REPORT

On a study to propose different strategies aimed at the ultimate convergence of Angola's dual currencies, including a concise macroeconomic impact assessment of investment in appropriate infrastructure

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Nutrivo

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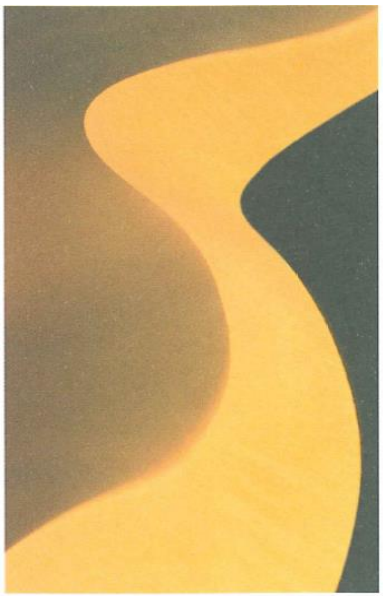

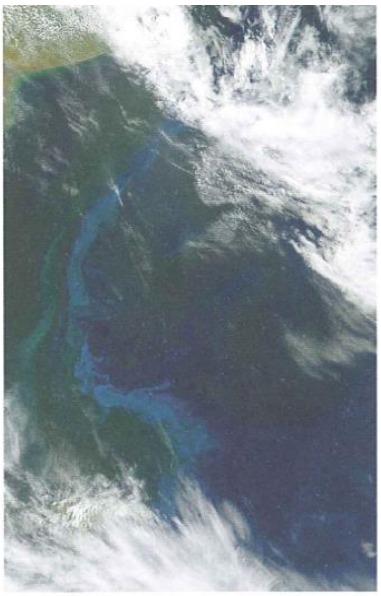

GOPA Group
Southern Africa (Pty) Ltd

Title page

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Research topic: Study to propose different strategies aimed at the ultimate convergence of Angola's dual currencies, including a concise macroeconomic impact assessment of investment in appropriate infrastructure

Submitted by	GOPA Group Southern Africa (Pty) Ltd
Postal address	P O Box 1793, Brooklyn Square, 0075, RSA
Physical address	41 MacKenzie Street, Brooklyn, 0181, Pretoria
Telephone number	+ 27 (0)12 460 9665
Mobile number	+ 27 (0)83 226 8921
e-mail address	gopasa@worldonline.co.za
Website of parent company	www.gopasa.de
Contact persons	Dr Roelof Botha & Keith Lockwood

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Abbreviations

ADB	African Development Bank
DBSA	Development Bank of Southern Africa
EIA	Economic impact assessment
EM	Emerging market
EU	European Union
IDC	Industrial Development Corporation (South Africa)
IEF	Index of economic freedom
IIAG	Ibrahim index of African governance
IMF	International Monetary Fund
SoE	State-owned enterprise
SSA	Sub Saharan Africa
GDP	Gross domestic product
HIPC	Heavily indebted poor country
LDC	Less developed country
LIC	Low income country
VAT	Value added tax
EIA	Economic Impact Assessment
PPP	Purchasing power parity
CEO	Chief operating officer
BoP	Balance of payments
BMI	Business Monitor International
I/O	Input/output (table)
JSE	Johannesburg stock exchange
CPI	Consumer price index
4IR	Fourth industrial revolution
MPLA	Popular Movement for the Liberation of Angola
PIT	Personal income tax
US	United States (of America)
SWOT	Strengths, weaknesses, opportunities & threats
UN	United Nations
BNA	Banco Nacional de Angola (Angolan central bank)

1. Introduction

This study is submitted in response to an invitation by Lukas van der Linde, CEO of Nutrivo, to submit a proposal for the conducting of a study relating to the current mismatch between Angola's official exchange rate and the parallel rate (which was subsequently approved).

In this regard, note has been taken of the significant reduction that has occurred in the parallel premium since the beginning of 2018, a direct result of the early economic reforms that are being implemented by Angola's new government. The parallel exchange rate premium has declined from 142% on 1 January 2018 to 63% on 26 June 2018 – a remarkable achievement in a short space of time.

Parallel exchange rates with premiums well above official rates (usually pegged) are quite common in developing countries. In Zambia's case, this premium averaged above 100% for two full decades (between 1070 and 1990). A worst-case scenario of a rapidly growing gap between an excessively overvalued official exchange rate and its apparent economic worth is its replacement by one or more dominant foreign currencies – in Zimbabwe's case this has occurred, with the US dollar and the South African rand acting having been accepted by the public as *de facto* legal tender for the exchange of goods and services.

Such a situation is extremely embarrassing to a country's political leadership, as it signals gross failure with the key objectives of macroeconomic stabilisation policy, including high & sustained economic growth, employment creation, rising taxation revenue growth and sufficient foreign exchange reserves.

Over the past two decades, several countries in sub-Saharan Africa (SSA) have experienced declining growth, rising unemployment and fiscal constraints as a result of a combination of corruption, over-regulation by the state and inadequate investment in infrastructure. Little doubt exists that public concerns over deteriorating economic dispositions have played a part in recent changes to the executive political leadership in Angola, Zimbabwe and South Africa.

Based on policy statements during the first half of 2018, early indications are that substantial reforms will be implemented by the governments of these three countries, mainly aimed at reducing corruption and creating an environment that is more conducive to private sector business formation. Angola seems to have taken the lead in this regard, with a number of measures already having been announced to improve corporate governance in the public sector and stabilise the balance of payments.

2. Objectives and structure of the study

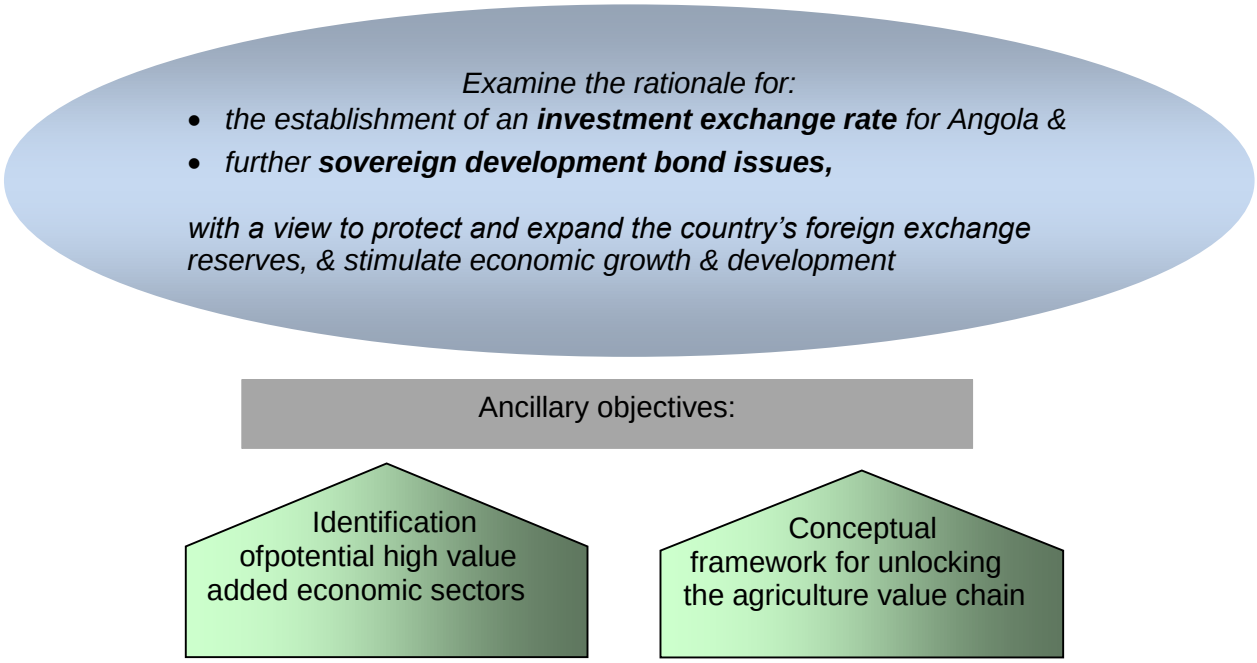
The first round of research by the authors involved a literature study of remedial policy measures that are available to governments faced with a significant degree of economic instability, particularly with regard to the existence of dual currencies, a period of low

growth, inadequate fiscal resources and balance of payments constraints. This included empirical analyses of the economic impact of different policy options, especially those that were aimed at strengthening balance of payments flows.

It soon transpired that the original study objective, which was focused on monetary policy (as formulated in the proposal), should be expanded to also include the domain of fiscal policy, specifically the possibility of further forays into global capital markets via bond issues.

The authors are aware that Angola launched a successful international bond issue in May 2018, an initiative that is likely to benefit the country's economy on several levels, but there may be scope for further bond issues, possibly at lower values, shorter maturity dates and ring-fenced for specific development projects, aimed a ultimately broadening the taxation base.

Against this background, **the project objectives** have been amended & expanded to read as follows:



Section 3 contains a concise overview of Angola's disposition with regard to salient macroeconomic and socio-political indicators. The purpose is not to provide a detailed overview of the current state of the Angolan economy, but rather to point out, where feasible, the country's relative standing within a designated peer group of sub-Saharan African countries. This will guide the determination of Angola's regional competitiveness for attracting foreign investment, both direct and portfolio in nature.

The data and trends identified in section 3 serve the dual purpose of also identifying the absolute values for key indicators of Angola's economy that will guide the discussion of suggested fiscal and monetary policy interventions. To a large extent, section 3 serves as

a brief macroeconomic “SWOT” analysis, with the emphasis on key strengths and weaknesses that should guide any policy interventions.

Section 4 deals with the domain of public finance, especially the question of the size and nature of public debt, both from an SSA and global perspective. Analyses are provided of sovereign bond issues in SSA countries that have been selected from the initial peer group (#1). Only countries with a sovereign bond credit rating of higher than B3 (as per Moody’s Investor Services) were selected for the re-classification of the initial group of countries and are now classified as SSA peer group #2.

This section is regarded as particularly relevant to Angola’s quest for a return, in the not too distant future, to a larger measure of economic stability in general. Potential benefits are identified of a debt financing strategy that targets specific industries, infrastructure upgrading and projects.

Section 5 discusses a monetary policy approach aimed at attracting foreign exchange inflows via a second official exchange rate, termed the “investment rate”. This exchange rate would be determined somewhere between the current crawling peg and the parallel rate and would be temporary in nature.

An exchange rate that acts to incentivise inward investment would need to be monitored carefully by the country’s central bank. It would also be ring-fenced for particular investments into projects that are aligned with the country’s development objectives. Care should also be taken not to allow the premium over the official commercial rate to be of such a magnitude as to exacerbate inflationary pressures and to cause balance of payments (BoP) instability in future.

Section 6 contains a list of economic sub-sectors that have the potential for high domestic value added to the Angolan economy, whilst section 7 provides a concise conceptual framework for unlocking the agriculture and food processing value chain in Angola.

The concluding section quantifies the potential socio-economic advantages of either of the fiscal or monetary policy interventions discussed earlier, based on a case study that combines some element of infrastructure development with an ancillary increase in the supply of goods and services by private sector businesses (as a logical response to the enhanced business environment and assumed existence of ample demand).

3. Angola's attractiveness as an investment destination

African countries, like all other developing nations, are constantly in competition with one another in attempting to attract foreign investment, foster socio-economic development and secure higher rates of growth & employment creation. To this end, the effectiveness of policy initiatives may be constrained by the limitations of domestic economic prowess.

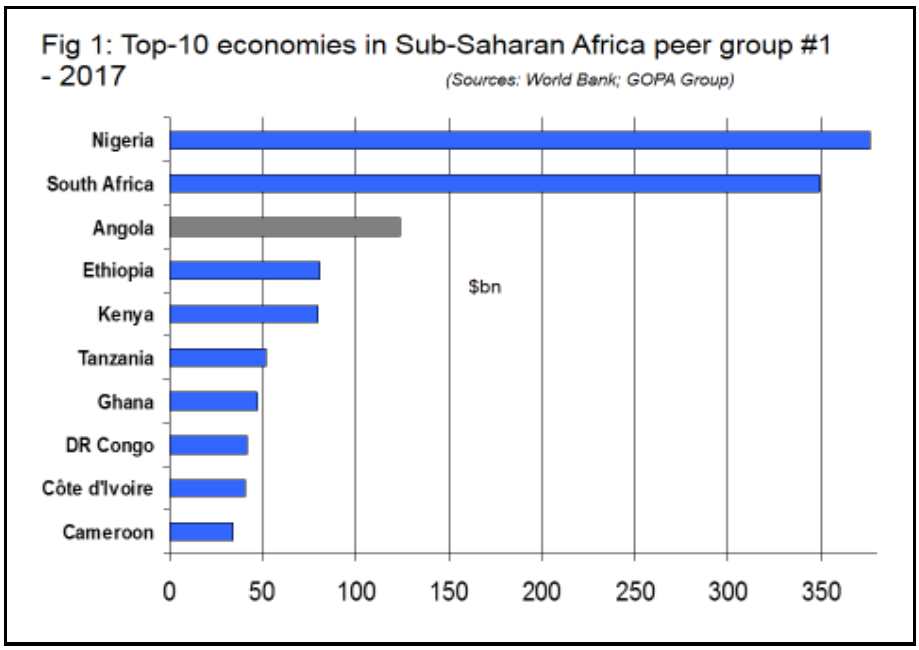
It is therefore regarded as crucial to the discussion of potential monetary and fiscal policy initiatives aimed at currency stabilisation to compare Angola's attractiveness as a destination for investment with other countries in Africa.

The selection of a relevant peer group for purposes of comparing key socio-political and economic indicators was done by combining the rankings of GDP and population sizes for sub-Saharan African countries. Two filters were then introduced, namely a minimum GDP of US$ 9 billion and a minimum population of 12 million people. Furthermore, island states were excluded (which only affected Madagascar).

A total of 20 countries were selected, which included Rwanda, a country that has recently joined the ranks of SSA countries that have managed to issue sovereign bonds to boost infrastructure spending and assist with economic stabilisation objectives.
Data sources utilised for the graphs included in the study are indicated on each of the individual graphs and are mainly from the *World Bank Group*.

3.1 Size of the economy

Figure 1 depicts the largest 10 economies in sub-Saharan Africa (SSA), whilst table 1 lists these countries and the other ten that make up the top-20 (in terms of the value of gross domestic product at current US dollars – in billions).



Only countries with a minimum population of 12 million people have been included in this classification, which is referred to as SSA peer group #1.

Table 1: Top-20 economies in sub-Saharan Africa (minimum population of 12 million)

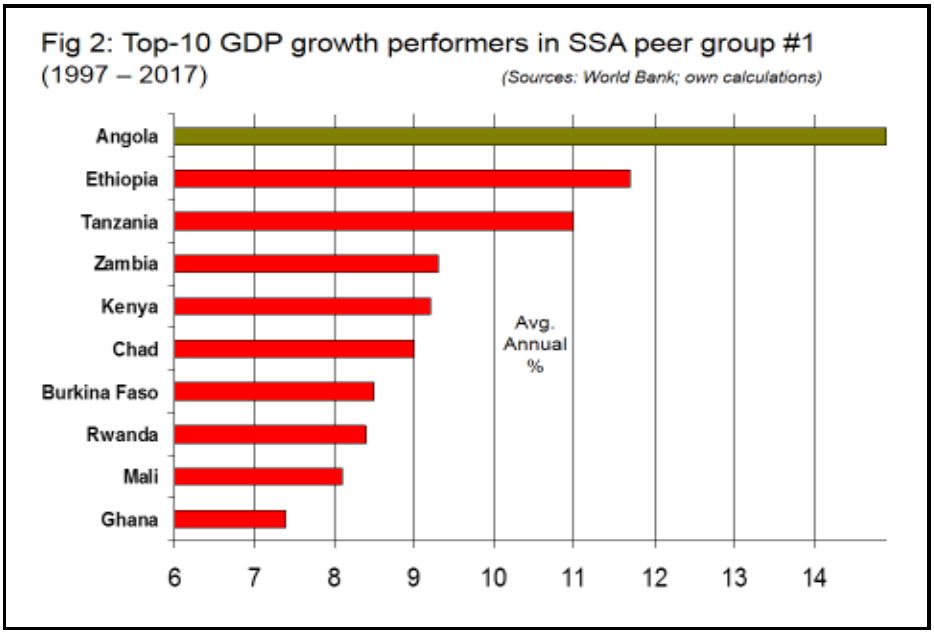
Country	GDP ($bn)	Country	GDP ($bn)
Nigeria	376.28	Uganda	26.35
South Africa	349.30	Zambia	25.50
Angola	124.21	Zimbabwe	17.49
Ethiopia	80.87	Senegal	16.46
Kenya	79.51	Mali	15.32
Tanzania	51.73	Mozambique	12.68
Ghana	47.03	Burkina Faso	12.57
DR Congo	41.44	Chad	9.87
Côte d'Ivoire	40.36	Guinea	9.72
Cameroon	34.01	Rwanda	9.14

Source: *World Bank*

It is clear from this ranking that Angola has become a significant developing economy, with the third highest GDP. In the quest to attract foreign investment, market size remains an important consideration, as confirmed by its inclusion as a separate indicator of competitiveness in the World Economic Forum's annual *Global Competitiveness Reports*.

3.2 Growth of the economy

Figure 2 and table contain rankings of the SSA peer group #1 in terms of average annual real growth in economic output over the past two decades. It is quite apparent that the stellar growth of the Angolan economy over this period has been the driving force behind the country's ascension to one of the largest economies on the African continent.



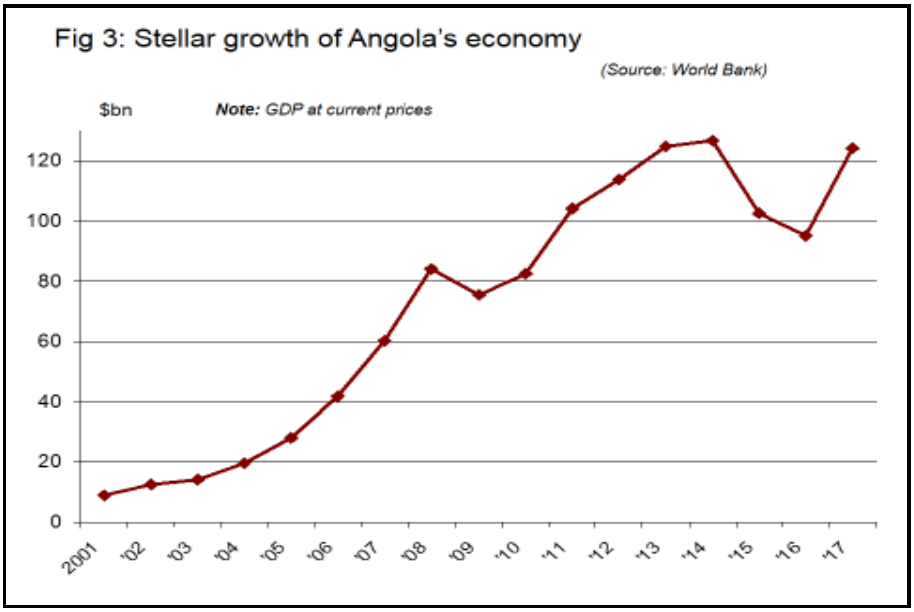
Since the beginning of the new millennium, no country of similar economic size and demographics has been able to match the stellar growth performance of Angola's economy.

Table 2: Average annual real GDP growth between 1997 and 2017 - SSA peer group #1

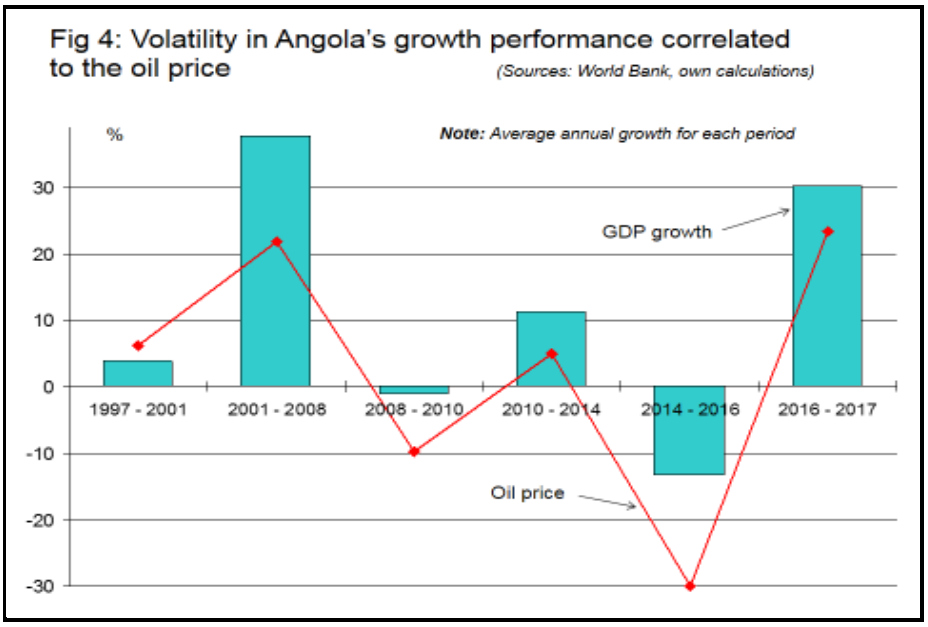
Country	%	Country	%
Angola	14.9	Uganda	7.3
Ethiopia	11.7	Senegal	6.5
Tanzania	11.0	Côte d'Ivoire	6.4
Zambia	9.3	Cameroon	6.0
Kenya	9.2	Mozambique	5.8
Chad	9.0	South Africa	4.2
Burkina Faso	8.5	Nigeria	3.5
Rwanda	8.4	Zimbabwe	3.4
Mali	8.1	Guinea	3.2
Ghana	7.4	DR Congo	1.8

Source: *World Bank*

Since 2001, Angola's GDP at current prices has increased 14-fold, from less than $9 billion to more than $124 billion (as illustrated by figure 3), explaining its rise from an underdeveloped and relatively insignificant economy to one of Africa's economic powerhouses.



Unfortunately, Angola's economic fortunes remain closely correlated with the oil price, is clearly depicted by the trends in figure 4. During periods of rising oil prices, Angola's economy has expanded at a high rate and vice versa.

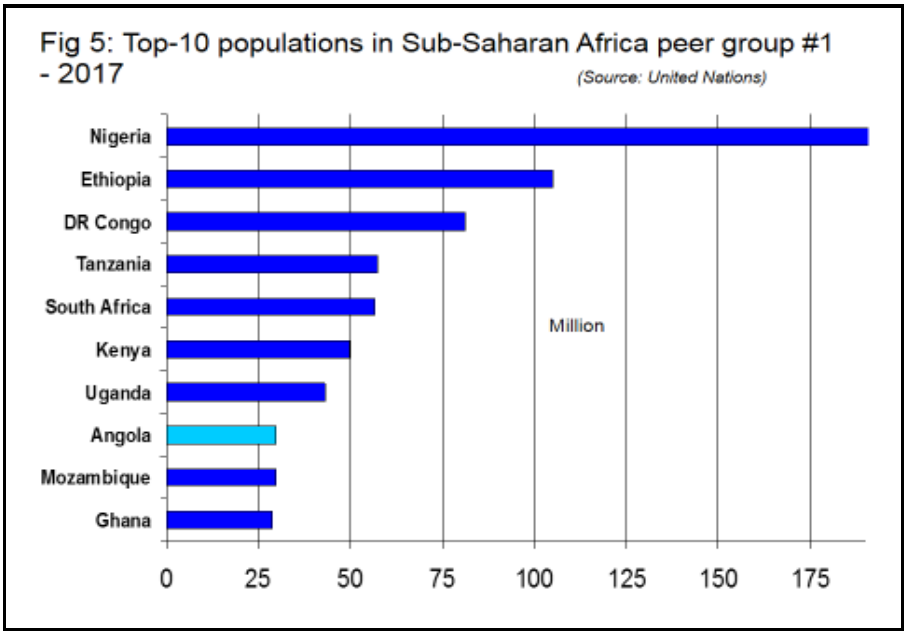


Fortunately for the country, there are indications that a new and sustained upward trend in energy prices has ensued, driven by stable economic growth in virtually every advanced economy and emerging market, with the two most populous countries in the World, China and India growing at rates of between 6% and 8%.

The need to diversify the economy into sectors that are not susceptible to commodity price cycles is a key policy priority for the country, as is the case with several other African countries that are highly dependent on global commodity prices, especially metals and minerals.

3.3 Demographics

Angola has the eighth largest population in sub-Saharan Africa and, by virtue of the second highest population growth rate on the continent, continues to move up the rankings for demographic size (see figure 5 and table 3).



According to the *World Population Prospects – 2017*, published by the United Nations (UN) Population Division, Angola has a population growth rate of 3.28% per annum. From a macroeconomic perspective, a relatively high population growth rate secures a rising demand for goods and services, whilst also guaranteeing a growing supply of labour.

Table 3: 20 largest populations in sub-Saharan Africa

Country	Million	Country	Million
Nigeria	190.9	Madagascar	25.6
Ethiopia	105	Côte d'Ivoire	24.3
DR Congo	81.3	Cameroon	24.1
Tanzania	57.3	Niger	21.5
South Africa	56.7	Burkina Faso	19.2
Kenya	49.7	Malawi	18.6
Uganda	42.9	Mali	18.5
Angola	29.8	Zambia	17.1
Mozambique	29.7	Zimbabwe	16.5
Ghana	28.8	Senegal	15.9

Source: *United Nations*

Only Bahrain, Niger and Oman have higher population growth rates than Angola. Furthermore, the country's population growth rate is higher than the two largest economies in SSA, namely Nigeria (2.58%) and South Africa (1.2%).

3.4 Per capita GDP

In the process of assembling the most relevant data for the ultimate purpose of this study, it is necessary to refine the chosen SSA peer group, in order to facilitate objective regional comparisons on investor attractiveness. One of the key objectives of this exercise is to provide a clear and mainly quantifiable indication of whether Angola can benefit from policies designed to ease pressure on the balance of payments and assist in stabilising the country's currency.

Per capita GDP represents one of the most important measures for gauging the state of a country's economy. Due to the near-universal adoption of taxation systems that rely heavily on progressive individual income tax rates, combined with the dominant share of GDP that is represented by labour remuneration, *per capita* GDP provides a useful guide as to the robustness of the revenue side of the fiscal equation.

The adjustment of the SSA peer group has been guided by subjecting the original 20 countries to a third filter, namely a sovereign credit rating of above B3 (with Moody's Investor Services), which is only a speculative grade, but is nonetheless regarded as a relatively safe distance from the dreaded "default" rating of C.

Table 4: Moody's rating classification

AAA Aa A Baa	Investment grade
Ba B Caa Ca	Speculative grade
C	Default

Table 5: SSA peer group #1 countries with a higher sovereign debt rating than B3 *(Source: Moody's Investor Services)*

Country	Rating
South Africa	Baa3 (stable)
Côte d'Ivoire	BA3 (stable)
Senegal	Ba3 (stable)
Ethiopia	B1 (stable)
Kenya	B1 (stable)
Nigeria	B1 (stable)
Angola	B1 (negative)
Cameroon	B2 (stable)
Rwanda	B2 (stable)
Uganda	B2 (stable)

Table 4 lists the different sovereign credit ratings assigned by Moody's, whilst table 5 lists (and ranks) the SSA peer group #1 countries that meet the requirement of a rating above B3. This will be referred to as SSA peer group # 2.

Fig 6: 2017 *Per capita* GDP at current international $ and PPP – SSA peer group #2 *(Source: World Bank)*

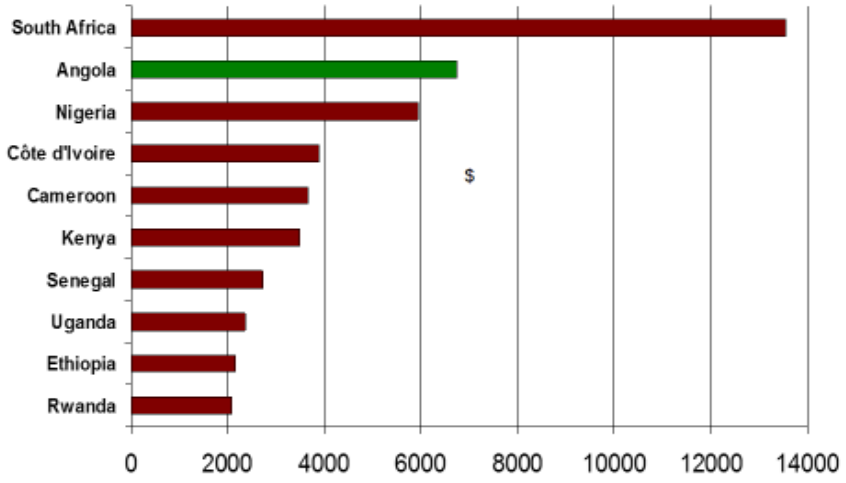


Figure 6 ranks the SSA peer group #2 countries in terms of *per capita* GDP in 2017 (at purchasing power parity), confirming Angola's position as the second richest economy in the group, having overtaken Côte d'Ivoire and Nigeria since the start of the new millennium and also opening up a healthy gap with countries like Cameroon, Kenya and Senegal.

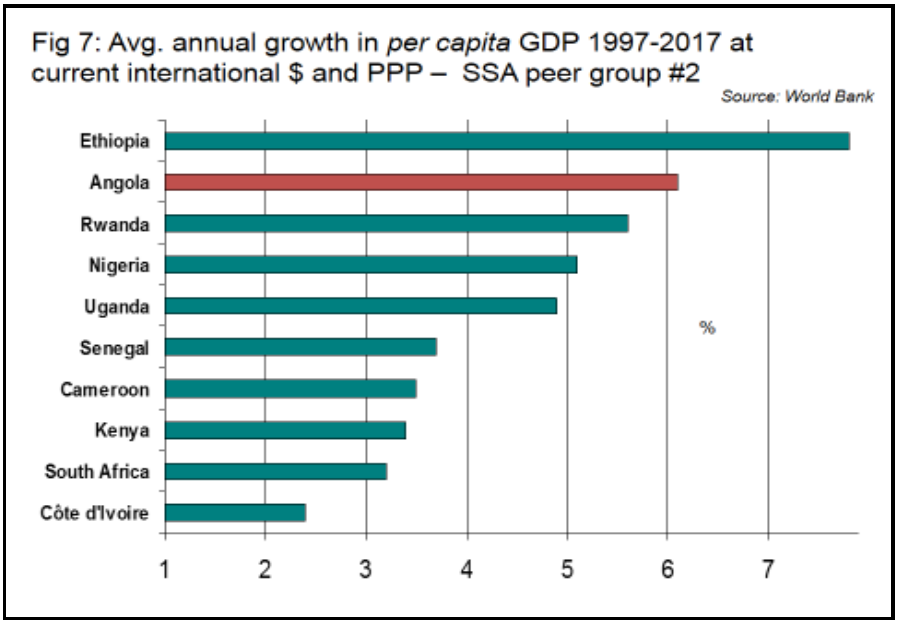
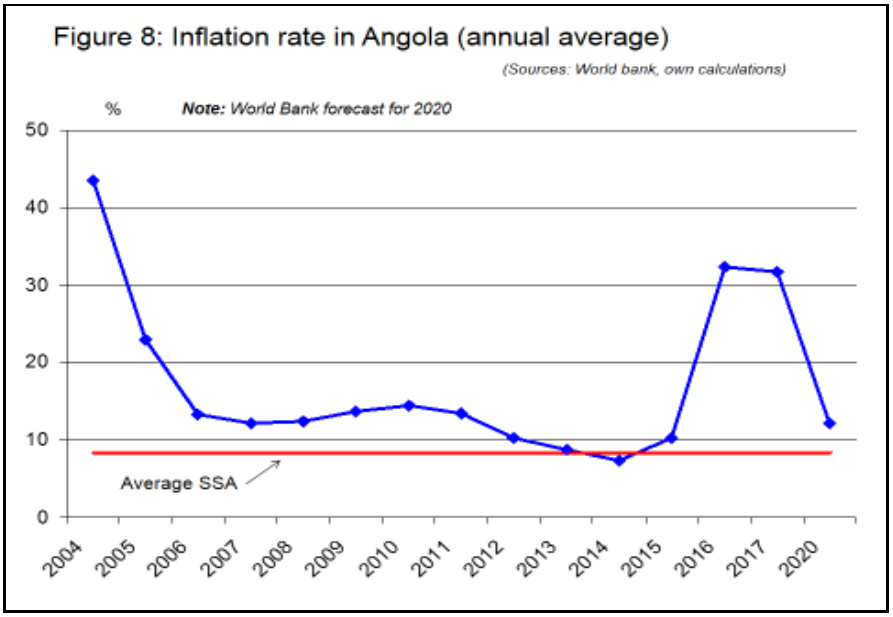


Figure 7 illustrates the average annual growth in *per capita* GDP for the SSA peer group #2 over the past two decades, with Angola once again in position number 2. Although Ethiopia has managed to record a higher growth for this indicator, Angola's absolute *per capita* GDP is more than three times higher than that of Ethiopia.

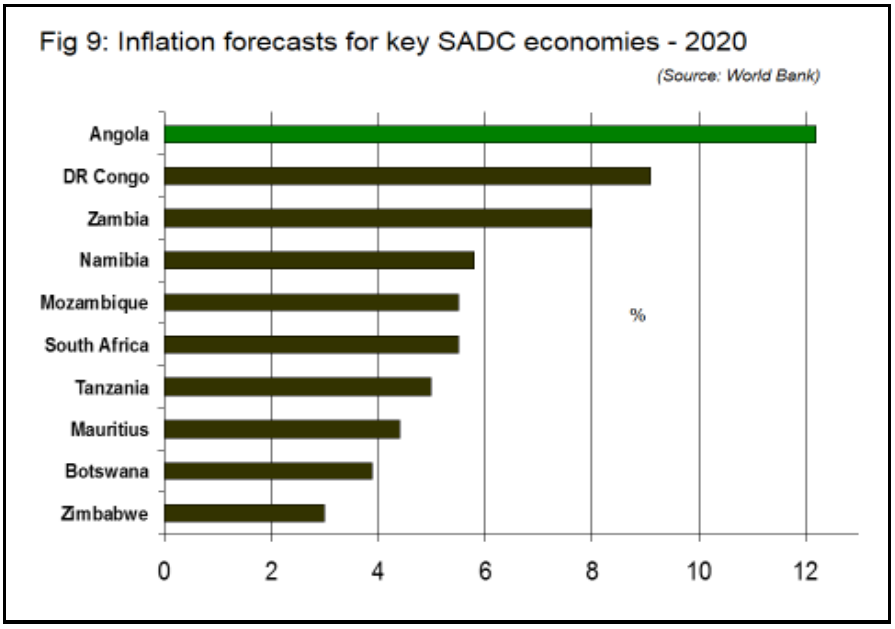
3.5 Price stability

Despite an unparalleled economic growth performance over the past two decades (compared to peer group countries around the globe), Angola has experienced persistent problems with attaining price stability. Since 2004, the country has only a recorded single-digit inflation rate on two occasions (annual average increase in the consumer price index – CPI)



It is a point of concern that Angola's rate of inflation has only once been able to drop to below the average for the SSA peer group #1 during this period. It is not surprising that

his occurred during the sharp drop in the oil price, which decimated economic growth but also led to lower energy prices (see figure 8).



Apart from a traditionally high cost of energy, the other two major reason for persistently high rates of price increases are related to currency depreciation and inadequate food supplies. Fortunately, record production levels for staple crops in South Africa have contributed to an easing of food price instability, with the World Bank expecting Angola's inflation rate to drop to just above 12% by 2020 (see figure 9).

3.6 External trade

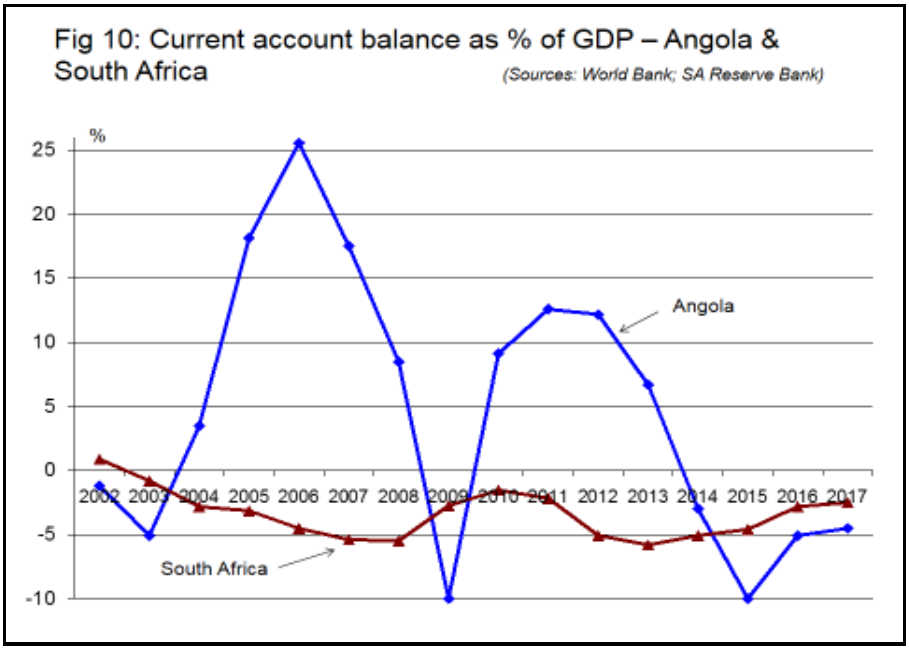
The higher oil price has manifested itself in a significant improvement of Angola's trade balance. According to *Trading Economics,* a trade surplus of close to $5 billion was recorded in the first quarter of 2018, almost three time higher than the same quarter a year ago.

Oil accounts for an estimated 90% of Angola's exports, whilst key import categories include machinery & equipment, vehicles, pharmaceuticals, textiles and food. Key export trading partners include China, the US, India, France, Taiwan and South Africa, whilst imports are mainly sourced from Portugal, China, the US, Brazil and South Africa.

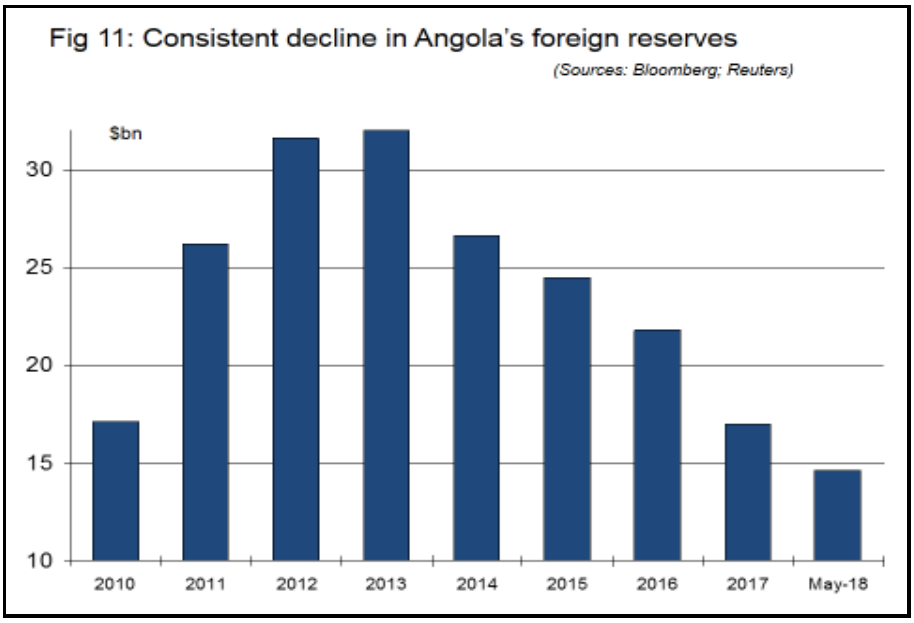
Due to the country's reliance on oil for the bulk of its foreign exchange inflows, the trade balance is closely correlated to energy commodity prices. As a result, Angola's current account balance as % of GDP is highly volatile, as illustrated by figure 10, which also shows the relatively stable ratio for South Africa. An interesting observation is the fact that over the past 16 years, Angola's average current account balance/GDP ratio amounted to a positive figure of 3.5%, compared to a negative 3.1% for South Africa.

The World Bank expects Angola's external trade position to strengthen further over the next three years, at least, which should lead to a recovery of the country's foreign

exchange reserves, especially as a result of the new era of economic reforms that commenced with Mr João Lourenço's ascension as head of state.



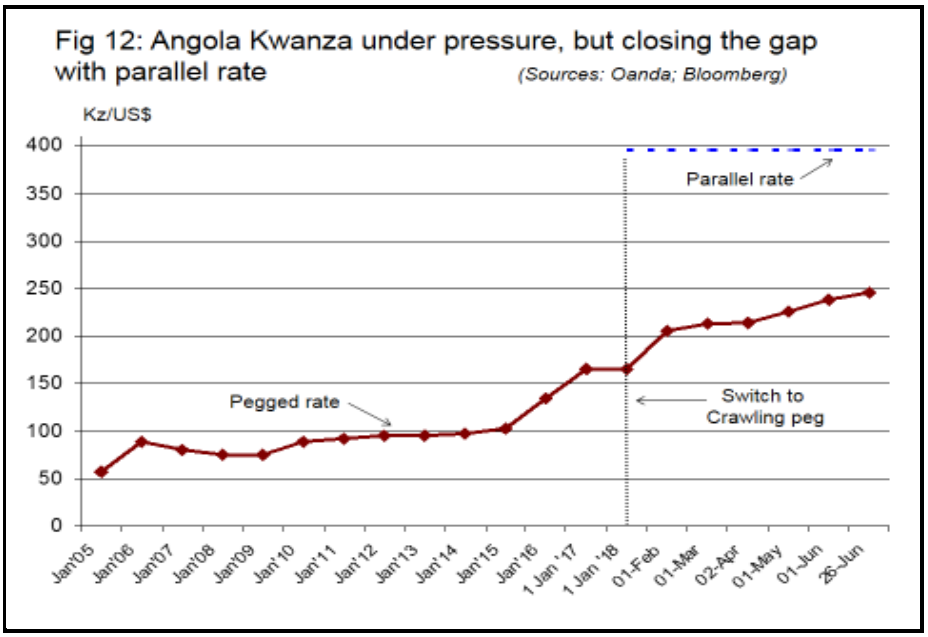
A window of opportunity exists for Angola to utilise the current oil price windfall to remove onerous regulations on businesses, enhance governance and transparency in the public sector and diversify the country's economy. Investor sentiment has already improved fairly dramatically in the wake of early reforms and will improve further as the imminent benefits of market-friendly reforms become more visible.



3.7 Exchange rate

Decisive policy changes in the domain of monetary policy have taken place since the re-appointment of Mr José de Lima Massano as governor of Angola's central bank (BNA). During his previous tenure between 2010 and 2015, Mr Massano was instrumental in

lowering the country's inflation rate to within the target range of 7%-9% and stabilising the kwanza. Firstly, a more conservative monetary policy stance has been adopted and the BNA is likely to keep interest rates relatively high until inflationary pressure has eased. The official bank rate was 18% in mid-July 2018, 200 basis points higher than in 2017.



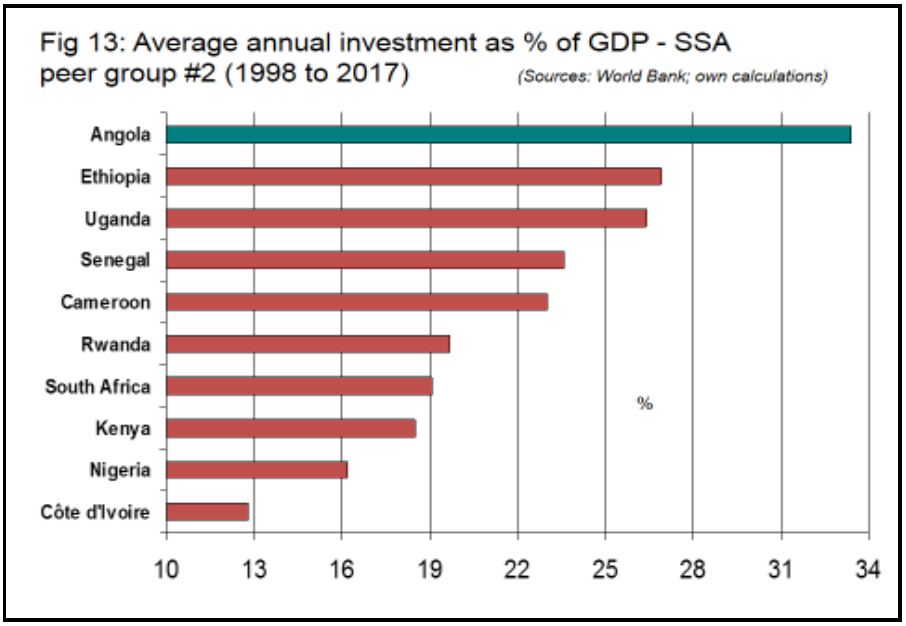
Secondly, Mr Massano has taken the bold step of switching to a more flexible exchange rate system, namely a so-called "crawling peg", with the ultimate aim of achieving convergence between the official exchange rate and the parallel rate (see figure 12). BNA expects the kwanza to weaken further in 2018, but more slowly. The central bank has also set a limit on fluctuations at the currency auctions of 2% per auction (held to determine the official exchange rate).

3.8 Capital formation

Data published by the World Bank indicates a highly favourable average annual ratio of investment to GDP for Angola, as illustrated by figure 13. Unfortunately, the level of fixed capital formation has suffered a fairly dramatic drop in the aftermath of the commodity price decline that followed shortly after the end of the 2008/09 recession.

For agriculture, raw materials, and base metals, the downward cycle in commodity prices commenced in 2011. Precious metal prices started dropping in 2012 and energy prices started to slide towards the end of 2013. Agriculture prices have stabilised since 2015, but the other commodity groups only started recovering in 2017.

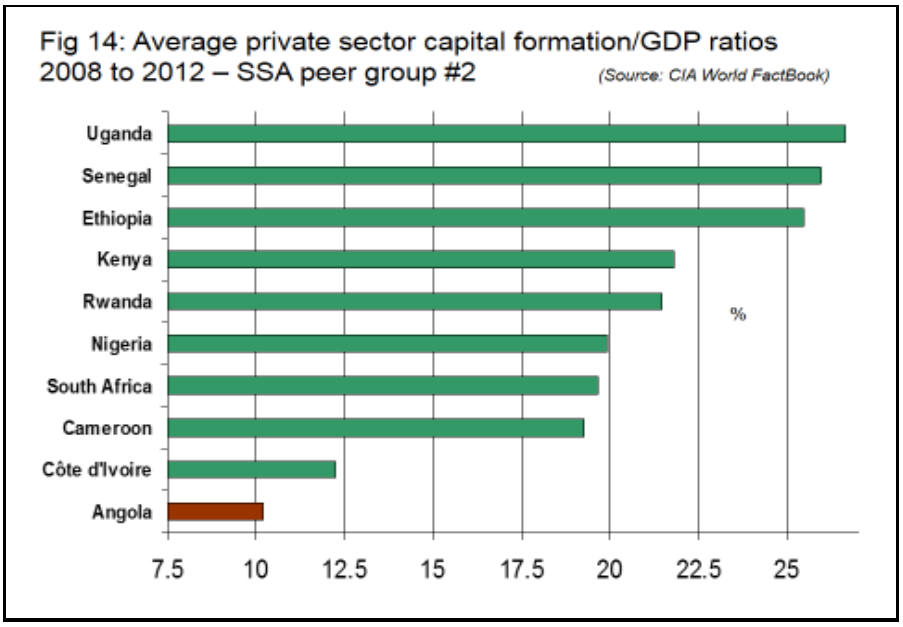
Anomalies also exist with regard to detailed data on capital formation in Angola, with the African Development Bank (ADB) having published figures that show a dramatic decline in fixed investment since 2014 – a trend that the research agency *IE Economics* agrees with. The ADB country data on Angola shows total capital formation declining from 29% of GDP in 2014 to merely 9.2% in 2015. According to *IE Economics*, this ratio declined further to only 8% in 2017.



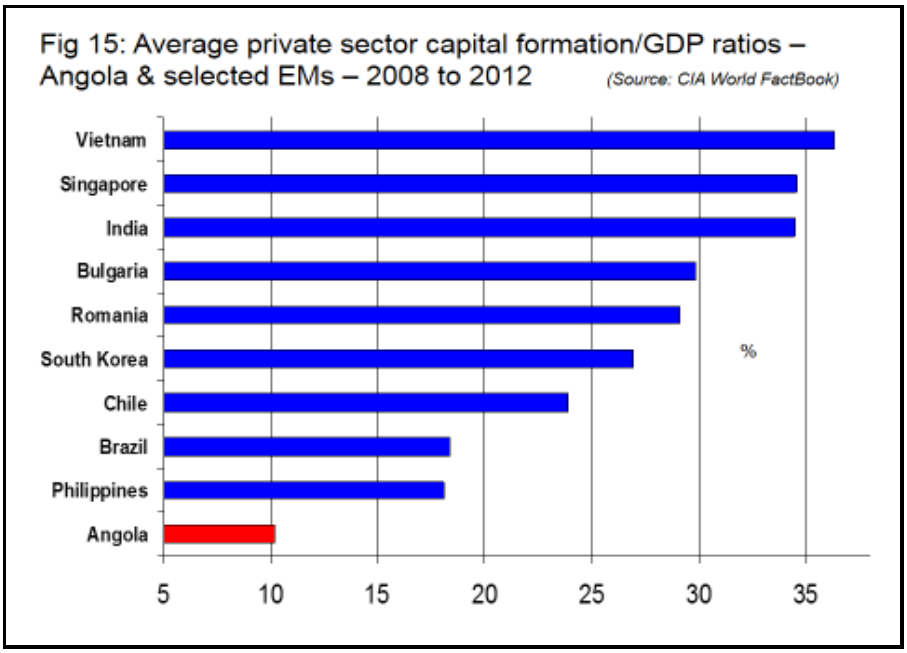
Data on the relative shares of public and private sector capital formation in Angola confirms an extraordinarily high level of state involvement. ADB figures for 2013 and 2014 indicate that the share of government and SoEs in the country's capital formation represented 81% of the total (for both years).

By comparison, in South Africa, the public sector has only accounted for marginally more than one-third of total capital formation over the past decade.

Low levels of private sector capital formation may be regarded as a structural constraint to the development and growth of Angola's non-oil sectors and this phenomenon is explained, to a large extent, by the country's poor track record in the area of economic freedom.



Figures 14 and 15 confirm Angola's poor international ranking for private sector capital formation/GDP ratios, both with regard to the SSA peer group#2 and for selected emerging markets.



3.9 Economic freedom rankings

The Index of Economic Freedom (IEF) published annually by the Heritage Foundation documents the positive relationship between economic freedom and a variety of positive social and economic goals. The ideals of economic freedom are strongly associated with healthier societies, cleaner environments, greater per capita wealth, human development, democracy, and poverty elimination.

By comparing the relationship between economic freedom scores and quantitative measures of prosperity and human development over a period of 20 years of data collection, the IEF has confirmed the fact that economic freedom brings greater prosperity.

Per capita incomes are significantly higher in nations that are more economically free. Economies rated "free" or "mostly free" in the 2018 IEF enjoy incomes more than double the average levels in other countries, and more than five times higher than the incomes of people living in "repressed" economies."

The IEF measures economic freedom based on 12 quantitative and qualitative factors, grouped into four broad pillars of economic freedom, each with three separate categories. Angola's disposition with regard to the 2017 and 2018 IEF is depicted by table 6, which also includes the change in the score over the past year and a comparison to the World average.

Angola's economic freedom score for 2018 is 48.6, making its economy the 164th freest in the 2018 Index (out of 180 countries that were ranked). Its overall score increased

marginally during 2018, due mainly to improvements in government spending and labour freedom. Angola is ranked 40th amongst 47 countries in the sub-Saharan Africa region, and its overall score is below the regional and world averages.

Table 6: 2017 & 2018 Index of Economic Freedom scores for Angola and World average (for all 12 indicators)

	% 2017	% 2018	Change	World avg. 2018 (%)
Rule of law				
Property rights	36.4	36	-0.4	51.5
Government integrity	12.8	18.9	6.1	42.1
Judicial effectiveness	19.8	25.4	5.6	46.9
Regulatory efficiency				
Business freedom	62	58.3	-3.7	64.8
Labour freedom	40.4	50.9	10.5	58.9
Monetary freedom	70.6	58.5	-12.1	76.8
Government size				
Government spending	58.6	69.1	10.5	64.9
Tax burden	87.7	82.4	-5.3	77.1
Fiscal health	70	54.8	-15.2	68.6
Open markets				
Trade freedom	56.7	59.5	2.8	76.4
Investment freedom	30	30	0	59.5
Financial freedom	40	40	0	49

Source: *Heritage Foundation*

It should be pointed out that the research underpinning the 2018 IEF was conducted just before the departure of the country's previous head of state, José Eduardo dos Santos, who had been in power for 38 years. Due to a combination of corruption, state capture and an excessive regulatory environment, Angola was classified as a repressed country under the Dos Santos regime (see table 7).

Table 7: 2018 Index of Economic Freedom rankings (out of 180 countries) and scores for SSA peer group #1

Moderately free	**Rank**	**Score (%)**	**Mostly unfree (cont.)**	**Rank**	**Score (%)**
Rwanda	39	69.1	Kenya	129	54.7
South Africa	77	63	Zambia	132	54.3
Uganda	83	62	Ethiopia	142	52.8
Côte d'Ivoire	85	62	Guinea	146	52.2
Burkina Faso	95	60	DR Congo	147	52.1
			Cameroon	149	51.9
Mostly unfree					
Tanzania	97	59.9	**Repressed**		
Namibia	103	58.5	Chad	162	49.3
Nigeria	104	58.5	Angola	164	48.6
Mali	113	57.6	Mozambique	170	46.3
Ghana	122	56	Zimbabwe	174	44

Source: *Heritage Foundation*

Fortunately for the country, its new president, former Defense Minister João Lourenço of the ruling Popular Movement for the Liberation of Angola (MPLA) has clearly stated his intention to fundamentally reform the Angolan economy. It seems realistic, therefore to expect a marked improvement in Angola's IEF ranking for 2019.

3.10 Governance standards

Over the past decade, Angola has recorded a marginal improvement for its scores in the Ibrahim Index of African Governance (IIAG) for all four of the categories that comprise this index, namely safety & rule of law; participation & human rights; sustainable economic opportunity; and human development

Unfortunately, however, a decline in the country's governance score has set in during the last five years. Having consistently ranked in the bottom ten since 2000 (the first data year in the IIAG), the country moved out of the bottom ten in 2012, but has since fallen back amongst the ten lowest ranking countries on the continent.

Table 8 lists selected areas where Angola is obviously in dire need of policy redress. The country is ranked in the bottom quintile for all of these indicators and the list represents a concise overview of commentary on Angola's competitiveness challenges by various leading research agencies, including the World Bank, the Economist Intelligence Unit and Business Monitor International (BMI).

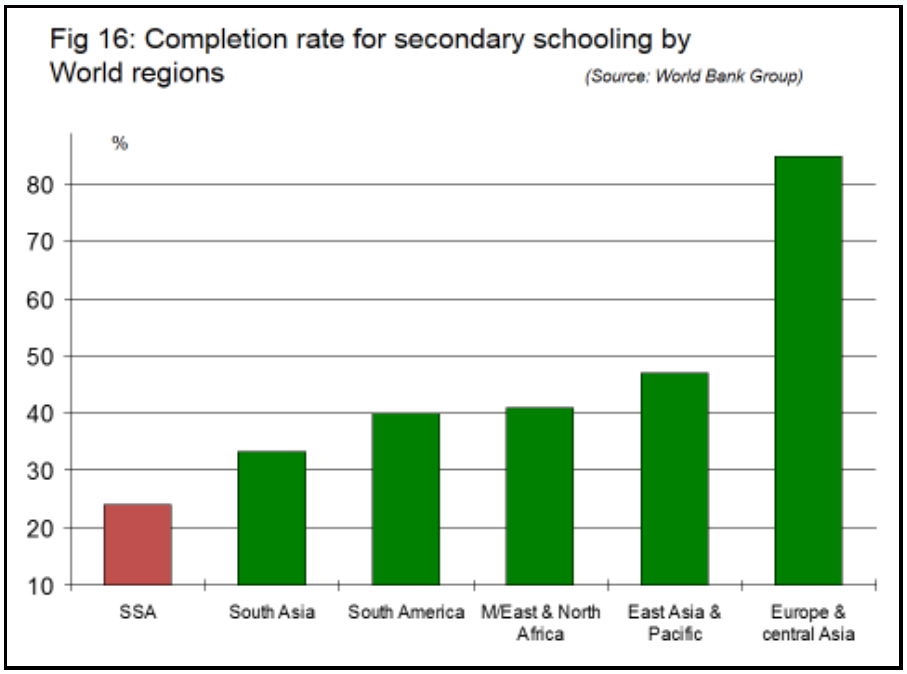
A particular point of concern is the low level of educational attainment amongst Angola's citizens, with a secondary school completion rate that is even marginally lower than for SSA as a whole (see figure 16).

Table 8: Selected areas where Angola is ranked in the bottom quintile for governance standards in Africa

	Rank/54
Economic diversification	53
Corruption investigation	49
Competition	49
Accountability of public officials	47
Personal safety	47
Police services	47
Revenue mobilisation	47
Health	47
Civil society participation	46
Judicial process	45
Property rights	45
Statistical capacity in government	45
Investment climate	45
Infrastructure	45
Education	44
Public administration	43

Source: *Mo Ibrahim Foundation*

Any concerted policy drive to steer the country towards greater economic diversification, especially in sectors that are technologically driven, will require the recruitment of experts from abroad to assist in the transfer of skills.



3.11 Public debt to GDP ratio

The option of further international bond issues to supplement Angola's precarious foreign exchange position and assist in stabilising the country's exchange rate represents a key theme of this study. It is therefore deemed necessary to provide more detail on the nature of public debt, especially with regard to its size in relation to GDP and potential limitations that may exist with regard to expanding Angola's foreign debt.

Ever since the near-universal acceptance of Keynesian demand-side management of the macro-economy during the last stages of the Great Depression of the 1930s, public debt has represented an attractive method for governments to supplement taxation revenues, usually for purposes of capital expenditure and the expansion of infrastructure. A standard caveat is that debt financing of budget deficits should not be utilised for current public sector expenditure.

Prudent application of public debt management allows governments to augment domestic funding for purposes of infrastructure creation, including schools, roads, dams and electricity generation. Not only does this lead to economic growth and employment creation, but it also broadens the tax base and facilitates private sector business development (in the absence of an overly regulated environment).

One of the key advantages of foreign borrowing over domestic bond issues is that it does not place upward pressure on domestic interest rates. Domestic borrowing therefore

tends to effectively crowd out capital formation by the private sector via higher debt servicing costs (unless private companies borrow abroad.

Theoretically, the servicing of foreign debt may, over time, exert a deflationary effect on the economy, especially in an environment of currency weakness. This effect can be countered if the proceeds from bond issues are invested in appropriate capital formation projects, particularly through public/private partnerships.

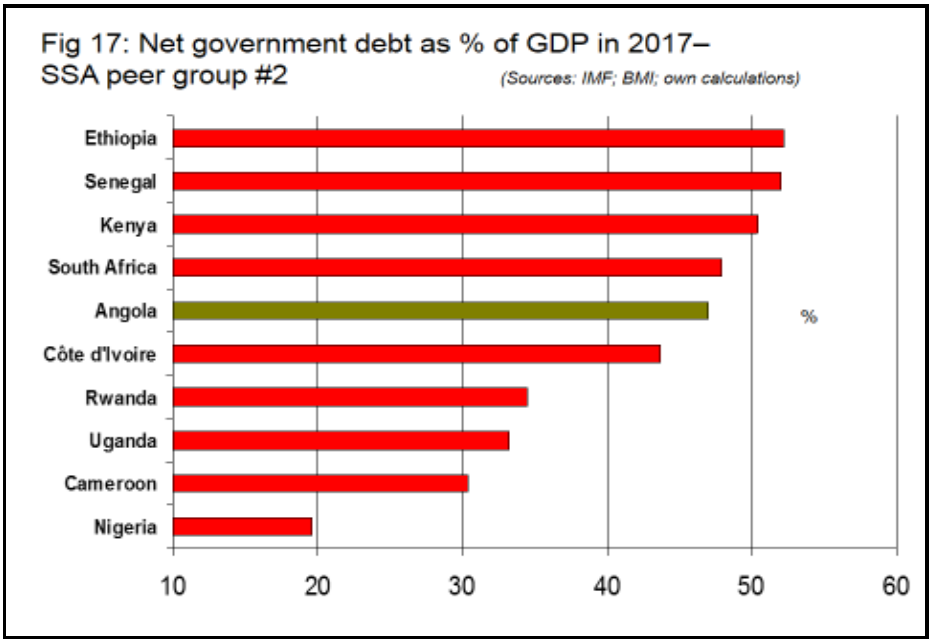
Public debt remains potentially dangerous when it reaches critical levels as a percentage of a country's GDP. No consensus exists in economic theory, however, as to what constitutes a critical level of debt. Correlations between public debt levels, on the one hand, and indicators of economic growth, development and prosperity, on the other hand, are fraught with anomalies.

Some countries with very low levels of gross public debt as % of GDP are either very poor (DR Congo) or relatively isolated with little economic diversity (Brunei). In contrast, the US, which is the largest economy in the World, enjoying a *per capita* GDP of $60,000, has a public debt/GDP ratio in excess of 100%, whilst Japan, the third largest economy in the World, has a public debt/GDP ratio of more than 230% and enjoys a *per capita* income of $38,000.

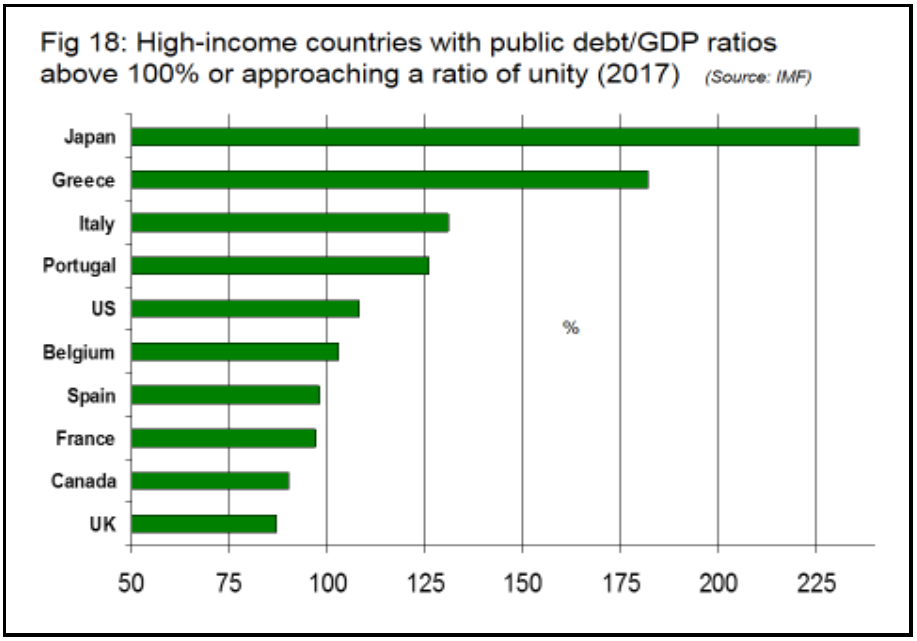
Numerous studies have been conducted on the impact of public debt levels on economic growth, including a detailed study by Reinhart & Rogoff (2010), based on data from 44 countries spanning more than 3,700 observations. The results on the relationship between public debt levels and GDP growth are illuminating.

For the emerging market group of countries included in this study (titled: *Growth in a time of debt*), median and average GDP growth rates hovered around 5% for debt/GDP levels of below 60% (for the period 1970 to 2009), No discernible difference exists between debt ratios below 30% and levels between 30% and 60%.

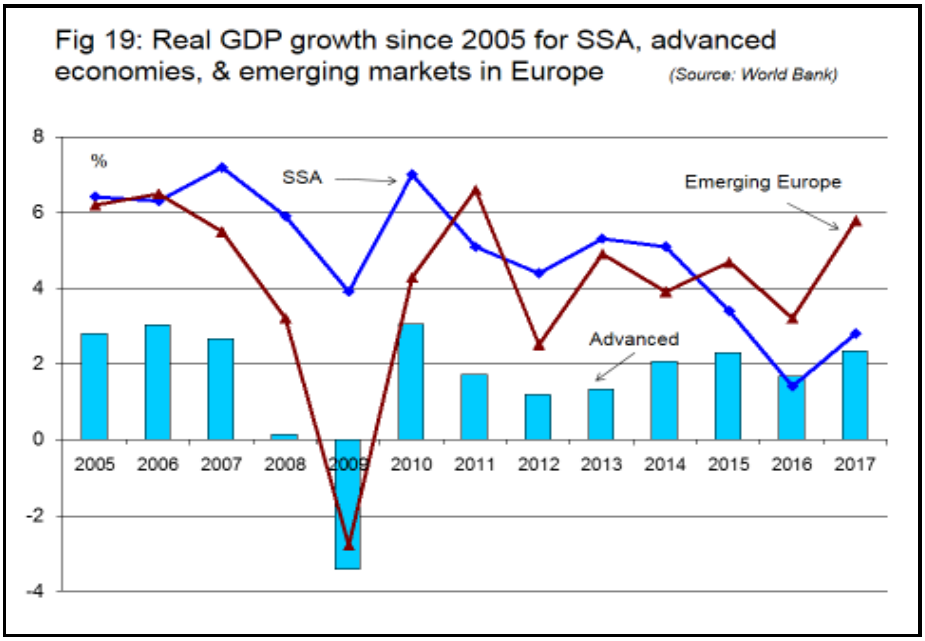
Research by Bua et *al.* (2014) on public debt trends in low-income countries (LICs) found that domestic public debt increased from 12.3 percent of GDP in 1996 to 16.2 percent of GDP in 2011, almost reaching the size of external debt. Predictably, the debt burden on domestic debt was higher that on external debt but it has decreased over time, consistently with lower borrowing costs due to financial deepening.



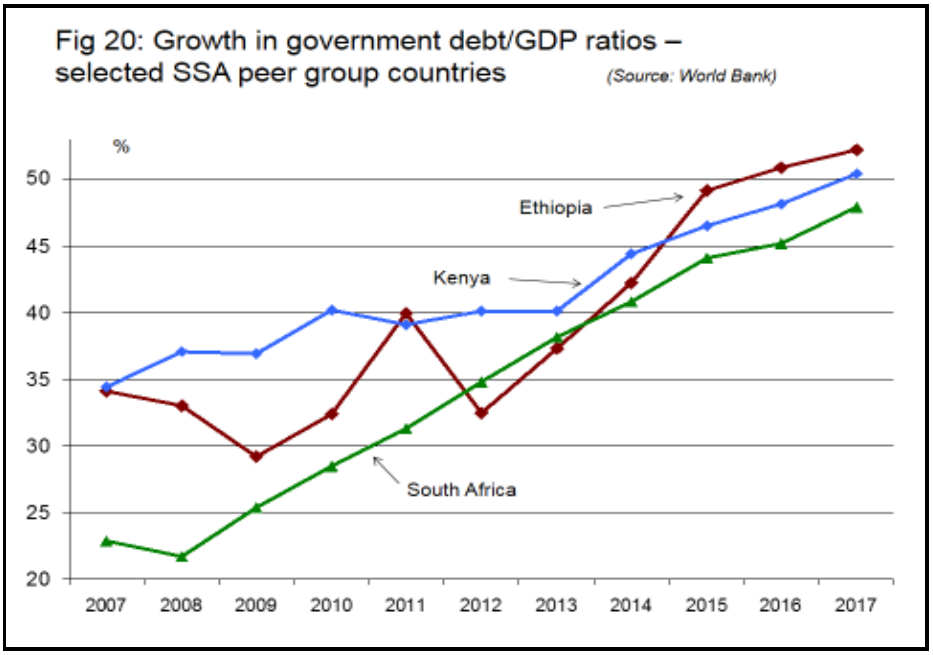
Maturity lengthening went together with a reduction in borrowing costs, suggesting that some LICs are reaping the benefits of developing domestic financial markets and broadening the investor base.



It is clear from the data in figures 15 and 16 that Angola's public debt/GDP ratio is not cause for undue concern. This statement is also borne out by Angola's recent successful international bond issue, which was substantially oversubscribed (discussed in more detail in the following section).It should be pointed out that the main reason for the near-universal increase in public debt/GDP ratios over the past decade has been the after-effects of the global recession of 2008/09.



During and immediately after a period of declining economic growth, governments are faced with the dilemma that taxation revenues tend to also decline, whilst public expenditure either remains more or less constant or keeps on increasing, with a predictable negative impact on budget deficits (see figures 19 & 20).



3.12 Summary of reform requirements

In analysing the IEF data on Angola, as well as reports by authoritative research agencies, including the African Development Bank and the World Bank, it is clear that reforms need to be concentrated on the following areas:

- Diversification into non-oil industries, especially food production
- Expansion of the oil industry to include refined products
- The introduction of competition policy to reduce the number of monopolies
- Systematic eradication of corruption, including due judicial process for persons implicated in fraud and theft and a national campaign aimed at identifying culprits (possibly via substantial rewards for whistle-blowers)
- Privatisation of sectors that are dominated by state-owned enterprises, especially in the banking sector
- Expansion of banking services to all economically active persons
- Easing of cumbersome investment regulations, both for domestic and foreign investors
- Public-private partnerships in realising the vast agricultural potential of the country, including legislative changes to guarantee private property rights
- Concerted efforts to deregulate economic activity, especially with regard to time-consuming and costly property registration procedures
- Removal of non-tariff barriers to trade
- Statutory incentives to foster the development of a domestic capital market, *inter alia* via prescribed asset allocations to government bonds
- Ensuring that the judiciary is independent and free form any kind of political influence
- Incentives for students studying courses where skills shortages exist, especially in the areas of law, accounting, public administration and business management
- Closer cooperation with selected countries in SADC to develop a regionally-based tourism strategy, aimed at giving tourists the opportunity to pick form a selection of multi-country visits

4. The socio-economic significance of infrastructure

4.1 Infrastructure defined

It is regarded as necessary for a study of this nature to include a concise discussion of the nature and significance of infrastructure, especially as it pertains to its potential pivotal role in enhancing Angola's ability to secure foreign direct investment.

Most of the definitions of infrastructure in economic literature, including Todaro (2000) and the World Bank (1994) emphasise the crucially important role of infrastructure in raising productivity, and, by inference, a nation's international competitive advantage. Essentially, this takes place through lowering the costs of production, an issue that is also

acknowledged by the Development Bank of Southern Africa (DBSA) in its explanation of the nature of infrastructure.

The DBSA's formal definition of economic infrastructure (1998) is depicted in box 4.1. It is clear that infrastructure is one component of "capital formation", a term that features prominently as one of the four key demand components in all systems of national accounts. Capital formation occurs when some portion of a country's national income is invested in facilities that serve to augment value added in future.

The latter occurs through private sector investments in physical capital stock (also called "production structure") and public sector investments in the services that facilitate and integrate economic activities – infrastructure.

Box 4.1: The Development Bank of Southern Africa's definition of infrastructure
Economic infrastructure is that part of an economy's capital stock that produces services to facilitate economic production or serves as inputs to production (e.g. electricity, roads, dams and ports) or is consumed by households (e.g. water, sanitation and electricity) *Economic infrastructure can be divided into three categories:* • *Public utilities (electricity, gas, water, telecommunications, sanitation, sewerage and solid waste disposal)* • *Public works (water catchment in dams, irrigation and roads)* • *Other transport sub-sectors (railways, roads, seaports, airports and urban transport systems)* *Social infrastructure provides services such as health, education and recreation and has both a direct and an indirect impact on the quality of life.*

4.2 Benefits of infrastructure investment

The development of civilisation is directly linked to the development of infrastructure. In the absence of transport, most markets would cease to exist, employees would not be able to commute, medicine would not be available in clinics and the world would regress back to the pattern of a subsistence economy. In the absence of adequate supplies of water, food production would falter and societies would be faced with the prospect of famine and the rapid spread of diseases.

Like most things in life, infrastructure is not free. Infrastructure facilities mostly exhibit the classic characteristics of public goods, which require fiscal intervention. Taxation revenues and government bond issues are most often utilised to finance the establishment of new infrastructure.

The logic behind adequate investment in infrastructure is not difficult to comprehend when one considers the array of advantages that a society derives from adequate investment in appropriate infrastructure, including the following:

i. Unlocking of factor and product markets

The existence of roads in the development of markets, particularly in rural areas, has traditionally enjoyed particular prevalence in establishing infrastructure priorities. Research by Gilles, *et. al.* (1992), confirms that the absence of good roads can increase the cost of producing surplus crops by as much as 100%. Irrigation provides a further example of the powerful effect that infrastructure investment can exert on the productivity of factor markets, whilst a modern, industrialised economy simply cannot function properly in the absence of a reliable supply of electricity.

ii. Contribution to GDP

Public sector capital formation represents an indispensable element of economic activity. The productive investments by the private sector to augment new output capacity through factories and equipment will not yield adequate returns unless they are supplemented by social and economic infrastructure. The latter serves to integrate the economic activities of private businesses. Research by Botha and Lockwood (2005) has shown that GDP increases by 127% for every rand spent on road building (via the input/output table multiplier effect).

World Bank research (2007), based on cross-country analyses, indicates the existence of a direct correlation between infrastructure accumulation and economic growth. Infrastructure is clearly essential both for the maintenance of a certain level of economic output and a positive future rate of economic growth.

iii Economic multiplier effects

Research conducted by Lockwood (2006) to determine an objective estimate of the social and economic impact of a development finance fund similar in nature to the Risk Capital Facility administered by the Industrial Development Corporation (IDC) confirms the existence of strong capital formation multiplier effects in South Africa. Under the assumption that the facility would have an initial capital base of R250 million – matched, on a project-by-project basis by the IDC, it was concluded that, in total, additional output of up to R2.1 billion could be directly supported over a three-year period. When account is taken of the indirect and induced effects of the leveraged investment, the cumulative impact could rise to potential additional business turnover of around R7.5 billion for all of the direct, induced and indirect multiplier effects (based on input/output tables of the national accounts for South Africa).

iv Positive rates of return on investment

Consensus exists that infrastructure investments produce relatively high rates of return. Research by Easterly and Rebelo (1993), covering a large sample of developing countries, confirmed the existence of a rate of return of 63% on transportation and communication projects. Research by Bregman and Marom (1993) found that projects relating to transportation, power, water and sanitation in Israel resulted in output increases of between 31% and 44% for every monetary unit of increase in the level of infrastructure.

v Alleviation of poverty

As emphasised by the DBSA (2006), developmental infrastructure can make a huge difference to reducing poverty and includes reducing the vulnerability of poor people

through health facilities, adequate nutrition, an improved work and study environment, access to information through the media, and more time spent on productive activities.

vi Contribution to employment creation

Beyond a certain level of output growth (depending on the multiplier effects of the different sectors of economic activity), both formal and informal sector employment will be created. According to the World Bank (1994), as long as quality and cost-effectiveness are not compromised, labour-based approaches to infrastructure development can also be an important instrument for employment-intensive economic growth.

vii Contribution to taxation revenues

A further important macroeconomic effect that was calculated in studies by Botha and Lockwood (2005 & 2007) relates to government revenues (the so-called fiscal backflow effect). In essence, this effect is created as a result of the fact that most of the processes involved with the generation of value added (GDP) in the economy are subject to some form of tax. In the case of the study on the socio-economic impact of a proposed Risk Capital Fund (Botha & Lockwood, 2007), it was found that almost R700 million of additional individual tax, company tax and indirect taxes could be supported/generated for the government (over a three-year period) as a consequence of the economic activity induced by an initial capital outlay of R500 million by the proposed Fund.

vii International competitiveness

International agencies are continuously producing surveys and reports on the perceived investment risk and competitiveness of advanced economies and developing countries alike. Several authoritative surveys publish data on the perceived quality and scope of basic economic infrastructure, including the annual World Competitiveness Report. In the event of Angola embarking on an effective strategy to improve the scope and quality of its infrastructure, the country will almost certainly experience an upgrading of its global competitiveness, which may eventually become manifested in tangible benefits relating to lower public sector debt service costs.

The imperative of sufficient and modern infrastructure in enhancing a country's attractiveness as a destination for foreign direct investment is underscored by the World Bank (1994). Surveys by prospective international investors invariably include detailed reference to the range and quality of infrastructure, which is a key factor in ranking potential destinations for foreign investment.

4.3 The challenge of the 4th Industrial Revolution

Muted progress since the Golden century

It has become fairly evident that the World is entering a fourth historical stage of production, characterised to a growing extent by artificial intelligence and a range of new technologies. The so-called Fourth Industrial Revolution (4IR) is being driven by new technological applications in virtually every field of endeavour. Collectively, these

applications are fusing the physical, digital and biological realms, ultimately impacting on all economic activity and, as an inference, on all human endeavour.

Over the past decade, substantial research has been conducted into assessing the impact of the new production paradigm, especially because of the relatively muted impact of the Third Industrial Revolution. The latter is widely acknowledged to have started during the early 1970s and has lasted ever since.

Global productivity growth over the past four-and-half-decades has, however, not remotely matched the impressive productivity boom that occurred during the first two industrial revolutions, which began with the invention of the steam engine and progressed to the age of electricity, telecommunications, mass production of beneficiated metals and minerals, chemicals and, ultimately, a structural shift towards the services sectors.

In combination, the period between 1870 and 1970 has been referred to as the Golden Century of economic progress, bringing huge gains in the standard of living of most countries and, in advanced economies, making huge welfare interventions possible (*inter alia* via a sustained broadening of the tax base in high-income countries).

Inadequate diffusion of infrastructure technologies

Several reasons exist for the fact that all the innovation, and investments in technology over the past half-century have not delivered the same level of productivity growth that was recorded during the previous century. These include the so-called base-effect, which makes the peak of the Golden Century a hard act to follow.

A second reason is to be found in declining population growth rates in many of the post-industrial countries that fuelled the exceptionally high growth during 1870 and 1970. A third reason, which is relevant to any future economic development strategy in a country like Angola, is the backlogs in the four infrastructure technologies that provided the foundation for all three of the other industrial revolutions.

These are related to energy, transportation, health, water & sanitation and telecommunication. Several researchers concur with the hypothesis that these fundamental technologies were important on their own, but that two other factors were essential for accelerating growth and productivity.

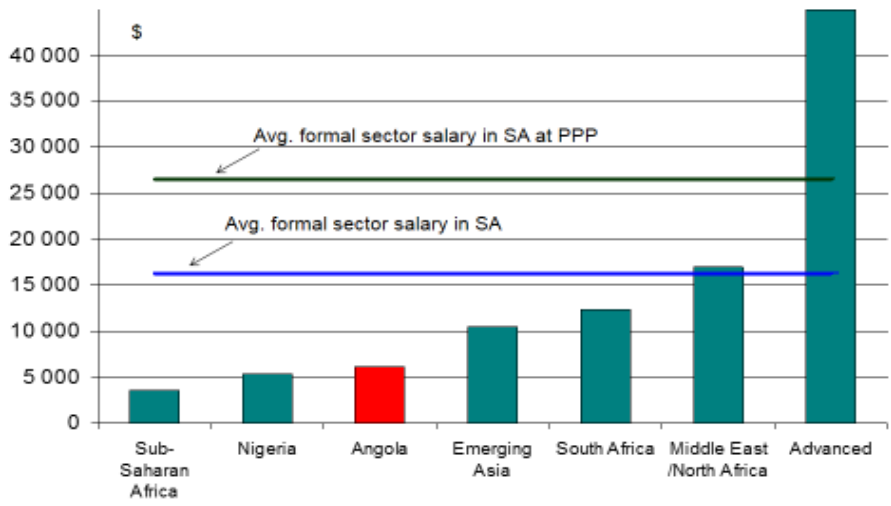
The first was when the adoption of each technology was widespread enough to reach a tipping point and allow for the near-universal adoption in a particular country. The second was the so-called network effect, namely that the technologies needed to operate in tandem to facilitate high growth. In the absence of such diffusion of all four technologies, rapid growth was unlikely to happen.

Exceptions to this rule included relatively small and sparsely populated island states or enclaves and commodity exporters that experience substantial windfalls during booms in the commodity price cycle (albeit often temporary).

Unfortunately, a large number of developing countries have not yet succeeded in matching the progression from under-developed status to emerging market status, mainly due to a lack of diffusion of existing infrastructure technologies.

This statement is borne out by the large and growing gap between the *per capita* GDP figures of low-income countries, on the one hand, and advanced nations and emerging markets, on the other hand, as aptly illustrated by figure 21.

Fig 21: *Per capita* GDP at purchasing power parity in 2017 (constant 2011 international $) *(Sources: World Bank; own calculations)*



The data in the figure includes an indication of the average formal sector salary in South Africa (both in nominal and PPP terms), which is substantially higher than the average *per capita* GDP for SSA and other developing regions in the World. One reason for this phenomenon is the relatively high level of global competitiveness enjoyed by South Africa in the area of well-developed infrastructure.

Socio-economic dividends

The challenge for a developing country is quite obvious – pursue the expansion of all four infrastructure technologies with vigour or fall further behind in the global economic race for food security, prosperity and socio-political stability.

In Angola's case, such expansion should ideally target the supply chains involved with food production and energy, both of which feature prominently in the country's basket of consumer goods & services. Not only will this strategy assist in a structural lowering of inflation (via an increase in supply), but it will also serve to diversify the economy.

Private property ownership and adequate investment in supporting infrastructure, especially in water, energy and transport modes are widely regarded as essential enablers to unlock the full productivity potential of the agriculture and food value chain. An added benefit of appropriate public sector investment in human and physical capital formation in agriculture is the positive contribution that surplus food production can make to combating poverty and malnutrition and generating export earnings.

4.4 Summary

The pervasive nature of the way that infrastructure stimulates economic activity is manifested in various causal effects that flow from an increased level of public sector capital expenditures. The most important of these relate to poverty alleviation (due to increased national income and enhanced access to markets), facilitation of future growth in key industries, increased employment, diversification of economic activity, a direct and indirect contribution to GDP, and the generation of fiscal revenue for government.

In the event of projects being funded through a combination of fiscal resources, grant funding and concessional loans, these benefits will tend to be far greater than the costs. Any new infrastructure project should ideally involve cost-benefit analyses and a concerted public-private sector partnership approach to local economic development.

5. Sovereign bonds as a catalyst for development

5.1 The rise of prominence for developing world debt

Until a decade before the start of the new millennium, emerging market (EM) debt was not regarded as a tradable asset. The realisation amongst fund managers in an integrated global capital market that economic growth in the developing world would probably continue to outperform advanced economies by margins of 50%-plus changed the sentiment towards higher-risk debt.

According to Mukansi (2017), the development of the EM bond market, coupled with the rapid economic growth of the EM countries relative to that of developed countries in the last decade has resulted in the transformation of EM debt as an erstwhile niche asset class to a $12tn behemoth, with market expectations of a tripling of outstanding debt over the next five years.

Unsurprisingly, developing countries sold record levels of government debt in 2017, taking advantage of a surge in optimism towards the developing world as a result of a recovery of international trade, record low interest rates in Europe and an easing of inflationary pressures in developing countries.

Factors that have facilitated the entry of emerging markets (EMs) and less developed countries (LDCs) into the sovereign bond market are listed in box 5.1:

Box 5.1: Deepening of the developing world's bond market
• Improvements in key domestic macroeconomic indicators (prior to the 2008/09 recession) • Relatively low and stable public debt to GDP ratios • Improved governance in public financial management • Sound debt management frameworks

- Adequate central bank oversight
- Strong investor appetite for new asset classes and higher-risk instruments
- Ample international financial liquidity as a result of an extended period of monetary accommodation by central banks, which led to record low interest rates in several advanced economies

The growing number of successful sovereign bond issues by EMs and LDCs have allowed these groups of countries to access international financial markets with increasingly higher values and have also resulted in relatively low & declining coupon rates.

Boxes 5.2 and 5.3 summarise the different participants in the global sovereign debt market and strategic considerations that developing countries need to consider before any bond issuance, respectively.

Box 5.2 : Participants in the global sovereign debt market

Principals: National Treasuries, taking direction from senior politicians representing the governing party/coalition (in a democracy)

Agents: Government debt management offices, usually acting as a directorate within National Treasury. Agents interact with:

- Investment banks that underwrite bond issues
- Institutional investors that purchase sovereign bonds
- Debt managers in other countries, to share relevant capital market information
- Other public sector organisations, including regional and local governments and state-owned enterprises
- The central bank
- The private banking sector

Agents follow standardised operating procedures: Structuring of bond issues, including the value, maturity date, currency denomination and target coupon rate

Government debt managers must also anticipate the impact on the bond issue of political events and the nature of corporate governance standards within the public sector at large

Box 5.3 : Strategic considerations for an external sovereign bond issue

- Country creditworthiness should not be compromised
- Medium-term fiscal framework needs to be supportive and stable
- A modest monetary size for the issuance should be chosen, so as to improve the chances of an over-subscription
- Maturity dates should preferably not exceed 10 years, due, *inter alia,* to the coupon premium that exists for longer-term debt issues
- Determination of interest rate (fixed or flexible) should be sufficiently motivated
- Choice of currency

- Choice of financial advisors and underwriters
- Sound relationships with influential multilateral organisations, especially the World Bank and the IMF
- Consideration of linking the bond issue to one or more specific investment projects

5.2 Risks and costs

Over the past decade, sovereign bond issues by countries in SSA have also surged. Although a multitude of advantages can be identified for successful bond issues at affordable coupon rates (most notably the financing of development projects), incurring debt also carries substantial risks. It is therefore incumbent on a government issuing debt to ensure that sufficient fiscal resources will be generated via sustained positive economic growth, in order to service the debt and, ultimately, to redeem the debt.

5.2.1 Generic sovereign bond market risks

The four key risks associated with the issuing of sovereign bonds are:

i. Exchange rate risk
Over the past decade, all the foreign bonds issues by countries in SSA have been denominated in foreign currency, dominated by the US dollar. This poses an obvious exchange rate risk for repayment of interest and capital. For commodity exporters, this risk is mitigated during upward movements of the commodity price cycle. Tyson (2015) has estimated that a repeat of the 2014 market disruptions caused by the severe slump in commodity prices would translate to approximately 1.13% of GDP (across the whole of the SSA region). In the space of one year between 2014 and 2015, commodity exporters were dealt a severe blow by sharp declines in the prices of exports, particularly energy exporters such as Angola and Nigeria (see table…).

Table 9: Decline in World Bank commodity price indices 2014 to 2015

	% decline
Energy	45.1
Metals & minerals	21.1
Agriculture	14.2
Precious metals	10.4
Raw materials	9.4

Source: *World Bank*

It should be borne in mind that a weaker currency possesses a significant upside, namely boosting export revenues in local currency terms and acting as a disincentive for imports. Currency weakness in developing economies may also

stimulate local manufacturing industries and, as a general rule, leads to higher GDP growth.

ii. Interest rate risk
It has become customary for developing countries to issue sovereign bonds at a fixed coupon rate, which provides certainty to the cost of servicing the debt (in foreign currency terms). Maturity dates for bonds are invariably positively correlated with their coupon rates, due to the inherent increased uncertainty. A window of opportunity exists for commodity exporters to issue bonds with shorter maturity dates (e.g. 5 years) during upward phases of the commodity price cycle, as coupon rates can justifiably be set at relatively low levels.

According to research by Tyson (2015), countries in SSA have a preference for issuing bonds with a maturity of 10 years and longer. Only 6% of the bonds issued by SSA that were included in this study were for 5 years or shorter. Tyson's analysis covered 22 sovereign bond issues between 2006 and 2014 by 15 countries in SSA totalling $18.3 billion.

iii. Liquidity risk
More than two-thirds of bonds issued by countries in the SSA region over the past 12 years have made provision for so-called "bullet" repayments of the principal sum, as opposed to an amortising arrangement. Bullet repayments increase liquidity risk.

iv. Debt sustainability risk
Investors and credit ratings agencies use debt-to-GDP ratios as one measure to assess the level of risk involved with buying sovereign bonds. A decline in the rate of economic growth or a recession will tend to threaten debt sustainability ratios, which will make it more difficult and more expensive to access foreign funding. An obvious recourse to mitigate such a scenario is for governments to ensure that macroeconomic policies are aligned to private business development and employment creation. The latter have a positive correlation with tax revenues and, in the presence of sound public sector expenditure control, will lower the fiscal deficit.

5.2.2 Risks from a developing country perspective

Incurring sovereign debt obligations via international bond issues is no panacea for the sustained implementation of policies designed to improve macroeconomic fundamentals and enhance private sector capital formation in an economy. Some of the risks associated with global bond issues by SSA countries are as follows:

- The possibility that public spending projects financed by sovereign debt may have been poorly selected or executed. This could lead to higher recurrent government spending that may not be sustainable.
- Delays and inefficiencies in the financing of infrastructure projects will tend to place pressure on the public finances, leading to the possibility of a lengthening of maturity of public debt
- Successful sovereign bond issues could facilitate easier access to international capital markets by state-owned enterprises (SoEs). To the extent that SoEs suffer

the same maladies as other public sector bureaucracies in the area of effective and speedy project implementation, this could exacerbate macroeconomic and structural vulnerabilities.

- In cases where currencies are not significantly undervalued at the time of the bond issuance, meaningful inflows of foreign exchange could lead to a strengthening of domestic currencies, which would be detrimental to their international competitiveness

5.3 The causality between an international bond issue and the economy

When a sovereign bond is issued, the relevant fiscal authority raises a fixed amount of capital at a fixed rate of interest (the coupon). Both the capital (principal sum) and accrued interest have to be repaid over a set period of time (usually 10 year or 20 year terms, but 5-year and 30-year bonds issues also occur). The issuing authority obviously has to generate sufficient cash flows to repay the interest and capital.

Box 5.4 summarises the potential advantages of a foreign bond issue.

Box 5.4: Impact on a developing country's economy of an international bond issue ring-fenced for specific infrastructure projects
1. Inflow of foreign exchange 2. Strengthening of the balance of payments 3. Augmentation of domestic savings 4. Greater exchange rate stability 5. Increase in the level of capital formation in the economy 6. Easing of short and medium term pressure on the public finances 7. Since 2010, the pricing of coupon rates have often been at a discount to domestic debt servicing costs 8. Realisation of the objectives contained in the business plans for the specified projects, which could range from the socio-political domain (enhanced delivery of basic services) to traditional macroeconomic stabilisation goals (employment creation) 9. Stimulation of business development 10. Positive impact on domestic consumer & business confidence levels 11. Broadening of a country's portfolio investor base 12. Attracts the intention of foreign direct investors 13. Allows for easier access to international capital markets for the corporate sector and state-owned enterprises 14. Provides an incentive to government's economic policy makers to pursue fiscal and monetary discipline 15. The increase in capital formation exerts a multiplier effect on GDP via its direct impact on aggregate demand in forward and backward linked industries as well as indirect effects resulting from higher consumption expenditure 16. Increase in employment (also via an above average multiplier effect)

17. Increase in taxation revenues
18. Broadening of the tax base

In the event of ring-fencing a particular bond issuance for development initiatives such as infrastructure, the task of generating sufficient fiscal revenues may be quite easy, depending on the successful implementation of such projects, the existence of a well-functioning taxation system and whether they serve to facilitate downstream economic activity.

One example that is relevant to a country that lacks food security is a bond-financed project aimed at providing the basic infrastructure required for food production, including water, irrigation, transport, storage and market facilities for end consumer demand or further processing.

The combination of individual income taxes (flowing from increased employment), company taxes (flowing from potentially higher profits) and VAT (flowing from the value added within each linked sector of economic activity) should be more than sufficient to not only finance the repayment of debt, but also to lead to a larger extent of fiscal stability.

In this regard, it is important to point out the following:

- The chain of activity resulting from the initial spending on infrastructure will progress far beyond the sectors that are directly impacted. Higher employment will lead to increased consumer expenditure on goods and services in other industries, with a ripple effect on economic output and on taxation revenues (so-called indirect effects which gives rise to the value added multiplier)
- The resulting increase in the GDP will automatically reduce the public debt/GDP ratio (in the absence of any brand new bond issues)

5.4 African bonds in demand

5.4.1 The crucial role of multilateral debt relief

Over the past decade, international capital markets have warmed to sovereign bond issuance by African countries like never before. The main precursor to the renewed appetite amongst international investors for loans to African countries, especially in sub-Saharan Africa, was the pre-recession round of debt relief by the World Bank, the International Monetary Fund (IMF) and other multilateral and bilateral creditors.

The Heavily Indebted Poor Country (HIPC) initiative began in 1996, but only started bearing meaningful results after the dawn of the new millennium, when the program was comprehensively reviewed and enhanced to enable a broader group of countries to qualify for debt relief. A total of 39 countries are currently eligible for debt relief, 30 of which are in Africa.

The HIPC program has played a major role in restoring debt sustainability in many low-income countries (LICs). Together with a continued search for yield and desire for portfolio diversification by investors in a decade-long record low interest rate environment in advanced economies, it has increased the range of viable financing options, including international bonds, for many EMs and LICs.

5.4.2 Pioneering countries

In 2006, the Seychelles became the first African country after the start of the new millennium to issue sovereign bonds on the international capital market (a $200 million Eurodollar bond). Prior to this date, global financial institutions had become wary of high and growing levels of African debt, which had resulted in programmes like the World HIPC debt relief initiative.

A year later, the success of structural fiscal adjustment programmes and a measure of multilateral debt relief to participating countries led to Ghana becoming the first HIPC nation to issue sovereign bonds in international markets. Due to the global financial crisis of 2007/08, which was immediately followed by a relatively brief global recession, but, unfortunately for exporters of primary products, a lengthy commodity price cycle downturn, the African bond market went into limbo for a number of years. Zambia got the wheels turning again in 2012 with a $750 million bond issue, which attracted offers of more than $11 billion from global investors.

Other countries followed suit, with large oversubscriptions becoming the norm. In 2013, Rwanda issued a 10-year $400 million bond, with BNP Paribas and Citigroup as the lead managers. Once again, the new global appetite for African debt led to a huge oversubscription. The Rwandan bond carries a coupon of 6.625% and received total orders of $3.5 billion. The government of Rwanda had committed to ring-fencing a large portion of the proceeds for the maintenance and expansion of energy infrastructure.

Table 10: International bond issues by the SSA peer group #2 since the end of the 2008/09 global recession

Country	Year of issue	Term years	Coupon %	Amount $ million
Angola	2012	7	7.19	1 000
Angola	2015	10	9.5	1 500
Angola	2018	10	8.25	1 750
Angola	2018	30	9.375	1 250
Cameroon	2015	10	9.75	750
Côte d'Ivoire	2014	10	5.375	750
Côte d'Ivoire	2015	13	6.375	1 000
Côte d'Ivoire	2017	8	5.125	728
Ethiopia	2014	10	6.625	1 000
Kenya	2014	5	5.875	500
Kenya	2014	10	6.875	1 500
Kenya	2014	5	5.9	250
Kenya	2014	10	5.9	500

Kenya	2018	10	7.25	1 000
Kenya	2018	30	8.25	1 000
Nigeria	2011	10	6.75	500
Nigeria	2013	10	6.375	500
Nigeria	2017	10	6.5	1 500
Nigeria	2017	30	7.625	1 500
Nigeria	2018	12	7.143	1 250
Nigeria	2018	20	7.696	1 250
Rwanda	2013	10	6.625	400
Senegal	2011	10	8.75	500
Senegal	2018	10	4.75	1 165

Notes: *1. Excluding South Africa*

2. Euro issues converted to $ at rate of 1.1655

Sources: *C-Bonds; Bloomberg; Financial Times; Tyson, JE*

Kenya joined the global sovereign debt club in 2014, raising $2 billion of 5-year and 10-year bonds. It was also hugely oversubscribed, with $8 billion in bids. In the same year, Ethiopia, one of the poorest countries in SSA, successfully floated a bond of $1 billion. Other sub-Saharan African (SSA) countries other than South Africa that have since issued international bonds include Gabon, Senegal, Ivory Coast, Congo Republic, Nigeria, Namibia and Zambia.

Table 11: Other international SSA bond issues since 2010

Country	Year of issue	Term years	Coupon %	Amount $ million
Gabon	2013	11	6.375	1 500
Ghana	2013	10	7.875	750
Ghana	2014	12	8.125	1 000
Namibia	2011	10	5.5	500
Mozambique	2013	10	8	850
Seychelles	2010	16	5	200
Tanzania	2013	7	6.332	600
Zambia	2012	10	5.375	750
Zambia	2014	10	8.5	1 000

Sources: *C-Bonds; Bloomberg; Financial Times; Tyson, JE*

5.4.3 The advantage of a high growth rate

The Ethiopian bond issue is an illuminating example of one of the key behavioural characteristics of institutional investors, namely an emphasis on long-term expectations. Although Ethiopia had the second lowest *per capita* GDP of the SSA peer group #2 identified in this study, it recorded the highest average annual growth rate for this indicator between 1997 and 2017, namely 7.8%.

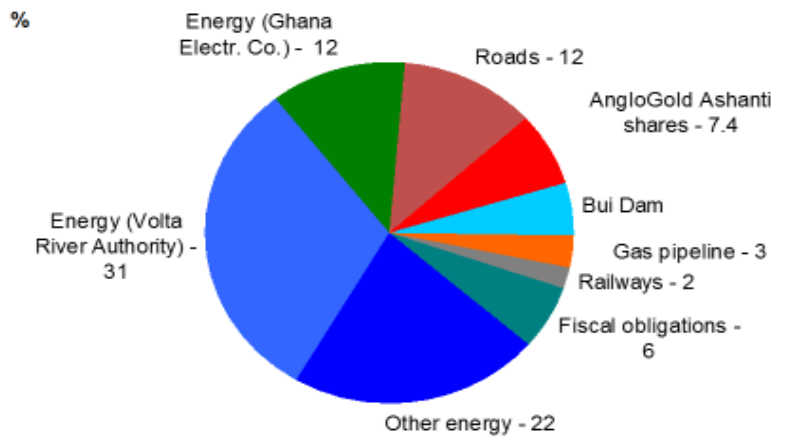
Little doubt exists over the positive influence of relatively high GDP growth rates on the coupon rates for recent SSA bond issues (as illustrated above in table 10). As pointed out in section 3, Angola enjoys a highly favourable disposition within the SSA peer group with regard to economic growth, also in terms of *per capita* growth.

5.4.4 Progress with macroeconomic stabilisation

Another African bond issue that may be regarded as relevant to this study relates to Ghana (which is not part of the final SSA peer group selection). It is informative to note that Ghana's 2007 inaugural international bond issuance of $750 million paid a coupon of 8.5%, but subsequently declined by 368 basis points to reach a yield of only 4.82% by May 2013.

This increase in the value of the Ghana's bonds on global capital markets clearly shows that perceived progress with fundamental macroeconomic stabilisation objectives can produce a substantial pay-off to developing countries.

Fig 22: Composition of disbursements from Ghana's 2013 international bond issuance ($750 million)



The diverse composition of spending allocations that underpinned the Ghana bond issue (see figure 22) suggests that institutional investors have a measure of faith in the ability of at least some of the tangible development projects to be implemented successfully, whilst also assisting in lifting the growth rate and broadening the tax base.

5.4.5 Positive response to political change

In South Africa, the latest sovereign bond issuance has also been met with a healthy bid ratio, namely 1.7. The country's National Treasury announced in May 2018 that it had successfully placed US$2bn worth of 12 and 20 year notes in the international capital markets, hailing it as a sign of the international market's confidence in South Africa's economic policy framework.

The bonds were issued at relatively favourable interest rates, well below the country's current benchmark prime overdraft rate of 10% and demand emanated from across all

the major financial centres in the United States, Europe, the United Kingdom, Middle East and Asia.

Commentators have attributed the favourable coupon rate as a sign that global capital markets have faith in the declared commitment by South Africa's new president, Mr Cyril Ramaphosa to stamp out corruption and state capture that occurred during Mr Jacob Zuma's term of office.

The 12-year bond was priced at a coupon rate of 5.875%, which represents a spread of 280.5 basis points above the 10-year US Treasury benchmark bond. The 30-year bond was priced at a coupon rate of 6.3%, which represents a spread of 310.1 basis points above the 30-year US Treasury benchmark bond. The issuance was managed by a Deutsche Bank/Nedbank (in consortium), JP Morgan, Rand Merchant Bank and Standard Bank.

5.5 The absence of a benchmark for public debt/GDP ratios

Debates on fiscal consolidation, where deemed necessary, often include the issue of prudential limits on public debt/GDP ratios. The introduction of such benchmarks come to the fore from time to time, especially in technical analyses by researchers at the IMF, the World Bank and the European Union (EU).

The closest that advanced economies have come to some kind of consensus on public debt benchmarks was with the introduction of the Euro as common currency in the majority of EU member states, which made a national budget deficit/GDP ratio of 3% (maximum) a condition for acceptance in the Euro-zone.

None of the benchmarks related to public debt have, however, been officially endorsed by the IMF and the question arises as to what value exists in treating any of the proposed prudential limits on public debt/GDP ratios as useful in design of fiscal policy, in general and public debt management, in particular.

In 2010, the Fiscal Affairs Department of the IMF proposed a prudent limit of 60% for public debt/GDP ratios in developed countries, implying that a higher ratio will threaten fiscal sustainability. For developing and emerging economies, 40 per cent is a public debt/GDP ratio that has been suggested. The IMF also suggested a number of remedial policy measures that could be implemented to lower existing ratios to this benchmark by 2030 (loosely termed "fiscal adjustments").

Several researchers have, however, pointed out that the concept of designing an "optimal" benchmark for public debt as a percentage of GDP is fraught with anomalies and is also not backed by empirical evidence. This includes the work of Chowdbury & Islam (2012), as published in a G-24 Policy Brief.

The rationale for these benchmarks and also others that have been proposed remains unclear and highly subjective, as witnessed by the presence of caveats in various studies

on the topic of fiscal stability. In the *Sustainability Framework* published by the IMF in 2002, it is stated that: "…it bears emphasizing that a debt ratio above 40% of GDP by no means necessarily implies a crisis – indeed…there is an 80% probability of not having a crisis (even when the debt ratio exceeds 40% of GDP").

Due to the multitude of factors that impact on both the numerator and the denominator of the public debt/GDP equation, it is simply not possible to expect all countries to adhere to a particular benchmark. This has become even more evident in the aftermath of the global financial crisis of 2007-2008 and subsequent global recession.

Due to low or declining GDP growth in 2009 in virtually all advanced economies and emerging markets, fiscal revenues followed suit, with a fairly sharp deterioration of public debt/GDP ratios around the globe. This did not, however, prevent the recession from a swift recovery. As a group, advanced economies only recorded negative GDP growth in one calendar year (2009), although growth was below-par between 2011 and 2016. Emerging markets in Europe (mainly in the East), also recovered in 2010, whilst SSA, as a region, managed to escape the recession.

A cursory analysis of a number of authoritative studies on the broad topic of public debt reveals a significant divergence of views on what should be regarded as an optimal level of debt, as well as on the macroeconomic impact of different debt levels.

Ostry *et al.* (2010) has emphasized that a debt limit is not an absolute and immutable barrier, nor should it be interpreted as being the optimal level of public debt. According to this IMF study of 23 advanced economies, the estimated debt limits range from 150% to 260% of GDP, corresponding to a median long-run debt/GDP ratio of 63% and a median maximum debt/GDP ratio of 183%.

The standard advice, of course, is for debt/GDP ratios to be set at well below any proposed limit, in order to prevent adverse shocks (such as a recession or commodity price slump). This advice has little scientific justification, as it does not take into account any analysis of liquidity, rollover risk, the size of the economy, the medium- to long-term economic growth trajectory or the ability to swiftly recover from adverse shocks.

Moreover, a growing number of advanced economies have recently crossed the unity threshold for public debt/GDP ratios, with Japan way out in front. In 1988 this country, which is the third largest economy in the World, had a ratio of below 60%, rising to 170% in 2007. Its public debt is now 240% of GDP and it still enjoys a high degree of macroeconomic stability.

5.6 Rising national income remains crucial

The global recession of 2009 provided ample proof that a deflationary economic environment poses a much bigger problem for policy makers than short-term price instability. Higher, but still moderate inflation raises a country's nominal GDP and lowers the public debt/GDP ratio (in the absence of any new bond issues).

Domar (1993) correctly points out that the proper solution of any public debt problem does not lie in excessive fiscal austerity, but in achieving faster growth of the national income. As long as there is spare capacity in the economy or unemployment, higher fiscal deficits add to purchasing power and do not exert any upward pressure on interest rates or inflation on their own, nor are they the cause of large current account deficits.

The claim by some economists that high public debt causes lower growth is also not grounded in robust empirical evidence, as proven by country comparisons of such correlations, conducted by the IMF (2010-1).

It is also incorrect to claim that higher public debt today places a burden on future generations via higher taxes. As long as the interest paid on the debt is less than the annual increase in nominal GDP, the debt will be a shrinking fraction of GDP and will not require additional taxes in the future.

5.7 The role of international credit ratings agencies

A point that needs to be emphasized is the relationship with international credit rating agencies. Econometric testing for externalities in foreign debt and reserves by Hawkins & Turner (2000) suggests that government credit ratings are more closely related to government debt than overall national debt.

The dependent variable in the regressions by Hawkins & Turner was a measure of Standard & Poor's sovereign credit ratings, which had been transformed into numbers by assigning values to the ratings notches (diminishing with every lower rating notch). Data was gathered for 20 emerging markets. Explanatory variables included per capita GDP (on a PPP basis) and inflation, which studies such as Cantor and Packer (1996) have shown to have an important influence on ratings.

The conclusion was that an increase in government debt of 8 to 11 percentage points of GDP causes a one notch deterioration in credit ratings (e.g. from B+ to B), which could lift borrowing costs by around 40 basis points. The results of a specification based on government debt implies that sovereign credit ratings are more closely related to government debt than overall national debt.

When this specification is considered in isolation from the other variables, however, the impact is very much smaller. An increase in national debt of 43 percentage points of GDP is necessary to cause a one-notch deterioration in credit ratings (and, as an inference, a 40 basis points increase in borrowing costs).

South Africa provides a recent and relevant example of the manner in which improved prospects for economic stability flowing from a change in political leadership can influence the sentiments of credit rating agencies.

Within a mere six weeks after Mr Cyril Ramaphosa's inauguration as South Africa's new president, ratings agency Moody's Investor Services affirmed South Africa's investment-grade credit rating and also revised its credit outlook to stable from negative. The

confirmation of investment grade status for South Africa's sovereign bonds reflects Moody's view that the previous weakening of South Africa's institutions will gradually reverse under a more transparent and predictable policy framework, which is expected to support an economic recovery.

It would clearly be to Angola's advantage to continue with its new policy approach aimed at reforming public institutions, improve corporate governance standards, enhance the environment for private sector expansion and other policies designed to raise the country's international competitiveness.

5.8 Conclusion - opportunity beckons for Angola

5.8.1 High-growth frontier market status

Ever since the end of the 2009/09 recession, relatively low coupon rates and subsequent yields for SSA bond issues have gone hand-in-hand with high investor interest. Afro-cynics may call this phenomenon lucky timing but in essence, it demonstrates a growing appetite amongst global fund managers for a measure of exposure to some of the world's fastest growing frontier markets. Bond funds dedicated to emerging and frontier markets have seen strong inflows recently as pension funds and insurers, sovereign wealth funds and even retail investors search for the higher-yielding securities.

These trends in global capital markets represent an opportunity for several countries in SSA to broaden their investor base and source funds for development purposes, including the crucially important domains of infrastructure creation and human capital development.

A number of relevant indicators require scrutiny in order to assess the feasibility of further international bond issues for Angola. The country enjoys a highly favourable ranking for key economic indicators, especially with regard to the size of the economy, *per capita* GDP and the growth in these two indicators over the past two decades, as confirmed by the list in table….

Table 12: Angola's rankings for key macroeconomic and fiscal indicators within the SSA peer group #1 (regarded as relevant for assessing the feasibility of further sovereign bond issues)

	Ranking
Average annual growth in GDP 1997 - 2017	1
Average annual growth in investment as % of GDP	1
Per capita GDP 2017 ($)	2
Average annual growth in *per capita* GDP 1997 - 2017	2
Total GDP 2017 ($)	3
Foreign debt as % of GDP 2017	4
Paying taxes (World Bank/PwC)	6
Population size	8

Sources: *World Bank; UNDP; own calculations*

Angola has recorded the highest average annual economic growth rate and the second-highest growth rate for *per capita* GDP over the past two decades. The country is second only to South Africa with regard to the absolute figure for *per capita* GDP in terms of current international dollars ($6,753 – at purchasing power parity). It is also the third largest economy in the SSA region.

5.8.2 Absence of electoral policy bias

As a general rule of political expediency in democracies, an incentive always exists prior to a general election to follow expansionary fiscal policies, inter alia, to try and lift the economic growth rate, create jobs and improve the standards and scope of basic service deliver to the voting public. According to research by Ballard-Rosa, et. al. (2016), rational investors may recognise the deleterious effects that such fiscal profligacy could exert on the particular country's broader macroeconomic stabilisation goals.

In the event of a critical mass of institutional investors believing that undue fiscal expansion may jeopardise the ability of a country to service and repay its debt, they could view such pre-electoral bond issues as more risky, which will reduce their demand. It may also require an upward revision of the planned coupon rate, thereby placing further pressure on the public finances.

Angola is in the fortunate position that it has just entered a post-electoral phase, with a strong mandate from the voting public to implement reforms aimed at reducing high levels of corruption and patronage, diversify the economy away from the dominant oil industry and encourage private sector capital formation.

5.8.3 Relatively low foreign debt/GDP ratio

Angola's level of foreign debt as a percentage of GDP is below 5%, which is extremely low by any standards and one of the lowest in SSA, as depicted by the data in table 13 and figure 23.

Table 13: Foreign debt as % of GDP - 2017 selected SSA countries

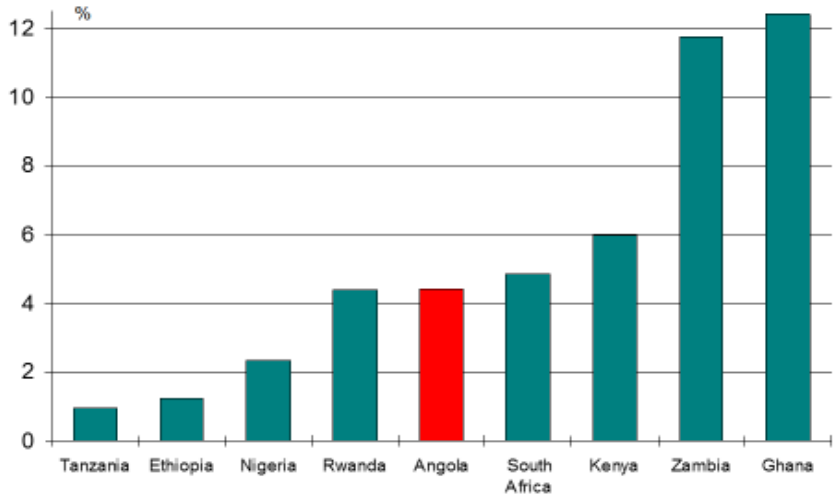
Country	Foreign debt ($m)	GDP ($m)	Debt/GDP ratio (%)
Tanzania	0.5	51.73	0.97
Ethiopia	1	80.87	1.24
Nigeria	8.8	376.3	2.34
Rwanda	0.4	9.137	4.38
Angola	5.5	124.2	4.43
Kenya	4.75	79.51	5.97
Zambia	3	25.5	11.76
Ghana	5.84	47.03	12.42

Gabon	2.2	15.21	14.46
Côte d'Ivoire	8.23	40.36	20.39
Senegal	4.27	16.46	25.94
Namibia	4.14	12.69	32.62

Note: *Ranked by lowest debt/GDP ratio*

Sources: *C-Bonds; Bloomberg; Financial Times; own calculations*

Fig 23: Foreign debt /GDP ratios in 2017 – selected SSA countries with ratios below 12.5% *(Sources: Cbonds; Bloomberg; Financial Times)*



It is also evident that foreign exchange risk has traditionally not featured as a major policy concern in Angola, as demonstrated by a stress test for SSA countries conducted by Tyson (2015). A stress test is a standard method used to examine various sources of risk and involves the application of adverse historical (or assumed) market events to benchmark ratios of fiscal or monetary stability.

Table 14: Stress test for foreign exchange risk of sovereign bond repayments in selected SSA countries (as % of 2013 GDP)

	%		%
Nigeria	0.13	Rwanda	2.64
Angola	0.36	Mozambique	3
Tanzania	0.78	Zambia	3.39
Ethiopia	1.05	Gabon	3.97
Kenya	1.73	Senegal	4.18
Namibia	1.94	Seychelles	6.55
Ghana	2.09	Côte d'Iviore	11.6

Notes: *1. Based on cash flow repayments of principal and interest*

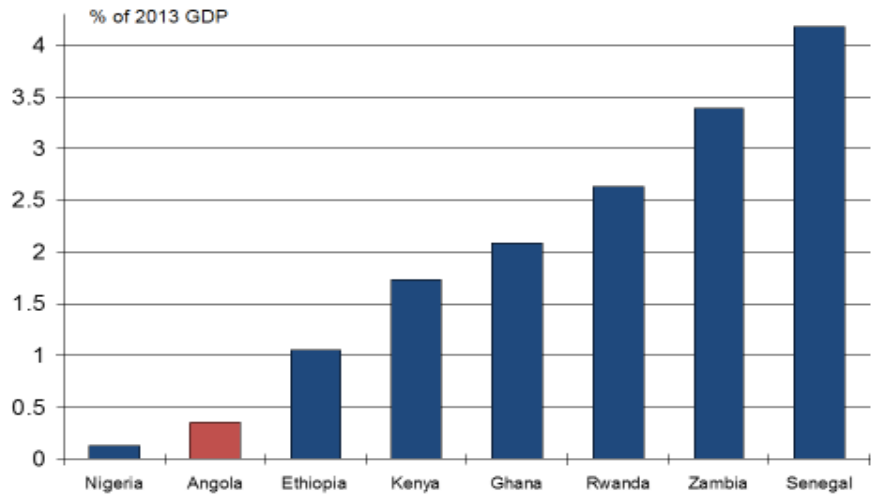
2. Stress test scenario based on a 30% currency depreciation

Source: *Tyson JE (2015)*

The results of Tyson's analysis are summarised in table 14 and figure 24. The stress test scenario applied for foreign exchange risks was a 30% devaluation, based on the devaluation of the Ghana Cedi from peak to trough of 40% in August 2014 and the Nigeria Naira which was devalued by 10% in November 2014.

It is evident from this research that Angola is in a position to expand its foreign debt, particularly in an environment of high demand from institutional investors, a rising oil price and prospects for reforms aimed at removing obstacles to business development and growth.

Fig 24: Stress test results for foreign debt repayments – selected SSA countries with single-digit ratios *(Source: Tyson JE – 2015)*



5.8.4 Bullish sentiment from the International Monetary Fund (IMF)

The IMF has stated that Angola's economic growth prospects have improved considerably, due mainly to rebound in oil prices and policy measures that have been taken by the country's new president, Mr João Lourenço to stabilise the economy since he took up office in September 2017.

In an Article IV statement in March 2018, the IMF said the economy was experiencing a "mild recovery", while the administration was focused on "improving governance". The latest IMF forecast for GDP growth in 2018 is 2.25%, a significant improvement on the 1% that was recorded in 2017. The IMF has also come out in support of the new government's efforts to cut the fiscal deficit and public debt burden, which stood at 6% and 64% of GDP, respectively, in 2017.

According to the IMF, Angola's fiscal goals would be achieved by ongoing efforts to enlarge the tax base, including the introduction of value added tax (VAT) on January 1 2019 (as planned) and rationalising public spending.

The IMF does not have a formal programme arrangement with Angola but the Luanda government said it had requested non-financial assistance from the IMF to assist the

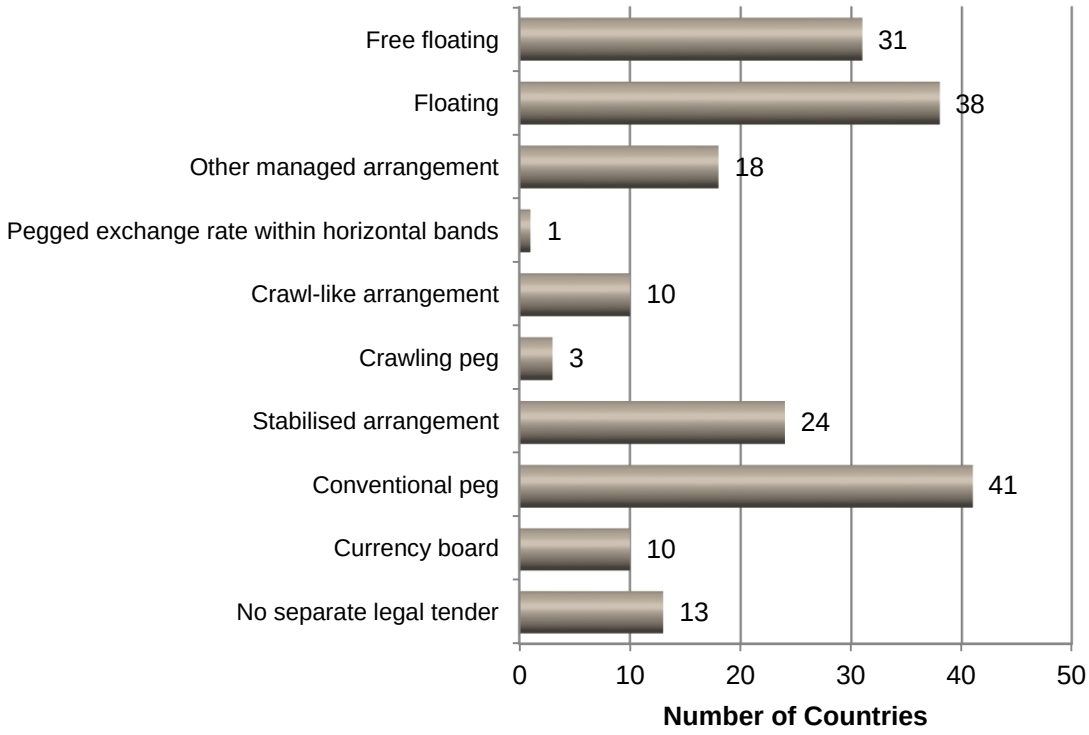
country in implementing economic reforms, through a so-called Policy Coordination Instrument agreement.

6. Considerations relating to the possible adoption of an "investment kwanza"

6.1 Types of exchange rate systems

The IMF recognises a wide variety of exchange arrangements and regulatory frameworks that govern the international current and capital transactions of member countries. The prevalence of these different exchange rate arrangements as at October 2017 are reflected in the figure below.

Fig 25: Prevalence of different exchange rate arrangements in October 2017



Source of basic data: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions (Washington, October 2017)

A conventional peg is marginally more common (41 out of 189 countries) than a floating exchange rate (38 countries) and a free floating exchange rate (31 countries). A crawling peg was only in place in 3 countries, with a further 10 having "crawl-like arrangements". At the time that the data for this report was collated, Angola was listed as one of 24 countries with a "stabilised arrangement". However, in January 2018 central bank governor José Massano announced that Angola would scrap the kwanza's peg to the dollar and establish a band in which the currency would trade – with a longer term

intention of closing the gap between the official exchange rate (then trading at around Kz165/US$) and the parallel market rate (then trading at more than Kz400/US$), and ultimately floating the exchange rate.

Since that announcement, the kwanza has been allowed to depreciate by almost 55% against the US dollar. Currently, the kwanza trades at around Kz260/US$. At the end of January 2018, the parallel rate is reported to have depreciated to Kz470/US$, but some reports refer to values of Kz415/US$ in June 2018. This suggests that the parallel market discount narrowed from around 152% to 72% between January and June.

The combination of a devalued kwanza and a stronger international oil price means that in July 2018 Angola was earning around Kz18,250/barrel – more than 130% up on the equivalent earnings in July 2017. The higher oil export earnings will go some way towards shoring up Angola's foreign currency reserves, but the dependence on imports of many tradable goods[1] coupled with the weaker currency points to increased imported inflationary pressures. These have so far failed to have a material impact on overall inflation rates, which have fallen steadily from 26.25% in October 2017 to 19.52% in June 2018. Nevertheless, in its June 2018 country report the IMF[2] projects average consumer price inflation for this year of 27.8% - suggesting some increase in the rate of inflation in the second half of 2018.

From an exchange rate policy perspective, the questions that arise are:

i) How far can the monetary authorities go in pursuit of exchange rate "liberalisation" before the resulting inflationary pressures threaten the country's financial and economic stability?

ii) Are there mechanisms that could limit the "pain" and potential disruption caused by this transition from an exchange rate that is effectively pegged at an artificially strong rate, to a floating exchange rate?

In order to answer these questions it is first necessary to understand what the impacts of the existing exchange rate regime on the economy are.

6.2 Impacts of the prevailing exchange rate regime on the economy

Dual and multiple exchange rate systems are typically a response to either a *supply shock* (such as a severe deterioration in the terms of trade due to a significant fall in a major commodity export), or a *demand shock* (such as a surge in local demand for foreign assets triggered by unfavourable and unsustainable macroeconomic and political policies) that exerts substantial pressure on the foreign exchange market. One policy response – aimed at avoiding the resulting fall in real wages and rise in inflation – is to

[1] COMTRADE data indicates that while Angola enjoyed an overall trade surplus of US$23.8 billion in 2017, this was almost exclusively driven by oil earnings. The country had a trade surplus in only 7 out of 99 product categories.
[2] IMF Country Report No. 18/156, June 2018

introduce (either through an official, regulated process, or simply by allowing a parallel market to develop) a dual exchange rate regime.

In an officially-regulated dual exchange rate system the market-determined rate is typically used for financial account transactions and – in some cases - non-basic imports, while the official rate is used for trade-related current account transactions (sometimes excluding non-basic imports). Theoretically, this should reduce inflation. It can also help to protect socially-sensitive economic activities, channel resources to developmental priorities, and redistribute income progressively. Practically, dual exchange rates usually cause large efficiency losses because they effectively subsidise imports and impose a tax on exports. In the process, they act as a disincentive to import-replacement and localisation activities, reduce productivity gains and lower economic growth and employment creation over time. They can also lead to socially-destructive rent-seeking activities, and entrench favoured sectors (with access to preferential exchange rates), and less favoured sectors (that do not have such access). In this context, it could be argued that the lack of diversification of the Angolan economy is – at least in part – entrenched by the existing "dual" exchange rate regime. With a view to the 4th Industrial Revolution, it can also be argued that the existing exchange rate regime also limits the ability of the Angolan economy to deal with the inevitable disruption and need for adaptability that the economy of the future will require. de la Torre and Ize (2014)[3] argue that:

> *"Exchange rate unification should therefore originate both static efficiency gains (i.e., a better allocation of existing resources, so that more income and output can be generated with the same labor, land, and capital that are already available today) and dynamic efficiency gains (i.e., the income expansion arising from the process of accumulation and better use of resources over time)".*

6.3 The adoption of an official "investment kwanza" as a transition mechanism towards unification of the exchange rate

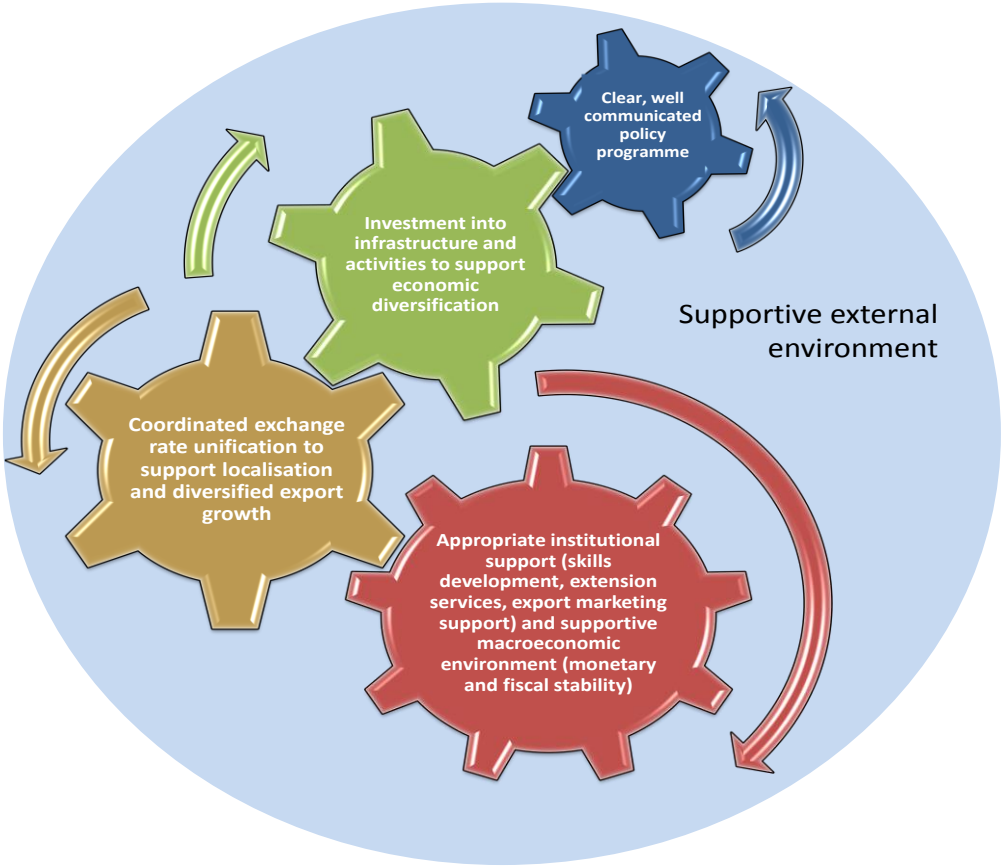
While the international evidence suggests that unified exchange rates are more conducive to favourable longer term economic outcomes, there may still be scope to consider the introduction of an official dual exchange rate – similar to the financial rand adopted by South Africa in the 1980s – as a mechanism to aid the transition to a unified exchange rate. However, the potential of an "investment kwanza" to assist with currency unification and favourable economic outcomes will depend on a number of other factors, including:

[3] Augusto de la Torre and Alain Ize, 2014. "Exchange Rate Unification: The Cuban Case". Brookings Institution, 2014.

- Whether markets believe that it is only a transitionary mechanism. This means that it should be accompanied by a clear timetable towards exchange rate unification.
- The extent to which the measure is supported by other macroeconomic policy, fiscal spending and political commitments that serve to raise business and investor confidence. These will need to be effectively communicated both locally and internationally.
- The degree to which any capital inflows that arise from the favourable exchange rate regime are successfully channelled into infrastructure and investment that serves to diversify the economy away from its current dependence on oil and gas.
- The appropriate phasing of interventions so that new production capacity is supported by both growing domestic demand and exports. This means that the period that the "investment kwanza" regime is in effect should not be of such a duration that it undermines the potential of localisation and diversified export growth.
- A generally supportive global and regional economic environment that supports both capital attraction and subsequent export growth.

The figure below highlights some of the sequencing and coordination efforts that will be required for the introduction of an official "investment kwanza" to contribute positively to economic outcomes.

Fig 26: Ensuring positive outcomes from an "investment kwanza"



The nature of the originating shock/s can have a material impact on the kind of policies required to limit the scale of adaptation generated by exchange rate unification. Where demand shocks were caused by financial repression and/or poor macroeconomic management, the adoption of sounder macro-financial policies may be sufficient to discourage capital flight and thereby reverse the pressures that led the parallel rate to deviate from the official rate in the first place. However, where a supply shock gave rise to a long-term, or permanent worsening in the terms of trade – such as a dramatic fall in a commodity price due to technological change and redundancy – exchange rate unification is likely to involve more substantial costs. In such cases the post-unification exchange rate is likely to be closer to the most depreciated (parallel) rate, rather than the official rate. This is because the demand for basic imports is usually quite inelastic and there is also typically a lag in the response of exports to a more competitive exchange rate. In South Africa, for example, many exporters noted that it can take up to three years to be listed on approved supplier lists in some countries tends to take time to materialize. That is – in part – why successful export development requires a relatively stable domestic demand base, as well as a longer term commitment on the part of producers to the export market. It is also the reason why the various conditions necessary for successful exchange rate unification need to be acknowledged and addressed prior to, and in conjunction with, unification.

It can be argued that the *status quo* in Angola is the cumulative result of longer term demand shocks, as well as a more recent supply shock linked to the extended fall of the oil price. While the latter has shown some sign of recovery over the past year, the longer term prognosis for the oil price must still be viewed negatively. In its latest World Economic Outlook, the IMF forecasts that crude oil prices will fall back to between US$53 and US$55/barrel for the next 5 years (till 2023). Angola therefore needs to pursue exchange rate unification irrespective of the oil price, and to use the gains arising from the higher oil price to actively support economic diversification sooner, rather than later.

6.4 Possible alternatives to the adoption of an "investment kwanza"

Like Angola, Cuba has an official exchange rate, and a parallel exchange rate that trades at an even more pronounced discount[4]. While there is official recognition of the damage that this discount/premium causes to the economy, Cuban authorities have been reluctant to pursue currency unification because of the extent of the adjustment that will be required. de la Torre and Ize (2014) argue that a "*successful transition strategy should thus pursue two objectives. First, to limit the short-term pains until efficiency gains materialize and come to the rescue. Second, to boost the pace at which such efficiency gains materialize*." They identify four "typological" options.

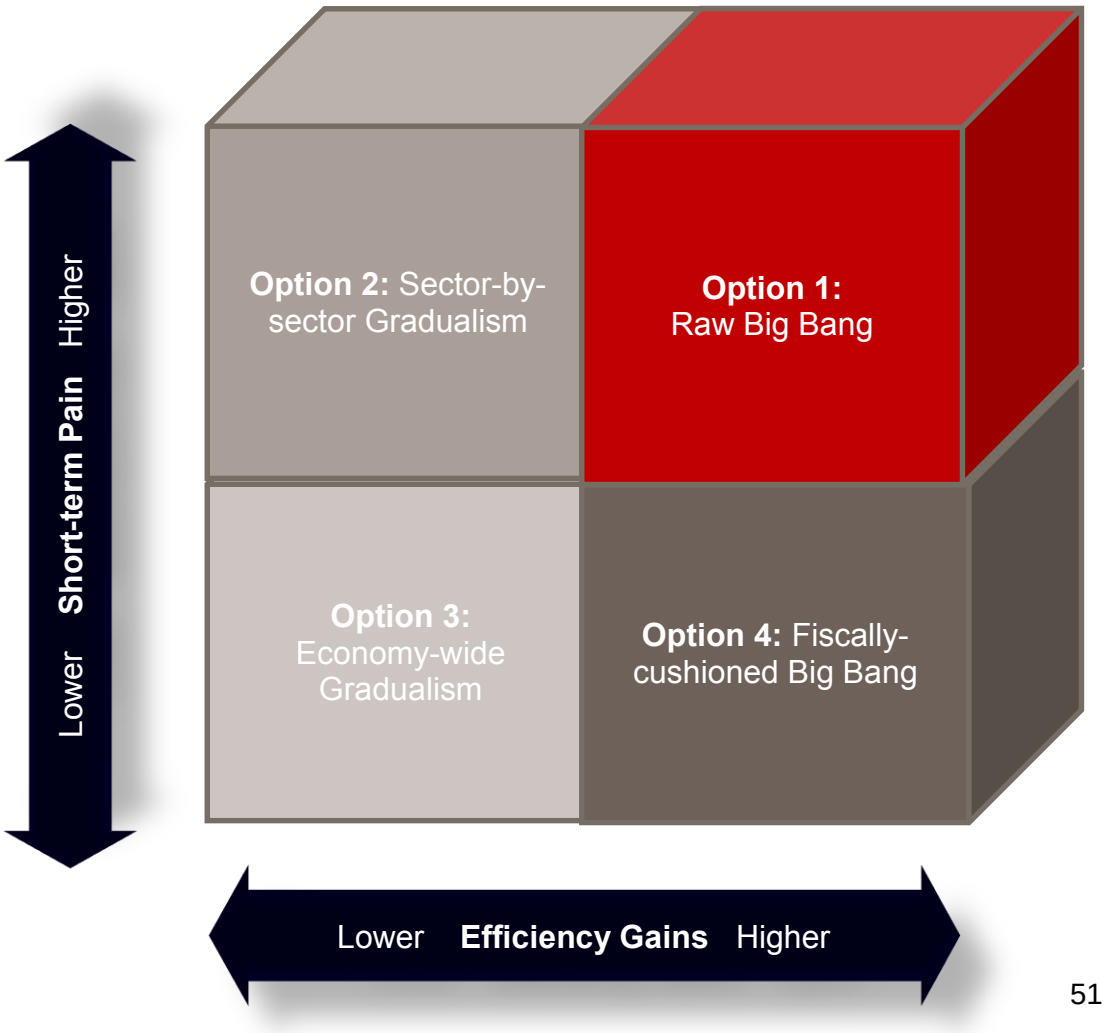
[4] In July 2018, the Cuban peso traded at 24/US$, while the convertible peso was pegged at 1/US$.

i) A “raw big bang” where rates would be unified at the parallel rate on day one. This has the advantage of simplicity and maximises efficiency gains, but does nothing to limit the pain in the short term.

ii) “Sector-by-sector gradualism”, which seeks to gradually depreciate the official rate towards the parallel rate on a sector-by-sector basis. This carries less pain than option 1, but also dilutes potential efficiency gains.

iii) “Economy-wide gradualism” characterised by a preannounced path of gradual convergence of the official rate toward the parallel rate that applies uniformly to all sectors, actors, and activities in the economy. Is less traumatic than option 1 and cleaner and less prone to distortion than option 2, but will not generate the efficiency gains of option 1.

iv) A “fiscally-cushioned big bang” that would see the two exchange rates being unified at the outset at the parallel rate. To mitigate the initial pain, the shadow taxes and subsidies implicit in the dual exchange rate would be replaced by explicit, revenue neutral, non-distortionary *lump-sum* taxes and subsidies that would initially see exchange rate beneficiaries having their gains taxed away, and losers subsidised to the full extent of their losses. These taxes and subsidies would be phased out over a period of four years following unification. This carries substantially less pain than option 1, but should generate greater efficiency gains from the outset than options 2 and 3. It will, however, be more complex to administer and coordinate.



6.5 Conclusion

The dual exchange rate regime that is currently in place in Angola works against the country's long term economic interests by subsidising imports and reducing prospects for diversification of the economy, efficiency gains, and export and employment growth. Unification of the official and parallel exchange rates must, therefore, be a priority of the new government. However, given the discount that the market-determined parallel exchange rate currently trades at to the official exchange rate, the process of unification is likely to be disruptive and to inflict pain on many sectors of the Angolan economy. The adoption, and correct sequencing, of a range of necessary supportive measures could reduce the adjustment costs associated with unification without necessarily undermining and delaying needed efficiency gains.

While the introduction of an official "investment kwanza" could be used as a transitional policy instrument to attract additional capital to Angola, there are a number of preconditions if it is to achieve its objective. These include:

- Establishing a clear timetable towards exchange rate unification and clearly articulating the role of the "investment kwanza" as a transitional instrument within the unification context.
- Supporting exchange rate unification with confidence-building policies and measures that are effectively communicated to local and international investors.
- Ensuring that capital inflows that arise from the favourable exchange rate regime are successfully channelled into infrastructure and investment that serves to diversify the economy away from its current dependence on oil and gas.
- Phasing interventions to ensure that new production capacity is supported by both growing domestic demand and exports. This should include a clear timeline and conditions for the phasing-out of the "investment kwanza" so that it does not serve to undermine localisation and export diversification.

A generally supportive global and regional economic environment that supports both capital attraction and subsequent export growth will make it easier to pursue the above objectives.

There are a number of alternative processes to achieve unification. Some analysts suggest that a "fiscally-cushioned big bang" offers the best potential for both limiting the short-term pain, and ensuring that the efficiency gains that can be derived from unification are enjoyed as quickly as possible. In this context, the potential for an "investment kwanza" to contribute meaningfully to a smoother, less painful transition is relatively limited. Judicious use of transparent tax incentives and grants, coupled with a clear policy and timetable for exchange rate unification, could achieve similar and, even better, outcomes with less complexity and "noise".

7. Possible areas in which to focus economic diversification efforts

A common element of much of the preceding analysis relates to the urgent need for Angola to diversify its economy away from a stifling dependence on oil and gas (and to a lesser extent diamonds). An attempt to identify product categories with a revealed competitive advantage proved unsuccessful because – outside of oil, gas and diamonds, Angola's export performance is so limited and so erratic as to make such an analysis meaningless. A more fundamental approach is to identify sectors and economic value chains where the country has the potential to develop local capacity relatively easily, and that can serve as stepping stones to more advanced processes. Ideally, they should also be sectors with relatively low barriers to entry that can benefit significant numbers of Angolans economically and socially. Two major value chains are consistent with these objectives:

i) Agriculture and agro-processing; and

ii) Housing construction.

7.1 Understanding economic value chains and multiplier effects

Activities in an economy are linked. The sales of a producer in one sector necessitate not only the coordination of production factors within that firm, but also the purchase of inputs from "upstream" suppliers in other sectors of the economy. The products sold may, in turn, be in their final form and be used to satisfy final demand (from household or government consumption, or capital formation, or constitute an intermediate input into another "downstream" production process. Because of these linkages it is possible to discern a number of distinct effects that arise from a sales "stimulus" in a particular sector, namely:

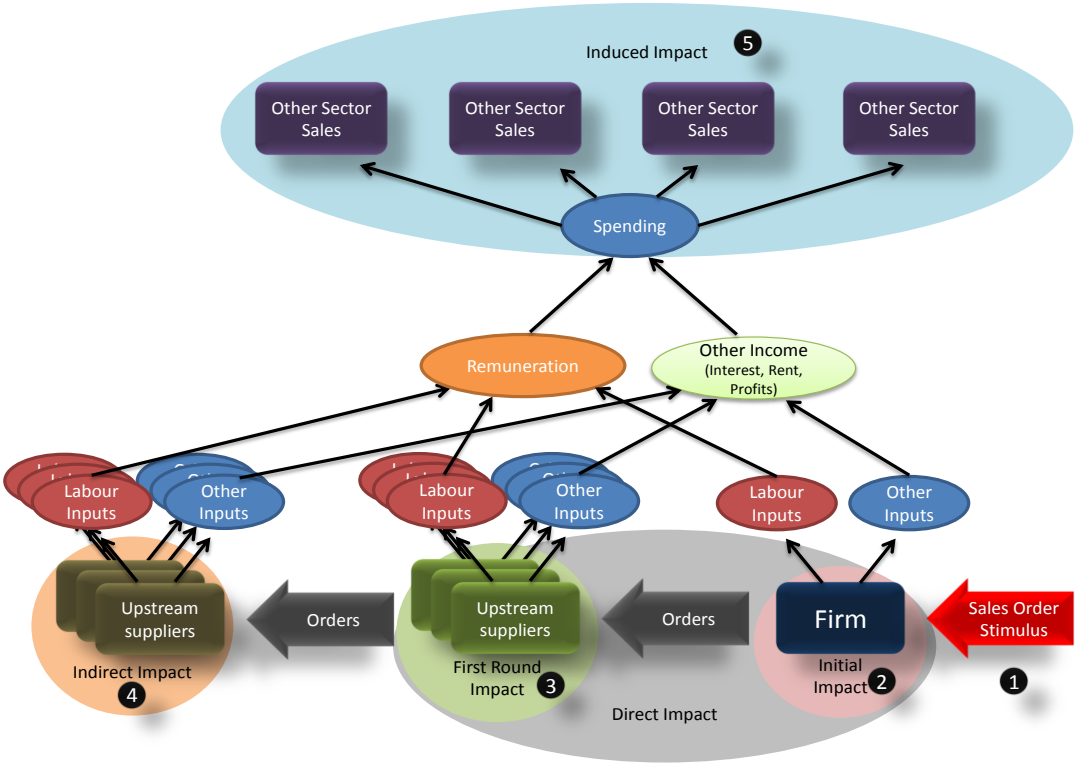
i) An ***initial impact*** that relates to the value creation process within the firm receiving the sales order; and

ii) A so-called ***first round effect*** that arises from the orders that the producing firm places with its direct suppliers in order to fulfil the sales order.
Together i) and ii) above constitute the ***direct impact*** of the initial stimulus.

iii) Those suppliers, in turn, place additional purchase orders with their upstream suppliers. This gives rise to an ***indirect impact*** of the initial sales stimulus.

iv) The incomes derived by the owners of the different factors of production (wages, interest, rent and profits) as a consequence of the different impacts described in i), ii) and iii) above may then be either spent or saved. As a consequence, the sales in numerous other sectors of the economy will increase. This is regarded as the ***induced impact***.

Fig 27: The different multiplier effects generated in an economy in response to a sales stimulus

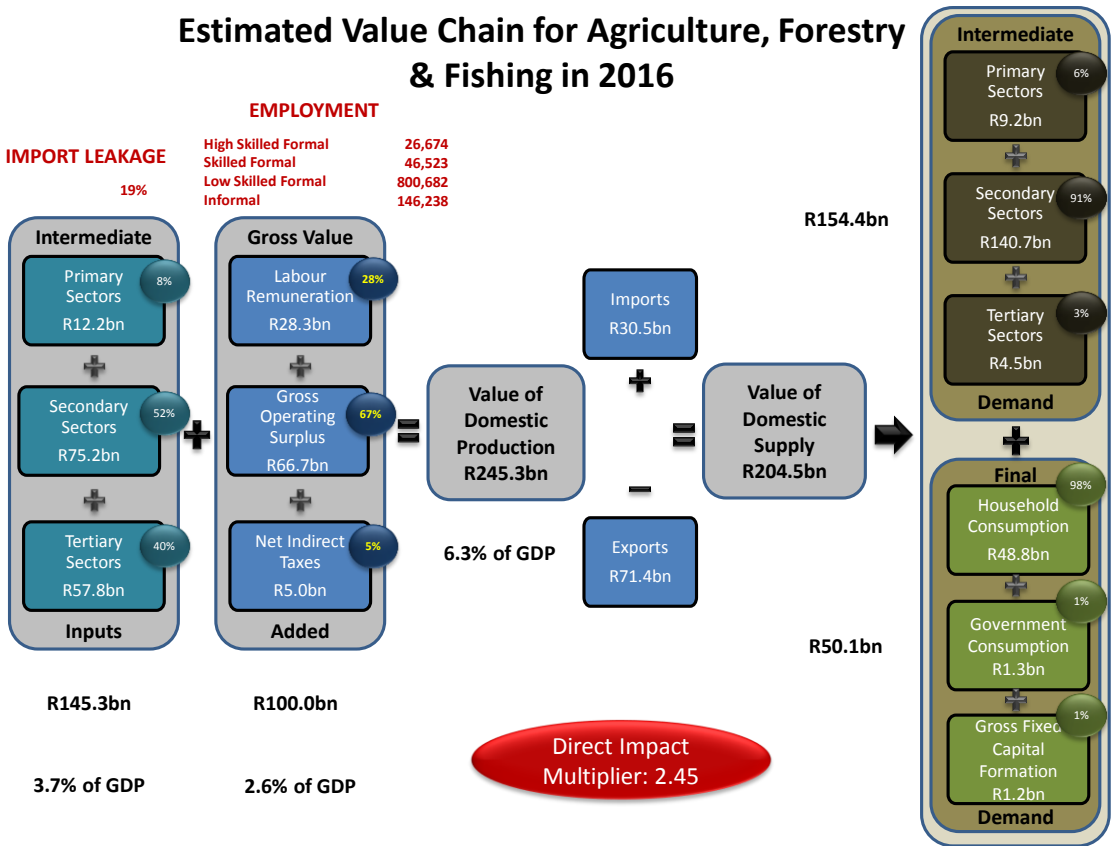


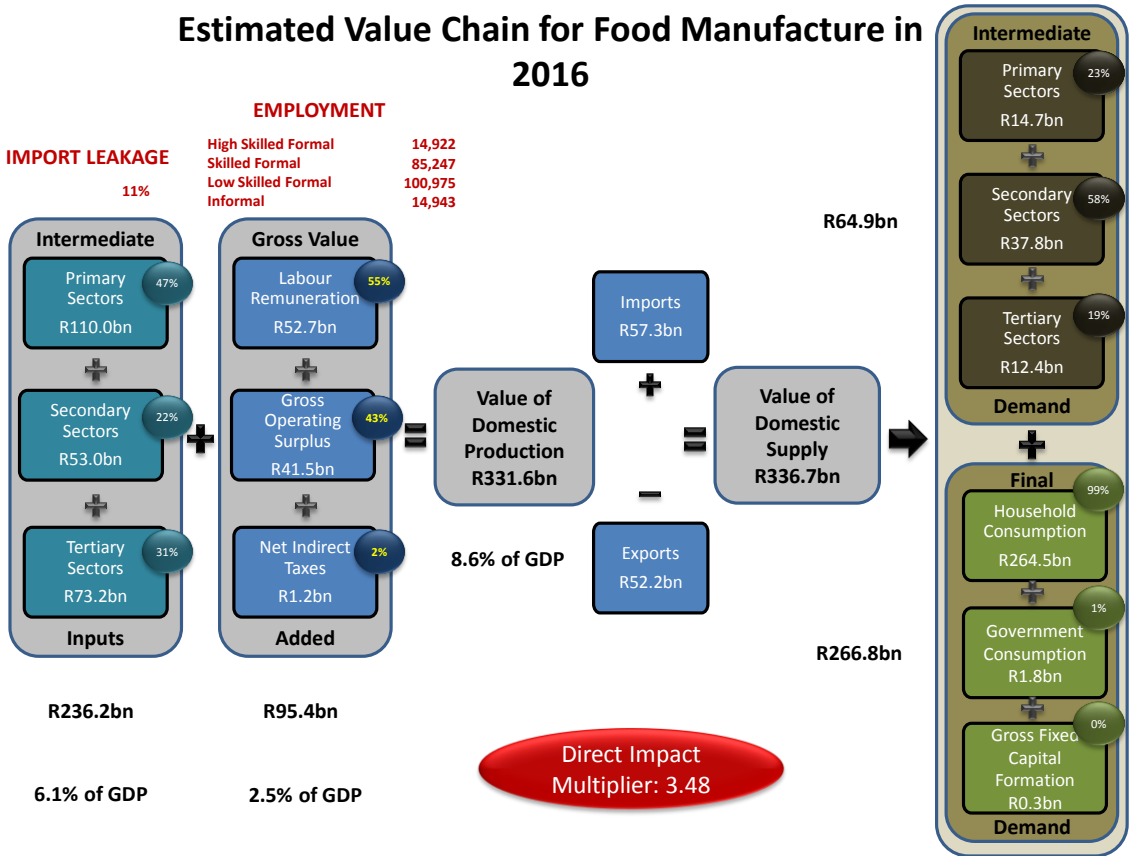
7.2 Agro-processing and housing construction value chains

The linkages between different economic sectors can also be captured in economic value chains that illustrate the relationships between focus sectors and their upstream suppliers and downstream customers. The figures below illustrate the economic value chains for agriculture, forestry and fishing (top) and food manufacture (bottom) in South Africa in 2016.

The following should be noted:

- Both activities have relatively low import leakages, which contributes to relatively high direct output multipliers. The strength and self-sufficiency of the agriculture, forestry and fishing sector reduces the import leakages of the food manufacture sector.
- Collectively, the two sectors accounted for 5.1% of South Africa's GDP and for sales of close to R577bn in 2016.
- The two sectors have very different employment profiles: Agriculture, forestry and fishing has a high dependence on low-skilled formal and informal employment, while food manufacture has a relatively higher skills profile. Collectively, more than 1.2 million people are employed in the two sectors.





The above value chains do not reflect the current situation in Angola, but they do provide a perspective of the potential of agro-processing in a country that has long been regarded

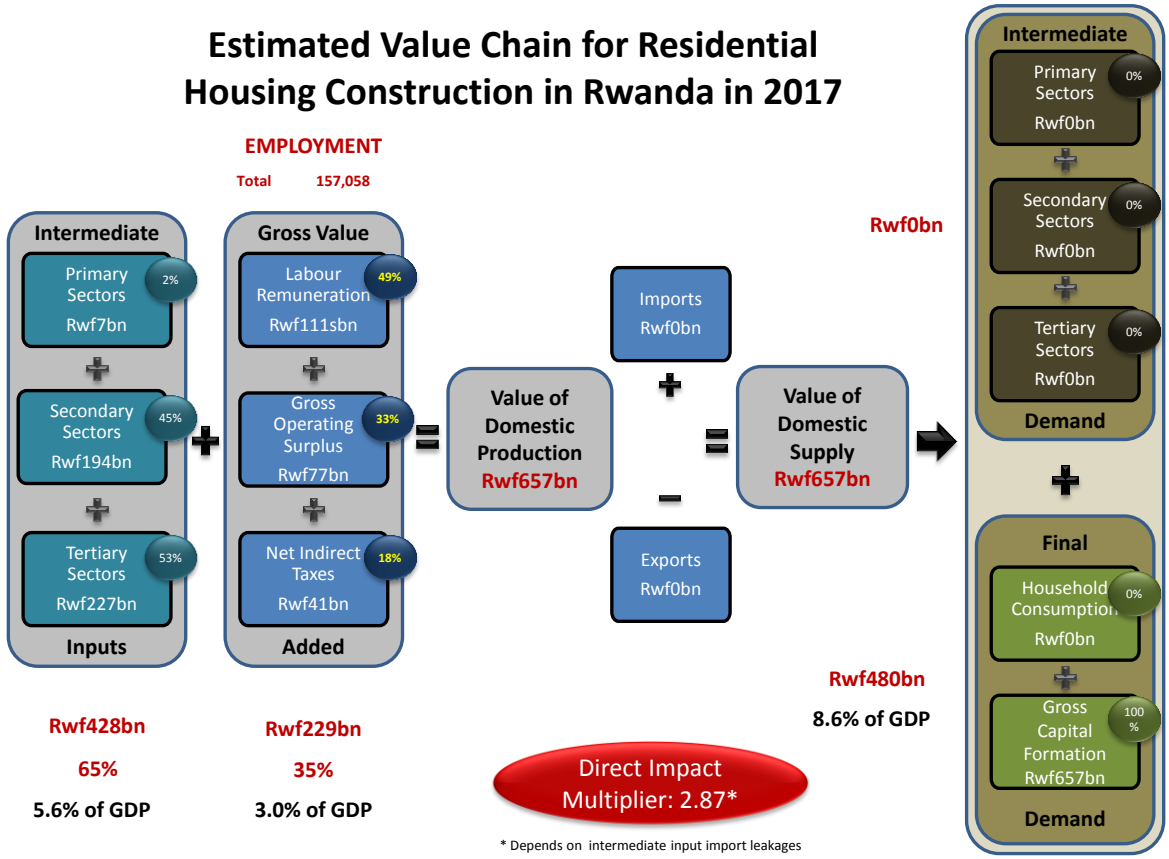
as a potential “bread-basket” of Southern Africa. Unlocking that potential requires a conducive policy environment, investments in the necessary economic and social infrastructure, and mobilising private and institutional investment into diverse agro-processing operations. The South African example suggests that every Kz1 million in investment that Angola manages to attract into agriculture, forestry and fishing could generate Kz5 million in gross value added (GVA) and more than Kz12 million in sales. In the case of food manufacture, every Kz1 million of investment should support more than Kz6 million in GVA and more than Kz22 million in sales.

Another value chain that is generally well suited to localisation in Africa is residential housing construction. This not only gives rise to direct contributions to the GDP at the time of construction, but the resulting stock of housing also gives rise to the ongoing potential for a range of real estate activities, including rental income streams. The United Nations[5] projects that Angola’s urban population will increase from around 11 million in 2017 to almost 19 million in 2030. In many rapidly-growing African cities the majority of the population rents – rather than owns – their accommodation. This is partly driven by affordability factors, but also by the fact that first generation city dwellers often still have strong cultural and ownership ties to rural land.

However, studies by the Centre for Affordable Housing Finance in Africa (CAHF) suggest that many African economies have a poor understanding of what constitutes affordable housing, and often adopt policies that favour large-scale multinational developers – rather than smaller local ones. This, combined with inappropriate housing standards often results in higher import leakages and houses that are less affordable to the local population. According to the CAHF dashboard, a US$25,000 house would be affordable to around 27% of urban households in Angola - given prevailing incomes and mortgage rates. A US$50,000 house would only be affordable to around 10% of urban households.

The figure below – which reflects the estimated housing construction value chain for Rwanda – indicates a comparatively high direct impact multiplier, with strong linkages to many other sectors of the economy and comparatively low import leakages, and a relatively high contribution to the GDP. Appropriate policies that draw in local developers in a range of housing options with varied affordability that is matched to the population’s means can stimulate a many local manufacturing and other sectors. Once again, this value chain is presented to illustrate the potential of residential housing construction to diversify and boost Angola’s economy. In South Africa, every R1 million investment in the fixed assets of construction firms supports R19 million of GVA and more than R43 million of sales in the economy.

[5] United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, CD-ROM Edition.



7.3 Conclusion

The much-needed diversification of the Angolan economy should begin with a sober assessment of those sectors and value chains that are best suited to Angola's current stage of development, skills and potential. Agro-processing and housing construction appear to be well suited because of their localisation and (in the case of food manufacture and building materials) export potential. Attracting investment to these value chains could provide substantial stimulation to the Angolan economy, provided that it supported by the necessary economic and social infrastructure and coherent and transparent policy frameworks.