were also rationalized. To increase non-oil revenue, the government is targeting the implement of VAT in 2019. The government is also committed to put debt back on a sustainable trajectory by reducing the financing needs of the government through fiscal consolidation and improved debt management. Angola faces high gross financing needs in 2018 and to a lesser extent in 2019, but fiscal sustainability is currently not considered a binding constraint to growth. Domestic financing of gross financing could push up domestic interest rates and crowd out available financing for the private sector, but the successful Eurobond issuance earlier this year and the IMF financing under negotiation provide buffers.

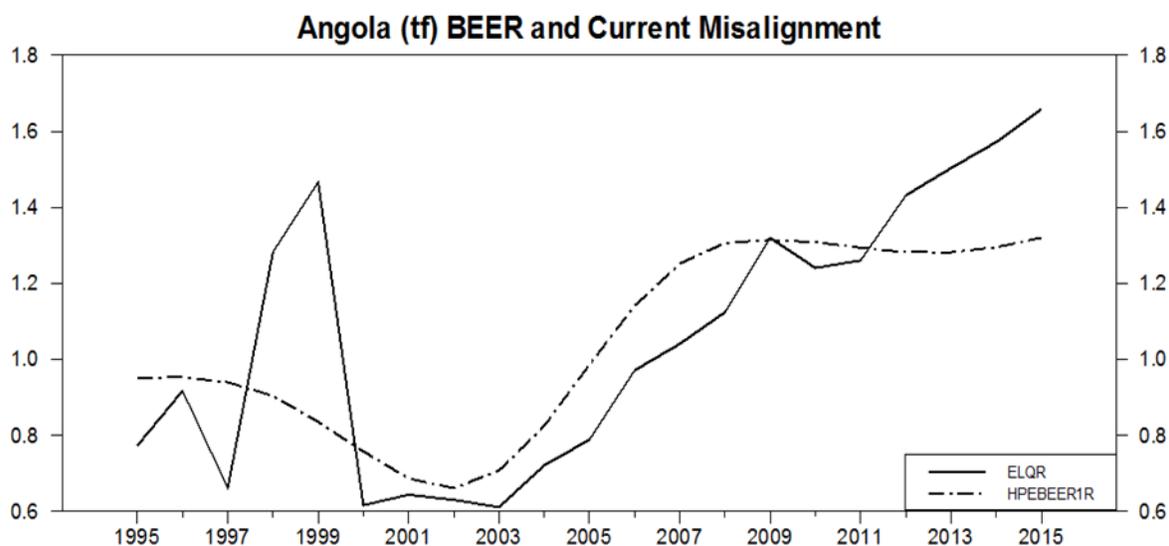
### Box 6: Angola's real effective exchange rate

The potential degree of exchange rate misalignment is assessed on the bases of a behavioral real effective exchange rate model (BEER) following the Clark and MacDonald (1999). The BEER approach is not based on any specific exchange rate model and in that sense may be regarded as a very general approach to modelling equilibrium exchange rates. However, it takes as its starting point, though the proposition that real factors are a key explanation for the slow mean reversion to PPP observed in the data. Its specific modus operandi is to produce measures of exchange rate misalignment which are free of any normative elements and one in which the exchange rate relationship is subject to rigorous statistical testing. There is a vast empirical literature evaluating the determinants of real exchange rates using the BEER approach, proposing a range of important fundamentals that have been found to impact the equilibrium exchange rate in the long run (terms of trade, productivity differentials, net foreign assets) or in the short run (monetary, fiscal, and trade policy instruments). The BEER approach is implemented using the multivariate cointegration methods of Johansen (1995).

The plots of the estimated BEERs alongside the actual real effective exchange rates (REER) are presented thereby demonstrating any implied misalignment for a country. To aide in the interpretation of the latter, a simple HP adjusted version of the BEER is also presented to provide a smoother plot of the estimated equilibrium exchange rate. All estimates are generated using the period 1995 to 2015; the REER is assessed as overvalued, if it exceeds that of the BEER.

The results for **Angola** in Figure B12.1 show a variety of misalignment regimes over the sample period, with a small undervaluation during 2003 and 2008 and a very clear pattern of overvaluation post 2012. In 2015, the extent of overvaluation appears around 40 percent. It is likely that the devaluation at the beginning of 2017 has removed a significant degree of overvaluation and some estimates seem to indicate that the REER is close to fundamentals. A fair-valued real effective exchange rate is essential to economic diversification.

**Figure B12.1: REER and Behavioral Real Exchange Rate**



Source: Fliess and MacDonald (2018).

*Message 7: Market failures also contribute to low returns to private investment. Insufficient market competition and a weak regulatory environment are considered binding constraints to private investment and diversified growth. Barriers to entry and a large state footprint in the economy are believed to have impeded technological innovation and exploitation of comparative advantages.*

**2.29 High barriers to investment and low market competition are constraining private sector innovation.** Imperfect competition and barriers to entry can reduce the incentives to innovate. Firms enjoying relatively uncompetitive domestic markets for their goods and services will be less likely to turn to export markets, which require continued investment in productivity enhancements, including human capital development and research and development. This reinforces the competitiveness gap for local companies, preventing them from innovating and upgrading as in dynamic markets. The GCI 2014-2015 ranked Angola last (out of 144 countries) in terms of competition dynamics. Part of this can be explained by the difficulties to enter the Angolan market: a quasi-necessity for foreign investments until now is to find a local partner<sup>25</sup>. As Angola lacked a functional antitrust framework to tackle anticompetitive behavior in the past, competition dynamics depended largely on the impact of government regulation.

**2.30 Low market competition is also a result of the large footprint of the state in the economy.** Market competition is greatly curtailed by the extent of SOEs and government-connected business involvement in the economy. Economic management in Angola has favored large-scale planned projects and SOEs remain present in key sectors of the economy. For example, *Sonangol*, the national oil company, has activities in diverse sectors of the economy such as airlines, real estate, insurance and the banking system. Investment has been historically limited in several sectors, and ownership is restricted to the government for seaports and airports, and national telecommunications network infrastructure activities.

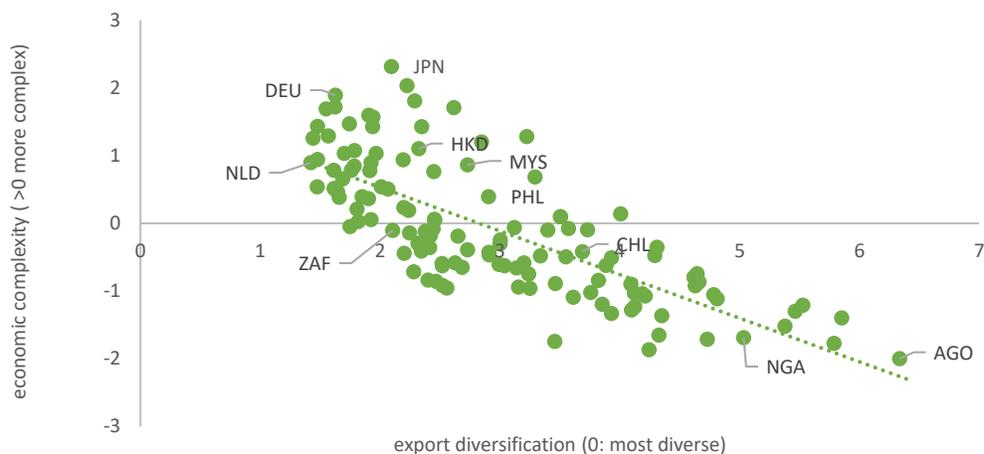
**2.31 Angolan firms have failed to discover new markets and products, which is reflected in low export diversification and product complexity.** Sub-optimal market structures in Angola as outlined above are likely to have constrained private sector innovation and diversified growth. This is reflected in Angola's export performance and product diversity; both are indicative of a country's ability to innovate in the production of goods and services. Angola is one of the least diversified economies and the productive knowledge embedded in its exports (i.e. its economic complexity) is very low (see Chapter 3).<sup>26</sup>

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<sup>25</sup> The 2015 investment law further required a 35 percent local partner for investments in energy and water, hotels and tourism, transportation and logistics, telecommunications and information technology, civil construction, and communications.

<sup>26</sup> The Economic Complexity Index (ECI), developed by Hausmann et al (2011), measures the sophistication of exports; i.e. it approximates the productive knowledge in a country and helps explain differences in the level of income of countries.

Figure 32. Export diversification and Economic Complexity



Source: Authors own calculations.

**2.32 Attempts of the government to diversify the economy had limited success in the past.** The government’s diversification strategy is based on import substitution and discretionary investment incentives with low transparency. Few industries and agricultural enterprises that have been developed are not efficient; they generally rely on subsidized credit, tax breaks, favorable access to markets and foreign exchange, and other benefits (Soares de Oliveira, 2015)

**2.33 The government has introduced new legislation to support competition and remove barriers to FDI entry.** A new private investment law has been approved to ease constraints on private investment, including improving legislation to support competition in domestic markets and attract FDI. The new competition law will support competition in domestic markets and address monopolistic practices in key sectors such as telecommunications. In addition, procedures for facilitating export processing and the capacity of investment-promotion agencies will be enhanced. The reform of the SOE sector is also expected to help promote competition.

## C. Conclusion

**2.34 Access to credit in Angola remains poor and binding.** Access to credit remains poor in Angola, especially for micro, small and medium sized enterprises (SMEs). Angolan banks have been cautious to lend to the private sector, partly because of poor legal protection and lack of credit information on borrowers, but also due to insufficient bankable projects. The government has been implementing reforms to increase financial inclusion and improve credit information systems and this is expected to ease access to credit.

**2.35 The main impediment for low private investment in the non-oil sector are low returns to economic activity.** Returns to investment have improved over time, but improvements were mainly due to productivity gains in the highly capital-intensive resource-sector, which has limited production links with the rest of the economy. As a result, productivity in other non-resource sectors has stagnated. This is likely the result of low social returns to investment and low appropriability of private returns.

**2.36 Human capital and infrastructure are key constraint to private investment.** Social returns to investment appear to be limited due to infrastructure bottlenecks and a poorly educated workforce.

Despite progress in closing the infrastructure gap, availability and quality of productive services in Angola is relatively low, which translates into high operating costs for businesses, including electricity, communication, and transport. The Angolan labor market does not produce highly skilled domestic workers, and there is a lack of skilled labor across economic sectors. Skills mismatches in Angola's labor market do not currently appear to be binding as firms are able to bypass this constraint by hiring expatriate workers. However, since a new growth model based on broad-based economic diversification requires a highly skilled domestic labor force as well as productivity improvements in the non-oil sectors, human capital is considered a key constraint for economic diversification.

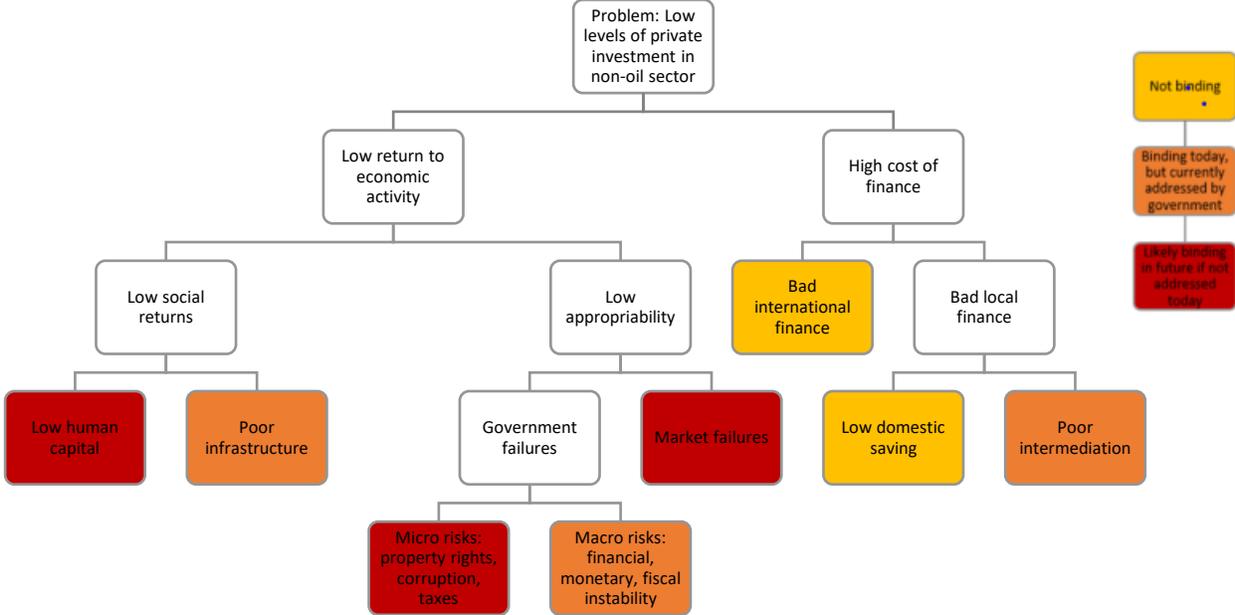
**2.37 Low appropriability of private investment is reinforced by weak institutions, a difficult regulatory environment and macroeconomic imbalances.** A challenging macroeconomic framework creates uncertainty for investors and undermines economic activity. Lower oil prices since 2014 have exposed significant macroeconomic imbalances, and resulting currency inconvertibility, high inflation, and negative interest rates have been a binding constraint to growth. Among the most problematic factors for doing business are inefficient government bureaucracy and corruption. The burden of government regulation and low market competition have impeded technological innovation and exploitation of Angola's comparative advantage, and hence diversified growth. Policy measures adopted by the new administration are easing these constraints.

**2.38 Binding constraints are not static.** The GD framework focuses on constraints that are binding today, but not necessarily in the future. As highlighted in analysis, the government is currently engaged in several reform efforts that strive to facilitate private sector development and economic diversification. If implemented effectively, many of the identified growth constraints may be removed or ease over time. Figure 31 shows the Angola growth diagnostic decision tree and identifies constraints that are currently not binding; binding today, but where the government is actively engaged in reforms that may alleviate these constraints; and constraints that may become even more binding, if not addressed today.

**2.39 Social returns to investment can increase with better education and investments in infrastructure.** Given a constraint fiscal space, the government will need to focus on improving the efficiency of social expenditures and of capital investments to enhance the availability of social and productive services, including for human capital, energy, connectivity, and knowledge-intensive services. While some investment will take time to bear fruit, there are also policies that can help in the shorter term. For instance, increasing the access to quality skills development programs that match the needs of the labor market. Chapter 5 and the Angola Policy Notes (World Bank, 2018) provide more specific policy recommendations.

**2.40 The appropriability of private returns will increase through macro-stability and effective legal and regulatory framework that protects property rights.** Chapter 5 lays out critical reforms for macro-stability and pre-conditions for economic diversification and highlights sector-specific policies to support private sector-led growth and economic diversification.

Figure 33. Angola’s Growth Diagnostics Decision Tree



Source: Authors’ elaboration, World Bank.

## Chapter 3. The Need for Export Diversification in Angola

**3.1 Natural resource wealth has been a significant driver of growth for the last three decades, but it has made Angola dependent on the hydrocarbon industry and on international oil prices.** In terms of export concentration,<sup>27</sup> Angola shows the largest degree of concentration by export products in the region, and export concentration has also increased over time (see Figure 10). The end of the commodity boom in 2014 exposed significant macro-financial vulnerabilities and the limits of a natural resource-driven growth model. Prospects of persistent lower oil prices in a changing hydrocarbon market depleting oil reserves, and the disappointing development effect triggered by the hydrocarbon sector, further call for a new growth and development model that needs to broaden economic and export diversification, preferably supported by strengthened regional and global economic integration.

**3.2 This chapter explores Angola's opportunities for export diversification:** The chapter first introduces the concept of economic and export diversification, their close interlinkage and their respective importance for the development process in Angola via impact on economic growth, job creation and macro-economic stability. The chapter then presents stylized facts of Angola's export sector over time and then assess Angola's export competitiveness according to various analytical approaches, including revealed comparative advantage, export sophistication, economic complexity, and product space analysis.<sup>28</sup> The analysis is based on global trade flow data, the benefits of which are: (i) trade data allows for a comparative approach on a global scale and links countries to the products that they make using a standardized classification across time; and (ii) trade data for Angola is quite comprehensive and hence suitable for longer-term analysis. While intensive use is made of various concepts that identify the *product space* approach as developed by Hausmann and Hidalgo, more recent analytical concepts related to trade in services (Mishra et al. 2011) are also used where data is available. The chapter concludes by highlighting some potential opportunities for export diversification based on established export patterns, emerging trends and future capabilities.

**3.3 A caveat about the data-driven nature of the analysis:** As product space analysis is entirely data driven, this exercise serves primarily as a scoping tool for potential export and economic diversification opportunities. Further analysis, including consultations with sector experts, is needed to validate identified export and diversification opportunities; such validation would need to account for (sector specific) constraints to investment and diversification as identified in Chapter 2. The forthcoming country private sector diagnostic for Angola (CPSD, 2018) complements the analysis presented here with sectoral deep dives and detailed discussions of sector-specific opportunities and constraints for private investment.

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<sup>27</sup> The Herfindahl index is used to measure the concentration of exports by product and markets, it is an inverse measurement of export diversification. Higher values of the index imply a greater concentration of exports while lower values imply a greater diversification. The index is calculated at a 4-digit disaggregated level from the SICT 1<sup>st</sup> revision.

<sup>28</sup> Annex 2 to this chapter provides a brief overview over these different approaches.

## A. The case for economic and export diversification

### 3.4 Diversification of production is considered an integral part of the development process.

*Domestic production diversification* or economic diversification results from the shift of domestic output across sectors, industries, and firms from low productivity activities to those with higher productivity and captures the dynamics of structural transformation. Diversification is key in the development process, since a lack thereof increases exposure to sector specific-shocks and creates economic vulnerability, which can undermine the development process.<sup>29</sup> Chenery et al. (1960, 1962, 1968) showed that as countries grow richer, their production structure becomes more complex and the share of industrial output increases. Imbs and Wacziarg (2003) observed a U-shaped relationship in per capita income and economic concentration: diversification increases with per capita income but starts to decrease with greater specialization at higher income levels. Bahar (2016), however, showed that the apparent greater concentration at higher income levels disappears with more disaggregated trade data, i.e. while many high-income countries tend to specialize in certain industries, there is great product diversification within those industries. Asia's specialization in electronics with great diversification within electronics is a case in point.

### 3.5 Export diversification and the sectoral diversification of domestic production are closely linked.

Trade is often the key driver for economic diversification. *Trade diversification* can occur in three ways, (i) export (import) of new products (good or services); (ii) export (import) of existing products to new markets, and (iii) quality upgrading of exported (or imported) products. Empirical evidence shows that quality upgrading of exports is closely correlated with a greater impact of domestic production diversification on productivity growth.<sup>30</sup> Hummels and Klenow (2005) find that richer countries tend to export a more diverse basket of goods and at slightly higher prices. Hausmann, Hwang, and Rodrik (2007) further identify a positive relationship between a country's growth and the income of the countries that import its products, suggesting that a country could increase its growth not only by diversifying exports, but by seeking out wealthier countries to receive their goods (Hausmann et al. 2007). More complexity in exports tends to lead to positive future growth and increases in per capita income (e.g. Hidalgo and Hausmann, 2009).

**3.6 Export diversification also helps improve macro-stability.** Beyond the positive impact of export diversification on growth (e.g. Lederman and Maloney, 2007), export diversification has other advantages. Singer (1950) and Prebisch (1959) famously warned against export specialization in early stage of development as specializing in primary commodities, such as food and raw materials, may confine countries to low-growth sectors and contribute to the deterioration of their terms of trade. Export diversification can also less vulnerable to external shocks. UNDP (2013), for example, shows that more diversified countries fared better during 2008/2009 crisis.

### 3.7 Economic and export diversification in Angola are expected to support macro-economic stability and inclusive growth.

In Angola, economic diversification would greatly enhance growth per worker and would therefore be part of a strategy to promote inclusive growth. Economic diversification could help in three ways: (i) it could buffer against commodity price volatility and reduce macroeconomic volatility due to adverse export and fiscal revenue shocks; (ii) it could bring new jobs into the non-resource

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<sup>29</sup> WB 2017.

<sup>30</sup> WB 2017.

sector of the economy and would allow to develop new skills with long-term benefits for the domestic economy, and (iii), it could mitigate against a “resource curse” where countries with great natural resource wealth tend to grow more slowly than resource-poor countries.

**3.8 It is difficult to identify successful policies used by resource-rich countries to diversify the economy.**<sup>31</sup> Time series and spatial coverage of available data are weak for developing resource-rich countries. If datasets are available, they are often riddled with missing values and sources are often unreliable. Some export diversification measures, such as export shares, reveal very little about the actual structure of production and exports in some resource-dependent economies. Establishing the direction of causality between oil dependence and policies, institutions and shocks remains a major challenge in the literature: specific policies and institutions could either be the consequence of export performance *or* affect themselves export performance.

**3.9 Some resource rich countries in South East Asia and Latin America countries have witnessed an increase of the non-oil share in exports.** The diversification success story of some countries (Indonesia, Malaysia, Mexico and Vietnam) can be broadly explained by their increasing participation in global production networks through favorable geographic position and international trade deals, underpinned by favorable and targeted domestic policies. For example, Malaysia, Mexico, and Indonesia witnessed productivity growth led by capital deepening (private sector investment), others, like Vietnam, by investing in human capital. Kazakhstan and Mongolia are learning to manage resource booms and diversify their economies from export instability. In other countries such as Iraq, Niger, Mali, Syria or Venezuela progress has stalled as political risks are hindering export diversification. Larger countries generally engage less than medium or small countries in international trade given the opportunities presented by their larger domestic markets, which is not reflected in export share data. Non-oil employment in the private sector of larger countries are more internally diversified than in medium or small countries. Annex 5 provides further lessons on diversification experiences from Chile and Malaysia.

**3.10 Reforms that support an enabling environment for diversification have paid off.** These include reforms to enhance the business climate, including investment and trade policies; investment in skills, infrastructure, and strong institutions and governance quality. Chapter 5 discusses policies for an enabling environment in Angola, including a stable macro-economic framework; cross-cutting policies in support of private investment; and a complementary agenda for strengthening governance and trade.

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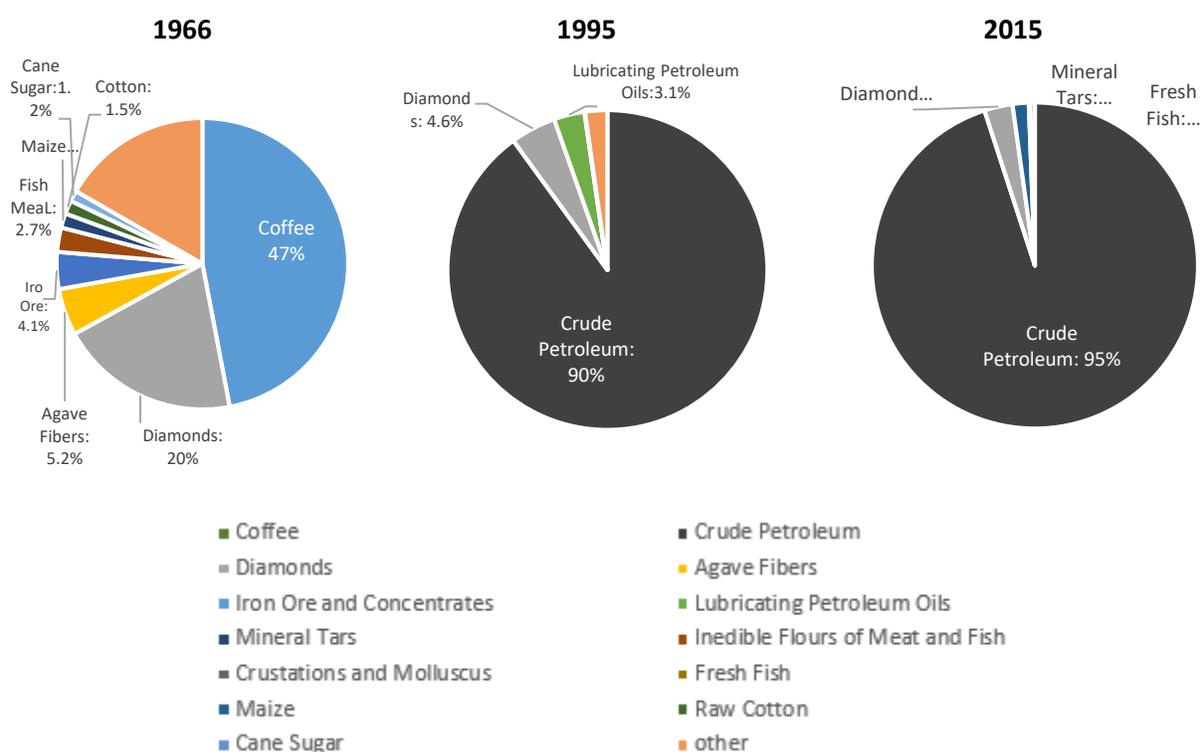
<sup>31</sup> Policy recommendations designed to mitigate resource dependence do not have a strong evidence base. The main challenge is the difficulty to assess empirically successes and failures of economic diversification. Policy literature on this topic focuses on three main arguments. First, tight monetary policy and fiscal discipline are fundamental to ensure long term price stability and to diversify economic dependency. Second, sustainable long-term economic growth requires increased investments in human capital and infrastructure. Third, it is important to provide incentives for non-resource industry growth, such as better business climate through lower administrative costs, tax reforms and possibly subsidies to support growing export-oriented firms in non-resource sectors to become competitive.

## B. Angola's export sectors – Stylized facts over time

**3.11 Angola's export base was relatively well diversified in the past...** Prior to independence, agriculture dominated the Angolan economy, the country was the fourth largest producer of coffee in the world (da Rocha et al. 2017). Similarly, Angola was a net exporter of food and fishing products, the world's fourth largest exporter of diamonds, and a major exporter of iron ore. A host of events and conditions, including continuous conflict (late 1970s to 2002<sup>32</sup>) and outward migration of skilled labor, led to the decline in agriculture and manufacturing exports. The end of the 27-year civil war in 2002 opened the way to recovery (Ecobank 2015, Golub and Prasad 2016), however this was largely carried by Angola's oil resources until 2014, and by the price boom for hydrocarbon products and commodities in general.

**3.12 ...but became highly concentrated in oil in the 1980s.** The predominance of oil has diminished somewhat in recent years, perhaps revealing an early sign of renewed diversification potential. Figure 33 shows the composition of merchandise exports from Angola in 1966, 1995, and 2015. Angola's exports in the 1970s provide a helpful insight into its natural comparative advantage in non-oil products with almost half of exports driven by coffee, iron, and raw cotton. In 1995, oil accounted for over 90 percent of total exports. In 2015, oil continued to generate over 90 percent of export revenues, while other exports included diamonds, mineral tars and fresh fish.

Figure 34. Angola's exports in 1966, 1995, and 2015



Source: SITC Rev. 4, Hausmann, Hidalgo et al., 2018.

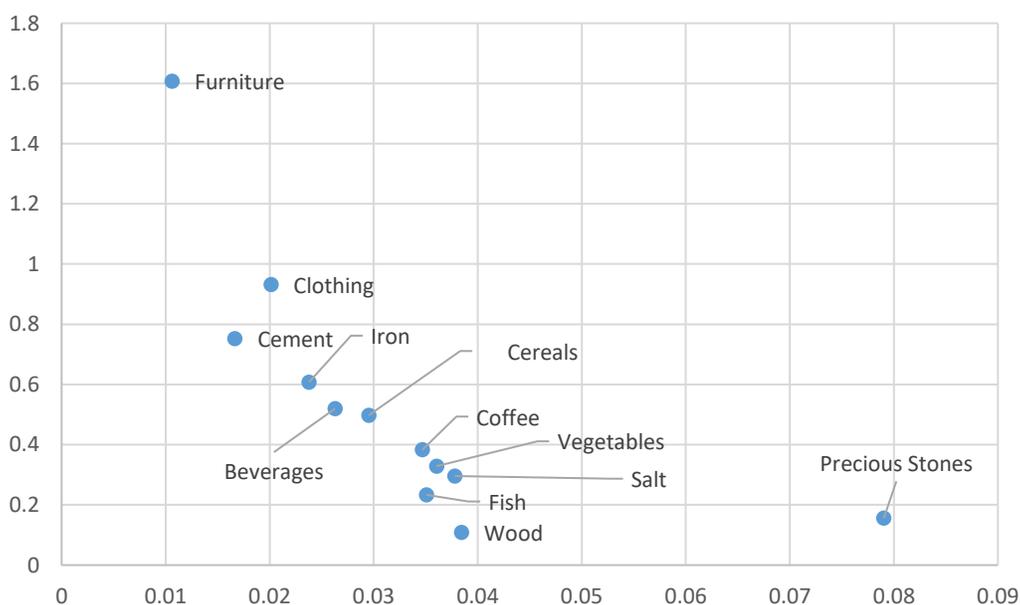
<sup>32</sup> The conflict after gaining independence on 11 November 1974 followed the conflict to gain independence. Angola suffered up to 2002 from about 41 years of almost continuous conflict.

### Box 7. PRODESI – a strategy for Export Diversification and Import Substitution

In 2018, the Angola adopted a Program to Enhance Production, Export Diversification and Import Substitution (PRODESI). The intention is to promote economic diversification and to develop capacities in clusters with export or import-substitution potential—covering over 50 products, including food and agroindustry, resources minerals, oil and natural gas, textiles, clothing and footwear, as well as tourism and leisure. In addition to measures to address fiscal, financial sector, debt, and exchange rate challenges, the program outlines an ambitious agenda to attract investment, improve competition, reduce the cost of doing business, and increase private sector participation in service delivery. While PRODESI places a strong focus on improving fundamentals, transparency, and introducing sunset clauses for targeted support, similar to previous government support programs to economic diversification and private sector development, it maintains a strong government role in supporting specific industries; such focus may open exposure to risks of elite capture and inefficiencies (CPSD, 2018). The success of PRODESI program will depend on the ability to attract investors and the provision of large-scale infrastructure development; it will be important to ensure that success is not undermined by weak implementation capacity or insufficient inter-ministerial coordination.

Figure B6-1 maps the products identified by PRODESI into the economic complexity/ feasibility space (see Section E below). A complexity value above 1 indicates high complexity, with many potential connections to other nodes in the product space, a low value on feasibility identifies relative ease for market entry.

**Figure B6.1.** PROEDSI-identified products in the economic complexity/ feasibility matrix.



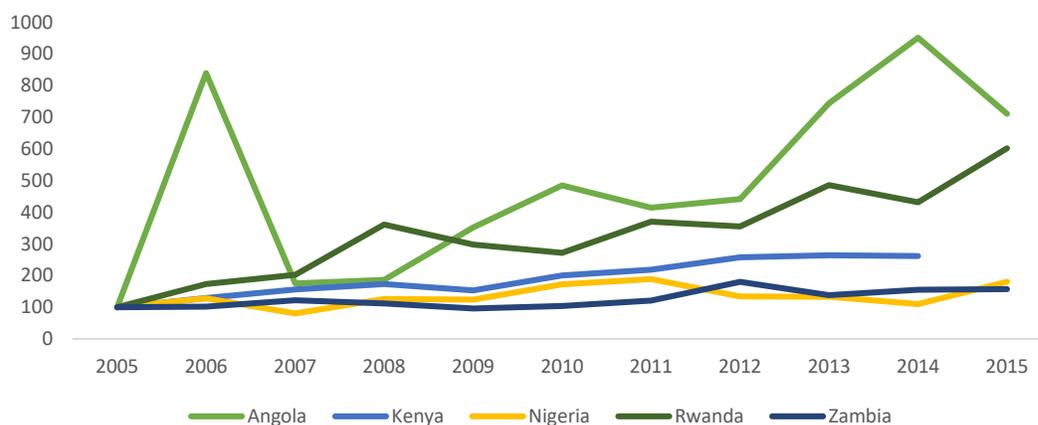
Source: Atlas of Economic Complexity.

## Services

**3.13 Services exports from Angola are at a nascent stage of development but appear to be growing fast.** Service exports have grown almost nine-fold since the financial crisis, whereas exports of goods have remained fairly stagnant; Angola exported about \$1.2 billion in services in 2015. Figure 34 shows the growth in Angola's service export relative to peers. While service exports constitute a relatively small portion of total exports<sup>33</sup>, they are growing faster than in peer countries, albeit from a much lower base. If this growth could be sustained, it could become a promising pathway to export diversification in goods, as services and production tend to move in a synergetic way. Battaile and Mishra (2015) identify potential positive spin-over effects of enabling services, such as finance, ICT and other business services, as particularly relevant for supporting productivity gains and export growth in other sectors of the economy.

**3.14 Travel services appear to be dominant in Angola.** Travel services account for almost 92 percent of total service exports between 2010 and 2015. Air transport and sea transport service account for approximately 5 percent of total exports. Services have become relatively more concentrated since 2000, especially in traditional services. Business services, which accounted for the majority of service exports in early 2000s, have declined to less than one percent of total service exports from Angola.

Figure 35. Comparing service export growth from Angola with peer economies (2005=100)



Source: Vandana Chandra and Saurabh Mishra (2018), based on IMF Balance of Payments Manual 6, 2018

<sup>33</sup> Service exports averaged around 2 percent of total exports between 2000 and 2015 but have reached about 3.7 percent in 2015.

## C. Mapping Angola's export competitiveness

**3.15 Certain structural characteristics can help inform policy design for export diversification.** Several measurements<sup>34</sup>, including revealed comparative advantage, export sophistication, economic complexity, and product space analysis can help provide assessments and also benchmarking of specialization patterns to inform a diversification strategy. This can take different forms, ranging from adding value to existing exports (export quality upgrading) to developing new products and services.

### Export upgrading

**3.16 Improving the quality of existing products can build on comparative advantages, raise productivity and hasten structural transformation** (see Henn et al. 2013). Export quality upgrading is most successful with manufactured goods. The potential for upgrading varies with the length of a product's quality ladder or the development path. Improvements to export quality reflect successful structural transformation, and sectors with long "quality ladders", i.e. a significant potential for quality upgrading, hold most potential as evidence shows that quality tends to converge to the word "frontier".

**3.17 In Angola, merchandise export quality<sup>35</sup> declined between 1970 and 2010.** Prior to 1970, Angola's unit value of exports was higher than that of its peers, but unit values have steadily declined and are now of low-quality when compared to peers (see Figure 35 – a value of 1 represents the world quality frontier). A spectral decomposition of export quality by HS6 level products shows that Angola is specialized in a small set of activities compared to peer economies. Where Angola has high-quality products, comparator countries have also goods of equal or higher value, which means there is limited space for broad-based export quality upgrading.

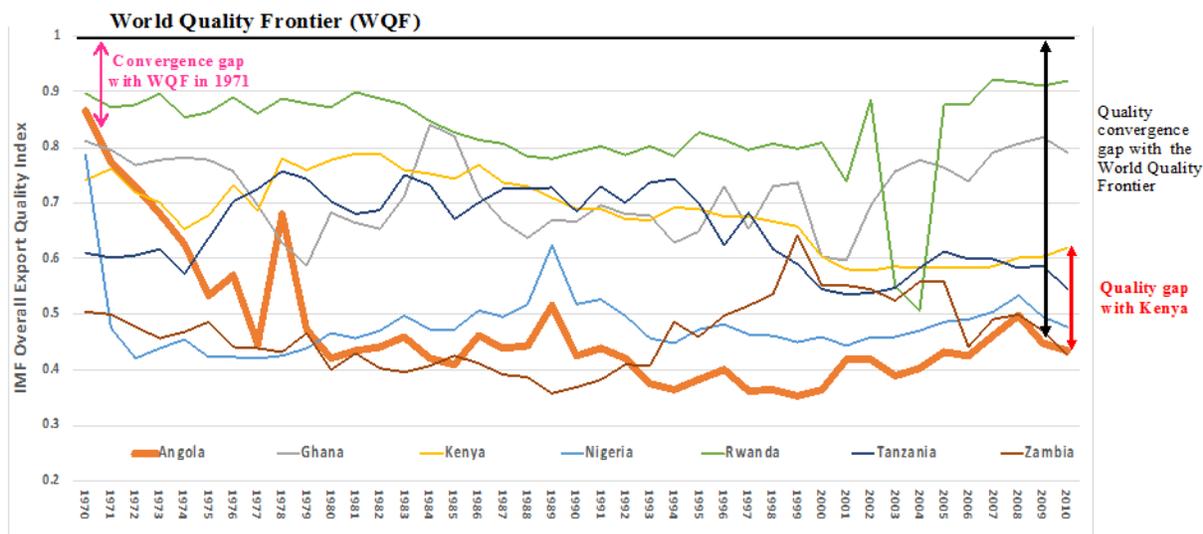
**3.18 Angola is close to the World quality frontier for some products. Their quality upgrading could complement export diversification.** Machinery, beverages and tobacco, manufactured articles and chemicals are of relatively high quality in Angola, Table A.2 in Annex 2 identifies 40 products that could bring most benefit to Angola if they were upgraded. Some identified high tech manufactures such as gas turbines, transport equipment may however reflect incorrect data and/or re-exports, rather than genuine opportunities for export diversification.

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<sup>34</sup> Export time series are one of the best proxies and perhaps the only available detailed data to understand a country's economic structure over time. Few developing countries have detailed and reliable national accounts which of course, are the ideal data for such investigation. The annex presents a summary of the main methods used. Many of the measures use results based on a newly created database that combine detailed data on goods as well as service exports to construct a universal matrix of world trade (Mishra et al. 2017).

<sup>35</sup> The IMF export quality measure is constructed in the following manner. The methodology estimates quality based on unit values, but with few important adjustments. For any given product, the trade price (equivalently, unit value) is adjusted for exporter income per capita (meant to capture cross-country variations in production costs to proxy for capital versus labor intensive sectors). Second, the distance between importer-exporter are accounted for using gravity equations to accommodate selection bias i.e. composition of exports to more distant destinations are tilted towards higher-priced goods, because of higher shipping costs.

Figure 36. Angola Export Quality and distance to World Quality Frontier



Source: Chandra and Mishra (2018), based on IMF Export Quality Index, 2015.

## Export Sophistication and Export Complexity

**3.19 The Export Sophistication index measures the productivity or technological content associated with a country's export basket.** As high-income countries' exports tend to have higher technological content, export sophistication is also related to "income potential"; the measure generally captures whether products in a country's export basket reflect export products from high-income or low-income economies.<sup>36</sup> The universal sophistication index extends the concept to service exports.

**3.20 Angola's exports are less sophisticated than its level of GDP per capita would suggest, Angola also lags peers in economic complexity.** Angola's exports are more sophisticated than Rwanda, but lag that of Nigeria and Zambia, its regional natural resource-exporting peers (Figure 37). Angola also lags peers in terms of export complexity, a holistic measure of the production characteristics of an economy.<sup>37</sup> According to Chandra and Mishra (2018), Angola's exports are the least complex when compared to Botswana, Kenya, and Nigeria. Angola is primarily specialized in non-complex highly ubiquitous activities, such as oil. As such, developing specialization in more complex economic activities such as the production of complex minerals (e.g. quartz and mica) and fertilizers could help Angola break away from resource-driven exports.

<sup>36</sup> Measures the productivity or sophistication level associated with a country's export basket. Hausman Hidalgo, and Rodrik, who developed this indicator, concluded that it is not the amount of exports, but the technological content and sophistication of exports that matters for growth.

<sup>37</sup> The Economic Complexity Index (ECI) of Hidalgo et al. (2009, 2012) contends that the knowledge accumulated in a country is expressed in the country's industrial composition. The ECI combines metrics about the diversity of countries and the ubiquity of products to create measures of the relative complexity of a country's exports. The ECI seeks to explain the knowledge accumulated in a country's population (the networks that people form) expressed in the country's industrial composition.

Figure 37. Export sophistication and growth



Source: Chandra and Mishra (2018).

#### D. The Product Space View

**3.21 The Product Space analysis reveals a country’s potential for export diversification based on existing capabilities.** The Product Space is a network that represents the “relatedness” or “proximity” of products (see Box A.1 in the Annex 2 for a brief introduction to product space analysis.)<sup>38</sup> The underlying idea is that the production of products that are closely positioned in the product space requires similar “capabilities” (or inputs), such as similar skills, institutional and infrastructural requirements, or technologies. Product Space analysis reveals therefore how transferable or substitutable those capabilities are. The underlying assumption behind this approach is that a country is more likely to develop specialization in activities that are already close to its current set of capabilities. As such, a country’s position in the product space signals its capacity for export diversification.<sup>39</sup> The product space map for trade worldwide (grey network and dots) and Angola specifically (colored dots) is illustrated in Figure 37. In the product space view of the world, the most complex products with the largest number of connections are located at the center of the network: these are for instance machinery, metal products, or capital-intensive goods. Products that lie in the periphery of the product space share fewer capabilities with other product. As such, those products do not lend themselves readily to diversification and a greater

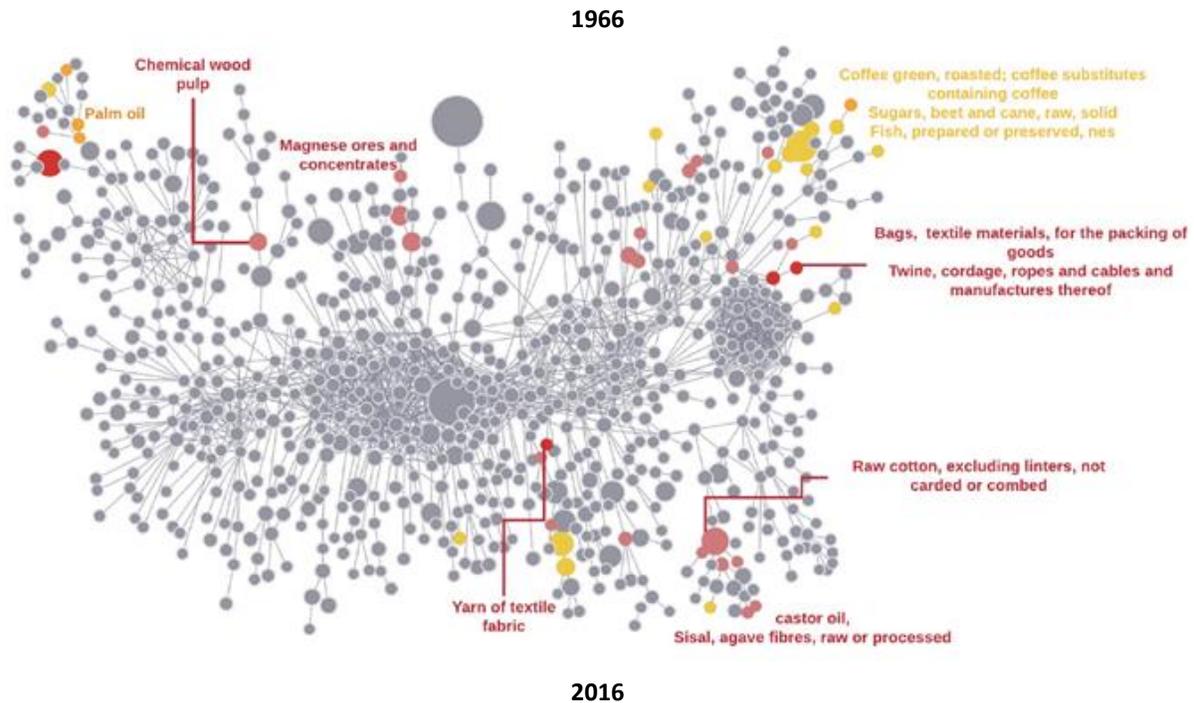
<sup>38</sup> Hidalgo et al, 2007; Hausmann and Hidalgo, 2011.

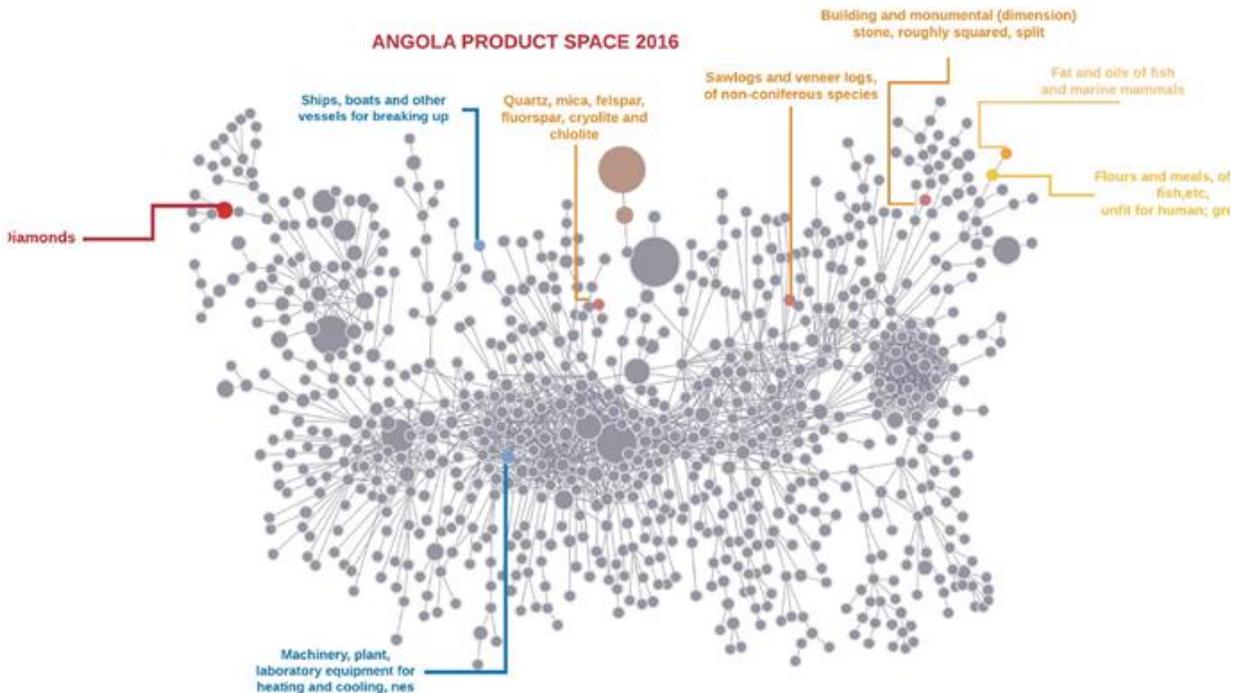
<sup>39</sup> The probability to develop comparative advantage for a product in the future depends on the ease with which capabilities existing in the country can be adapted to launch new products. Hence it is important how close the new product is to the existing export structure. This measure is called *density*. Density varies from 0 to 1, with higher values indicating that the country has achieved comparative advantage in many nearby products, and therefore should be more likely to export that good in the future. Hausmann and Klinger (2006) show that this measure of density is indeed highly significant in predicting how a country’s productive structure will shift over time: countries are much more likely to move to products that have a higher density, meaning they are closer to their current production.

effort to diversify into other areas of specialization is required. Products in the periphery of the product space include petroleum products, fishing and animal agriculture.

**3.22 In 2016, Angola’s Product Space showed opportunities for new connections.** Figure 37 shows the changing product space for Angola over time. Panel A presents the product space for 1966 and Panel B presents the product space for 2016. Compared to today, Angola was more diversified along central activities in the 1960s. The Product Space in 1966 shows specializations in various activities that are relatively central to production networks such as woolen yarn, palm oil, castor oil, textiles, and various agricultural products including coffee, fish and sugar. The product space became quite empty from 1975 to 2015, with only specialization in oil, diamonds, and some fishery products. While Angola’s product space remained largely peripheral in 2016, some opportunities for connection to new specializations may have opened up, including chemicals such as quartz and mica; construction equipment (i.e. stones for building); and machinery tools and products. As Malaysia is often referred to as an example of successful diversification that Angola could follow (Collier 2006), the product space for Malaysia is shown in Figure A.4 in the Annex for illustration.

Figure 38. Product Space for Angola, 1966 and 2016





Source: Chandra and Mishra (2018).

## E. Opportunities for Export Diversification

**3.23 While established export patterns provide a natural basis for export diversification, emerging products and services can also lead to new specialization.** This section first looks at opportunities for export diversification based on *current* export patterns. It then highlights *emerging* products where Angola has only recently developed some comparative advantage or products and services where the development of a comparative advantage would seem most feasible; such feasibility is based on the proximity of these products and services to the current network of products and services that Angola already exports.

### Opportunities for Export Diversification based on established export patterns

**3.24 Broad-based diversification is more likely to develop if diversification strategies target products that offer connections to many products and as such lead to several new specializations** (so-called long-path activities).<sup>40</sup> One specific medium-tech export with potential for new specializations that is targeted by PRODESI is footwear (see Box 7). This product has primary connections to more than 20 other products (see Figure A.5 in Annex 2); as such, this niche specialization may lead to many other specializations that lie in the central nodes of the products, and ultimately the discovery of many new products.

**3.25 While *short-path* activities hold less potential for broad-based diversification, they may offer valuable opportunities for niche market development.** Coffee, for example, is only related to few other products. As such, coffee by itself may not offer an optimal diversification strategy as very few nearby

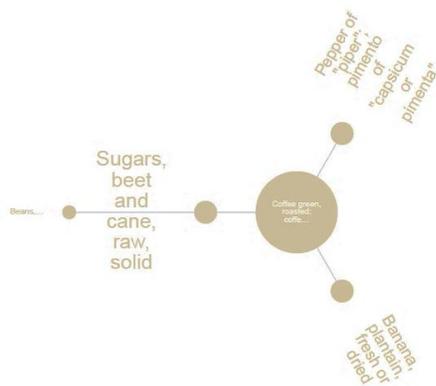
<sup>40</sup> For example, countries that export computer CPU's tend to also make motherboards, silicon chips, photolithography processes, etc. Hi-tech exports like CPU's may have a longer path indicating they lead to many new specialization, whereas other ubiquitous products like oil have smaller paths indicating that they generally do not lead to developing specialization in many other products.

products are located in the vicinity of coffee; however, Angola’s comparative advantage in coffee may allow for the development of a valuable niche export sector.<sup>41</sup> Similar arguments can be made fish and related products.

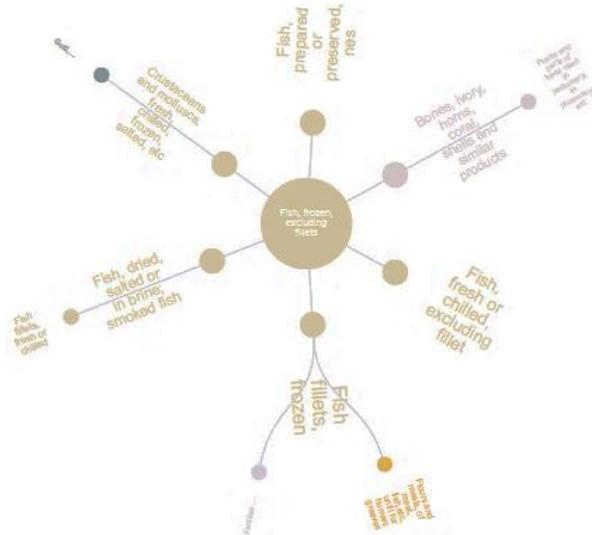
**3.26 Some lower tech but resource-bound products also have potential.** While specialization in more complex activities increases competitiveness and returns, the ability to specialize in a specific activity depends on the relative ease of gaining such specialization. Economic complexity analysis combines measures of export complexity and feasibility to assess future capabilities for export diversification. Figure 39 maps Angola’s product space for goods and services into the complexity-feasibility space. Several findings stand out: (i) the negative slope implies that more complex goods and services are more difficult for Angola; (ii) compared to 2015, there was greater capability to export complex products in 2005, as indicated by a higher “density” and hence feasibility of a greater number of products in more “complex” products and services; (iii) some low-tech and resource-based products are complex and relatively easy for Angola to specialize in, such as light manufacturing In addition financial services, business travel and other services are also relatively complex but appear within the sphere of Angola’s current capability structure.

Figure 39: The proximity of coffee and fish in merchandise trade network, 2016

Coffee green, roasted (exports 2016: \$928k)



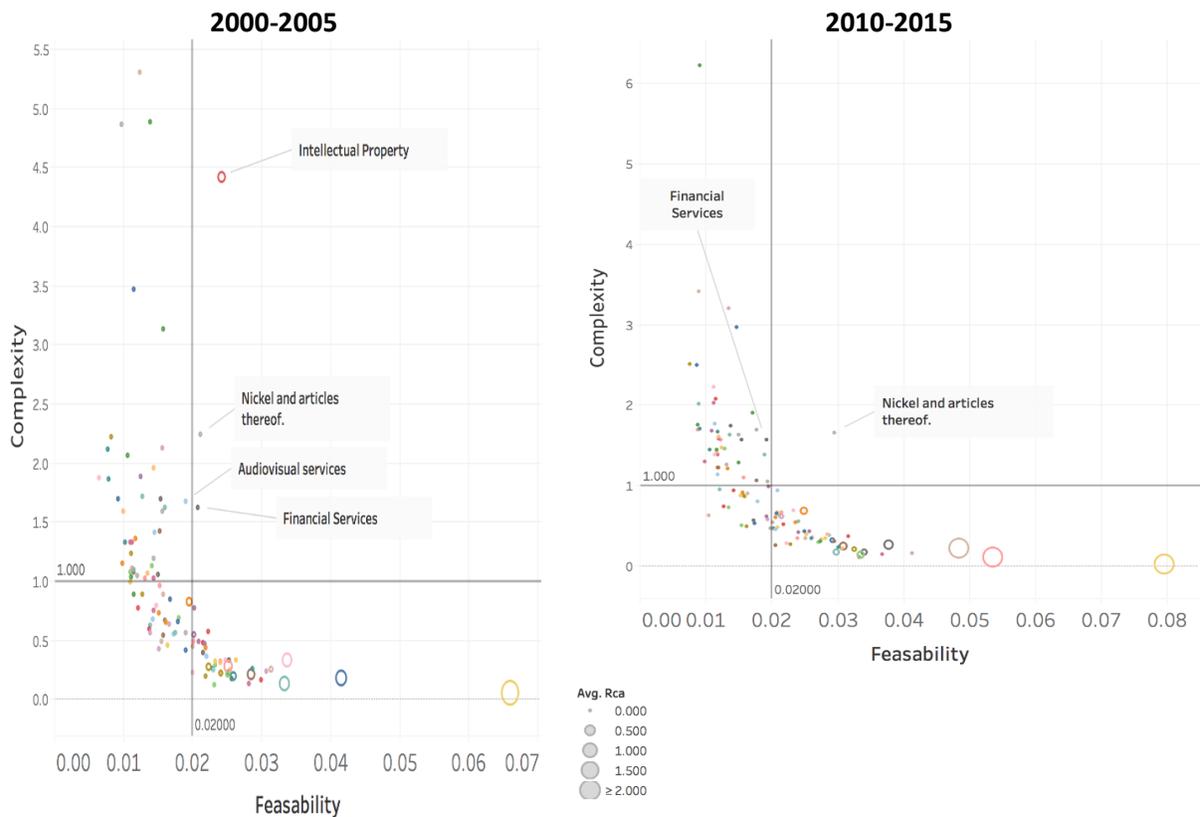
Fish, frozen, excluding fillets (exports 2016: \$15.6M)



Source: Atlas of Economic Complexity, <http://atlas.cid.harvard.edu/>

<sup>41</sup> See Chapter 4 for more information on coffee production in Angola.

Figure 40. Product Complexity and Feasibility, based on Fitness-Complexity metric



Source: Chandra and Mishra (2018). Notes: The color schematic indicates different sectors based on combination of HS6 chaptered goods and IMF BPM6 service exports. The bubble size indicates RCA.

## Emerging Trends and Future Capabilities

**3.27 Emerging products with relative comparative advantages (RCA) point to future possible capabilities.** Keeping in mind the caveats surrounding this data-driven identification strategy, wood, sawlogs, diamonds, building-construction materials, lead, quartz, fish fats, and flours appear to be products with emerging specialization for Angola. Based on 2016 data, Angola appears to have an RCA in these products and market entry seems relatively easy (see Table 2). Chandra and Mishra (2018) also identify certain fairly-complex products where Angola currently has limited specialization but where it could explore growing these industries. Such industries in the nearby product space of Angola’s current capabilities include: petroleum oils and oils obtained from bituminous minerals, other than crude; copper; paper and paperboard; automated data processing units; transmission apparatus; or insulated wiring and cables.

**3.28 Some service exports also hold potential for future diversification.** While feasibility for service exports is currently low in Angola, Chandra and Mishra (2018) point to some potential in sea transportation, telecommunications, and air-transport services; these critical chains could become important for the service infrastructure of complex engineering operations in off-shore drilling which require a variety of maintenance and prognostics services.

**3.29 Specialization in more complex activities increases competitiveness and returns, but the ability to specialize depends on the relative ease of gaining such specialization.** In 2018, Angola adopted the

Program for Support to Production, Diversification of Exports and Imports Replacements (PRODESI), which targets capacity improvements in food and in the agricultural industry, resources minerals, oil and natural gas, textiles, clothing and footwear, as well as tourism and leisure. A mapping of PRODESI-identified products onto the complexity-feasibility space shows that low-tech products, such as furniture and textiles, and certain resource-based products, such as cement, wood or iron, are fairly complex, yet relatively easy for Angola to specialize in (see Box 7).

**3.30 Given the centrality of services in global production networks, developing a modern services base is also important for diversification.** Unlike many goods, services are typically fully integrated with the industrial sectors, and as such share a high number of capabilities. This is particularly true for high-complex services such as Research & Development and intellectual property; these are highly connected with sophisticated industrial sectors, such as aircraft and spacecraft, and pharmaceuticals (Zaccaria et al. 2018). The centrality of services in global trade networks indicates that latecomers to development like Angola should use this knowledge to target the most connected nodes for its diversification strategy, by focusing on building a modern services base that also includes highly efficient financial and business services, ICT and logistics.

Table 2. Products and Services from Angola, ranked by high density or feasibility

Item Name	Density (feasibility)	Path	RCA	Export Value in 2015	Complexity Rank (1 - most complex)
Mineral fuels, oils & product of their distillation;etc	0.088030858	19.59	11.80	32,193,689,436.41	114.00
Natural/cultured pearls, prec stones & metals, coin etc	0.079029269	22.57	1.77	1,667,069,792.00	111.00
Business Travel	0.057275582	28.07	4.53	995,164,806.80	110.00
Ores, slag and ash.	0.055765563	21.41	0.00	1,551.22	108.00
Government	0.045639965	24.99	0.00	0.00	109.00
Sea Transport	0.040891340	25.70	0.00	0.00	101.00
Personal Travel	0.040229392	27.71	0.14	167,549,616.30	106.00
Telecommunications	0.039696439	27.63	0.26	30,172,000.00	107.00
Air Transport	0.039614983	27.83	0.06	25,297,552.43	102.00
Animal/veg fats & oils & their cleavage products; etc	0.039552390	28.30	0.02	2,993,400.79	99.00
Edible fruit and nuts; peel of citrus fruit or melons.	0.039502128	28.69	0.00	0.00	103.00
Nickel and articles thereof.	0.039317588	12.03	0.00	7,433.00	33.00
Cotton.	0.038451593	26.73	0.00	24,303.14	85.00
Wood and articles of wood; wood charcoal.	0.038449457	27.34	0.12	27,762,374.17	112.00
Salt; sulphur; earth & ston; plastering mat; lime & cem	0.037799936	29.51	0.46	38,838,522.95	100.00
Cocoa and cocoa preparations.	0.037514515	27.60	0.00	0.00	95.00
Oil seed, oleagi fruits; miscell grain, seed, fruit etc	0.036895758	24.38	0.00	101,847.82	94.00
Vegetable plaiting materials; vegetable products nes	0.036363159	27.73	0.00	0.00	88.00
Edible vegetables and certain roots and tubers.	0.036039827	30.05	0.00	3,853.96	96.00
Lead and articles thereof.	0.035444943	28.93	0.20	2,540,867.79	105.00
Passenger Transport	0.035383043	29.40	0.03	8,149,902.00	98.00
Fish & crustacean, mollusc & other aquatic invertebrate	0.035067810	27.44	0.55	100,655,189.21	104.00
Coffee, tea, matF and spices.	0.034671686	24.50	0.02	1,770,865.72	87.00
Sugars and sugar confectionery.	0.034300690	30.42	0.00	1,711.18	91.00
Tobacco and manufactured tobacco substitutes	0.033787613	30.76	0.00	226,980.30	93.00
Inorgn chem; compds of prec mtl, radioact elements etc	0.032399568	26.66	0.00	438,245.93	81.00
Prod.mill.indust; malt; starches; inulin; wheat gluten	0.031704097	30.99	0.00	0.00	92.00
Raw hides and skins (other than furskins) and leather.	0.030595314	28.50	0.00	0.00	97.00
Other transport	0.030513988	30.42	0.00	0.00	90.00
Copper and articles thereof.	0.029641385	25.83	0.05	11,186,422.49	70.00
Cereals	0.029521923	26.72	0.00	2,035.49	78.00
Prep of vegetable, fruit, nuts or other parts of plants	0.028622431	31.45	0.00	29,978.41	83.00
Miscellaneous edible preparations.	0.028502426	32.54	0.00	35,771.00	79.00
Live animals	0.027836597	29.94	0.00	0.00	86.00
Fertilisers.	0.027242877	26.07	0.00	67,196.26	82.00
Ships, boats and floating structures.	0.027120512	19.21	0.00	166,777.00	84.00
Beverages, spirits and vinegar.	0.026281304	31.50	0.00	415,574.49	77.00
Prep.of cereal, flour, starch/milk; pastrycooks' prod	0.026072870	33.77	0.00	0.00	80.00
Postal	0.026040435	26.03	0.00	0.00	60.00
Personal cultural	0.025841940	26.23	0.00	0.00	62.00

Source: Vandana Chandra and Saurabh Mishra (2018).

■ Services  
■ Goods

Notes: Based on Fitness-Complexity algorithm for (Tachella et al 2014, Cristelli et al 2013) complexity ranking, density based on Hausmann and Hidalgo (2007, 2009, 2014). Red color indicates service export and blue goods. Goods are based on HS6 detailed products in chaptered form and services based on IMF BPM6 based on Mishra et al. (2017, 2018a, 2018b). The chart is presented for 2015.

## F. Conclusion

**3.31 Export diversification is considered an integral part of the development process.** As countries grow richer, economic complexity of production structures tend to increase. While Angola’s export base was relatively diversified up to the civil war, it has since become highly concentrated in oil. Export diversification has been found to support economic growth, job creation and macro-economic stability. While there is no blue print to export diversification, lessons from successful countries seem to suggest that “picking winners” has rarely worked and reforms that support an enabling business environment, strong institutions and human capital development have paid off the most.

**3.32 Export diversification can take different forms, ranging from export upgrading to developing of new products.** Angola has room for both. Key industry and product clusters that appear promising based on the product space analysis, include: (i) preserving or building on older comparative advantages in agricultural products, including coffee; diamonds; fisheries; and natural and cultured pearls; (ii) deepening specialization in the oil-related heavy industry, and vertical integration in oil and gas-related value chains, such as phosphate-based fertilizers; (iii) export upgrading of light-manufacturing products where Angola is not too distant to the World quality frontier; (iv) leveraging the centrality of services in global production chains to build a modern service base, an apparent emerging specialization potential in sea transportation, telecommunications, and air-transport services could be used support the services infrastructure of complex engineering operations in off-shore drilling, including maintenance and diagnostic services.

**3.33 An important caveat to the analysis presented in this chapter is the data-driven nature of the exercise.** Some identified export capabilities may reflect incorrect data while others identified export opportunities that may reflect re-exports. The analysis presented here provides a first-level assessment; further validation through industry-specific deep-dives will be needed, this includes the forthcoming *Angola Country Private Sector Diagnostic*.

## Chapter 4. The Agriculture Sector in Angola

**4.1 Angola’s agricultural sector has a lot of potential and could have a strong impact on growth, economic diversification, employment, and social inclusion.** Angola has a history of successful commercial agriculture, which came to a halt with the civil war. Pre-independence, Angola was one of the world’s leading coffee exporters, and commercial agriculture was fairly well developed. However, independence and the civil war led to the exodus of largely Portuguese settlers and the destruction of large parts of the country’s infrastructure, causing commercial agriculture to collapse. While the agricultural sector’s contribution to GDP declined from 19 percent of GDP in the 1990s to 3 percent in 2008, it has since increased to 6.3 percent. The agricultural sector employs 46 percent of the workforce and remains the main source of income for 90 percent of the 9.6 million Angolans in rural areas.

**4.2 Angola’s National Development Plan (2018-2022) recognizes the potential of the agriculture sector** and identifies it as the key sector for economic diversification and inclusive development. Chapter 3 identifies the agriculture sector as a key industry for economic (and export) diversification based on past competitive advantage, and the country private sector diagnostic (CPSD) recognizes as an emerging sector in Angola with high potential across a range of agriculture and livestock subsectors, backed by growing domestic demand<sup>42</sup>.

**4.3 This chapter takes stock of the current state of agricultural development in Angola,** identifies key binding constraints, and offers some recommendations for the way forward. It is worth to keep in mind that some of data on agricultural production in Angola is not too reliable. The agriculture census, expected to be completed in 2019, should provide more comprehensive and better data.

### A. Angola’s current agricultural development

**4.4 Angola has rich agricultural potential.** Savannah covers much of the country, with humid savannah forest accounting for about 18 percent of the total land area. Humid tropical forests are largely restricted to the northern patches in the provinces of Zaire, Uíge, Kwanza Norte and the enclave of Cabinda (Food and Agriculture Organization, 2013b). Landscape diversity is high, and water is abundant, or it is sufficiently available from rain and rivers.

**4.5 Most land is not used for agricultural production.** 47 percent of the country or 58 million hectares are arable (Figure 40). From the total amount of arable land, only around 2 million hectares, or about 3 percent (Figure 41), are currently under cultivation. As in most African countries, Angolan farmers grow mostly maize, cassava, beans, peanuts and bananas as the main food crops. Even though agricultural potential is largely untapped, the sector currently provides the main source of income and employment for most Angolans in rural areas.

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<sup>42</sup> A small but growing agribusiness sector is developing linked to rising demand in urban centers, a formal food distribution sector has also developed, primarily to serve the Luanda market, and large supermarket chains have started developing commercial partnerships with small and medium domestic producers to reduce imports and increase freshness and control over quality. National off-takers (distributors of fresh products, supermarkets, manufacturing companies and hotels) revealed strong interest in the development of national commercial agriculture, in close alignment with the new Government’s expressed priorities. Entry points for more private sector participation include expansion of commercial horticulture and fruit producers; backward integration of distribution and processing companies; development of mid-size agribusinesses and aggregation models; privatization and PPP models to valorize government agro-industrial assets (CPSD, 2018).

Figure 41. Angola's surface distribution

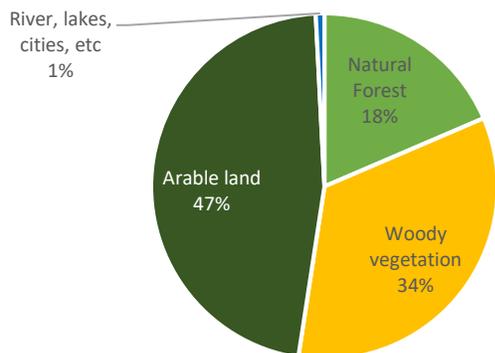
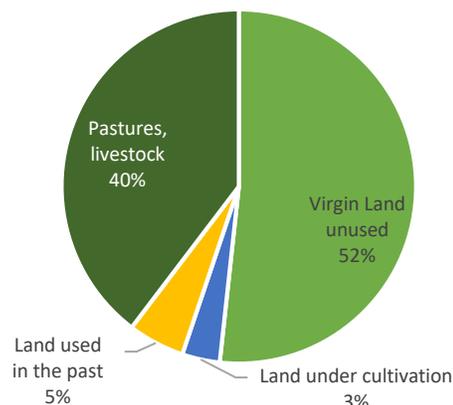


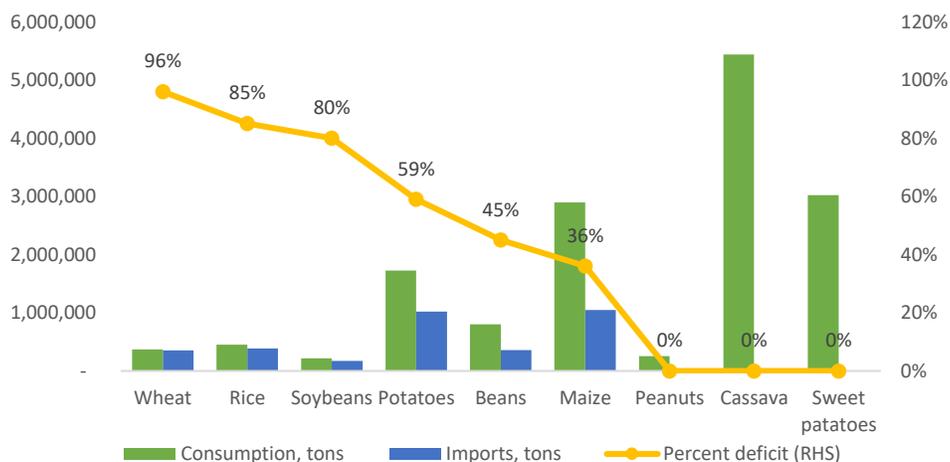
Figure 42. Angola's arable land



Source: World Bank staff calculations using official sources of the Ministério de Agricultura, 2012-2017.

**4.6 Angola depends on imports for several key staples.** A large share of food products, such as chicken, maize, rice, wheat and potatoes need to be imported to meet the country's needs. Angola is self-sufficient in sweet potatoes, cassava and peanuts (Figure 42). Portugal, Brazil and South Africa are Angola's main food suppliers. The high share of imported food offers the opportunity to scale up the production of a number of crops to meet local demand.

Figure 43. Import needs for key food staples, in tons



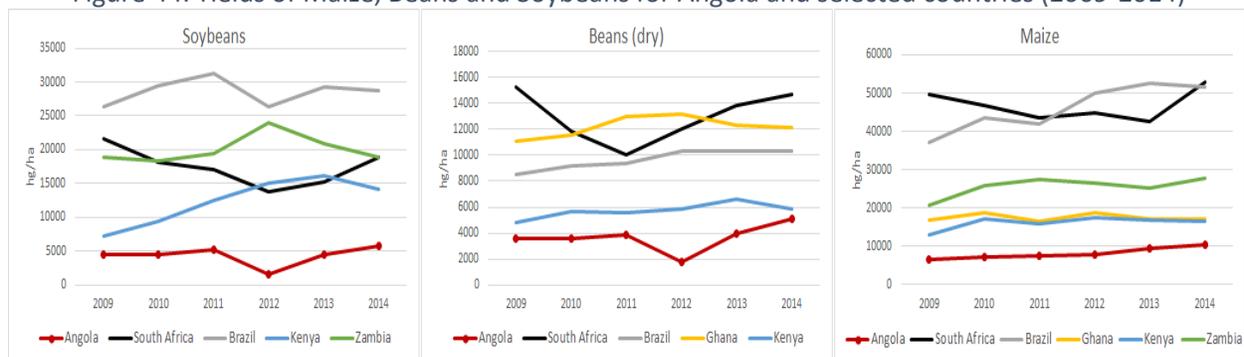
Source: Ministry of Agriculture and Forestry, 2014/2015 agriculture campaign.

**4.7 Agricultural production is dominated by smallholders, and there are few medium and large-scale private sector operators.** Smallholders represent over 80 percent of agricultural production and 92 percent of land under cultivation. These are primarily farms used communally for subsistence farming, but some smallholders are also selling surplus production to the market. Of the many cooperatives and producer groups, few are registered and/or active, and market-oriented, collective decision-making is uncommon. Angola has a limited number of successful private medium and large-scale projects in horticulture, cereals. Most other large-scale projects are government-sponsored (i.e. there are several farms under state-owned Gesterra, Biocom, Aldeia Nova, Capanda agro-industrial pole), these are often financed with bilateral lines of credit and in some cases under concession to private management (CPSD, 2018).

#### 4.8 Agricultural productivity in Angola is well below the African average but has recently increased.

Agricultural productivity has not improved significantly in Africa since the 1970s; this is largely due to a decline in soil fertility as traditional practices of maintaining soil fertility through slashing-and-burning are no longer economical (Guanziroli and Guanziroli, 2015), and more advanced technologies are not systemically applied. The situation in Angola is also poor and productivity levels for maize, beans and soybeans trail both agriculture-rich (Brazil and South Africa) and other lower middle-income countries in Africa (Kenya, Ghana and Zambia). Despite low productivity in the last 50 years, agricultural productivity has increased in recent years. Cereal yields, which were around 500 kg/ha in 2007, increased to almost 900 kg/ha by 2014. Yields are however still low with respect to international standards. As an example, maize yields reached only 1 ton per hectare in 2016, only about 1/3 of international levels. While productivity, given that 90 percent of production is by smallholders, some medium and large commercial farms reach much higher productivity levels

Figure 44. Yields of Maize, Beans and Soybeans for Angola and selected countries (2009-2014)



Source: Elaborated by the authors based on data from the Food and Agriculture Organization.

**4.9 Maize production appears to be driving productivity increases in Angola.** Several crops (beans, rice) have achieved gains in productivity, but a large share of the increase in agricultural yield is due to maize production, which has been incentivized by agricultural campaigns (e.g. fertilizer donations) that support family farms and commercial producers. However, due the lack of maize milling facilities, the production of value-added foodstuffs using locally produced maize is not possible. Some demand for maize as animal feed also exists, but feed mills often cannot meet demand with local production and have to resort to imports. Limited storage facilities and lack of financing lead to large price spikes towards the end of the year when most of the maize has been consumed (OABS Development 2018). The soya industry faces similar constraints as maize.

**4.10 Fruit has performed better than vegetables in recent years and horticulture appears to be gaining in importance.** The banana stands out as a promising commodity, in terms of output and production, with almost 3.5 million tons in 2014 and with high yields per hectare (Figures 44 and 45). While data on current production levels of horticulture products is scarce, informal evidence suggests that farmers are reporting high yields per square meter using improved seeds and technology such as plastic tunnels, hydroponics and substrate cultivation. The CPSD (2018) also attests potential for increased agribusiness employment from growth of large commercial players in horticulture and fruit.

Figure 45. Production of fruits in Angola, in tons

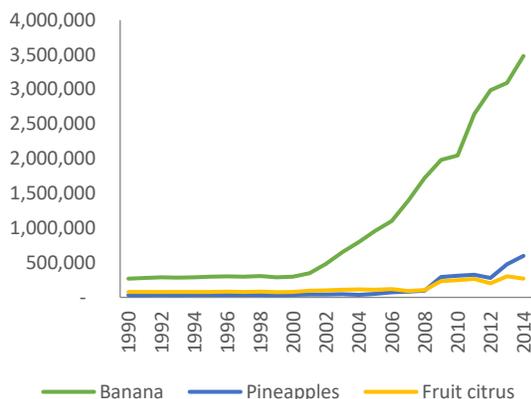
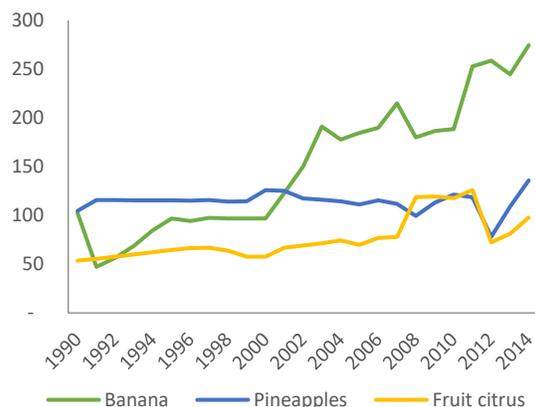


Figure 46. Yield of fruits in Angola, per hectare



Source: World Bank staff calculations based on FAO Statistical data base.

## Coffee

**4.11 Despite the decline in coffee production in Angola, the crop continues to have important potential.** Angola was the 4<sup>th</sup> largest exporter of coffee worldwide in the past. However, the abandonment of most plantations as a result of the security situation following the civil war in the mid-seventies, as well as changed production and market parameters post-independence, led to a dramatic decline in production. FAO statistics show that Angola exported about 190,000 tons between 1970 and 1974; and 80,000 tons between 1975 and 1979. This declined to an average of less than 15,000 tons during the late eighties, reaching a bottom of around 3,000 tons in the nineties. In more recent years, production and exports have been recovering, although they remain far below the high levels of the seventies. Chapter 3 also highlights coffee as a valuable opportunity for niche market development in Angola.

**4.12 Natural conditions for coffee production in Angola are highly favorable.** Angola has excellent soil-climatic conditions that allow for production of different types of coffee, mostly Robusta, but also small amounts of Arabica. Arabica achieves higher prices, it would also serve as a necessary requirement for coffee blends as most Arabica currently used in blends in Angola is imported. A revival and scaling up of the Robusta industry would offer many opportunities, such as the production of instant coffee if processing facilities are rebuilt. Angolan Robusta has been popular in a number of countries for a long time, indicating demand for scaled up production.<sup>43</sup> The recent success of Café Cazengo, a small start-up coffee business in the Kwanza Norte Province that integrated the full coffee value chain from producing to marketing, shows that Angolan coffee can compete in foreign markets again.<sup>44</sup>

**4.13 Given the constraints faced by the sector, significant policy engagement and investment is needed to scale up coffee production.** Current constraints faced by the sector include: low prices due to low bargaining power insufficient infrastructure; lack of finance, skills and extension service, high levies and taxes; and a non-favorable image of the coffee industry (OABS Development 2018).

<sup>43</sup> For more details, see OABS Development (2018).

<sup>44</sup> [www.cafecazengo.com](http://www.cafecazengo.com)

Figure 47. Coffee Exports in Angola, in tons

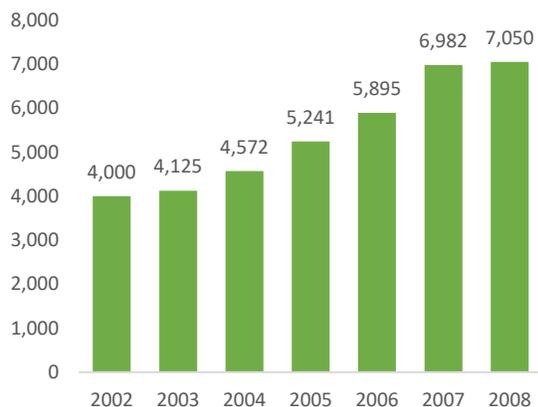
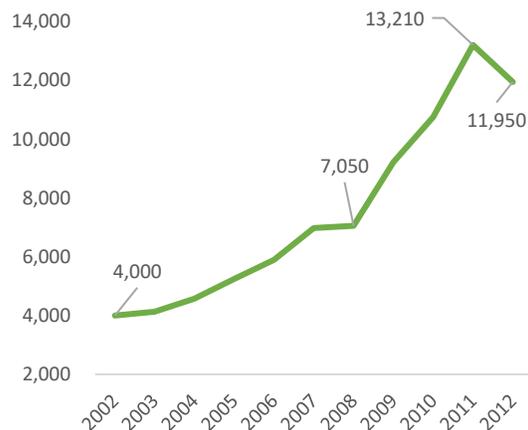


Figure 48. Coffee Production 2002-2012, in tons



Source: World Bank staff calculations based on CODESPARO, FAO, 2007.

## Livestock production

**4.14 Poultry production has increased substantially since 2008, but remains limited.** Poultry meat production increased from 3.1 tons in 2008 to 25.3 tons in 2016, equivalent to an average annual cumulative growth of 30 percent. However, the increasing demand for chicken has led to higher imports rather than an increase in local production. Most frozen poultry meat is imported, in 2015 imports amounted to 360,000 tons of chicken. The production of eggs has been substantially higher, but also lags demand. The development of the poultry sector is constrained by inadequate infrastructure and inputs, compounded by the current lack of forex, which hinders the purchase of the necessary raw materials as well as access to new technology. In addition, insufficient local production of feed pushes up the cost of poultry production. (OABS Development 2018). The scaling-up of the poultry industry would also provide significant growth opportunities for maize and soya production.

**4.15 Cattle farming has potential but requires better infrastructure.** According to estimates<sup>45</sup>, 92 percent of Angola's arable land is devoted to permanent pasture and 8 percent is arable cropland. There is a large comparative advantage for cattle ranching, however most cattle farmers are traditional small-scale farmers that use their cattle more as a store of wealth and for social status than for intensive ranching.<sup>46</sup> Efficiency of production is determined by traditional means and constraints.<sup>47</sup> Developments and improvements to infrastructure would increase the potential for cattle raising and ranching; any such improvements would help develop the chain of production for, storage, processing, and distribution to reduce operating costs for more commercial oriented ranching.

<sup>45</sup> BIIA, 2016, p. 3

<sup>46</sup> Traditional farmers generally slaughter cattle when an animal is injured or ill, or in the event of a wedding or some other special social occasion.

<sup>47</sup> BIIA, 2016.

## B. Constraints to agricultural growth

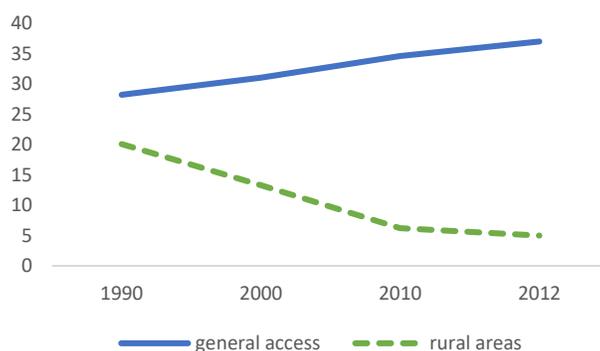
### Infrastructure

**4.16 Africa's rural infrastructure constitutes the single-most limiting factor to the continent's agricultural development.**<sup>48</sup> Angola is rebuilding its infrastructure after the civil war; the war and subsequent neglect badly damaged rural and other infrastructure, resulting in increased costs of doing business. The removal of landmines from the civil war period remains another obstacle, however there is arable land that is clear of landmines and underutilized (see Annex 3). The Angolan government needs to focus on rebuilding and strengthening rural infrastructure as a priority for rural and agricultural development.

**4.17** Infrastructure is an essential enabling factor for market access and competitiveness. Market links are constrained by poor road connectivity, storage, and commercial infrastructure. The total road network in Angola is about 76,000 km, much of which needs rehabilitation. The Government has invested heavily in improving the transport network over the last decade, including roads and railways, but limited budget has been available for rural roads. Insufficient coverage the electricity networks and unreliable of power supply further limit investments in agro-processing and irrigated agriculture.

**4.18 Access to electricity in Angola for the total population has increased to 36 percent since 1990, but rural access has decreased to about 5 percent.** The lack of rural electrification options (Figure 48) hinder the installation of irrigation systems and the possibility of adopting intensive agricultural procedures and means of production. This limits improvement in productivity and production quality. The absence of electricity also jeopardizes the evolution of mechanized and automatic processes for raising animals as well as limiting the ability to slaughter, conserve and process meat, and produce eggs.

Figure 49. Access to electricity (general and rural areas), percent



Source: World Bank staff calculations based on World Bank data.

**4.19 The poor state of road infrastructure is a considerable challenge to agricultural commercialization.** Many main roads have been restored, but tertiary and rural roads, and bridges, are still inadequate. Poor road condition increases transport times even between major production centers and markets (e.g. it takes about 8 hours to cover the 350 km between Luanda and Quibala, an area with a high concentration of commercial farms). Small farmers that are distant from main roads often cannot

<sup>48</sup> Ackello-Ogutu (2011).

afford the cost and risk of transporting their products to market centers where they could fetch a higher price (CDPS, 2018). Improving connectedness, and therefore market access is a *sine qua non* for exploiting Angola's agricultural potential; focusing on tertiary roads would rehabilitate the national trading network and enable farmers to procure production inputs and to sell at competitive prices. Continued road rehabilitation and improvements to the overall transport network, including the rail network, will provide a major push to the agricultural sector.

**4.20 Water management for agricultural purposes is largely absent.** In Angola, agriculture uses 33 percent of the total internal water, compared with 93 percent in Ethiopia and 63 percent in South Africa. Only 3.5 percent of the 3.7 million hectares of potentially irrigable land has been developed; any irrigation infrastructure that existed prior to the civil war suffered widespread destruction during the war. Despite the vast water resources available in Angola, many family and commercial farms depend on rainwater. The government has invested in irrigated perimeters including through the construction of dams for water retention, but most irrigated perimeters remain underutilized due to poor management or lack of additional investment. The lack of reliable water resources also presents difficulties for the development of livestock activity in the southern region of the country. Many water spots were built before the 1970s and have been destroyed or could not be maintained.<sup>49</sup> Currently, less than 30 percent of the rural population has access to improved water sources, down from almost 45 percent in the mid-1980s.

## ICT

**4.21 Lack of modern communication and infrastructure in rural areas hinders opportunities and improved productivity in the Angolan agricultural sector.** The lack of a telecommunications infrastructure in rural areas inhibits farmers and investors from improving the efficiency and productivity of agricultural activities, it also limits connectedness with critical stakeholders. The lack of internet access points has created a new form of isolation for the rural population and means that they miss out on: computer-based systems for agrarian management; mobile banking for financial operations; access to the internet for data sharing on the market, legislation, climate and prices; and logistics systems to reach markets. These shortcomings contribute to making agricultural transactions and operations costly and unreliable.

## Agricultural inputs and extension services

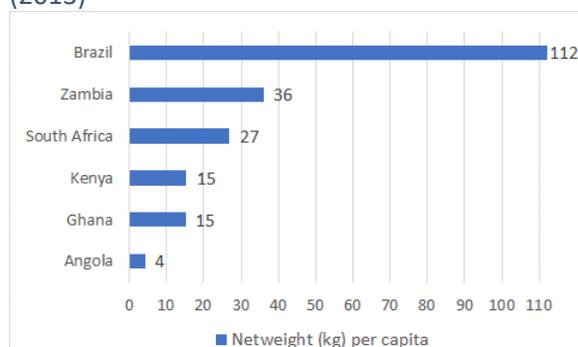
**4.22 The low level of productivity in food crops is partially explained by the poor performance of agriculture input markets in Angola.** Agriculture input markets, for example quality seeds, fertilizers, and agricultural equipment are relatively underdeveloped in Angola. Most small and medium size producers complain about the high cost and availability of agriculture inputs; the situation appears to have become worse since the onset of the economic crisis and with associated forex restrictions. Large commercial farms import inputs directly, while small and medium producers buy from a small number of local suppliers with presence in Luanda and/or in provincial capitals. To use the fertilizer market as an illustration (Figure 49), Angola uses significantly less fertilizer per capita than comparator countries; lower middle income countries such as Kenya and Ghana use more than three times the amount as in Angola;

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<sup>49</sup> See also Ministério da Agricultura; CBBS, 2017.

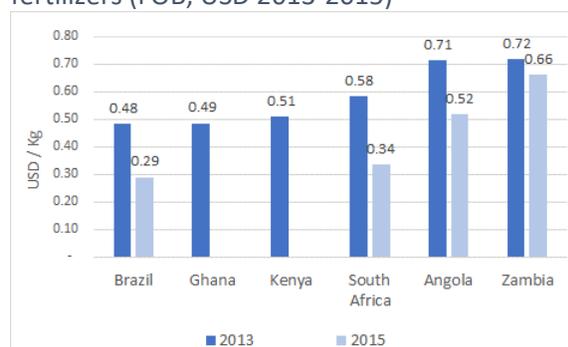
Zambia uses up to nine times more.<sup>50</sup> At the same time average import prices of fertilizers in Angola are higher than in most comparator countries (see Figure 50). Margins between commercial retail prices and import prices are also high, and the large resale mark-ups seem at odds with regional trends on imported fertilizer markups. In 2007, for example, the International Fertilizer Development Center identified that international prices of fertilizer constituted an average of 65 percent of the final retail price for seven African countries examined.

Figure 50. Consumption of Fertilizer for selected countries. Volume imported in Kg per capita (2013)



Source: Elaborated by the authors based on data from UNCOMTRADE and World Bank. Data consider volumes of 4 different harmonized system codes: 3102 (Mineral or chemical fertilizers, nitrogenous), 3103 (Mineral or chemical fertilizers, phosphatic), 3104 (Mineral or chemical fertilizers, potassic), 3105 (Mineral or chemical fertilizers containing two or three of the fertilizing elements).

Figure 51. Weighted average prices of imported fertilizers (FOB, USD 2013-2015)



Source: Elaborated by the authors based on data from UNCOMTRADE. Data consider prices and volumes of 4 different harmonized system codes: 3102 (Mineral or chemical fertilizers, nitrogenous), 3103 (Mineral or chemical fertilizers, phosphatic), 3104 (Mineral or chemical

**4.23** The use of productivity-enhancing modern seeds is closely regulated and is a constraint to the development of modern agriculture. Most farmers cannot afford certified seed and reuse seed from past harvests. Imported certified seed are subsidized by government or commercial input suppliers. State-owned enterprises and a small group of private firms which are selected by the government multiply certified seeds. The rules governing production of certified seeds<sup>51</sup> are not well known across the agriculture sector and the government lacks resources to inspect, monitor and certify both imports and local production of quality seeds.<sup>52</sup>

<sup>50</sup> This comparison considers volume of imported fertilizers as a proxy for consumption. The most updated figures for Angolan consumption of fertilizers from FAO date back to the year 2000 – the pattern of low usage by Angola compared to other countries is similar.

<sup>51</sup> Law 7/2005, and Presidential Decree n. 93/16 despite comprehensive regulation being issued in 2016. Decree n. 92/04 prohibits the import of genetically-modified or transgenic seeds unless carried out for food security purposes.

<sup>52</sup> World Bank (2017) Breaking down barriers: Identifying entry points to improve market dynamics of agricultural inputs in Angola (unpublished).

## Land distribution and ownership

**4.24 The dominant farming unit in Angola is the small family farm, complemented by community holdings.**<sup>53</sup> The estimated average size of a family farm is 2.32 ha. There are few commercial farms, which make up 5.8 percent of total land.<sup>54</sup> It is almost impossible to produce a significant output with such small parcels of land, but as an aggregate, family farms contribute an important volume of basic products. Producer organizations are weak, and only a few are commercially oriented. Stronger farmer organizations would enable greater production and productivity by smallholders. The government has been encouraging large public agricultural projects using foreign capital, but these have not yet produced very clear results, partly as a result of not clearly delineating public and private responsibilities for production (Ministério da Agricultura, 2016).

**4.25 Land ownership rights and protection.** All non-urban and some urban land is ultimately under state ownership, but can be leased for 45 years to private entities; different land rights apply to different land use requirements. The provincial governor allocates areas less than 5,000 ha; the Minister of Agriculture allocates land areas of between 5,000 and 10,000 ha, and the President allocates areas greater than 10,000 ha. In 2004, the country enacted a new land law that sought to strengthen perceived areas of weakness in prior legislation related to land and natural resource management, for example the role of traditional rural communities.<sup>55</sup> The law itself is not an obstacle to investment, but its application does not appear to create the security needed as the overall context for rural investment adds to uncertainties and high operational costs.

## Agriculture finance and insurance

**4.26 Agricultural finance and insurance are underdeveloped in Angola.** Notwithstanding the growth of private sector credit from 2004 to 2014 (from 5 percent to 22 percent of GDP), the share of credit for the agriculture sector has remained low at less than 5 percent. Insufficient access to finance poses a major constraint for most farmers and agribusiness SMEs. Commercial banks lack products and the expertise to serve the agricultural sector, which is subject to high systemic risks. On the demand side, weak capacity to present bankable business plans is a constraint recognized by commercial banks. Commercial banks have experience with government-subsidized credit and guarantee schemes, including credit lines from the Angolan Development Bank (BDA), agriculture campaign credit, and the *Angola Investe* Program. High levels of non-repayment of government-subsidized agriculture campaign credit have increased banks' risk aversion to agriculture lending (CPSD, 2018). Agriculture insurance is still nascent in Angola; the insurance regulator (ARSEG) developed a pilot project to introduce agricultural insurance (mainly against drought) in Angola, focusing on corn and beans. The enabling environment for promoting agriculture finance and insurance (e.g. crop and weather-based index insurance, warehouse receipts, equipment leasing, moveable collateral registry) is yet to be developed<sup>56</sup>. Consequently, agriculture clients, particularly smallholders, lack access to adequate financial services and face growth constraints.

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<sup>53</sup> The statistics do not account for individual or family holdings (Machambas) and community holdings, reflecting the social fabric of the traditional village economy. "Machambas" seldom represent a specific exploitation of one family, and very often are inserted in communal systems of agricultural exploitations.

<sup>54</sup> Just for comparison, in Brazil family farmers make up 87 percent of all farmers but they have only 32 percent of the total land (see Guanziroli et al. 2013).

<sup>55</sup> see also Food and Agriculture Organization, 2014, p. 16.

<sup>56</sup> World Bank (2018).

## Skills

**4.27 The level of human capital and services available in rural Angola does not lend itself to quick wins.** Rural areas were heavily affected by the war, leaving a devastating impact on physical and social infrastructure, particularly in terms of education and health services. The current widespread lack of opportunities limits employment potential for young men and women, and many remain dependent on their family networks.<sup>57</sup> The national rate of illiteracy is 34 percent, and in rural areas it is estimated to be in the order of 59 percent. High rates of illiteracy in rural areas make transformation of the agricultural sector a policy challenge, which restricts farmers' ability to adopt new technologies and technical empowerment. The lack of skilled labor in family farms has a strong impact on the quality and productivity of crops. Farmers are not trained to meet productivity and quality requirements for commercial farming. Commercial farms tend to rely on foreign workers or they employ incentives to attract a specialized workforce, both of which add to higher operating costs in farming. Government interventions

**4.28 The government involvement in the agriculture sector is significant and can crowd-out private investment.** The government continues to have a significant role in the agriculture sector through various government agencies and SOEs. While government support is justified to address market failures, a large state presence can crowd-out private investment and restrict competitive dynamics. Since the 1990s, policy orientation has gradually shifted towards promoting private activity but a strong focus on government intervention to increase production to achieve self-sufficiency has been retained. Past policies focused on the state as an investor and operator of large-scale projects (e.g. agricultural development poles, direct investments in developing farms and processing facilities or joint ventures such as *Aldeia Nova*). The government's import substitution strategy as well as the more recent PRODESI program have supported growth of agribusiness, but they also call into question the sustainability and overall competitiveness of some existing ventures (CPSD, 2018).

## C. Conclusion

**4.29 Developing Angola's agricultural sector is key for economic diversification and broad-based development.** The civil war period had a dramatic and adverse impact on agricultural development, and policy makers now need to address the development of Angola's significant agricultural potential. Angola has too much land that is not under cultivation and production. Macroeconomic conditions and the business climate constrain private investment in agriculture. A large share of the land lacks adequate infrastructure and the lack of tertiary and secondary roads make agriculture risky and costly in terms of obtaining inputs and transporting outputs. Land is not used for high-yield agricultural production because fertilizers and water resources are not directed towards it or they are not available. Lack of irrigation infrastructure and lack of electricity hinder development and depress productivity gains, ultimately constraining investment. Furthermore, the government's oversized role in the agriculture sector and a focus on import substitution and discretionary incentives can crowd-out private sector investment.

**4.30 Developing rural infrastructure is fundamental for unlocking Angolan agricultural potential.** Agricultural development in Angola requires an integrated policy approach to support the development of rural infrastructure (mainly tertiary roads). While some constraints require the provision of public goods, e.g. for roads, electricity, extension services to smallholders, others require addressing the

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<sup>57</sup> Rodrigues, 2010, p. 174.

constraints in the business environment to enable private investment (e.g. input provision, storage, rural credits).

**4.31 Building a strong agricultural sector requires agriculture finance.** Financial services for all types of agricultural producers and agribusinesses are a much-needed catalyst for agriculture development. Credit and insurance products are important, but innovative insurance products such as index-based crop insurance can mitigate risks and reduce economic losses during an adverse event. It can also improve the viability of agricultural credit products, and therefore increase access to credit. The development of agriculture insurance requires an enabling regulatory framework, expertise of private commercial insurers, access to the international reinsurance markets, and high quality agricultural risk market infrastructure; for example: agricultural data such as yield data and livestock mortality, remote sensing and weather data.

**4.32 Attracting investors for commercial farming and enabling family farming is equally important.** Continued inadequate infrastructure between rural and urban areas means that large scale investors are unlikely to be attracted to the sector as upfront costs and risks are high. Policy needs to focus on improvements to family farming and their operating context. Smaller family farming and larger scale commercial farming are mutually supportive as they create synergies with regards to the demand for and use of sector infrastructure and investments, including human capital formation.

**4.33 The development of service-oriented agribusiness and agri-networks requires a more productive and connected agricultural sector.** Agribusiness covers input suppliers, processors, traders, exporters and retailers; these provide inputs to farmers and connect them to consumers through financing, processing, storage, transportation, marketing and distribution. Farmers who are better connected to markets can make better use of agribusiness services.

**4.34 Government interventions in the agriculture sector should focus on fostering an enabling environment.** Reflecting on past attempts to promote the agricultural development through public incentives schemes and large-scale project, it would seem important for the government to shift its role from a direct actor to a facilitator of private activity. The focus should be on providing an effective regulatory environment and supporting public goods. Such a re-orientation of agricultural policy would also benefit from a more coordinated approach to policy implementation that engages private sector actors to ensure that policies and programs respond to their needs.

## Chapter 5. The Way Forward

**5.1 There is no blue-print for economic diversification, but lessons from successfully diversified economies suggest that creating an enabling environment is critical.** While governments may be tempted to pick winners, experience shows that identifying potential growth sectors *ex ante* has rarely yielded the desired success. As market forces are generally best placed to identify competitive sectors, economic diversification seems best served by policies that create the right enabling environment to support private sector development. Annex 5 highlights the successful experiences of Chile and Malaysia in economic diversification to underline this.

**5.2 This chapter explores policy options for economic diversification.** It considers the macro-economic pre-conditions for economic diversification and argues that insulating the economy from the impact of oil price volatility and fostering macro-stability are necessary to lay a sound foundation for economic diversification in Angola. It discusses policies needed to achieve such stability, for example, an appropriate fiscal policy and framework; a market-valued exchange rate; and supportive financial sector policies, including macro-prudential policies. The chapter then describes cross cutting-policies needed to support economic growth and diversification, including the business environment, human capital and infrastructure. Furthermore, the chapter highlights the importance of the institutional framework, trade policies, regional integration and global value chains for increasing private investment and economic diversification.

### A. Macroeconomic Pre-conditions for Economic Diversification

**5.3 Macroeconomic stability and economic diversification reinforce each other.** Empirical evidence shows that countries with a diversified economic structure are more resilient to exogenous shocks. During the global crisis of 2008-09, economies with more diversified export structures were in a better position to weather international trade shocks.<sup>58</sup> Moreover, output volatility tends to be lower in economies with a more complex structure; volatility of government revenue also diminishes as an economy becomes more complex and diversified. In this regard, the relatively high volatility in output and government revenue observed in Angola may be partly explained by a lower degree of diversification, particularly with its reliance on oil. Fostering macroeconomic stability through appropriate economic and financial policies is a prerequisite to the development of a viable and diverse non-oil sector.

### Sound Fiscal Policies and Framework

**5.4 The volatility of oil revenues, and the fact that oil may soon be exhausted, pose important challenges for economic management.** Angola faces simultaneous fiscal challenges to: (i) stabilize oil revenue flows in the short term and mitigate their pro-cyclical impact on fiscal policy, (ii) prepare for the potential of a strong reduction in oil revenues over the next 15 years<sup>59</sup>, and (iii) reduce foreign debt to

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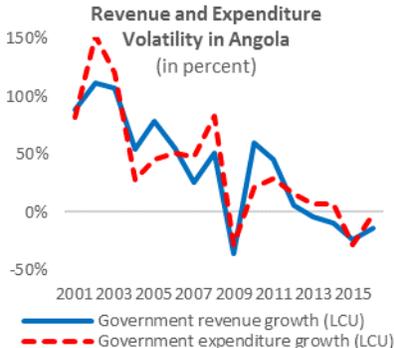
<sup>58</sup> According to UNDP (2011) [not in references], East Asian economies lost 18 percent of export revenue in 2009, while Middle East and African economies, which exhibit a higher export concentration ratio, lost about 30 percent of export revenue. Loss in export revenue also translated in lower growth performance, with growth in South Asia declining by 1.4 percentage points, while growth in Africa fell on average by 3.4 percentage points. Growth in oil-exporting Arab countries fell by 5.7 percentage points in 2009.

<sup>59</sup> Proven crude oil reserves stood at 9.5 billion barrels end-2016. This is equivalent to 16 years of production at current rates (NDP 2017: annual production of 597,6 million barrels).

levels that can be managed in a future without oil revenue. These are related, but separate, challenges. Angola has set up fiscal institutions to manage natural resource wealth, but they have not proven effective (see Angola Policy Notes, 2018). A robust fiscal framework for natural resource management needs to reinforce fiscally responsible economic management and long-term debt sustainability.

**5.5 The pro-cyclicality of fiscal policy stemming from volatile oil prices is a challenge for policy makers.** Fiscal volatility, sudden changes in public spending, and pro-cyclicality in fiscal policy contribute to macroeconomic volatility and uncertainty. There is a strong macroeconomic case for smoothing public expenditure and the non-resource balance in the face of resource revenue fluctuations. If the volatility of resource revenue is passed on to public expenditures and output - leading to pro-cyclical investment - it can have a damaging effect on growth. Overspending beyond absorptive capacity during a boom increases the costs of investment. Underspending during a bust may result in insufficient investment to maintain existing capital, driving up the depreciation rate and lowering overall investment returns. Lower levels of policy-induced volatility help to reduce macroeconomic volatility, which benefits growth and development.<sup>60</sup> Expenditure volatility in Angola has been high and has not been isolated from oil price and revenue volatility. Other countries including Norway and Chile have mitigated the negative impact of revenue volatility with fiscal rules and strong institutions, resulting in less volatile public spending (see Figures 51-53).

**Angola has experienced high expenditure volatility ...**  
 Figure 52: Revenue and expenditure volatility in Angola



**...whereas countries, including some with fiscal rules, have managed to mitigate against commodity volatility, e.g. Norway and Chile.**  
 Figure 53: Revenue and expenditure volatility in Norway

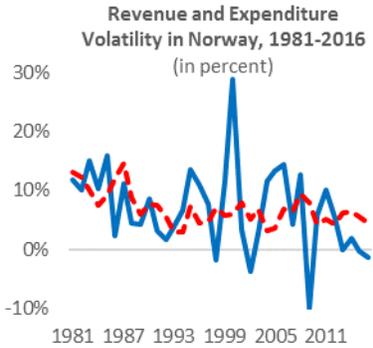
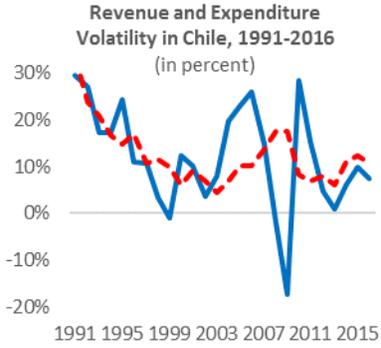


Figure 54: Revenue and expenditure volatility in Chile



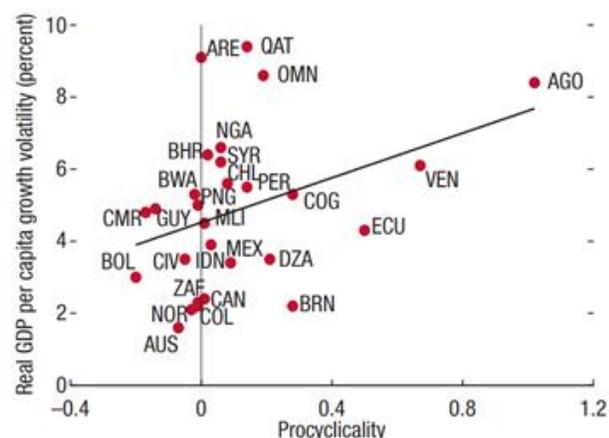
Source: IMF WEO, October 2017. Norway established a fiscal guideline in 2001, which limits the central government’s structural non-oil deficit over time to 4 percent. Fiscal policy in Chile has been built on the concept of a central government structural balance (SB) since 2001, supported by a fiscal guideline targeting that balance.

**5.6 Procyclicality and volatility are bad for growth.** Terms of trade volatility has significant adverse effects on economic growth in countries with procyclical government spending (Brueckner and Carneiro, 2017). IMF (2014) shows that volatile government expenditures hurt growth and that reducing the procyclical nature of government spending in relation to oil prices would be beneficial for long-term growth. A “spend-as-you-go” approach to public investment, which invests oil revenues as they become available is suboptimal to a gradual scaling-up of public investment in line with absorptive capacity; if not,

<sup>60</sup> IMF, (2011). Fiscal Management in Resource-Rich Countries.

there is a risk to adopt costly and disorderly expenditure cuts, involving the suspension or abandonment of investment programs. Figure 54 shows a positive relationship between pro-cyclicality and per capita income volatility in oil-rich countries; Angola would benefit most from reducing pro-cyclicality to enhance long-term growth.

Figure 55. Procyclicality and output volatility



Source: IMF, 2015.

Note: Countries with at least 30 real GDP per capita observations are reported. Procyclicality is measured using country-specific regressions of real expenditure growth rates on commodity price changes. Predicted real GDP per capita growth volatility is obtained from a linear regression on procyclicality. The sample period is 1972–2014, but length varies across countries.

**5.7 The expected depletion of oil reserves in the not-too-distant future poses another challenge for fiscal sustainability, and a concern for intergenerational equity.** Angola’s oil production horizon is relatively short, proven oil reserves will be exhausted by 2032. Production levels averaged at 1,531 bbl/day in the first half of 2018, lower than the average production of 1.639 bbl/day in 2017. Oil production has been falling since end-2017, as a result of a lack of investments and operational inefficiencies at Sonangol, the national oil company. The National Development Plan (NDP) projects levels of oil production at an annual average of 1,591 bbl/day for the 2018-22 period. The World Bank currently projects that crude oil will average US\$56/bbl in 2018 and remain around US\$60/bbl through 2020. If oil revenues continue to fall, it will be more difficult to service the debt in the future. Angola’s gross public-sector debt (including Sonangol) is 64.1 percent of GDP; the non-oil primary deficit was 10.8 percent of GDP at the end of 2017. As an indicator of future debt servicing capacity, public sector debt as a share of non-oil GDP is 79.7 percent including Sonangol, whereas the non-oil primary deficit is 13.4 percent of non-oil GDP<sup>61</sup>. Public debt is projected to reach 72.9 percent of GDP in 2018 due to the currency devaluation<sup>62</sup>.

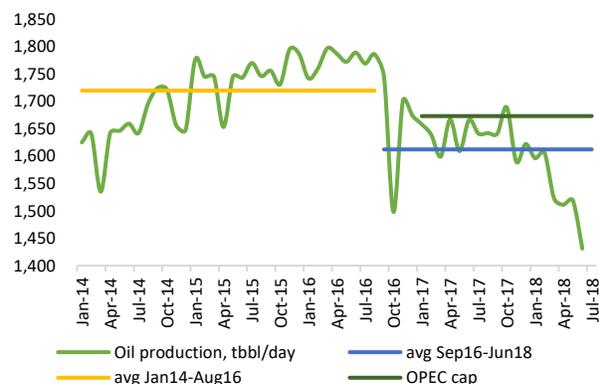
**5.8 Lower oil prices are exacerbating these challenges, calling for growth-friendly fiscal consolidation.** Fiscal consolidation in 2015 and 2016, in response to the oil price slump, led to a cut in overall budget deficit by 30 percent, or 2.1 percentage points of GDP - mainly in investment spending and goods and services - to manage revenue shock. Such aggressive expenditure cuts in public investment and goods and services are not sustainable and can have negative welfare impacts over time. Gradual, but

<sup>61</sup> IMF 2018 Article IV Consultation Report, June 2018.

<sup>62</sup> IMF 2018 Article IV Consultation Report, June 2018.

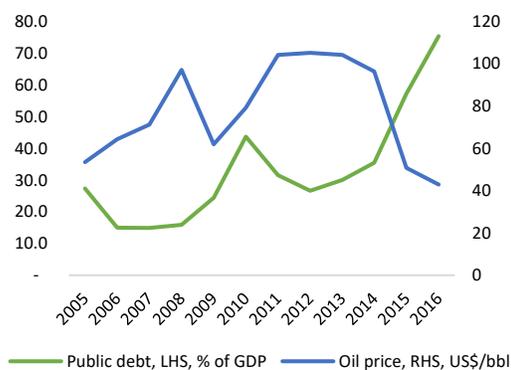
consistent fiscal consolidation is needed to adjust expenditures to the expectation of the lower resource envelope, and to ensure long-term debt sustainability by reducing financing needs.

Figure 56. Oil Production Levels, 2014-18



Source: OPEC, World Bank

Figure 57. Public Debt, 2005-16



Source: WEO, World Bank

**5.9 Growth-friendly fiscal consolidation requires broadening the non-oil tax base and increasing expenditure efficiency.** In terms of non-oil tax revenue, Angola is well below peers, and as such there is ample scope to scale-up. This will require reforms in tax policy and tax administration to broaden the tax base and strengthen taxpayer compliance. Angola is one of few countries in Africa without value-added tax (VAT) and introducing VAT (currently planned for 2019) could potentially add about 1.6 percent of GDP to revenue in net terms. The introduction of a simplified tax regime for small taxpayers would help broaden the tax base and strengthen compliance of informal firms. On the expenditure side, the focus should be on expenditure rationalization and increased expenditure efficiency, containing the public-sector wage bill and phasing out subsidies. Greater efficiency of capital expenditure and goods and services would be crucial. High-quality investment in infrastructure and human capital, which also require effective Public Financial Management and Investment systems,<sup>63</sup> is essential to raise the productive capacity of the economy and to support economic diversification.

**5.10 Angola also needs an effective long-term strategy to manage natural resources.** A key challenge is to reconcile long-term strategic objectives with the need to manage the volatility and uncertainty of resource revenue. Policy makers need to decide how best to leverage this wealth for economic development; how to allocate finite natural resource wealth across generations; and how best to insulate the economy from large and unpredictable commodity price swings. Fiscal institutions that manage the volatility of oil wealth should be linked to a long-term fiscal framework consisting of: a long-term fiscal anchor; short and medium-term fiscal targets; strong public financial management (PFM) institutions; and financial stabilization buffers and would need to include:

- **A long-term objective to guide fiscal policy.** Long-term anchors must reflect country circumstances and long-term policy objectives, including views on intergenerational equity, as the temporary nature of natural resource wealth creates a trade-off between how much resource wealth to consume and how much to save/invest in financial or other assets (e.g. infrastructure, human capital, or both). The long-term objective is particularly important for Angola as prospects of dwindling oil revenues and

<sup>63</sup> See Angola Policy Notes (2018) – Policy Recommendations for Public Financial and Investment Management.

high levels of external debt pose long-term fiscal challenges. Unless the non-oil economy can take the place of the oil-economy in terms of GDP, sustained fiscal consolidation would be required to place debt on a firm downward trajectory before oil revenues come to an end. Forward-looking debt sustainability analysis, with scenario analyses around different assumptions for oil prices and production, as well as oil and non-oil growth, could help gauge an appropriate long-term level of debt and help guide the appropriate fiscal stance in the medium term.

- **The IMF (2018) assesses different approaches to the long-term management of resource revenues in Angola.** One common approach is the Permanent Income Hypotheses (PIH)<sup>64</sup>, which implies constant government consumption (in real terms) of oil resources over time that is equivalent to interest income on the net present value of the country's oil wealth. The IMF argues that the standard PIH might not be ideal for a country like Angola that is relatively capital scarce, with high infrastructure and social needs and incomplete access to international capital markets. Instead, resource revenues may better be used to pay down existing debt and invest in domestic assets and human capital formation. The IMF shows that under a scenario with a more active fiscal rule<sup>65</sup>, public investment can be scaled up gradually, whilst at the same time building fiscal buffers and insulating the non-oil economy from volatile oil price movements.
- **Short- and medium-term fiscal targets.** Fiscal targets should be linked to the long-term benchmark and framed to avoid distortion by oil price volatility. For example, a non-oil primary balance as a ratio to non-oil GDP, or government expenditure could be adopted. Fiscal policy would also have to be set in coordination with other policy objectives, for instance any non-oil primary balance would have to take into account the absorption capacity of the economy. The fiscal target would need to be recalibrated every few years. Given the fiscal vulnerability and sustainability issues in Angola, one possibility might be to target a gradually declining non-oil deficit, to put the debt on a downward path (and thus also contribute to the build-up of financial stabilization buffers over time) and gradually bring the non-oil deficit to sustainable levels<sup>66</sup>.
- **Stabilization buffers to help weather large and persistent shocks.** A long-term strategy should ensure an appropriate level of precautionary savings to weather large and persistent oil price shocks. Properly-sized financial (stabilization) buffers allow for a counter-cyclical response to protect expenditure from shocks and promote long-term development. Benchmarks will need to account for the uncertainty that surrounds the returns to natural resource wealth. The objective of Angola's Oil Price Differential Account (OPDA) was fiscal stabilization, but its optimal size was undetermined, and there were no rules on how to handle excess capital.

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<sup>64</sup> Under the permanent income hypothesis (PIH), a country sustains a constant consumption flow equal to the (implicit) return on the present value of future natural resource revenue. While much of the revenue is saved to build up a stock of non-resource assets during extraction period, the return on these assets sustains the spending annuity after extraction has ended. The IMF argues that some tilting of consumption paths toward relatively poorer current generations in resource-rich developing countries may be welfare-improving (IMF, 2012).

<sup>65</sup> Under the active fiscal policy, higher non-oil tax rates allow the government to build up a stabilization fund before transitioning to the financing of public investment. IMF (2018).

<sup>66</sup> The IMF's latest (2017) Article IV Staff Report (para. 13) recommended this approach: "Targeting a non-oil primary fiscal consolidation path of 1 percent of GDP annually over the medium term which, under current assumptions regarding international oil prices, would be consistent with eliminating the overall fiscal deficit by 2018 and placing debt on a clearly declining path."

- **Strong public financial management (PFM) institutions will ensure longer-term objectives. A comprehensive medium-term fiscal framework can help to demonstrate and ensure consistency between the longer-term objective, fiscal targets and the annual budget.** Effective PFM practices are needed to ensure that government spending yields the expected growth dividends. Formal, numerical fiscal rules can enhance the credibility of fiscal policy and reduce pro-cyclicality, they also require effective PFM institutions to ensure: (i) consistency between the proposed budget and the fiscal rule; (ii) appropriate reporting and corrective action during budget execution; and (iii) adequate and transparent enforcement mechanisms.<sup>67</sup> If PFM institutions are not up to the task, it may be preferable to postpone the formal adoption of a numerical fiscal rule. Provided there is adequate political commitment, a first step could be to shadow the fiscal rule for policy guidance, while undertaking the necessary work to strengthen PFM institutions.

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<sup>67</sup> See Corbacho and Ter-Minassian (2013).

Box 8: Some observations on Angola's current fiscal institutions and rules for natural resource management.

Angola has several special fiscal institutions and rules for oil revenue management, with different objectives, institutional frameworks and governance structures. While the Sovereign Wealth Fund (FSDEA), the Oil Fund (FP) and the National Development Fund (FND) were set up to promote intergenerational equity and long-term development, the Oil Price Differential Account (OPDA) was set up for fiscal stabilization. FSDEA, which can invest domestically and abroad, was set up in 2012 with an initial endowment of US\$ 5 billion. FP can finance infrastructure projects in Angola and abroad, while FND finances domestic private sector projects. OPDA was set up after the global financial crisis to reduce pro-cyclicality of fiscal policy by channeling oil revenue into the fund when actual oil revenue exceeds budgeted oil revenue.

**(i) Overall fiscal framework for spending, stabilization, and saving**

**Overall fiscal framework lacked clear rules for spending, stabilization, and saving.** The current fiscal framework has no medium-term economic framework or long-term fiscal anchor. As such, the horizon for fiscal policy is at most two years ahead as spending programs in annual budgets are determined only by revenue prospects for the coming year. A “price-smoothing mechanism” is used to determine budget spending and transfers to OPDA for stabilization, but there is no link to a long-term fiscal benchmark. Under the current framework, the reference oil price (and quantities) for budget purposes define the amount of resource revenue that are being made available to the budget and transferred to the fiscal stabilization fund (OPDA). As reference oil prices were set below the actual price of oil from 2003-16, the extent to which budgetary revenues responded to actual prices was limited. However, the mechanism to set oil prices and volumes for budgetary purposes is not based on a formal and transparent rule (e.g. specific formula based on moving averages), but the result of an informal consensus between different government stakeholders. Although there will be some savings during a windfall, this approach still involves significant volatility. Finally, the price-smoothing mechanism is not linked to a sustainability benchmark.

While Angola has a debt ceiling, the law was amended in December 2016 to allow the government to exceed the previous public debt limit of 60 percent of GDP – *de facto* recognizing a breach in the debt limit.

**(ii) Fiscal stabilization fund**

**The fiscal stabilization fund (OPDA) fell short of its fiscal stabilization objective and was not integrated with the overall fiscal framework and budget process.** The withdrawal rules for the now defunct OPDA mechanism lacked clarity and were discretionary. Any withdrawal needed to be requested by the Minister of Finance and approved by the President, which limited flexibility and its role as a fiscal stabilizer. Furthermore, the deposit rule was based on oil price and quantities, was rigid and did not take fiscal outcomes into account (World Bank, 2017). OPDA was further not part of permanent legislation, which created uncertainty about its rules and tenure; it further lacked transparency and standardized procedures.

**There were no policies to help determine the optimal size of the fiscal buffer or to guide the investment of the fund's resources.** In the ideal, stabilization funds should only hold sufficient funds to mitigate against *expected* price and production shocks over a defined period of time. This is because the liquid assets required for stabilization purposes offer low returns and are hence costly to hold. As OPDA's investment rules stipulated that resources were to be invested domestically rather than abroad, OPDA may have added to the pro-cyclicality of expenditures; (dis)investing domestically during a boom (bust) exacerbated macroeconomic volatility.

**(iii) Governance, transparency, and accountability of different oil funds**

**Limited public disclosure/fiscal transparency of oil revenues.** The Oil Revenue Conciliation Report, available since 2014, provides information on oil production, exports and revenues, and the amounts transferred to the oil funds, but not on the actual account balance; it is also published with significant delays. No independent audit of activities of different oil funds has been conducted, which limits accountability to elected representatives. Angola has also not sought a formal endorsement of the Extractive Industries Transparency Initiative (EITI).

**Inadequate coordination between OPDA and external sector policy.** OPDA resources are reported as part of the country's international reserves, which leads to double counting as both fiscal and exchange rate buffers, and this misrepresents the country's ability to withstand shocks.

The different funds are currently in-operative and the Government is in the process of consolidating these different funds into *one* Sovereign Wealth Fund (SWF), as part of a new fiscal framework for natural resource wealth management.

## Exchange Rate Regime and Monetary Policy

**5.11 Angola needs a more flexible exchange rate regime to foster economic diversification and to open the path for sustainable growth; FX measures adopted in 2018 have greatly reduced exchange rate misalignment.** Exchange rate misalignment and depleting foreign reserves prompted the BNA to abandon the fixed peg to the U.S. dollar and ease currency controls in January 2018. The peg, which had been in place at a rate of 166 since April 2016, has been replaced by a crawling peg system, where the exchange rate is determined by the transactions that take place in primary market auctions. The kwanza has depreciated by 46.4 percent in nominal terms against the U.S. dollar between January and October, thus reducing the exchange rate misalignment, estimated at about 20 to 40 percent in real terms at end-2017. With greater exchange rate flexibility, the parallel-official exchange rate spread has decreased significantly to only 15 percent by mid-October percent, compared to 140 percent at the beginning of the year.

**5.12 A fair-valued real effective exchange rate is essential to economic diversification.** Economies that are highly specialized in extractive industries often fail to diversify because of Dutch disease.<sup>68</sup> Currency overvaluation, resulting from Dutch disease, exacerbates the distortions in the relative price of tradable and non-tradable goods, and amplifies the inefficiency in the allocation of production factors across sectors; prospects for new sources of growth are thus reduced. While some argue that an undervalued real effective exchange rate may be beneficial in the short term, such benefits tend to be offset by long-term drawbacks stemming from an inefficient allocation of resources as most of the gains may fall to firms that are not internationally competitive and that can only survive by exploiting distorted relative prices. Furthermore, an undervalued exchange rate is equivalent to a tax on industries that rely on imported inputs for growth.

**5.13 Maintaining the exchange rate close to fundamentals would best serve economic diversification.** The mainstream economic literature seems to suggest that economic diversification is best served by a fairly-valued exchange rate (see Box 10). Angola's exchange rate was significantly overvalued by end 2015, but the overvaluation has been largely corrected by end-2018 (see Chapter 2, Box 6). Going forward, it will be important to keep the exchange rate close to fundamentals. Greater exchange rate flexibility could help as more flexible exchange rate regimes are less likely to produce persistent deviations from fundamentals.

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<sup>68</sup> Dutch disease refers to a situation where the dominant sector in the economy causes a currency real appreciation that reduces the incentive to invest in other export sectors.

#### Box 10: Exchange Rate and Economic Diversification

Exchange rate regime and exchange rate valuation appear prominently in the diversification debate of developing countries. After independence, many developing countries pursued an overvalued exchange rate strategy with the aim of fostering the diversification of their production as part of an import substitution strategy: an overvalued exchange rate puts an indirect tax on the export-oriented agricultural sector while benefiting industrial development through cheaper imported inputs. This view was however not supported by empirical evidence and several studies, including Grobar (1993) and Sekkat and Varoudakis (2000) showed that exchange rate overvaluation decreases the ratio of manufactured exports to GDP and thus reduce exports diversification.

More recently, the view has been advanced that an undervalued exchange rate can be a second-best approach for promoting economic diversification if developing countries face certain distortions, such as a weak institutional framework (Rodrick, 2008) or insufficient financial development (e.g. Aghion et al., 2009) and Elbadawi et al., 2012). Rodrick (2008) argues that as more complex goods are more contract and relationship intensive, a weak institutional framework disproportionately taxes more sophisticated exports; an undervalued exchange rate can compensate for this tax and facilitated export diversification into more complex goods.

Empirical evidence has so far failed to establish a clear causal effect of exchange rate misalignment on export diversification. Agosin et al. (2012) and Levy-Yeyati et al. (2013) fail to provide such evidence, while Méon and Sekkat (2008), Freund and Pierola (2012) and Rajan and Subramanian (2011) find some empirical support. Addressing some of the empirical and methodological issues of earlier studies, Sekkat (2016) conducts a comprehensive analysis that accounts for the quality of institutions, the degree of financial development and distinguishes between the effects of under and over valuation. Sekkat (2016) fails to establish a clear impact of exchange rate misalignment and export diversification. While this study may not proof conclusive, it seems to validate the recommendation from mainstream economics that a fair-valued exchange is best for economic diversification.

With regards to fixed or floating exchange rate, empirical evidence is also mixed, but as exchange rate tends to return quicker to fundamentals under floating exchange rates, greater flexibility seems more suitable for export diversification.

## Financial Sector Policies for Growth and Economic Diversification

**5.14 Macro-financial vulnerabilities are a risk to growth and economic diversification.** Lower oil prices since 2014 have contributed to the deterioration of key financial soundness indicators. Delays in government payments to suppliers resulted in higher non-performing loans (NPLs). The shortfall in government finances raised public financing needs, which pushed up the yield on government securities and further crowded-out private borrowing. The state also has a significant role in the banking sector, which poses additional macro-financial risks: (i) the direct ownership of three banks (including one of the top of five), and Sonangol's significant stake in six banks (including one of the top five banks) pose a direct fiscal risk; (ii) the growing exposure of banks to government bonds and hence sovereign risks.<sup>69</sup> Additionally, there is a considerable ownership stake by politically exposed persons (PEPs) in the banking system. In parallel to the oil price shock, the banking sector suffered with the loss of correspondent banking relations (CBR) with US banks in 2016 amid concerns over of jurisdictional risk and weakness in the Angolan anti-money laundering/combating the financing of terrorism (AML/CFT) framework.

**5.15 BNA has been addressing financial sector vulnerabilities.** The authorities have made significant progress in improving the legal and regulatory framework for bank regulation and supervision, including (i) a new financial institutions law that includes improvements in corporate governance and internal controls, (ii) all domestic banks have migrated to the IFRS accounting system, and (iii) an ongoing follow-up asset quality review of the banking system. To help resolve NPLs, a public asset recovery entity (Recredit) was set up in 2017, which has agreed to purchase BPC's distressed assets. As part of the IMF program, the GoA will limit Recredit's mandate to purchase NPLs from only BPC and will introduce a sunset clause to its operations. The currency depreciation prompted BNA to increase the minimum capital requirements from US\$ 25 million to US\$ 35 million by end-2018, which could lead to some consolidation in the sector. Moreover, the BNA is strengthening the AML/CFT framework and started a National Risk Assessment (NRA) for AML/CFT in 2017.

**5.16 Since the beginning of the crisis, financial sector soundness indicators had deteriorated but have recently stabilized with improved capital adequacy and the bulk of concerns around state-owned banks.** NPLs, which peaked at 28.8 percent of gross loans in December 2017 declined slightly to 27 percent in October of 2018. However, about three quarters of NPLs are concentrated in the state-owned bank BPC, which is undergoing critical restructuring having closed several branches and laid-off staff. Capital adequacy measures have also improved. Regulatory capital to risk-weighted assets increased from 18.9 percent in December 2017 to 27 percent in October of 2018.

**5.17 Financial sector vulnerabilities deteriorated with the crisis, but have recently stabilized.** Low banking sector profitability, credit concentration in public sector assets and the loss of direct U.S. dollar Correspondence Banking Relationships (CBRs) compromise the stability of the financial system and the ability to support the broader economy. There is an urgent need to deal with a high share of NPLs, which stand at 27 percent in October 2018, after peaking at almost 29 percent at end-2017. However, about three quarters of NPLs are concentrated in the state-owned bank *Banco do Poupança e Crédito BPC*, which is undergoing restructuring and has already closed several branches and laid-off staff. System-wide capital

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<sup>69</sup> According to the IMF (2018) bank exposure to domestic sovereign risks has risen to 21 percent of GDP, the government has spent about 4 percent of GDP to recapitalize public banks since the oil price shock in 2014.

adequacy measures have also improved, and regulatory capital to risk-weighted assets increased from 18.9 percent in December 2017 to 27 percent in October of 2018.

**5.18 Angola needs a well supervised financial system...**The Financial Institutions Law (FIL) has already introduced significant enhancements to bank resolution, including the creation of a deposit guarantee fund (DGF), but specific regulation is needed to operationalize the framework. To bolster crisis preparedness, Angola also needs to enhance supervisory effectiveness and move to risk-based supervision. The ongoing National Risk Assessment (NRA) is an important step towards a comprehensive and effective AML/CFT strategy, but the NRA findings need to be used to develop a multi-disciplinary risk-based AML/CFT strategy that enhances ML/FT prevention, detection and repression. Angola's public Asset Management Company in charge of purchasing "bad debt" can play an important role in resolving NPLs, but it cannot end up transferring the burden of bad debts to the state; the objective should be to resolve NPLs on a market basis, by reflecting adequate collection costs and recovery values.

**5.19 ...that can channel resources from the oil sector to nascent business opportunities.** A deep and liquid kwanza-denominated capital market could help to provide long-term financing to the private sector and would contribute to financial sector stability by insulating the economy from exchange rate shocks. Deficiencies remain on both demand and supply sides of the market. The institutional investor base, especially the pension system, needs to be strengthened; the government also needs to build a more liquid yield curve through regular government issuances with defined benchmark maturities and to incentivize new issuers to enter the market and provide diversified investment opportunities. Capacity building will be needed to support the development of the market eco-system.

## B. Cross Cutting Policies for Economic Diversification and Sustainable Growth<sup>70</sup>

**5.20 Sectoral policies to support economic diversification** and sustainable growth should focus on: (i) an enabling business environment for private sector-led growth, (ii) human capital and labor productivity, (iii) better access to finance and financial inclusion, (iv) enabling infrastructure, and (v) the role of ICT as a catalyst for economic growth and diversification.

### Business Environment

**5.21 A favorable business environment is critical for increasing private investment, economic diversification and job creation.** Despite important government steps to reform the regulatory and institutional framework, Angola still presents a challenging regulatory and institutional environment for businesses, as illustrated by its 173<sup>th</sup> rank out of 190 countries in the Doing Business 2019 report. Private sector activity would benefit from reduced red tape and consistent application of regulations. Important steps for this include: expanding online information on government procedures<sup>71</sup>; implementing the legal framework for e-signatures; and streamlining procedures and introducing online platforms for business registration, filing and payment of taxes and property registration. The recent adoption of the investment and competition laws in 2018 are important steps towards facilitating greater private investment and competition, but it will be important to ensure that the future regulations do not create entry barriers or favor certain players. It would also be important that conflict of interest regulation is enforced.

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<sup>70</sup> Further information on sector-specific diagnostics and policy recommendations are provided in Angola Policy Notes (2018).

<sup>71</sup> *Portal do Cidadão*.

**5.22 Reforms in trade facilitation are critical for opening opportunities to exports** and for increasing the competitiveness of domestic sectors like agriculture, that rely heavily on inputs from abroad. Trade will be greatly facilitated by completing the implementation of ASYCUDA World at all border posts and streamlining import and export procedures.

**5.23 An effective competition policy framework** is needed to ensure that government policies and programs are designed to encourage competition and minimize market distortions. A review of existing policies and programs that target access to foreign exchange, tax and tariff exemptions, subsidized credit, public guarantees, risk capital and training are a priority in this regard.

**5.24 The 2015 investment policy and promotion framework offer a more welcoming policy for foreign investors.** However, important shortcomings remain. The government may wish to review requirements for mandatory joint ventures with local firms in key sectors; increase transparency in investment approval procedures; simplify visa restrictions; streamline the institutional framework for investment promotion, facilitation, and aftercare; and consider international arbitration for dispute resolution.

### Human Capital and Labor Productivity

**5.25 Notwithstanding the significant progress in increasing access to education, outcomes of the sector in Angola lag peers with similar levels of education spending.** While net primary school attendance rates improved from 56 percent in 2005 to 78 percent in 2014, one in six school-aged children are not attending school. Less than 50 percent of the youth have access to secondary education, which is particularly challenging in rural areas and for girls. Currently, more than 60 percent of students in grade 3 are unable to read a single word in Portuguese, due to poorly trained teachers and limited learning materials. Repetition rates as high as 20 percent and low scores on learning assessments also point towards significant issues in the quality of education. Quality of education could be improved through greater investment in teacher training and appropriate educational materials for the classroom. Skills development programs should be expanded and tailored to the needs of the labor market. To increase access to education – especially in rural areas and among girls – alternative forms of service delivery should be considered, including online programs and public private partnerships.

**5.26 Labor productivity needs to increase.** Young people are increasingly more educated, but productive employment opportunities are few. To create more and better jobs, Angola needs to improve the investment climate to encourage entry and growth of firms. An active jobs strategy would support an adaptable labor market that balances worker protection and flexibility. Policy focus and Active Labor Market Programs are required to increase job opportunities in the largest employment sectors of agriculture and services with a focus on youth, women and the informal sector.

### Access to Finance and Financial Inclusion

**5.27 Access to finance, and its cost, are critical binding constraints for economic development and diversification in Angola.** An inclusive financial system that provides cost-effective access to financial services is crucial for economic diversification. The government should build on recent initiatives for micro, small and medium-sized enterprises (SMEs), such as the savings and financial education campaigns for those firms and households currently underserved; or financing schemes for SMEs that focus on economic diversification. Ongoing government-sponsored SME finance programs should be evaluated

with a view to adopting more sustainable and transparent criteria for supporting SMEs, with the ultimate goal of crowding-in private bank finance. Within this context, policy initiatives in support of financial inclusion need to target reforms that: broaden the credit information infrastructure; improve the insolvency regime; strengthen payment systems and promote retail payments (especially mobile payments); and improve consumer protection and financial literacy. Measures to promote the introduction of financial services such as leasing, factoring, warehouse receipts should also be pursued. The reform most likely to have immediate impact on inclusion would be to enable and promote retail payment and mobile financial services.

## Infrastructure

**5.28 Infrastructure is a critical enabling factor for economic diversification.** The economy requires affordable and reliable energy; adequate access to water and sanitation; efficient transport and logistics systems to produce, move and commercialize goods and to deliver basic services. Institutional and regulatory frameworks need to be established and/or improved: (i) to attract private financiers and operators, and to relieve the budget, (ii) to plan and build resilient, cost-effective infrastructure which will enable trade facilitation for national and regional markets, and (iii) to provide access to basic services to support social development.

**5.29 Improving domestic and international connectivity is key for the transport sector.** Primary and critical road networks need to be identified, as do associated maintenance standards. Roads will need to be built and maintained to help improve access to lagging regions. A sustainable financing mechanism for a Road Fund and a strategy to scale up performance-based contracts for maintenance are crucial. The development of a regional transport corridor with DRC and Zambia would greatly support regional trade.

**5.30 Angola's long-term energy strategy, *Angola Energia 2025*, aims to double electricity infrastructure capacity and coverage by 2025.** The following measures need to be adopted to make this happen: strengthen the performance of existing energy utilities; ensuring financial viability of utilities; define a rural electrification strategy; and increase private sector involvement in power generation.

**5.31 The rapid expansion of water supply system requires an improved and updated sanitation infrastructure.** Provincial Water and Sanitation Utilities need to be monitored with a view to expanding and enhancing facilities, and their financial viability also needs to be secured. A transparent tariff regulation scheme and a national sanitation strategy to scale up access in urban and rural areas will help manage needs and ensure adequate access to water and sanitation.

**5.32 The PPP framework needs to be fully operational to attract private investment in infrastructure across sectors.** Existing legislation and procedures also need to be reviewed to support the framework. Establishing PPP units at technical ministries would help to develop a PPP pipeline.

## Information and Communication Technology (ICT)

**5.33 ICT has the potential to be a catalyst for economic growth and diversification.** A digital economy in Angola has the potential to create jobs, generate economic output, increase export revenue, and support social inclusion. It can help drive the use of ICT across sectors, including healthcare, education, financial services, and public financial management through operational reforms, digital leap-frogging, and innovation. The benefits of ICT-based development rely on good infrastructure, namely access to

mobile phones, high-speed internet, and digital clouds. Although Angola's mobile sector has shown remarkable growth, availability of high-speed internet is limited.

**5.34 Competition in the telecom sector should be strengthened.** Recent efforts to reduce the oligopolistic market structure, by awarding a fourth license for an additional mobile operator and plans for partial privatization of Angola Telecom go in the right direction, but remaining restrictions with respect to Angolan ownership as well as continued government control and participation may dampen the impact. There are also market structure issues with the involvement of important operators at several levels of the value chain (MS Telecom, Angola Telecom) which should be addressed with proper regulation guaranteeing competition (CPSD, 2018).

## C. The Complementary Agenda

**5.35** Effective and enabling institutions are critical for increasing private investment and economic diversification. While the government has taken important steps in recent years to reform the regulatory and institutional framework, Angola still presents a challenging regulatory and institutional environment for businesses, as illustrated by its 173<sup>th</sup> ranking out of 190 countries in the Doing Business 2019 report. In the past, economic management in Angola has favored large-scale planned projects and state-owned enterprises, and these dominate key sectors of the economy. To support economic diversification, countries need to attract investors who seek to use countries as an efficient production base to enter new markets and link up with global value chains. This often requires a paradigm shift in terms of the regulatory role of the government towards a regulatory regime that allows investors to operate in a dynamic market environment, while safeguarding legitimate societal objectives.

### Institutional Framework

**5.36 Effective institutions are critical for increasing private investment and economic diversification.** While the government has taken important steps in recent years to reform the regulatory and institutional framework, Angola still presents a challenging regulatory and institutional environment for businesses, as illustrated by its 173<sup>th</sup> ranking out of 190 countries in the Doing Business 2019 report.

**5.37 Private sector activity is unlikely to develop without more market-oriented policies,** such as the elimination of *de jure* and *de facto* barriers to entry in most markets. In the past, economic management in Angola has favored large-scale planned projects and state-owned enterprises, and these dominate key sectors of the economy. The investment regime was also geared towards natural-resource seeking and public procurement-seeking investment; this includes investment in oil extraction/refining, or building publicly funded infrastructure, which often happens in natural resource-rich countries. Mahood (2017) argues that to support economic diversification, countries need to attract investors who seek an efficient production base to enter new markets and link up with global value chains. This may require a paradigm shift in terms of the regulatory role of the government: away from a risk-averse, control approach that is often found in natural-resource rich countries, towards a regulatory regime that offers considerable freedom to investors. This freedom would allow investors to operate in a dynamic market environment, while safeguarding legitimate societal objectives. a

**5.38 Heavy-handed state presence can crowd-out private investment.** While government support is justified to address market failures, a large state presence can crowd-out private investment and restrict

competition. Chapter 2 showed that imperfect competition and barriers to market entry reduces firms' incentives to innovate, while firms in uncompetitive domestic markets are less likely to export. When large SOEs dominate entire sectors, private firms are prevented from competing on a level playing field. The government's new policies, including SOE reform and the new competition law, if supported by effective regulation, can help reduce the current dominant presence of the state in the economy and incentivize private investment.

**5.39 The quality of governance of economic assets and markets also needs to improve.** Governance has improved since the end of the civil war in 2002, but Angola lags its peers in Africa (IMF, 2018). Reaching the African average would generate 2 percentage points of additional growth annually. The recently approved competition law is a step in the right direction in this regard as it will help enhance competition in the domestic market and serve as a tool to address monopolistic practices. Passing new investment legislation that supports private investment and makes FDI less dependent on domestic partners would help build such an improved enabling environment. Shedding non-performing state-owned companies and reducing the share of state ownership in the economy – as currently envisaged by the government - will help enable the private sector, possibly reduce vested interests, and strengthen competitiveness; it will also free up fiscal resources that could be better used for investing in human capital and much needed infrastructure. The ongoing restructuring and privatization of Sonangol could complement these efforts. While improving governance is a longer-term process and needs to be accompanied by building effective institutions, sending the right signals now and building credibility for such a policy approach could yield positive economic results in the near term. In this regard, strengthening the stock exchange and crowding-in private investors through SOE reform and private-sector partnerships (PPPs) could be one way to support demand for better private sector governance; it would however be critical to ensure that robust due diligence is conducted on new investors, and that new stock market listings and SOE privatization are carried out in a competitive and transparent manner. Ali, Fiess and Macdonald (2010) identify FDI as an important driver of institutional change, as foreign investors are found to not only import high quality manufacturing and production technology, but also high quality social technology and institutions. Increasing transparency and accountability around natural resource management by bringing independent experts into the decision-making process and/or joining international efforts to impose discipline and oversight, such as the EITI, could be another step towards strengthening governance and institutional quality.

**5.40 Market-oriented policies would also benefit from public-private dialogue.** The government's recent reform plans and initial policy actions have started to change investor perceptions and unleashed considerable interest given significant unrealized market opportunities in the country. In order to maintain investor confidence, there is a need to strengthen public-private sector dialogue in an inclusive and transparent manner. The private sector should be invited to play a crucial role in identifying constraints and reform priorities for economic diversification. This will help to ensure a transparent and predictable business environment that provides a level playing field for all types of investors, foreign and domestic, small large, which is essential for economic diversification (CPSD, 2018).

## Trade Openness, Regional Integration and Global Value Chains

**5.41 International trade can be an important catalyst for economic diversification.** Countries can increase growth by diversifying exports, and particularly by exporting more to richer countries (Hausman et al. 2007). Angola's export sophistication index, which is defined as a country's notional income based on its exports, already reveals a high degree of market penetration into high income countries, although this is currently largely related to oil exports (World Bank 2018). Existing trading relationships could be leveraged to promote economic diversification and integration into global value chains.

**5.42 Global value chains (GVCs) have transformed the nature of international trade by breaking up the production process.** Different steps of the production process can now be carried out in different countries. While the leap to exporting manufactured products in the past required a full suite of complementary industries, the rise of global value chains (GVCs) enables less industrialized countries to insert themselves into production chains without having to produce a complete, final product (GVCDR 2017). GVCs provide an opportunity to increase economic diversification and export complexity as countries can develop products around the chain through trade and FDI. Over time they can also move into higher value-added sections of the production chain. A recent SADC (2017) study shows that Angola has potential in regional value chains for cassava, and fish and fish products. There is also potential for Angola to access GVCs related to ferrous metals (iron and steel) and diamonds. Angola has registered interest with SADC in the development of a regional value chain for maize, forestry products and fertilizers.

**5.43 Greater involvement in GVCs also requires greater openness to trade and investment.** Angola's borders are currently quite restrictive (see Figure 57). Dismantling formal and informal barriers to trade and investment are key for promoting trade and GVCs. More open borders would not only increase global and regional exports, but also generate larger agglomeration economies and attract foreign investment. Figure 55 also shows a negative relationship between economic complexity and border restrictiveness, indicating that lower openness to trade and investment is associated with lower economic complexity.

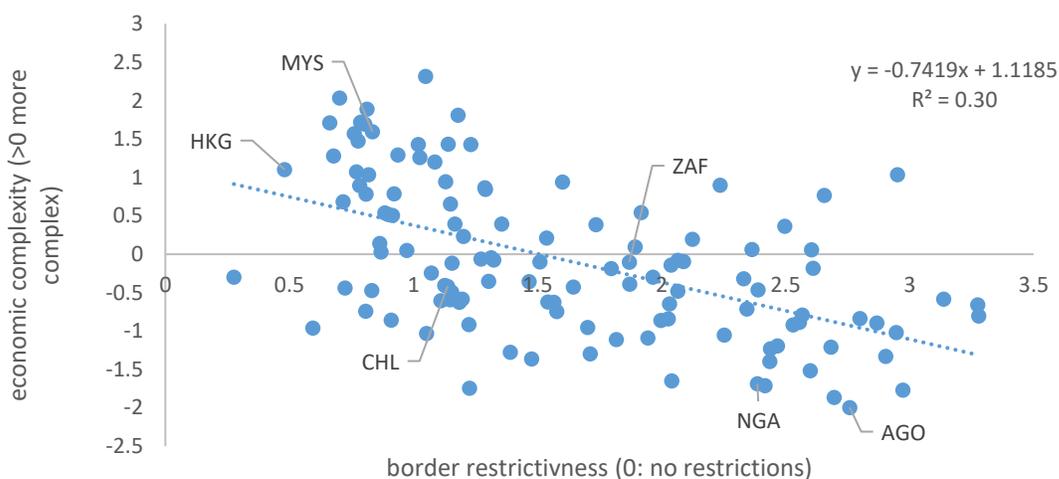
**5.44 Regional integration can be an important driver of economic diversification in resource-rich countries.** Regional integration is often seen as less relevant for resource-rich countries, as demand for commodities typically comes from the global market rather than regional markets. A recent World Bank study (Isik et al. 2015) shows that regional integration in Africa can play a vital role in diversifying economies: as resource deposits often tend to span multiple borders. Transport infrastructure and links would need to be built for trans-boundary mining for example, in order to facilitate the extraction and transport of these resources. Establishing such infrastructure is complex and requires a multi-country regulatory environment, but any new regional transport corridors could provide benefits for broader regional integration and economic diversification.

**5.45 Regional value chains for extractives can stimulate economic diversification and trade through linkages to the broader economy.** Regional value chains for minerals and metals tend to stimulate demand for services and goods that will feed into these value chains, and regional integration will help facilitate the flow of goods, services and people across borders. These two factors will help reduce costs and may help firms boost productivity enabling them to move up those value chains. According to GVCDR (2017), Angola is already part of an emerging regional value chain for steel roofing and is well placed to participate in regional value chains for phosphate-based fertilizers; there is also scope for regional metal

refining related to nickel. AfDB (2013) also reports emerging backward linkages from mining, which are also confirmed by Lindbjerg-Sperling (2017) (see Chapter 2, Box 5).

**5.46 Angola is part of several regional integration initiatives<sup>72</sup>, which are at different stages of effectiveness.** Recent evidence seems to suggest that preferential trade agreements (PTAs), ideally negotiated as a regional block, can be an important stepping stone for insertion into global value chains and economic diversification (see Laget et al. 2018). Trade agreements that go beyond simple tariff cutting and that involve legal commitments on laws and regulations have been found to be particularly relevant for facilitating entry into global value chains and stimulating economic diversification. In PTAs, a group of like-minded countries make agreements on policy areas that go beyond WTO commitments. In practice, the most important areas concern services, trade, investment, competition policy, and intellectual property rights protection.

Figure 58: Border Restrictiveness and Economic Complexity Index



Source: World Bank, Atlas of Economic Complexity.

Note: As in the World Development Report (World Bank 2009), the border restriction index summarizes four indicators: restrictions on the flow of goods, ideas, capital, and people. The indicators are normalized and rescaled from more open to less open borders and then summed. For all indicators, smaller is better. Data on border restriction index were provided by Izvorski et al. (2018).

<sup>72</sup> Angola is currently a member of Economic Community of Central African States (ECCAS) and Southern African Development Community (SADC), and in March 2018 signed up to the African Continental Free Trade Area (AfCFTA).

# ANNEX

## Annex 1: Natural Resources in Angola

Figure A.1. Natural resources as share of GDP

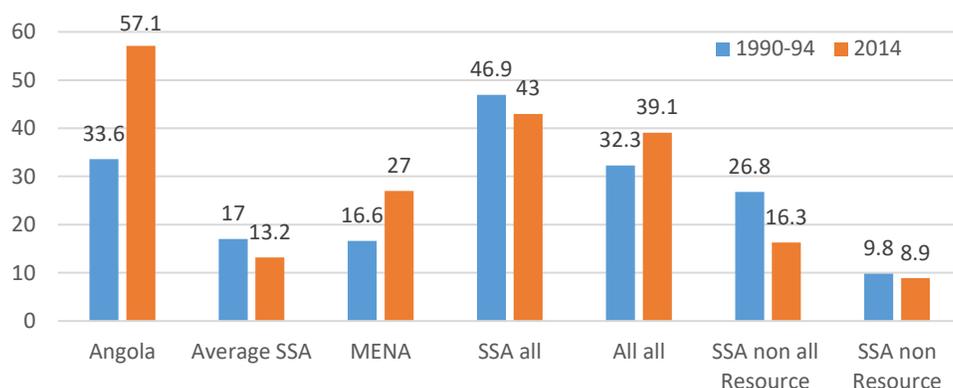


Figure A.2. Natural resources as share of total exports

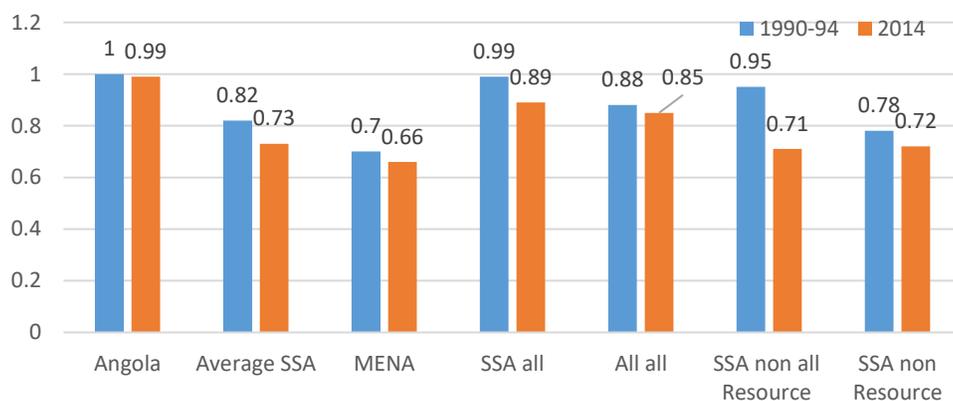
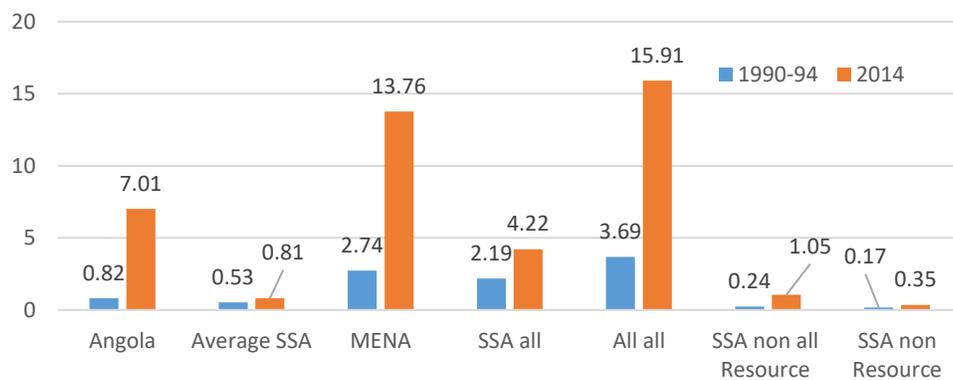


Figure A.3. Natural resources as share of labor force



Source: Calderon and Cantu (2018), based on COMTRADE.

## Annex 2: Product Space Concepts

Table A.1. Definitions of export concentration

Method	Definition and Use Cases
<b>Herfindahl Index (HI)</b>	<b>Herfindahl Index (HI)</b> is the most commonly used measure of export diversification. It lies between 0 and 1 where being close to 0 indicates well diversified exports. There is a non-monotonic relationship between sectoral diversification and development, as economic activity tends to re-concentrate at later stages of development, after diversifying during much of that process (IMF 2014, Imbs and Wacziarg 2003).
<b>Revealed Comparative Advantage (RCA)</b>	<b>Revealed Comparative Advantage (RCA)</b> calculates the relative advantage or disadvantage of a country in a certain class of goods or services as evidenced by trade flows (Balassa 1963).
<b>Export Quality (EQ)</b>	<b>Export Quality (EQ)</b> measures the export quality by using unit value adjusted for differences in production costs and for the selection bias stemming from relative distance (Spatafora et al. 2014).
<b>Export Sophistication (EXPY)</b>	<b>Export Sophistication (EXPY)</b> measures the similarity of a country's exports to the structure of advanced economy exports. The concept is based on the notion that what matters for growth is not how much you export but what you export (Hausmann, Hwang and Rodrik, 2007, herein referred to as (HHR)). Goods and services exports with high productivity and sophistication contribute more to overall economic growth (Hausmann et al. 2007; Mishra et al. 2011).
<b>Economic Complexity Index (ECI)</b>	The <b>Economic Complexity Index (ECI)</b> is an extension of the sophistication measure and suggests that the large income gaps between rich and poor nations are an expression of the vast differences in productive knowledge amassed by different nations. The ECI, developed by Hausmann et al (2011), approximates the productive knowledge in a country and helps explain differences in the level of income of countries.
<b>Fitness-Complexity (FC)</b>	Similar in spirit to the ECI approach, recent methods of the <b>Fitness-Complexity (FC)</b> algorithm use a non-monetary metrics for country competitiveness (fitness) allows for quantifying the hidden growth potential of countries by the means of the comparison of this measure for intangible assets with monetary figures, such as GDP per capita (Tacehlla et al. 2013; Pietranero et al. 2014).
<b>Product Space (PS)</b>	<b>Product Space (PS)</b> approach presents a variety of statistical measures that facilitate an understanding why a country that exports a certain set of products was able to diversify in another set of new exports. The changes in the RCA are governed by the pattern of relatedness of products at the global level (Hidalgo et al. 2007). As countries change their export mix, there is a strong tendency to move towards goods that are more closely related to ones already being produced rather than to goods that are less closely related.

### Box A.1. Product Space Analysis

Product Space (PS) analysis combines a variety of statistical measures that facilitate an understanding why a country that exports a certain set of products has been able to diversify into new a set of exports. Changes in relative comparative advantages (RCA) are governed by the pattern of relatedness of products at the global level (Hidalgo et al. 2007). As countries change their export mix, there is a strong tendency to move towards goods that are more closely related to the ones already being produced rather than to goods that are less closely related.

There are a few measures used in the product space: Proximity is a measure of relatedness of a pair of two exports (Hidalgo et al. 2007, Hausmann and Hidalgo 2011); in other words, it measures how possible it is for a country that is an active exporter of the item  $u$  (i.e. an item with a relative comparative advantage - RCA above unity) to be or become an active exporter of the item  $v$ . Having access to proximity, the general idea is that countries are more likely to develop specialization in a given activity that is close to their current set of capabilities. The density can be thought of as a measure of log likelihood of developing an  $RCA > 1$  in a future export. A high-density value indicates that a country has developed capabilities that surrounds the export. Complexity is inversely proportional to the number of countries which export that product, and directly proportional to how fit those countries are, or as this algorithm says, inversely proportional to the inverse of the fitness or economic strength of the country (Tachella et al. 2014, Mishra et al. 2018). Complex products or services are exported by highly diversified countries that non-diversified countries do not have any capabilities in.

The initial step in building a network representation of product relatedness (proximities) involved first generating a network framework using the maximum spanning trees (MST) algorithm for all the product nodes. The network exhibits heterogeneity and a core-periphery structure: the core of the network consists of metal products, machinery, and chemicals, whereas the periphery is formed by fishing, tropical, and cereal agriculture. On the left side of the network, there is a strong outlying cluster formed by garments and another belonging to textiles. At the bottom of the network, there exists a large electronics cluster, and at its right mining, forest, and paper products (Hidalgo et al. 2014). Generally, the core (or center) of the product space indicates a higher path or link to variety of other products, hence higher likelihood of broad-based diversification. Nodes highlighted in color represent  $RCA > 1$ , i.e. exports where a country has specialization.

Poor countries do not export complex products competitively. The larger the number of products a country exports competitively, the more diverse its set of capabilities or productive knowledge, assuming that the exported products are dispersed across the PS. The concept of 'density' reflects the ease with which a country's combined capabilities can be deployed to export a particular product. Density is a country-specific concept. As an example, Angola's density to export oil is much larger than its density to export petrochemicals or agricultural products. Through the metric of proximity, the PS would therefore show a strong degree of relatedness between crude oil and petroleum-related or natural gas- related products, i.e., the capabilities needed to export these products are relatively similar, which is why both are frequently exported with a comparative advantage or competitively by a country. On a scale of 0 – 1, the higher the proximity between exported products, the easier it is for a country to export both products competitively or with a RCA greater than 1. A country's position in the product space signals its capacity for export diversification. The process of structural transformation of an export basket can be helped or hindered by the nature of the products in which the country specializes. A country that produces goods in the dense core of the product space will find structural transformation easier because the set of acquired capabilities can be easily redeployed into the production of other products.

The probability to develop comparative advantage for a product in the future depends on the ease with which capabilities existing in the country can be adapted to launch new products. Hence it is important how close the new product is to the existing export structure. This measure is called density. Density varies from 0 to 1, with higher values indicating that the country has achieved comparative advantage in many nearby products, and therefore should be more likely to export that good in the future. Hausmann and Klinger (2006) show that this measure of density is indeed highly significant in predicting how a country's productive structure will shift over time: countries are much more likely to move to products that have a higher density, meaning they are closer to their current production.

Table A.2. Detailed Ranking of Highest Quality Products from Angola, 2010

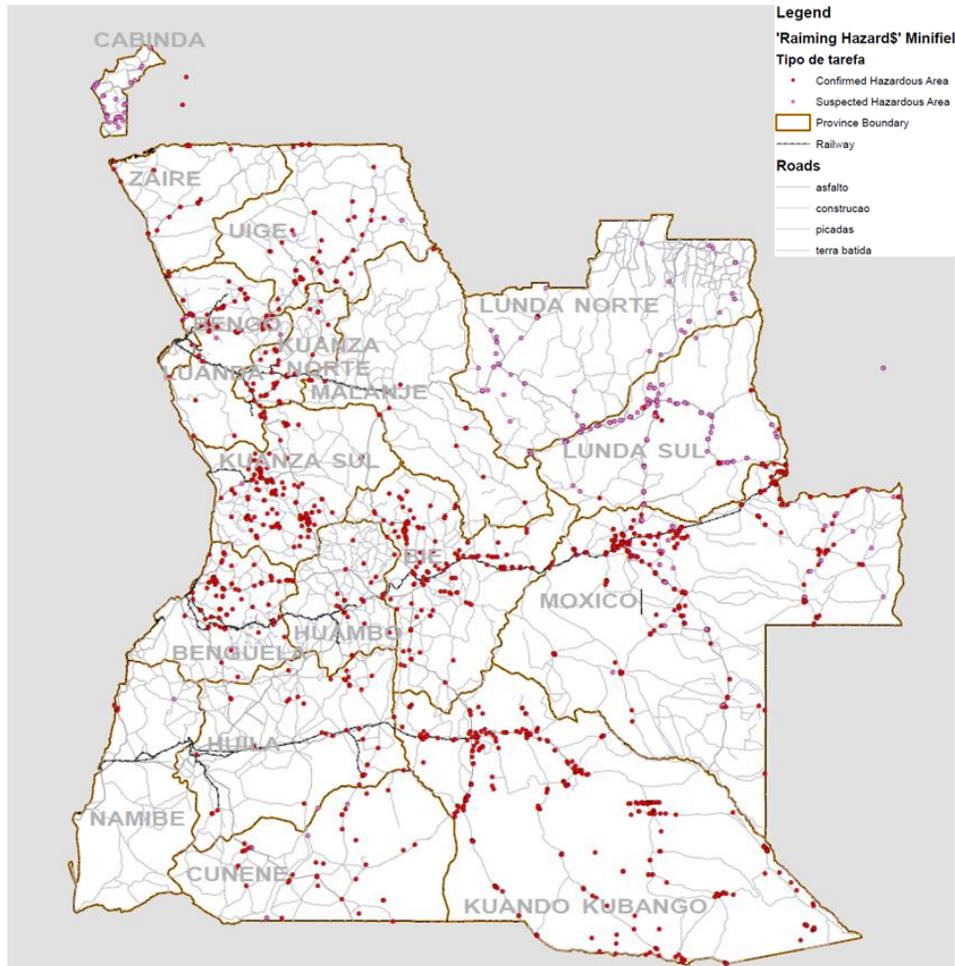
<b>id</b>	<b>SITC Industry Code Long Description</b>	<b>Product Quality in 2010</b>
1	Diamonds, not industrial, not set or strung	0.956
2	Parts of aircraft, balloons, airships	0.922
3	Statistical machines, cards or tapes	0.922
4	Phonographs, tape & other sound recorders etc.	0.921
5	Electrical machinery and apparatus nes	0.913
6	Electrical measuring & controlling instruments	0.912
7	Travel goods, handbags & similar articles	0.912
8	Gas turbines, other than for aircraft	0.891
9	Measuring, controlling & scientific instruments	0.89
10	Powered tools, nes	0.89
11	Telecommunications equipment	0.887
12	Other tools for use in the hand or in machines	0.885
13	Ball, roller or needle roller bearings	0.882
14	Coffee, green or roasted	0.88
15	Automotive electrical equipment	0.876
16	Office machines, nes	0.875
17	Printing and bookbinding machinery	0.875
18	Nuts, bolts, screws, rivets, washers, etc.	0.874
19	Apparatus for electrical circuits	0.874
20	Cutlery	0.874
21	Articles of artif plastic materials, nes	0.873
22	Machine tools for working metals	0.873
23	Batteries and accumulators	0.871
24	Tobacco, unmanufactured and scrap	0.87
25	Organic chemical products, nes	0.87
26	Pumps and centrifuges	0.87
27	Machinery and mechanical appliances, nes	0.869
28	Mechanical handling equipment	0.867
29	Electric power machinery	0.867
30	Starches, insulin, gluten, albumin, substances, glues	0.867
31	Other articles of rubber, nes	0.866
32	Prepared paints, enamels, lacquers, etc.	0.862
33	Passenger motor cars, other than buses	0.862
34	Chemical products and preparations, nes	0.86
35	Miscellaneous articles of base metal	0.859
36	Food wastes & prepared animal feed, nes	0.857
37	X-ray apparatus	0.857
38	Internal combustion engines, not aircraft	0.856
39	Television broadcast receivers	0.855
40	Headgear	0.854
41	Clothing of text fabric, not knitt4ed crocheted	0.854
42	Parts and accessories of machinery, nes	0.854
43	Bodies & parts motor vehicles ex motorcycles	0.846

Source: IMF Export Quality Index, 2015.



## Annex 3: Remaining Hazards (Minefields) in Angola

Figure A.1. Map of remaining hazards (minefields) in Angola, 2017



Source: National Information Management System for Mine Action (IMSMA) database, administered by National Intersectoral Commission for Demining and Humanitarian Assistance (CNIDAH)<sup>73</sup>.

<sup>73</sup> *Suspected Hazardous Area (SHA)* refers to an area where there is reasonable suspicion of mine contamination on the basis of indirect evidence of the presence of mines. *Confirmed Hazardous Area (CHA)* refers to an area where the presence of mine contamination has been confirmed on the basis of direct evidence of the presence of mines.

## Annex 4: Export Diversification in Chile and Malaysia

### Lessons learned from countries that successfully diversified their exports: Chile and Malaysia

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 their exports away from their traditional commodity exports—copper for Chile, and tin and rubber for Malaysia. In both cases, the relatively good governance, friendly FDI regime, and strong cooperation between the private and the public sectors were essential.

#### **A. Chile:**

For four decades, the Chilean authorities have pursued a very active policy to support the diversification of the Chilean economy to reduce the excessive reliance on copper, Chile's major traditional export. Minerals still represent the largest share of Chilean exports, but the growth of non-traditional exports, which has been substantial during the past three decades, provides Chile 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 and private cooperation by developing an institutional network that links the 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) the creation of sound infrastructures to reduce costs; and (vi) supporting private sector development through sound business climate regulation.

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 the diversification strategy on the exploitation of the country's potential in the agricultural sector and the liberalization of less performing sectors, such as services, where FDI boosted competitiveness and efficiency.

#### **B. Malaysia:**

Malaysia moved away from its two main sources of export—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, with the share of tin and rubber in total exports falling significantly while electronics and telecom components became the largest Malaysian exports.

Contrary to Chile, the Malaysian model was essentially state-driven and was based on (i) significant public investment in education to create a highly skilled labor force and in new economic sectors; (ii) close collaboration between the government and the private sector; (iii) gradual disengagement from the state in the economy through privatization of state-owned; (iv) policies to bolster the role of indigenous communities to reduce the economic gap and social tensions between different ethnicities; (v) an open FDI regime to develop nascent and the development of a good business climate; (vi) excellent infrastructure development; and (vii) active trade openness policy by signing bilateral, regional and multilateral trade agreements.

The Malaysian authorities developed a series of targeted tools to support the export sector, such as targeted export incentives that provided tax concessions and exceptions on inputs and export goods, the creation of EPZ with good access to major export infrastructures, international procurement centers to provide services to producers for exporting manufactured goods and purchasing intermediary inputs, the creation of instruments to provide export insurance and short-term financing to exporters and input importers; and financial regulation with no exchange controls for exporters and access to long-term foreign currency financing.

The continuous adjustment of export policies through the cooperation between the private and public sectors and the creation of highly skilled labor force has also made the Malaysian export model relatively versatile. While priority was placed on the manufacturing sector during the past four decades, in the 1990s, the authorities created the Multimedia Super Corridor in an effort to make Malaysia a global and regional leader in information and communication technologies (ICT) development and applications, understanding that ICT related export services could become a new source of growth.

Source: Gijon-Spalla, J. (2010)

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