

MACROECONOMICS, TRADE AND INVESTMENT | FINANCE

**EQUITABLE GROWTH, FINANCE & INSTITUTIONS INSIGHT**

# Uganda Oil Revenue Management

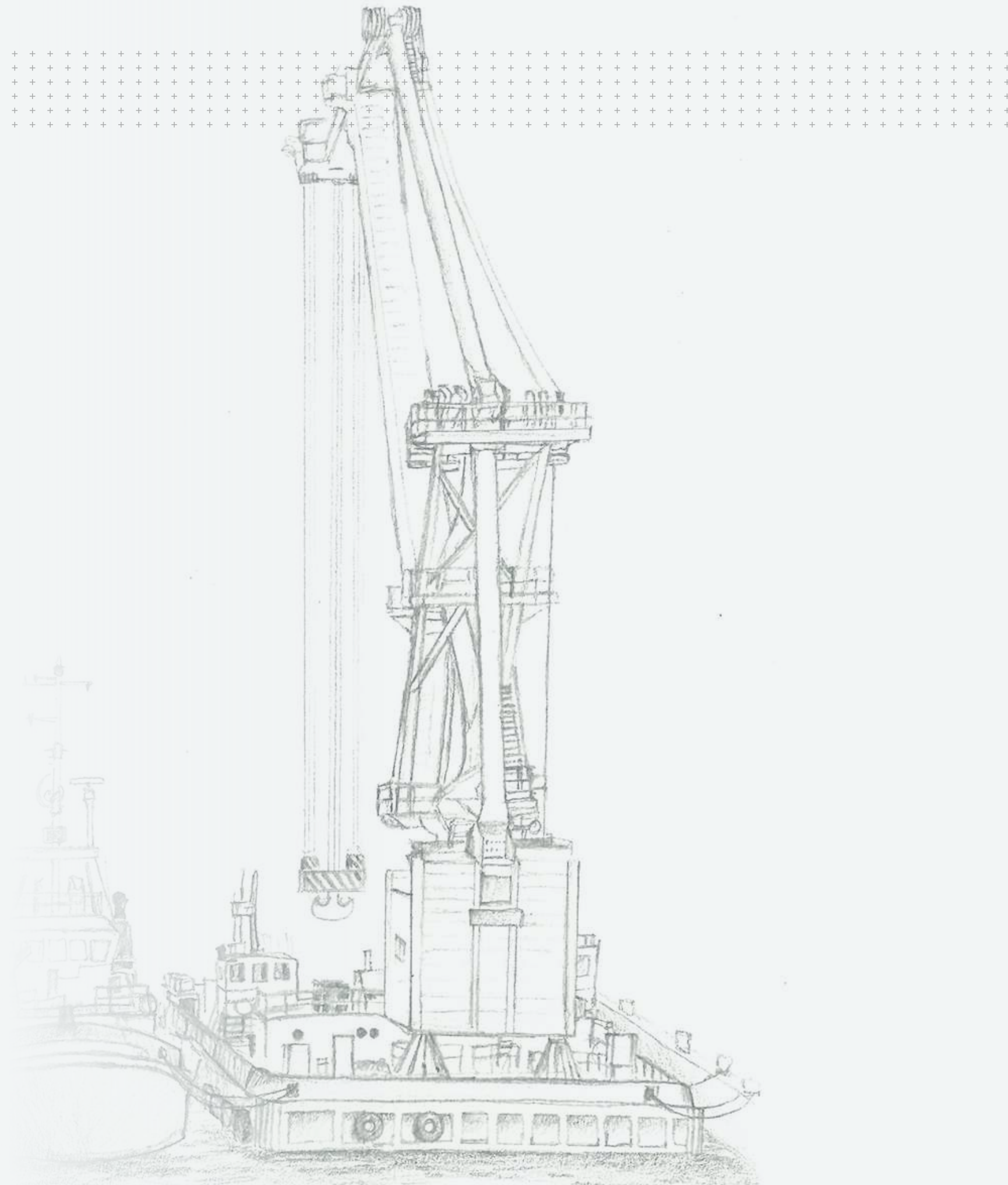
Closing Gaps in the Fiscal and  
Savings Frameworks to Maximize Benefits



# UGANDA OIL REVENUE MANAGEMENT

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Closing Gaps in the Fiscal  
and Savings Frameworks  
to Maximize Benefits



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# Acknowledgments

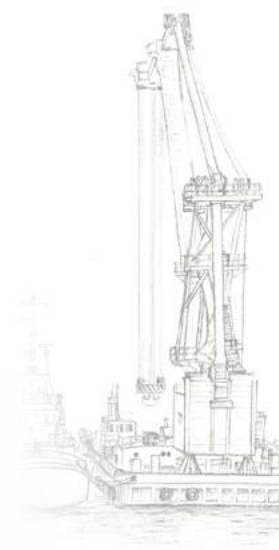
This paper is a team effort of several World Bank Global Practices, including Macroeconomics, Trade and Investment; Finance, Competitiveness and Innovation; and Governance.

The paper was prepared by Rachel Kaggwa Sebudde and Ekaterina M. Gratcheva, with contributions from Emiko Todoroki, Ernest Wasake, and Moses Kajubi. The team is grateful to Philip Schuler for technical guidance, as well as to the peer reviewers, including Stefano Curto (Senior Economist, GMTLC), Yue Man Lee (Senior Economist, GMTA1), Shanti Divakaran (Senior Financial Sector Specialist, EFNTL), David Santley (Senior Petroleum Specialist), and Lawrence Kiiza (former Director of Economic Affairs, Ministry of Finance, Planning and Economic Development, Uganda). Abebe Adugna (Practice Manager, Macroeconomic and Fiscal Management), Anderson Caputo (Practice Manager, Finance, Competitiveness and Innovation—Long Term Finance), and Antony Thompson (Country Manager) provided overall guidance on the project.

The paper benefited from consultative discussions with key stakeholders in the oil sector in Uganda. The team is grateful to insights on the oil sector from officials who met during two joint Macroeconomics, Trade and Investment and Finance, Competitiveness and Innovation team missions conducted during May and July 2019. During those missions, the team and key stakeholders discussed the developments and status of Uganda's oil sector and plans for oil revenue management. These stakeholders included Robert Kasande

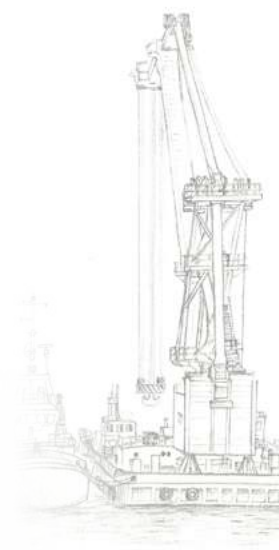
(Permanent Secretary), Honey Malinga (Commissioner for Petroleum Exploration Development and Production), and other staff of the Ministry of Energy and Mineral Development; Liz Adukule Mugisha and Felix Okot of the Petroleum Authority; Emmanuel Mugagga and Michael Nkambo Mugerwa of the Uganda National Oil Company; Phillip Wabulya, Peter Rumanzi, and Martha Kiiza of the Petroleum Investment Fund in the Bank of Uganda; Michael Aliyo and the macroeconomic team from the Ministry of Finance, Planning and Economic Development; and members of the Investment Advisory Committee, including Samuel Sejjaaka (Chairperson), Joseph Muvawala (member and executive director of the National Planning Authority), Lawrence Semakula (member and Accountant General, Ministry of Finance, Planning and Economic Development), and Jennifer Muhuruzi (Acting Director Treasury and Asset Management, Ministry of Finance, Planning and Economic Development). Godfrey Akena, Partner at ABMAK Chambers, provided useful insights on the private sector perspectives and taxation issues in the oil sector.

The team met Norway's Oil for Development Program representative to Uganda (John Age Haugen), from whom the team learned that Norway provides support to the government of Uganda by sharing Norway's experience with managing its oil resources (through relevant practitioners from Norwegian agencies). Specific to oil revenue management, the program of support includes providing advice on forming fiscal rules.



## Abbreviations and Acronyms

Bbl	Barrel of Oil
BOB	Bank of Botswana
BOG	Bank of Ghana
BOU	Bank of Uganda
BWB	Botswanan Pula
CAPEX	Capital Expenditure
CFR	Charter of Fiscal Responsibility
CNOOC	China National Offshore Oil Corporation
EA	Exploration Area
EM	Emerging Market
FX	Foreign Exchange
FY	Fiscal Year
GDP	Gross Domestic Product
GIA	Government Investment Account
GPFs	Ghana's Petroleum Funds
GRB	Government of Botswana
HOGL	Heritage Oil and Gas Limited
IAC	Investment Advisory Committee
IOC	International Oil Companies
IMF	International Monetary Fund
KFDA	Kingfisher Development Area
LCT	Low-Carbon Transition
MEMD	Ministry of Energy and Mineral Development
MOFPED	Ministry of Finance, Planning and Economic Development
NDP	National Development Plan
NPC	National Pipeline Company
PFM	Public Finance Management
PRIR	Petroleum Revenue Investment Reserve
PSA	Production-Sharing Agreement
SWF	Sovereign Wealth Fund
UCF	Uganda Consolidated Fund
UNCITRAL	United Nations Commission on International Trade Law
UNOC	Uganda National Oil Company
URA	Uganda Revenue Authority
UST	U.S. Treasury



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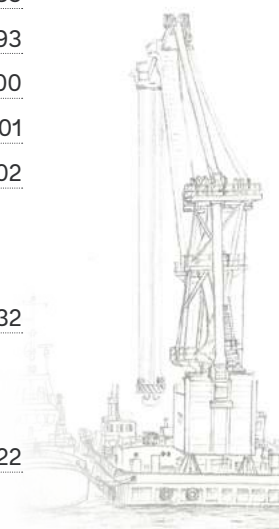
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# EXECUTIVE SUMMARY



Pump jack mining crude oil near Lake Albert, Uganda

**Prudent management of Uganda’s oil resources can significantly accelerate the pace of the country’s economic growth and development in Uganda, although the global COVID-19 pandemic has changed the present context for investment in Uganda’s oil sector.** In the short term, the activities supporting oil production, which had been optimistically expected to start around 2024, have been a key driver of the anticipated growth acceleration. Over the longer term, the benefits from oil production will depend on a range of factors, most important, how the country manages its oil revenues. Exogenous factors like the collapse in world oil prices in early 2020 and the COVID-19 related global recession in 2020 delayed the timing of investments in Uganda’s oil sector, but the delays also provided the opportunity for the government to improve the framework for managing oil revenue.

**With 1.38 billion barrels of recoverable oil reserves, Uganda may not be among the world’s top large oil producers, but the benefits to the economy are potentially large, directly through revenues, investments, exports, and the wider links to the economy.** Uganda’s recoverable oil reserves can support the invested potential of 260,000 barrels per day for about 15 years, a volume and duration far below those of Africa’s large oil producers, such as Nigeria and Angola. However, at its peak production, Uganda’s oil revenues would be enough to offset the current external financing, averaging 3 to 4 percentage points of gross domestic product (GDP); to expand the country’s exports by 5 percentage points of GDP; and to almost double the country’s current rate of economic growth.

**However, the benefits are neither automatic nor guaranteed, as they depend on whether the oil is taken out of the ground and if the resulting revenues are managed well.** Three crucial factors underly the amount of revenue that Uganda can realize from its reserves: the timing of investments, the capacity to extract the planned volumes of oil production, and the international price of oil, which, if it is too low, could deter investment prospects owing to reduced profitability. It is the strength of institutions and policies across the entire value chain for managing the oil revenues that will eventually determine the scope of benefits to the country and the general population.

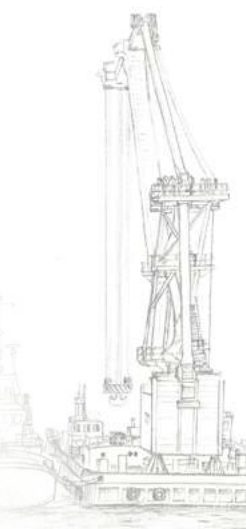
**Uganda has built a diverse institutional framework for managing its oil resource, but the country needs to improve coordination to avoid duplication and promote efficiency, including managing contingent liabilities that may arise from state-owned enterprises.** The wide-ranging legal, institutional, and policy reforms undertaken since 2006 have resulted in a sophisticated structure of accountabilities and flow of responsibilities underpinned by several laws and policies overseen by the Parliament (see figure ES.1). To date, most of the activity is by the institutions that are responsible for exploration and production, including the Ministry of Energy and Mineral Development, the Petroleum Authority of Uganda, and the Uganda National Oil Company. The closely related, sometimes overlapping mandates across these institutions call for more coordination to ensure efficiency in delivering outcomes. Moreover, the management of these state-owned enterprises needs to be closely monitored to avoid a buildup of contingent liabilities.

**On the other end of the spectrum of oil resource management are the institutions for macroeconomic, public finance, and savings management, which are mainly built on their traditional mandates.** These include (a) the Uganda Revenue Authority, mandated to collect all the oil revenues; (b) the Ministry of Finance, Planning and Economic Development, mandated to incorporate oil revenues into its policies and frameworks for ensuring economic stability and development; and (c) the Petroleum Revenue Investment Reserve (PRIR), under the auspices of Bank of Uganda, mandated to invest the savings for intergenerational equity transfer in a sovereign wealth fund (SWF) structure. In addition

to this institutional setup, investments have been made in critical infrastructure, particularly roads, to support oil production and its commercialization.

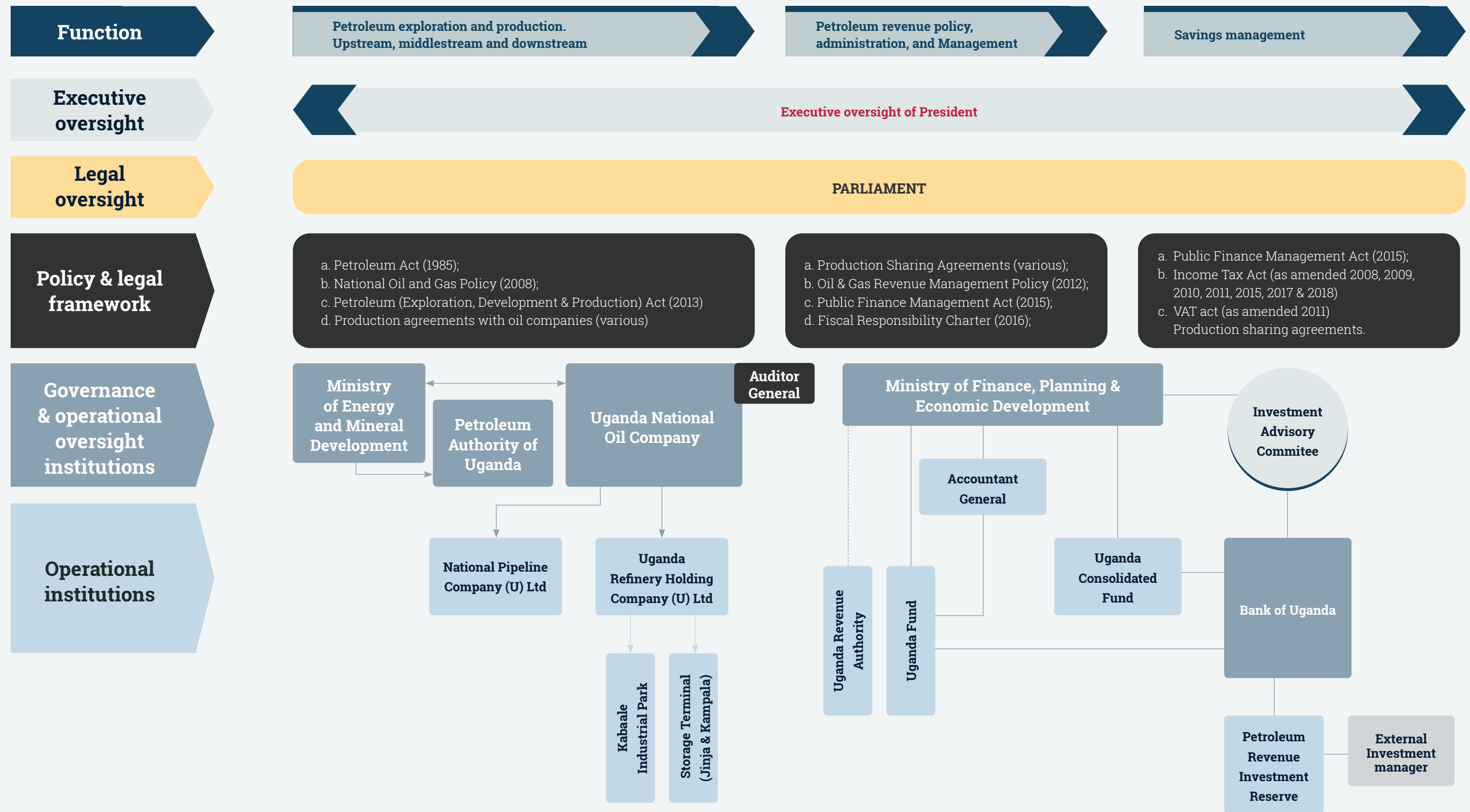
**Despite the creation or functioning of these institutions, Uganda has not moved into oil production, although commercial oil reserves were confirmed in 2006.** Protracted negotiations and deliberations on critical investment decisions, such as for production infrastructure (refinery and pipeline), partly stemmed from gaps in coordination and implementation capacity—like what is observed in other projects in the country. In addition, the oil taxation regime has faced implementation challenges, some of which arose from numerous legislation changes, with severe implications for investment decisions and the stability of the fiscal regime provisions. The breakdown of Tullow Oil’s farm-down agreement on August 30, 2019, created unprecedented uncertainty about the prospects of Uganda’s oil, as investment decisions were pushed further into the unknown future.

**When the COVID-19 pandemic subsides, the first and immediate priority for the government of Uganda is to streamline decision making in the oil sector, being cognizant of the increasing risk of Uganda not being able to engage in oil production, as the country continues to push its production time line forward.** The COVID-19 pandemic—combined with the drastic changes in oil prices—is likely to affect key investment decisions into the oil sector in Uganda (and may reduce levels of investment), thus pushing back further the timing of oil production. Meanwhile, the government could use this time to address many of the problems and gaps associated with the regulatory framework, fiscal regime, and oil fund management that the paper highlights. Once markets stabilize and economic conditions are more favorable, the government could then quickly move to reach its final investment decision and get back on track to start production. Prolonged delays have perverse effects on investor sentiments. In addition to the oil industry’s supply-driven price volatility, the risk of downward price pressures, underpinned by changes in the global environment (including climate change and the COVID-19 pandemic shock) that are driving a transition into clean technologies, could make Uganda’s oil production project too risky a venture for prospective investors.



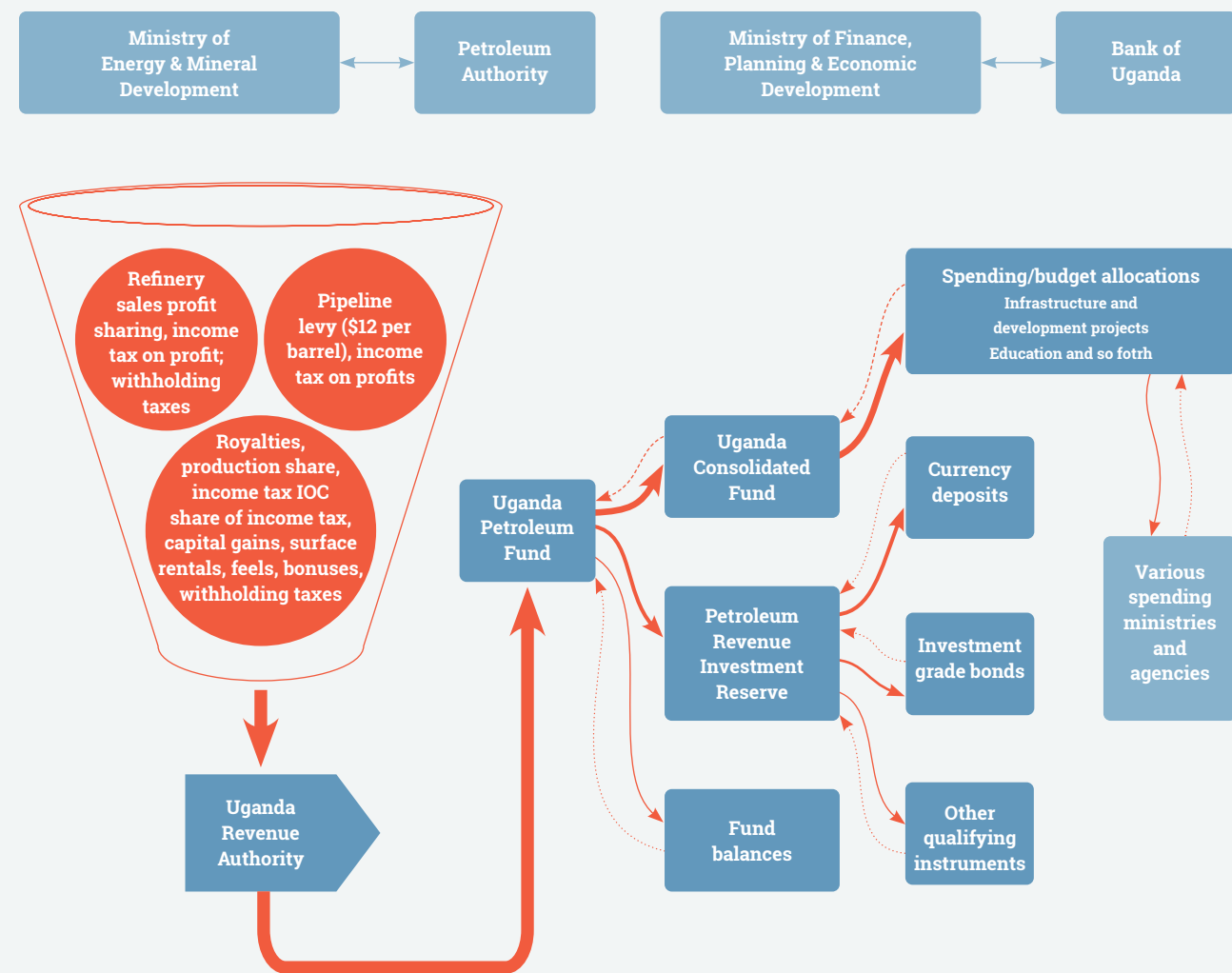


**Figure ES.1:**  
Institutional Arrangements for Managing Petroleum Revenues in Uganda



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**Figure ES.2:**  
Envisioned Flow of Funds for Petroleum Revenues in Uganda



**Fiscal policy provides the cornerstone for ensuring that oil revenue management contributes to Uganda's economic development.** Production-sharing agreements and the Public Finance Management (PFM) Act 2015 establish a framework for how oil revenues will flow through responsible institutions (see figure ES.2). But the framework for decisions on how much oil revenue to spend and when to spend it versus how much and when to save it is nonexistent. Without this framework, the Petroleum Fund's sustainability and the ability to maintain the country's net worth as it depletes its natural assets are severely undermined.

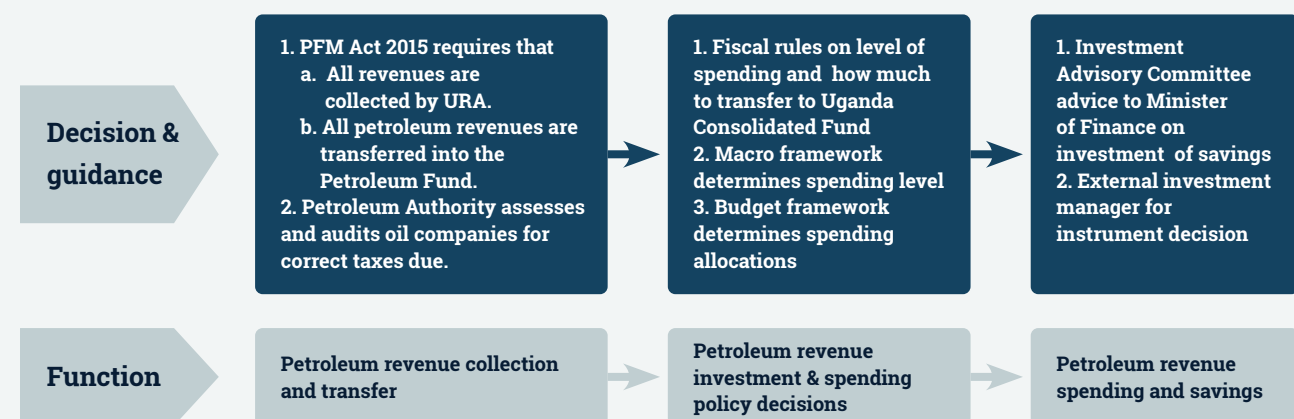
**Natural resource revenues present unique challenges for fiscal policy that require stringent fiscal rules on levels of spending and saving.** These challenges include (a) the volatility and uncertainty of oil revenues, (b) how to balance expected returns on investing domestically compared with accumulating (foreign) financial assets, (c) the absorptive capacity of the public sector and the economy at large to take on accelerated investments, and (d) the volume and time line of oil revenues before being depleted. Although additional revenues are estimated to average about 3 to 4 percent of non-oil GDP per year over the duration

for which Uganda will be producing oil, the year-to-year revenue flows will depend on the path of production and price. At the peak of production, which is expected to be about five years after the start of production, revenues could reach 9 percent of non-oil GDP. An effective fiscal management framework requires clear targets and fiscal rules to determine how much to spend and save, as illustrated in figure ES.3. Uganda currently lacks these targets and rules.

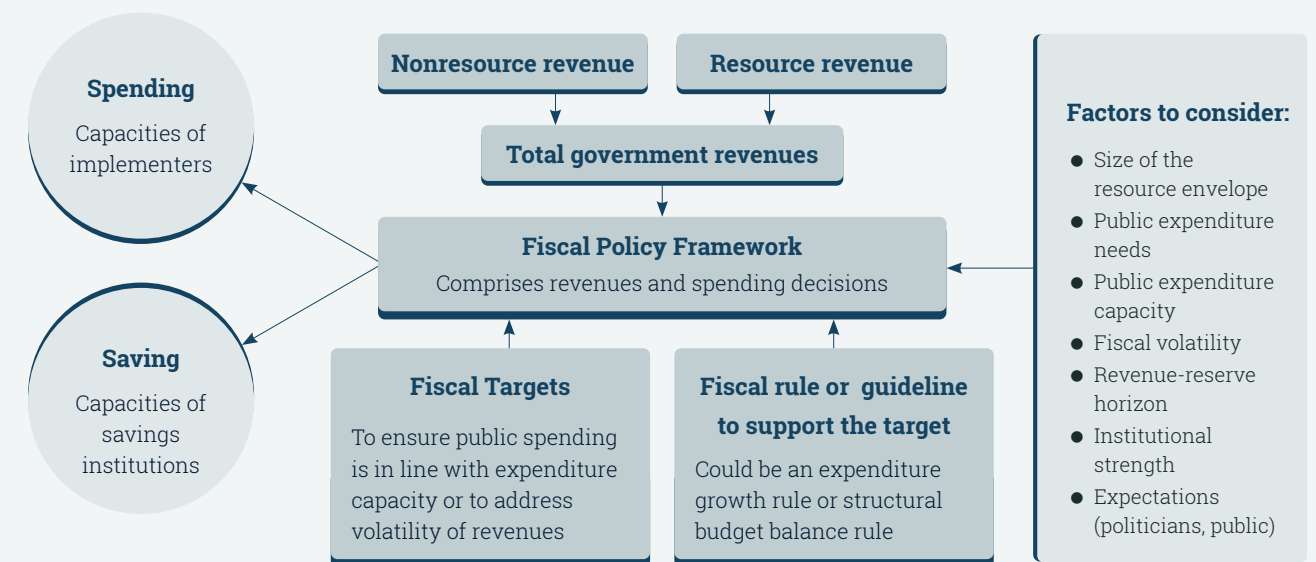
**Uganda's Charter of Fiscal Responsibility (CFR) introduced some form of fiscal rules, yet its implementation reveals gaps.** Whereas the current CFR sets boundaries for fiscal policy over five years, it is not binding—even if the current economic shocks related to COVID-19 had not hit Uganda, the fiscal targets for fiscal year (FY) 2021 were not likely to be met. The CFR (a) covers a period of five years—which contradicts the provision of three years under the PFM Act and is abundantly flexible—with only one end target, (b) includes ambiguous clauses for departure from the rule, and (c) has weak incentives for adhering to the rule.

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**Figure ES.3:**  
Conceptual Framework for a Fiscal Policy Framework in a Resource-Rich Country



Source: World Bank staff illustration.



Source: Adapted from World Bank 2014.

Finally, although resource funds hold considerable promise, international experience has been mixed, and the advantages of resource funds appear to be largely contingent on the underlying quality of national and fund governance. Several risks are involved in resource funds, particularly in weak governance environments, that can prevent even a fund with a sound governance structure and professional investment management from maximizing the benefits of resource extraction. Some funds fail because of inefficient fund management, in which suboptimal investments, in some cases motivated by political objectives or personal gain, reduce the value of returns. Others fail because of direct and indirect raiding of the fund, whether through misuse of funds or by allowing the fund to effectively underwrite unsustainable fiscal policies. Uganda has already set up institutions to manage the savings component of the oil revenue strategy in the PRIR. But this setup, governance, and investment framework require significant adjustment for the PRIR to fulfill its intended purpose.

Countries that establish SWFs typically follow a systematic, sequential process to put in place a system to manage commodity-related revenue. A successful process involves extensive stakeholder consultations, policy development grounded in empirical analysis, passing of relevant legislation and related acts, and subsequent implementation of institutional arrangements and operational management. In Uganda, selected operational assets of the national SWF have already been set up and are functioning—such as the Petroleum Fund Department in the Bank of Uganda since 2015 and the Investment Advisory Committee since 2019—while critical policy design that will affect the overall profile of the fund once the revenue starts flowing into it is still being developed.

The current setup of the PRIR may not be sustainable, given the contradictions and various interpretations of its objective by those engaged in its policy development and operational management. The current operational setup is based on the Oil and Gas Revenue Management policy that was approved in 2012, under a domestic and global environment that was considerably different from the currently more constrained environment. Furthermore, the

understanding and interpretation of the nature of the fund and its objectives differ significantly across different agencies. If the status quo remains, and the government of Uganda continues to implement the SWF as is defined in the current legislation, then the SWF setup will likely be unsustainable or ineffective, as evidenced by international experiences of managing commodity-related revenues across different contexts.

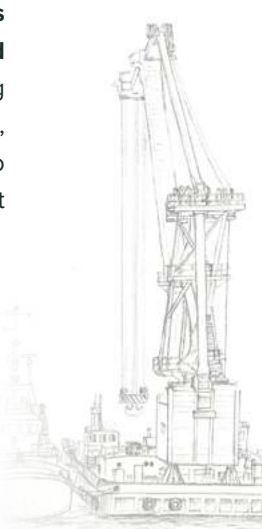
**Reforms that close the gaps in the fiscal and oil revenue management frameworks would help Uganda manage its oil resource more effectively.** Drawing on global experience, the paper’s recommendations are as follows:

- a. **Adopt clear fiscal rules to guide decisions about spending and savings.** This action requires adopting a set of rules to create a fiscal sustainability framework that will allow scaling up of public investments, consistent with the country’s needs and absorptive capacity. The fiscal targets and fiscal rules will provide a realistic expenditure path, consistent with macroeconomic stability, absorptive capacity, and the volatility of the revenues. The fiscal sustainability framework must be followed with a mechanism for its enforcement, including ensuring adherence to the fiscal rules and expenditure targets, with realistic penalties to minimize political interference. This reform will require amending the PFM Act to incorporate these requirements.
- b. **Enhance the transparency of oil revenue management and the fiscal sustainability framework.** This enhancement will require adopting and publishing a framework for determining the size and variability of oil revenues, considering the uncertainty about production, price, and other factors. Building on the recent improvement in budget transparency and the important steps Uganda has taken toward its membership in the Extractive Industries Transparency Initiative, Uganda must consistently provide and engage the public on key information related to fiscal management, including the size and expected volatility of oil revenues; the key variables of fiscal management, including fiscal targets and fiscal rules; and areas of investment of the oil revenues. The aim will be to increase transparency

around oil revenue management, to anchor public expectations and to raise awareness on key challenges in oil revenue management.

- c. **Update the 2012 Oil and Gas Revenue Management Policy to reflect prevailing market expectations and changes in the domestic and global environment.** The policy was developed when oil prices were high and when the market expected that the price of oil would continue to increase and, in turn, support large flows of oil revenue. Further, there is growing acceptance that collective action to address climate change risks will fundamentally change energy markets, creating conditions that are less conducive to developing oil production in Uganda.
- d. **In updating its Oil and Gas Revenue Management Policy, the Uganda government should analyze varying commodity price expectations and policy scenarios to evaluate future inflows into the Petroleum Fund consistent with sustainable fiscal policy.** Although the policy provides a comprehensive list of policy considerations that influence the oil revenue framework, it lacks quantitative analysis to inform specific policy and implementation decisions on the SWF setup that would be consistent with Uganda’s long-term policy priorities and objectives. It is crucial at this stage of the process to have an analytical foundation for the framework, on the basis of explicit expectations of the future inflows into the fund under different economic, market, and global regulatory scenarios. Specifically, government should develop an analytical tool and model on the basis of expected oil production to analyze scenarios for varying commodity price expectations. The result of this analysis should inform the next steps in the SWF implementation.
- e. **Amend the PFM Act 2015 to align it to the new realities of oil, and make it consistent with the revised Oil and Gas Revenue Management Policy:**
  - Clarify and strengthen mandates of institutions for oil revenue management to remove contradictions in interpretation of the law around management of the PRIR (Section 64).

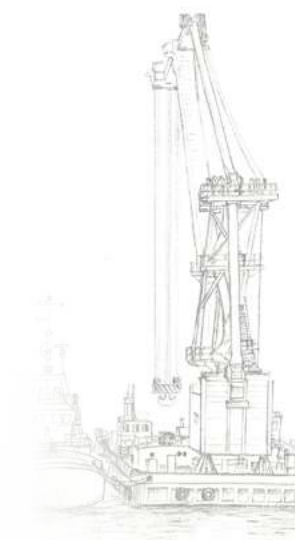
- Define, within the legislation fiscal rules to guide the decisions between spending and savings allocations, the optimal investment framework for the financial resources that have been put aside for future use and how the two will interact.
  - Eliminate the contradiction related to the treatment of balances in the Petroleum Fund.
  - Ensure consistency with the next Charter of Fiscal Responsibility, which also must be made more binding and less ambiguous on the consequences for noncompliance.
- f. **Further, the PRIR design and functioning should be revised for legal certainty and clarity around several aspects.** These include its governance structure, the purpose and investment objectives, and the fund’s eligible instruments. The proposed revisions would do the following:
    - Clarify the definitions of the roles and delegation of responsibilities of various governing bodies for the asset owner, fund manager, custodian, and administrator.
    - Explicitly define the PRIR’s purpose and investment objectives, grounded in empirical analysis of various options and evaluation of their effects and trade-offs.
    - Explicitly define in the legislation the appropriateness of all instruments as eligible asset classes, including the provision on whether the fund is allowed to invest in domestic instruments.
  - g. **Finally, Uganda should continue other reforms to strengthen the overall fiscal framework and public finance.** This action includes strengthening domestic revenue mobilization, spending controls, and public investment management, which are also important for a successful oil revenue management regime.



The recommendations and expected time frame for their implementation are summarized in table ES.1.

Recommendations	Time frame
<b>1. Strengthen fiscal management</b>	
Adopt a fiscal sustainability framework with the following elements: a. Adopt fiscal targets to provide a realistic expenditure path consistent with macroeconomic stability, absorptive capacity, and management of the volatility of revenues. b. Create a fiscal rule that cements a clear relationship between the revenues and expenditure paths. c. Establish a mechanism for enforcement, including penalties for noncompliance.	Immediate
<b>2. Strengthen public financial management</b>	
a. Close leaks in tax policy instruments, expand the tax base through better registration, and raise the efficiency of revenue administration to raise more domestic revenues. b. Implement the Domestic Arrears Strategy by, among others, establishing a comprehensive and reliable database for verified arrears, clearing existing arrears, strengthening measures that inhibit the diversion of domestic arrears resources, and stopping the creation of new arrears. c. Strengthen the institutional arrangements and capacity to prepare, appraise, and implement projects; and the legal and regulatory environment to improve absorption of the budget and to raise returns on public investments. d. Strengthen institutions and domestic capacities for debt management, including for nontraditional sources such as contingent liabilities. e. Improve allocative efficiency to balance between social and infrastructure sectors.	Short to medium term
<b>3. Update the 2012 Oil and Gas Revenue Management Policy</b>	
a. Incorporate the effect of the changed oil prices and regulatory landscape on the future oil revenue management framework. b. Develop an analytical tool for commodity price expectations and policy scenarios, to evaluate future inflows into the Petroleum Fund.	Immediate

Recommendations	Time frame
<b>4. Close gaps in the legal and regulatory framework</b>	
Revise the Public Finance Management (PFM) Act 2015: a. Introduce penalty clauses on the definition and use of petroleum revenues. b. Issue regulations to clarify the interpretation of the law (section 57 of the PFM Act) on the technical determinants for the decisions between spending and savings allocations, the optimal investment framework for the financial resources that have been put aside for future use, and the decision on how the two will interact. c. Redefine clauses 59(4) and 62(6) to remove the contradiction related to the treatment of balances in the Petroleum Fund. d. Clarify the definitions of roles and delegation of responsibilities of various governing bodies for the asset owner, fund manager, custodian, and administrator. e. Explicitly define the Petroleum Revenue Investment Reserve's purpose and investment objectives, grounded in empirical analysis of various options and evaluation of their effects and trade-offs. f. Explicitly define in the legislation all eligible instruments as eligible asset classes, including the provision on whether the fund is allowed to invest in domestic instruments, and remove the minister's discretion to decide on new instruments.	Medium term
<b>5. Engage with stakeholders and ensure communication with the public</b>	
The government of Uganda should do the following: a. Engage with the key stakeholders to ensure there is consistency across all policy makers and decision makers about the Petroleum Fund's strategic objectives and its implementation going forward. Regularly communicate information about the size of revenues and expected changes. b. Build further capacity by training key stakeholders and technical teams involved in policy and operational discussions to broaden their understanding of resource funds across different contexts.	Immediate and ongoing





1.

# INTRODUCTION



Jinja City Skyline, Uganda

**After Uganda enjoyed two decades of strong growth and poverty reduction in the 1990s and early 2000s, its economy slowed and social progress decelerated amid a steady increase of the population.** Between 1990 and 2011, gross domestic product (GDP) growth averaged 7.0 percent and poverty, measured by the national poverty line, declined from 56.0 percent in 1992 to 19.5 percent by 2013 (or from 68.1 to 33.2 percent using the international poverty line of US\$1.99). After that period, performance was less than stellar, with GDP growth slowing to 4.8 percent per year and poverty slightly increasing between 2012 and 2016. This

deterioration occurred amid various shocks, including adverse weather conditions, unrest in South Sudan, upheavals in the banking system, and policy slippages in 2011. Recently, the economy has been recovering and, before the COVID-19 pandemic outbreak, was forecast to grow above 6 percent and even accelerate further into the medium term. However, because of a fast-growing population, per capita income remains low.<sup>1</sup> Uganda currently has more than 40 million people, most of whom live in rural areas with poor access to services. Consequently, Uganda remains at the very low end of human capital development.

<sup>1</sup> COVID-19 is the disease caused by the novel coronavirus, which broke out in 2019 in Wuhan, China, and quickly spread into a global pandemic. The global economy contracted by between 3 and 4 percent during 2020 as countries—including Uganda—confronted the economic challenges arising from managing the pandemic. The pandemic has become the most significant adverse shock the global economy has experienced since the Second World War.

**Several constraints continue to undermine progress and social and economic transformation in Uganda.** These include the low levels of human capital, undeveloped infrastructure and land markets, and limited access to and high cost of credit. Productivity is low, especially in the agriculture sector, which provides primary employment to more than 70 percent of the workforce, while private sector investments are dominated by informal micro, small, and medium enterprises. Governance challenges underpin the weaknesses in the delivery of public services and failure to implement interventions that could have reduced the constraints.

**The start-up of oil production and revenues has the potential to accelerate growth by addressing some of the constraints to economic transformation, but it has to be managed well.** In the short term, the key driver of economic acceleration is the anticipated pickup in investments, especially to support oil production, which is expected to start around 2023–24. Over the longer term, sustainable benefits will depend on a range of factors; most important is how the revenues converted from the oil in the ground will affect critical economic variables in the country.

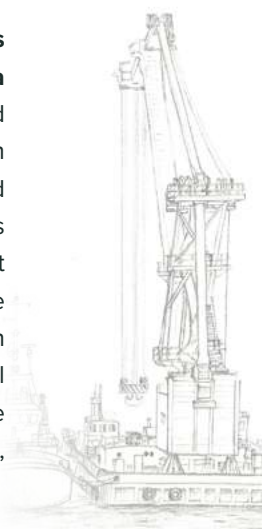
**The recoverable oil reserves are currently estimated at about 1.38 billion barrels, which can support production of up to 260,000 barrels per day over not more than 15 years.** This level is much lower than that of other oil producers, such as Nigeria (with 37 billion barrels in reserves, producing 2.5 million barrels per day and expected to run for 52 years) and Angola (13 billion barrels in reserves, producing about 1.5 million barrels per day and expected to run more than 40 years). In per capita, Uganda’s proven reserves convert to about 46 barrels per person, far lower than the 208 barrels for Nigeria or 286 barrels for South Sudan, and almost a hundredth of Canada’s 4,660 barrels per person.

**Actual revenues from oil will depend on levels of production and international oil, with significant impact on government revenue, exports, and investments.** Modest assumptions (discussed in more detail in section 3.2) suggest that during peak production, government revenues could reach between 3 and 4 percent of non-oil GDP, which would be enough to substitute for external financing of the government

budget today (US\$1,375 million by fiscal year [FY] 2017/18). Uganda’s oil exports could be boosted by an additional 5 percentage points of GDP, if the direct investments in the oil sector, combined with forward and backward links with the non-oil economy, result in impressive growth rates peaking at more than double the current growth rates. However, these benefits of oil are neither automatic nor guaranteed unless the resource is managed appropriately. The government has a crucial role to play in managing resource revenues in a manner that supports the development of synergies with domestic industries that can help realize a significant part of these consequences.

**Maximizing the benefits from oil revenues requires maximizing efficiency across the revenue chain.** As is summarized in figure 1.1, the first stage of the chain is petroleum exploration and production. In this stage, the fiscal regime would have been set to ensure that the country can capture the resource rent while remaining in position to attract companies with the capital, skills, and risk appetite to invest in the sector. The country must ensure this delicate balance; otherwise, it may end up with too little revenue or no revenue at all if investors think they are squeezed too hard. The second stage is the collection and management of the petroleum revenues, including the systems for the flow of funds and safe custody, as well as allocation between spending and savings. The latter is closely related to the country’s fiscal and macroeconomic management policies. The third and final distinct stage is that of savings management, which in many jurisdictions is referred to as sovereign wealth management, to use the accumulation of financial assets to preserve a part of the resource that is being depleted.

**Several analytical and technical assistance programs have recommended specific reforms to help Uganda maximize the dividends from its oil.** The World Bank 2015 Uganda Country Economic Memorandum underscored the importance of prudent fiscal and macroeconomic management for Uganda, as well as the need for the country to embrace a deliberate effort to accelerate economic diversification to avoid the resource curse (World Bank 2015). Work was undertaken to analyze fiscal rule scenarios; the expected structural transformation of Uganda’s economy that would arise from alternative policies (the all-saving approach,



all-investing approach, and sustainable investing approach); the effects of various uses of oil proceeds on economic growth, household income, and the Sustainable Development Goals; and the effects of various policy changes and shocks on long-run economic growth (steady state). The International Monetary Fund (IMF) has provided significant technical assistance and helped build the capacity of the Uganda Revenue Authority (URA) in oil revenue administration, and Norway has been Uganda's oil development partner for over two decades.

**This paper reassesses the adequacy of Uganda's public finance systems in providing an appropriate fiscal framework for determining spending as well as setting aside and managing savings for future generations.** The Public Finance Management (PFM) Act 2015 stipulates that all oil-related revenues will be deposited into a holding account, the Petroleum Fund, overseen by the Parliament. From the Petroleum Fund, resources are to be allocated to the Uganda Consolidated Fund (UCF) to finance the government

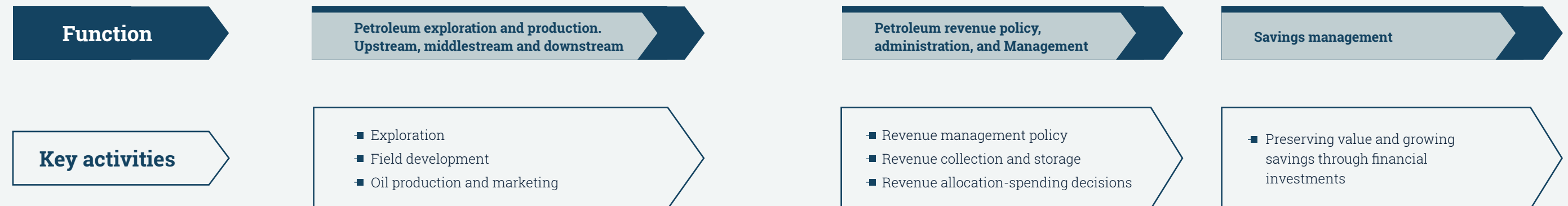
budget, with the balance going into the Petroleum Revenue Investment Reserve (PRIR), which is to operate as a sovereign wealth fund (SWF). The paper reassesses the extent to which the existing fiscal framework is ready to incorporate a new, significant source of oil revenue, as well as the protocols, policies, and procedures (including the type of investment strategy) governing the PRIR. The paper also includes analysis of the extent to which the PRIR can serve as a genuine SWF and how the upstream issues of macro and fiscal management are interlinked with the fund management.

**The rest of the paper is organized in three sections.** Section 2 provides an update on the state of development of Uganda's oil sector. Section 3 discusses the current fiscal framework and what would need to be adjusted before the oil revenue starts flowing. Section 4 delves into the institutional design and operational management of the petroleum revenue investment reserve and how it could be turned into a genuine SWF for Uganda.

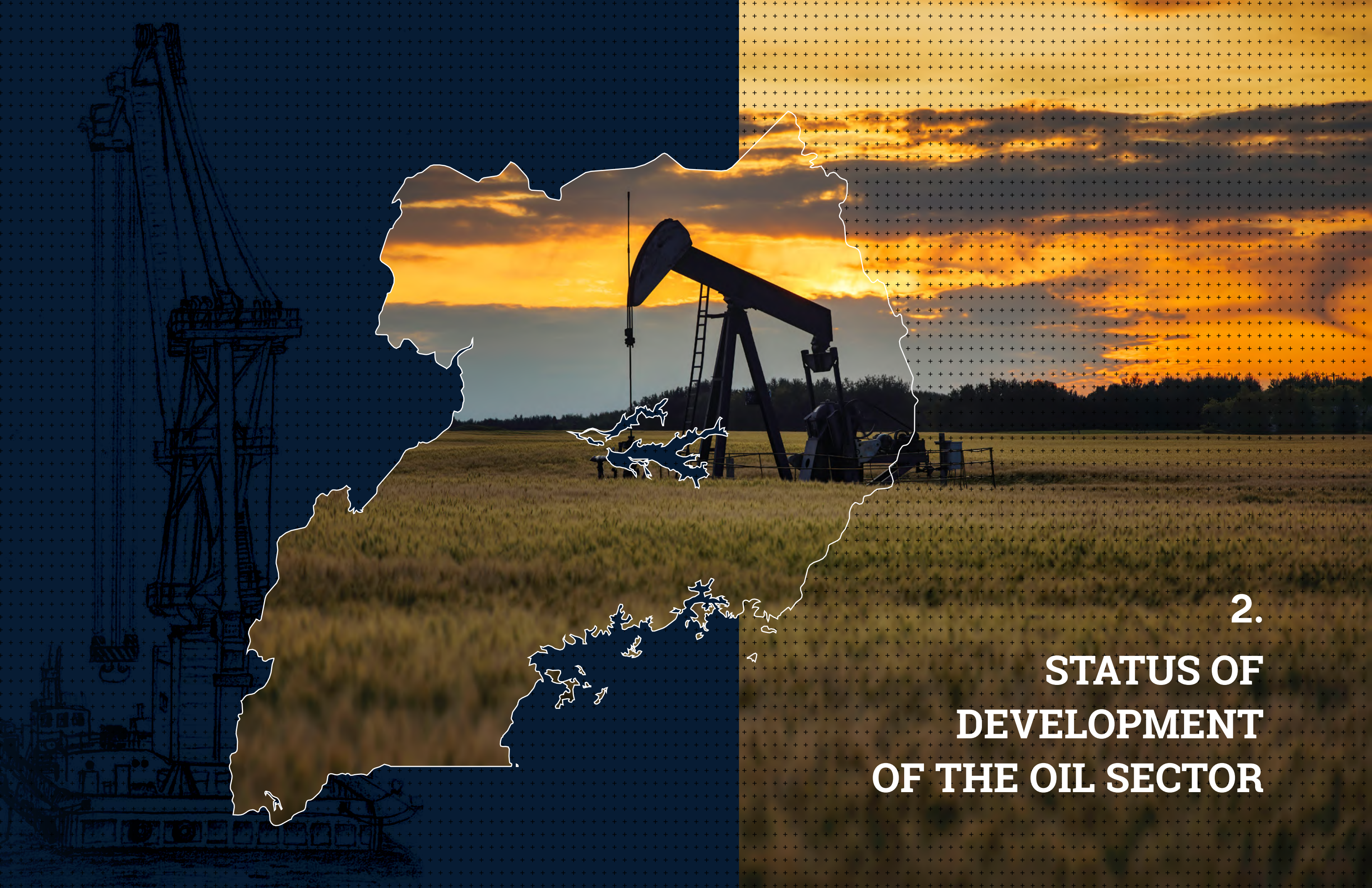


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**Figure 1.1:**  
Conceptual Oil Revenue Value Chain



Source: World Bank staff illustration.



2.

**STATUS OF  
DEVELOPMENT  
OF THE OIL SECTOR**





**Overall, the institutional framework for managing oil revenues is quite comprehensive, running from the exploration and production stages to the way oil revenues are to be administered and managed for investment and savings.** As is summarized in figure 2.1, the current accountabilities and flow of authority in the sector are underpinned by a legal framework that provides for the key roles and delegation of responsibilities of the relevant ministries and stakeholders, with the overall oversight of the Parliament. With the focus of current activities still on upstream exploration and production, the most critical institutions are the Ministry of Energy and Mineral Development (MEMD), the Petroleum Authority of Uganda, and the Uganda National Oil Company (UNOC). The MEMD develops and implements policy related to the petroleum and petroleum products sector, in addition to electricity and minerals. The Petroleum Authority of Uganda's legal mandate is to monitor and regulate exploration, development, and production, together with refining, gas conversion, transportation, and storage of petroleum in Uganda.

**In 2015, the government set up UNOC to manage all the government's commercial interests in the petroleum sector.** UNOC is wholly owned by the government, with 49 percent of UNOC's shares held by the Ministry of Finance, Planning and Economic Development (MOFPED) and with 51 percent held by

the MEMD. This further streamlined the management of the sector, allowing the MEMD to concentrate on the policy formulation mandate. The Petroleum Authority of Uganda was also set up to regulate the industry. To fulfill its role effectively, UNOC set up the National Pipeline Company and Uganda Refinery Holding Company Limited, to help manage these two activities, which require different capabilities.

**In anticipation of moving from production to oil revenue generation, institutions for macroeconomic, public finance, and savings management have been put in place.** URA, which is mandated to collect all the oil revenues, is strengthening its legal and assessment capacities, as well as other oil revenue administration specific to the oil sector. MOFPED, under its traditional mandate to mobilize and regulate the management of financial resources and formulate policies that enhance overall economic stability and development, through various legislations and particularly the PFM Act 2015, has made some institutional adjustments to incorporate oil into the macroeconomic models and decision making as well as budget frameworks. In addition, the PFM Act established the Petroleum Fund, into which all oil revenues collected by the Uganda Revenue Authority are deposited, and established the PRIR (within the auspices of Bank of Uganda), which is expected to work as an SWF and hence invest any savings from the oil revenues. The Investment Advisory

Committee (IAC) advises the minister on how to invest the savings in the PRIR, whereas the Charter of Fiscal Responsibility (CFR), which was first formulated in 2016, set up a framework for macroeconomic stability and fiscal transparency.

**Beyond the installed production capacity and price movements, the fiscal regime in the production-sharing agreements (PSAs), the Income Tax Act, and the special regime for the pipeline set the parameters for the actual revenue flows.** The government of Uganda opted to use production-sharing agreements to allow it to capture the economic rent from the oil resource.<sup>2</sup> The PSA type of arrangement adopted by Uganda (similar to Indonesia's) includes a basic royalty, levied from the start of production, on gross revenue per barrel of oil produced. When revenues start flowing, oil companies have to start recovering the costs of their investment. The residue after accounting for the royalty and cost recovery is "profit oil," and it is shared by the government and the company. Because the development costs are fully covered by the private partners, the government's share of these costs will be recovered from its share in profit oil. The company's share in the profit oil is then subject to an income tax of 30 percent. A special fiscal regime for the oil pipeline has been established under the 2017 Inter-Governmental Agreement and provides a 10-year tax holiday and concessions on value-added taxes and withholding tax for the pipeline operation. This regime was designed to reduce the pipeline tariff, thereby increasing the upstream profits. The pipeline tariff has been proposed at US\$12.77 per barrel. However, the tax treatment of turnover and costs in Uganda and Tanzania negotiated as part of the host government agreement with the private operators was not available for review. No special tax regime for the refinery is currently being considered.

**In line with the previous description, the rents to the government can be summarized as follows:** (a) royalties levied on gross production revenues; (b) income taxes on profit oil (after recovery of exploration

costs) and capital gains whenever there are changes in ownership rights in the fields; (c) other indirect taxes, such as the withholding tax on dividends; (d) sales value of shared profit oil; (e) pipeline levy; and (f) other revenues such as surface rentals, fees, and bonuses. Under a PSA, the international oil companies are expected to invest and extract oil without any financial contribution from the government, which later will get a share of the profit oil, based on the agreed take. The government of Uganda currently has rights to 15 percent in oil fields that have already been licensed for production (that is, Kilenga and Kingfisher).

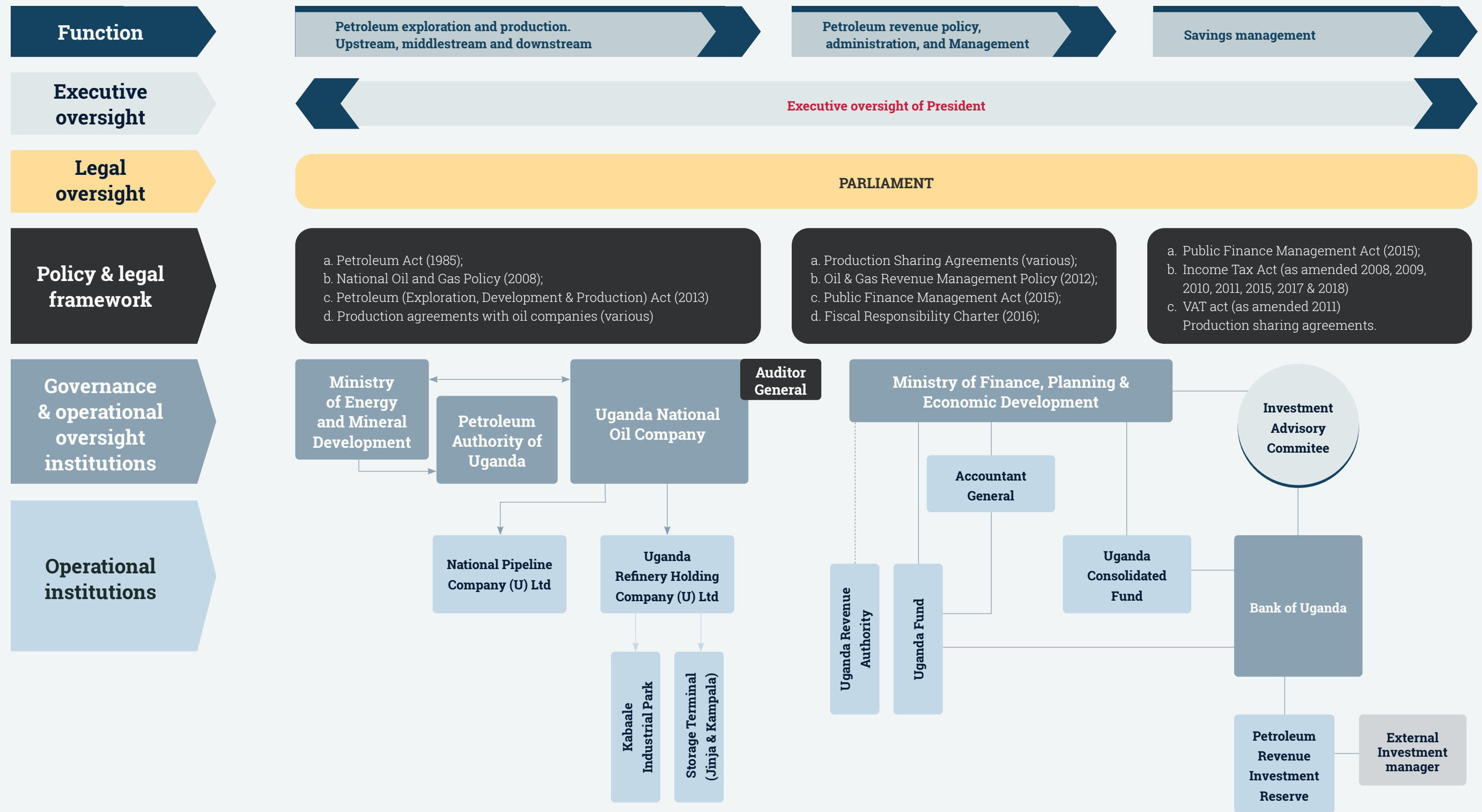
**Whereas the flow of oil revenues in and out of the Petroleum Fund and the PRIR is determined by the PFM Act, additional guidance and decisions are needed.** Fiscal rules are required to provide guidance on how much to invest and save, whereas spending allocations are determined with the budget framework. Once they are allocated for spending, funds could flow back into the Petroleum Fund if they are not spent as planned. The same holds for the flow of funds in and out of the UCF, which underscores budget execution problems. The PRIR is expected to receive additional flows as a result of returns on the investments in other instruments. The flow of funds is summarized in Figure 2.2.

**The legal and institutional arrangements should ensure that the government effectively manages the entire petroleum value chain and resultant revenue flows by strengthening coordination to avoid duplication and by ensuring accountability.** Moreover, despite this elaborate institutional framework, executive oversight from the Office of the President remains key at every decision point, sometimes undermining the institutions that have been put in place to perform these functions. The institutions also need to exercise the highest degree of transparency and accountability in the use of public resources. Experience from other countries indicates that institutions such as national oil companies often create unsustainable contingent liabilities that add to the government debt.

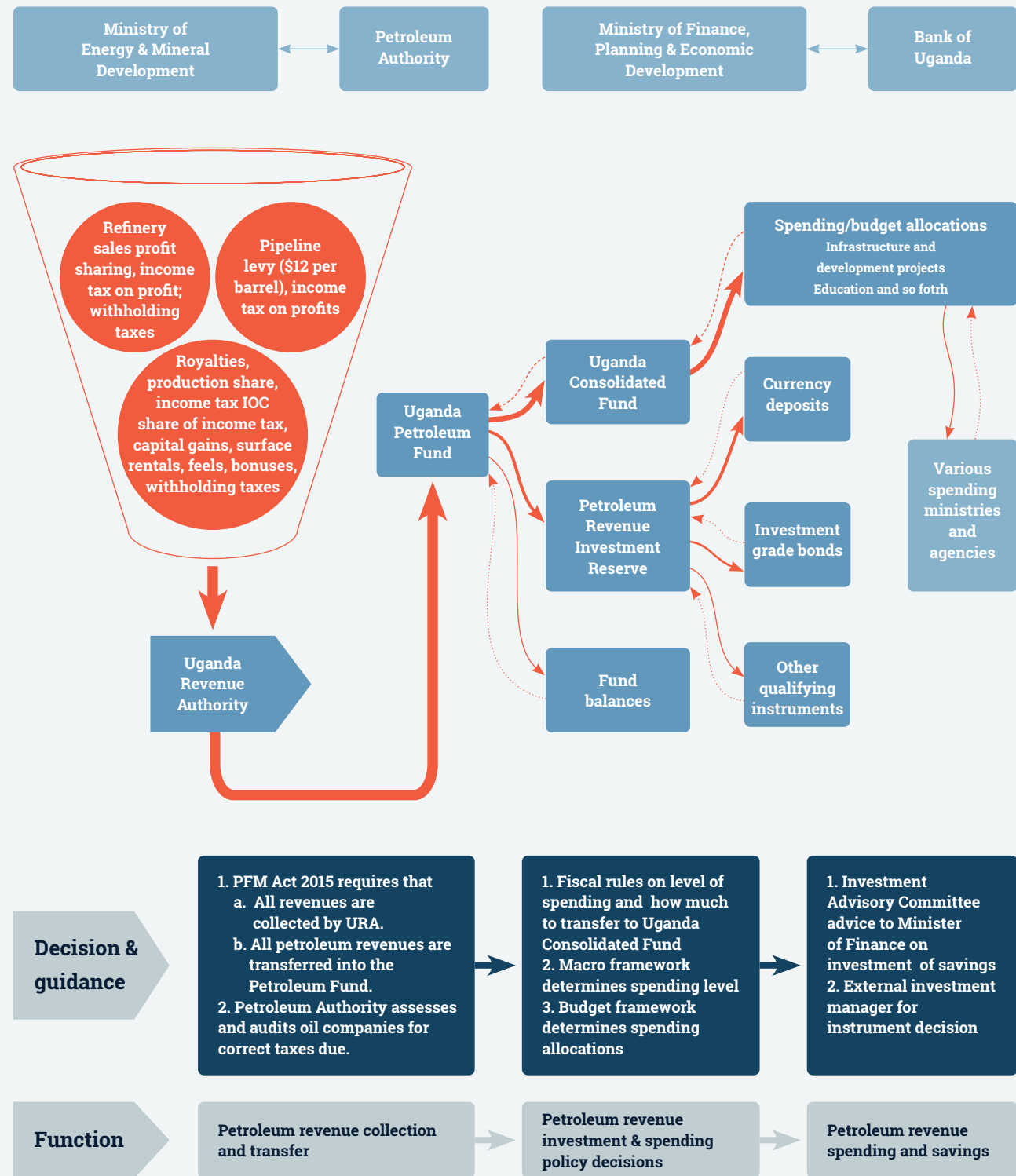


<sup>2</sup> Other types of arrangements governing relationships between governments and oil companies include (a) concessions, as in Norway, under which the government grants the right to produce and (b) service agreements, as in Peru.

**Figure 2.1:**  
Institutional Arrangements for Managing Petroleum Revenues in Uganda



**Figure 2.2:**  
Envisioned Flow of Funds for Petroleum Revenues in Uganda



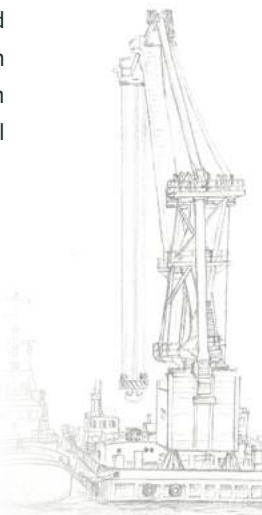
Source: World Bank staff illustration.

**It is still not certain or clear when the first oil revenues will be realized after more than 13 years since Uganda confirmed the existence of commercial oil reserves.** Several reasons account for the long time taken to start producing oil, including the following:

- a. *The need to build robust legal and institutional frameworks to manage the oil value chain.* Uganda has established a comprehensive legal regime for the oil sector, which has informed the institutional framework that has been put in place to manage the oil. Unfortunately, some institutions further down the oil value chain have been redundant, given that the sector has not yet moved into production.
- b. *The sharp declines in commodity prices between 2014 and 2016, recently during 2020.* This decline threatened the economic viability of Uganda's oil production, thereby affecting investor sentiments, which resulted in a "wait and see" strategy by investors during that period.
- c. *The protracted discussions without reaching key decisions on the investment in critical infrastructure.* In 2006, after commercial oil reserves were established, the government projected that it would realize some oil revenue by 2009 through an early production scheme. However, that scheme did not materialize, as there was a change in strategy with the government opting to develop a more elaborate plan to produce oil at a much larger scale. Thereafter, several key decisions have had to be made, including whether to build a refinery; the size of the refinery; whether to build a refinery and a pipeline (both, one, or a combination of the two); and the routing of the pipeline, which changed from the eastern route through Kenya to the southeastern route through Tanzania.
- d. *The tax treatment disputes that affected the pace of investment decisions by private sector players.* As discussed, Uganda's oil tax regime is established through PSAs and the Income Tax Act and covers the entire petroleum value chain. Currently, with the activities in the sector still on the upstream side, that is where disputes have occurred. Whereas the protracted court proceedings over tax treatment during two farm downs completed between 2010 and 2015 recovered taxes for the government, similar disputes among the factors have elongated

the time frame toward the final investment decision. The numerous revisions to oil-related sections of the Income Tax Act have created a sentiment of a government that wants to squeeze too much from the private participants in the oil sector. On August 30, 2019, Tullow Oil pulled out of a planned farm-down transaction that had aimed to reduce its stake in the oil while raising capital to support its investments in the sector. This was quickly followed by Total E&P Uganda postponing activities under the pipeline consortium, yet again impacting Uganda's time lines for moving into the final investment decisions and r starting production (see appendix B).

- e. *The protracted negotiation, sometimes caused by coordination and implementation challenges for large projects.* These challenges have resulted in introducing considerable delays at various stages of the oil development program. In the case of the refinery, cancellation of the contract for the first developer, RT Refineries, meant that the process had to be restarted and completed almost four years later with the signing of the framework agreement with the Albertine Graben Refinery Consortium. For the pipeline, the signing of the Inter-Governmental Agreement between Uganda and Tanzania paved the way for the negotiation of the host government agreements with the oil companies, which were eventually signed in 2021. Although the Tanzania side moved quickly, the Uganda side was held back because of several issues, key among which is the land and compensation challenge, given the land tenure system in Uganda as well as the lack of a clear social impact assessment and compensation framework. The shareholder agreement and transportation agreements were also signed in 2021, leaving a few other agreements, which will have to be signed before moving to the final investment decision.



**Box 2.2:**

Low-Carbon Transition Risks and Implications for Uganda

One of the defining characteristics of risks related to low-carbon transition (LCT) is the potential for the dominance of clean technologies that are disruptive to traditional business models and fossil fuel-dependent economies. Shifts in consumers' and investors' preferences and in changes of institutions and their policies are other features of the rising LCT megatrend. As stated by Peszko et al. (2020), an LCT triggers a transition from a traditional, capital-intensive growth model to a more labor- and knowledge-intensive growth model in which human and renewable natural capital, as well as intangibles, increasingly substitute for produced and natural (exhaustible) assets in driving prosperity. This transition opens a debate about strategies for LCT management.

Broad asset diversification is the optimal long-term economic strategy for fossil fuel-dependent countries, as found by Peszko et al. (2020). This new kind of thinking focuses not on diversification of outputs, but on diversifying inputs—the assets being used by an economy (for example, produced and intangible assets, including human and knowledge capital as well as institutions). For a country implementing this strategy, the key is to find the right balance between (a) managing traditional carbon-intensive assets to capture resource rents and (b) reinvesting these revenues to strengthen economic flexibility and preparedness for the multiple possible effects of an LCT. For this strategy to be successful, institutions and incentives that favor saving and investments over consumption are at the core.

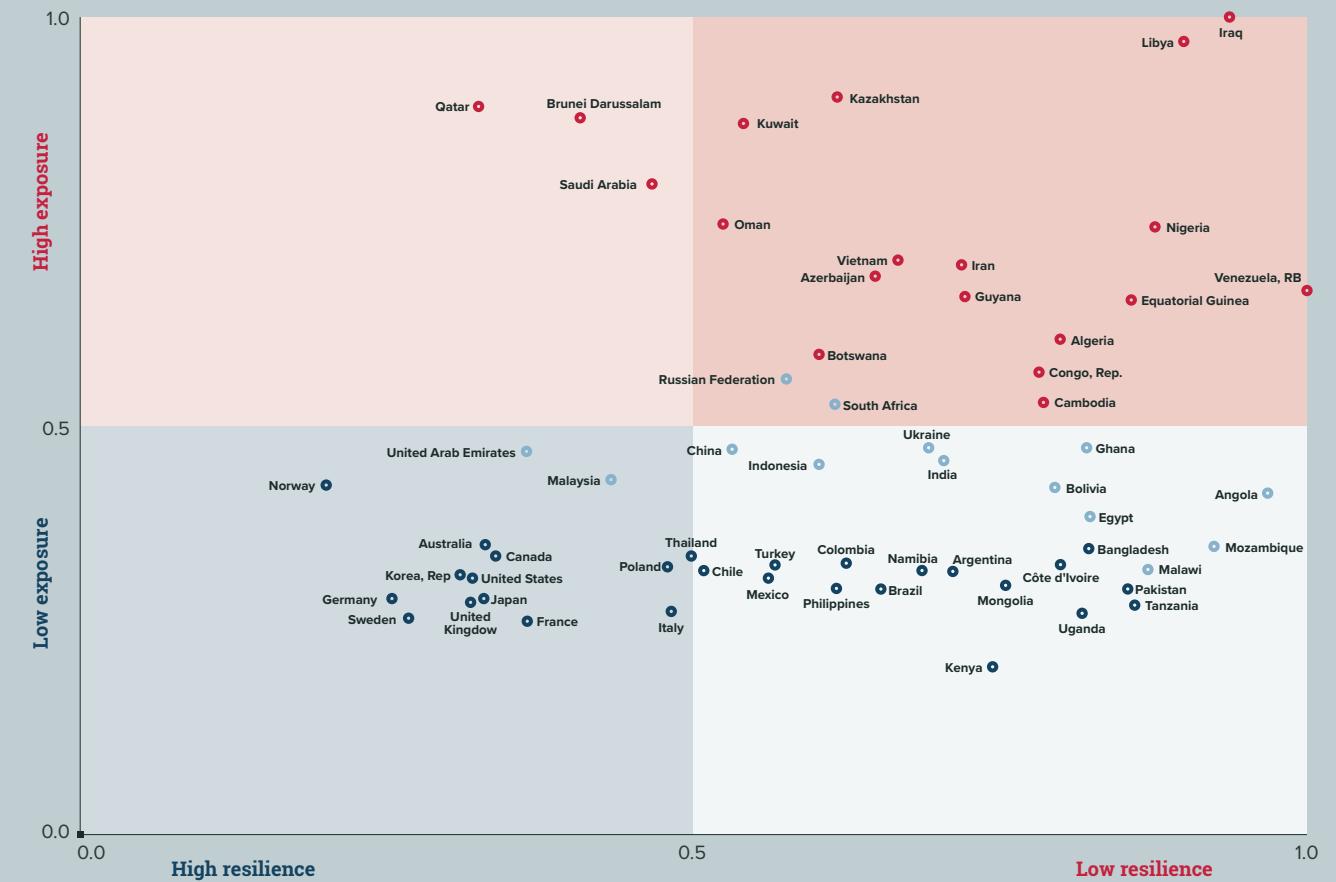
Uganda's resilience to LCT is estimated to be low (Peszko et al. 2020), with relatively poor quality of infrastructure, human capital, and institutions and with low ability to absorb new technologies. Based on the composite indicator that measures a country's resilience to LCT, Uganda's position is like that of Bangladesh, the Arab Republic of Egypt, Ghana, and Bolivia (figure B2.2.1). Despite that the current exposure to LCT seems to be at low levels, Uganda's future preparedness for LCT risks will depend on the development path it chooses for the coming decades, especially related to the management of oil reserves and the investment strategy for respective revenues.

According to Peszko et al. (2020), generating rents from fossil fuel-dependent assets is important during the transition period to ensure adequate resources for broad asset diversification and productive investments; however, this comes with its own challenges. First, it is key to avoid locking the economy into a fuel-dependent growth model. Second, the current phase of the country's oil development is a significant determinant of potential success. Despite that oil is still expected to play a major role in future energy even under the upcoming LCT scenario, early oil development stages require large investments in infrastructure with lifespans of decades, which increases the risk of long-term locking in of dependence on carbon-intensive assets. Additionally, because the future decline of the oil industry is likely to be driven not by supply but by demand, the development of high-cost, conventional reserves may become increasingly uncompetitive. Third, the way the savings from fossil fuel rents are invested will define the success of the country's development strategy and diversification efforts. For example, in many fossil fuel-dependent countries, such asset classes as human capital, knowledge, institutional capacity, and ecosystem services are traditionally underfunded.

With the latest developments, the dates for starting production and realizing revenues remain uncertain. Although the government is still optimistic about successfully renegotiating and getting the oil development program back on track, the private sector is less so, and several participants have indicated that it may take a minimum of a year to complete all required decisions. And with the COVID-19 pandemic whose global effects have also reduced the international crude oil price to less than US\$30 per barrel as it threw the world into a recession, it made it practically impossible that the original expected dates of 2022–23 can materialize. It appears likely to be further delayed by up to two years, as negotiations leading to the final investment decisions are concluded and implementation processes started, which would push production and revenue generation beyond 2024–25.

When the COVID-19 pandemic subsides, the first and immediate priority for the government of Uganda is to resolve outstanding issues that are preventing the final investment decision, by recognizing the increasing risk of being locked out of oil production as it continues pushing its production timeline forward. The pandemic—combined with the drastic fall in oil prices—is likely to postpone key investment decisions into the oil sector in Uganda (and may reduce levels of investment), thus pushing back further the timing of oil production. Meanwhile, the government could use this time to address many of the problems and gaps associated with the regulatory framework, fiscal regime, and oil fund management that the paper highlights. Once markets stabilize and economic conditions are more favorable, the government could then quickly move to reach its

**Figure B2.2.1**  
Countries' Preparedness for the Low-Carbon Transition



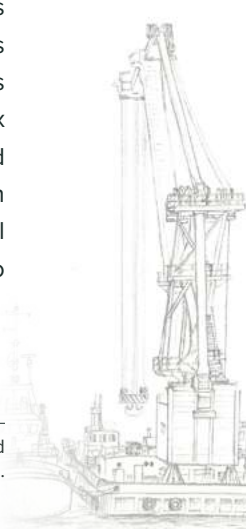
Source: Peszko et al. 2020.  
Note: The green, orange, and red dots in the figure represent countries that are well, moderately, and poorly prepared for LCT, respectively.

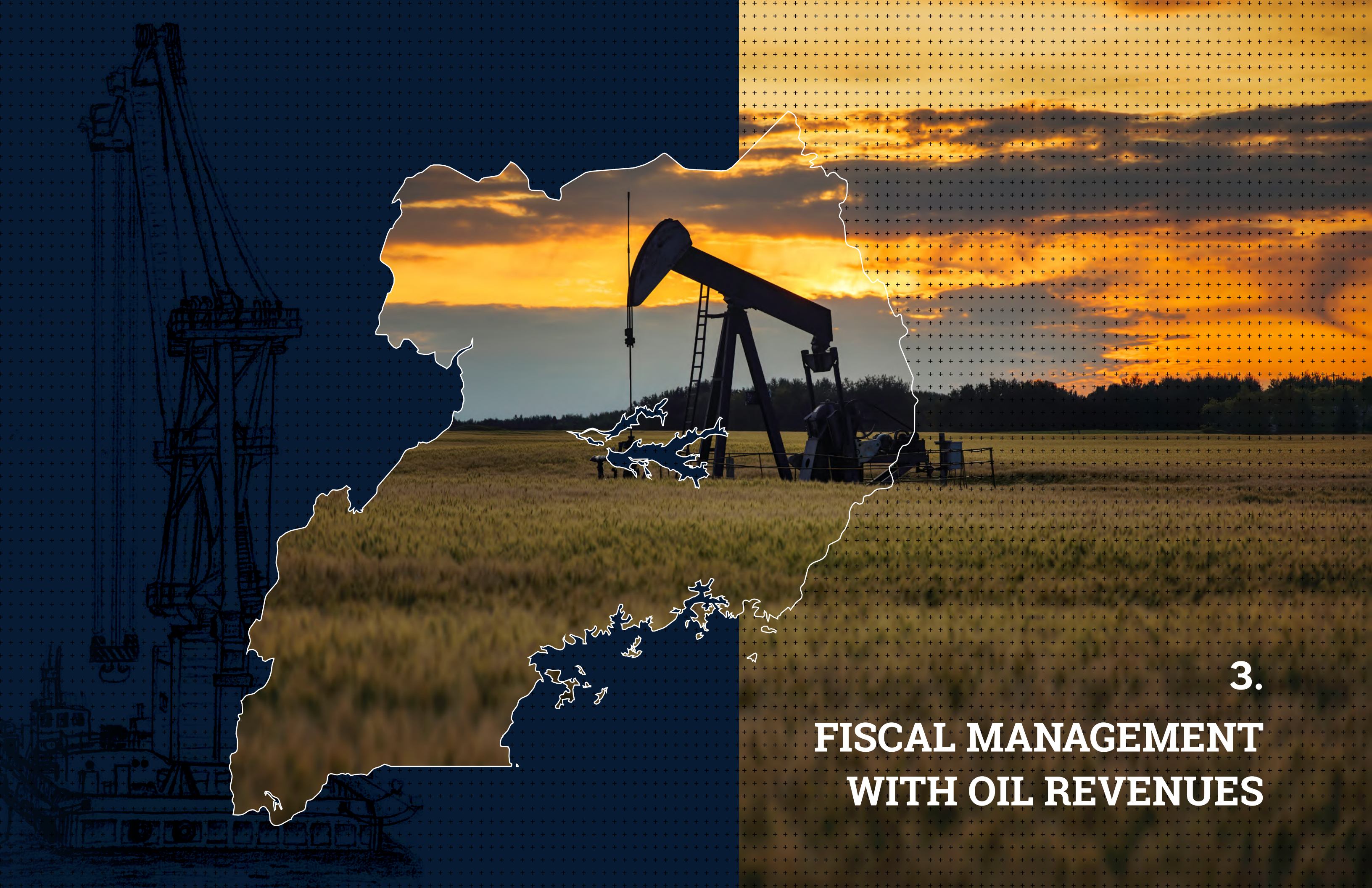
final investment decision and get back on track to start production. Prolonged delays have perverse effects on investor sentiments, which could have perverse effects on Uganda's oil prospects. For instance, the protracted negotiations to maximize the country's tax take may squeeze out the investors.

Uganda, like many other fossil fuel-dependent countries, must adapt to the fast-evolving policy and regulatory environment and ongoing transition into clean technologies prompted by concerns over climate change. Historically, oil price movements mainly

depended on changes in industry supply.<sup>3</sup> The transition to low-carbon technologies implies a secular change in demand. The effect of this transition has implications for financial, fiscal, economic, and social developments that could potentially disrupt the traditional structures of the economies of fossil-dependent countries. Box 2.2 summarizes how this low-carbon transition-related risk threatens countries that are heavily dependent on underground assets such as oil, gas, and coal. Fossil fuel industries and related value chains are likely to experience a global decline in the coming decades.

<sup>3</sup> For example, the sharp fall in the price of oil in 1985–86 occurred as OPEC (Organization of Petroleum Exporting Countries) members reversed earlier oil production cuts, but an even sharper decline over 2014–16 was on account of increased production owing to efficiency gains in U.S. production of shale oil.

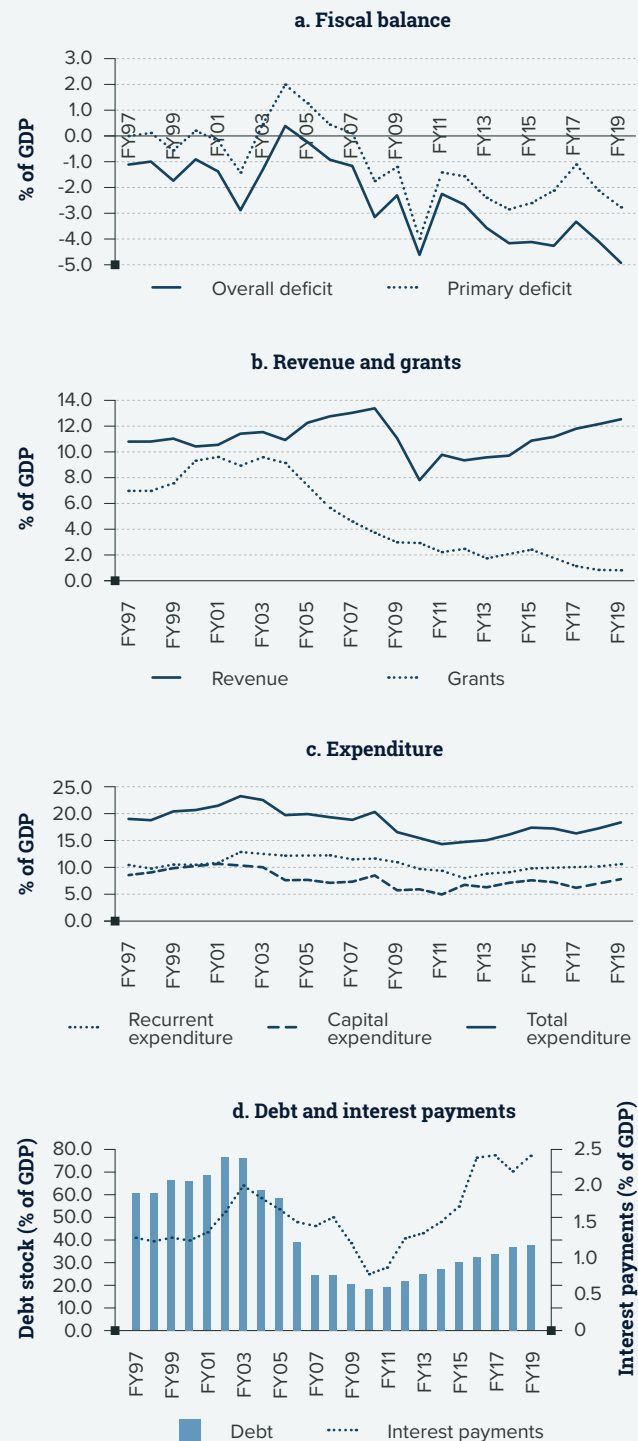




3.

# FISCAL MANAGEMENT WITH OIL REVENUES

**Figure 3.1:**  
Evolution of Fiscal Outcomes,  
FY 1996/97–FY 2017/18



Source: Uganda Ministry of Finance, Planning and Economic Development data.

Fiscal management is at the center of ensuring that the oil revenues are managed appropriately to maintain the country's net wealth. To offset the decline in natural wealth caused by the extraction of oil, the revenues generated must be invested in areas that result in lasting improvements in productivity and social well-being. This investment includes developing human capital through quality education and health care; expanding physical capital; and, if possible, putting aside some savings for future generations, as well as to deal with contingencies, exogenous shocks, and policy uncertainties. It remains crucial to continuously examine the fiscal framework in view of changing fiscal and other parameters, especially for the expected revenues and spending pressures.

### 3.1. Current Status of Uganda's Fiscal Policy Framework

Frequent changes in Uganda's fiscal policy stance over the past two decades highlight the absence of a fiscal anchor. Building on the successes of the 1990s, fiscal policy during the first decade of the 2000s went through a rapid consolidation, which was meant to crowd in private investments. Public investments were reduced by almost 2 percentage points, reaching about 4 percent of GDP by FY 2008/09. This trend has reversed since then, as the government implemented fiscal stimulus policies to address the country's significant infrastructure constraints and mitigate the impacts of the global financial crisis on the economy at that time. Hence, fiscal policy also partly supported a noncyclical response to the global economic crisis then. However, fiscal management slipped between FY 2009/10 and FY 2010/11 on the back of election-related spending pressures, which, together with other exogenous shocks such as a prolonged drought and global commodity inflation, contributed to instability. In FY 2009/10, the fiscal deficit tripled from the average of 1.5 percent of GDP that was attained during FY 2004/05–FY 2008/09 to about 5 percent of GDP, as depicted in figure 3.1. Major adjustments had to be made to restore fiscal stability before the country could revert to its investment plan. This illustrates how a non-rule-based fiscal framework could easily be captured by unforeseen exogenous factors and even more so by internal political pressures.

Since 2011, fiscal policy has aimed to be ambitious and expansionary, with the objective to increase spending to address the infrastructure gaps and support higher investments and growth acceleration. This stance was generally supportive of Uganda's Vision 2040 and the National Development Plans (NDP). Allocations to public works and the transportation sector, for instance, increased from an average value of 1.9 percent of GDP during FY 2004/05 to FY 2008/09, to 4.9 percent of GDP between FY 2015/16 and FY 2018/19. In a country expecting a significant future increase in revenue from oil production (or any other source), this rapid increase in public investments is typical of a front-loading scheme aimed to generate higher returns through accelerated growth than what could be achieved through existing savings alone. Accelerated public investments, when executed effectively, would also benefit future generations, thereby promoting the sustainability of the income generated.

With a lower revenue effort than expected, increased spending has been met with a rapid increase in debt. External grants have steadily declined, but domestic revenue only started improving in recent years to cover the gap. Over the five-year period from FY 2013/14 to FY 2018/19, revenue collection performance in Uganda improved, and the ratio of revenue to GDP<sup>4</sup> increased to more than 12.6 percent. This performance was better than that during FY 2005/06 to FY 2015/16 when the ratio stagnated at around 11 percent of GDP. However, it was still below the ratios of regional peers and the government of Uganda's target of 16 percent of GDP. With this low revenue effort, increased spending has been funded through higher public debt, which has increased by more than 10 percentage points over the past 10 years to reach almost 36.4 percent of GDP (US\$12.5 billion) by FY 2018/19.

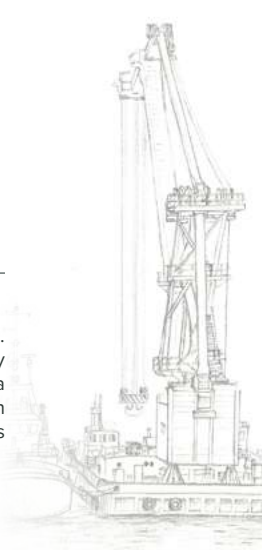
The rapid increase in debt raises fiscal vulnerabilities by eroding fiscal buffers that could be used in the face of shocks. Uganda benefited from the joint IMF–World Bank Highly Indebted Poor Countries Initiative and, by 2006 at the completion point, had reduced debt to less than 20 percent of GDP. However, debt has more than doubled, and its composition has shifted toward nonconcessional terms, which raises vulnerabilities. By FY 2018/19, the World Bank and IMF considered that Uganda still had a strong debt carrying capacity, and hence placed it at low risk of debt distress. Two-thirds of outstanding public debt was owed to external creditors (US\$8.3 billion or 28.8 percent of GDP), which finances largely energy and other infrastructure projects.<sup>5</sup> Over 70 percent of Uganda's debt was contracted on concessional terms; however, the share of nonconcessional debt has increased, raising vulnerability to how fast debt needs to be paid back and the size of the debt service. The burden of interest payments has already gone up, from 7 to 11 percent of the budget over the past five years, with implications for the ability of fiscal policy to meet its immediate obligations effectively.

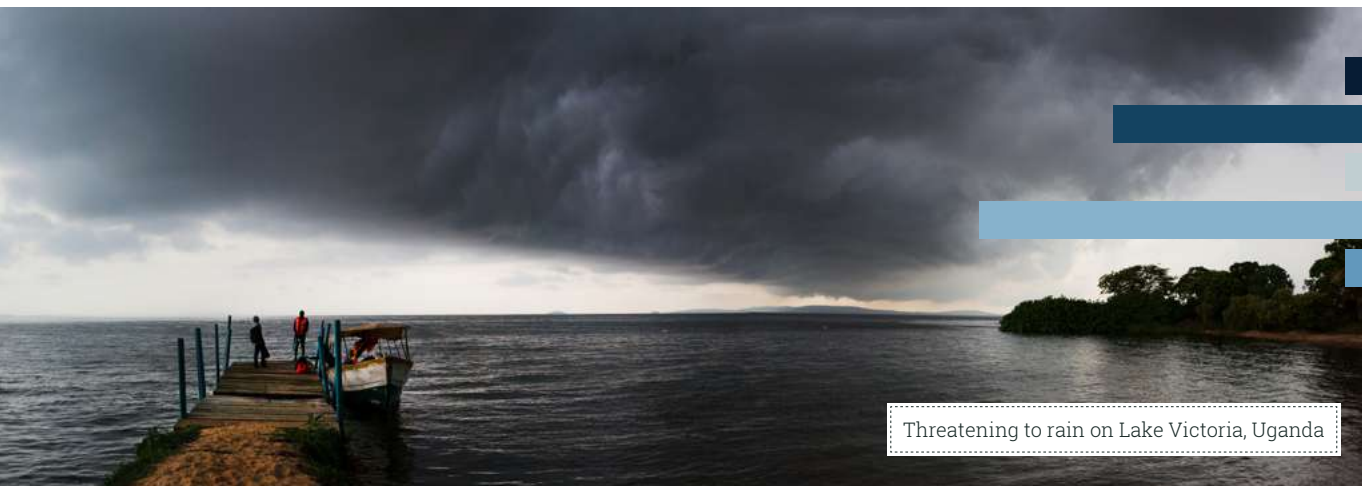
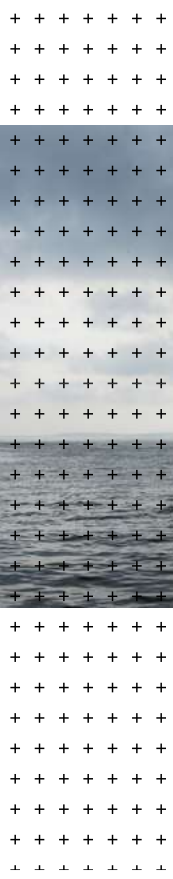
Contingent liabilities pose additional risks. By FY 2017/18, contingent liabilities were estimated at 12 percent of GDP, with these comprising state-owned enterprise debt of 9.1 percent of GDP and public-private partnerships stock of 2.8 percent of GDP.<sup>6</sup> This and other shocks, such as a slowdown in growth, and the choices the government makes on the financing of its large infrastructure projects remain key sources of vulnerability.

<sup>4</sup> Based on GDP numbers before rebasing in FY 2019/20, which lowered the ratio by about 1 percent of GDP.

<sup>5</sup> "Uganda: Staff Report for the 2019 Article IV Consultation—Joint IMF–World Bank Debt Sustainability Analysis," April 2019, IMF, Washington DC. The classification of debt carrying capacity is guided by the composite indicator score, which is determined by the World Bank's Country Policy and Institutional Assessment and other variables, such as real GDP growth, import coverage of foreign exchange reserves, remittances as a percentage of GDP, and growth of the world economy. The composite indicator also incorporates forward-looking elements, with the calculation based on a 10-year average (five recent years of historical data and five years of projections). Uganda's composite indicator is 3.11 and hence lies well above the threshold value of 3.05, which categorizes the country as having "strong" debt-carrying capacity.

<sup>6</sup> "Uganda: Staff Report for the 2019 Article IV Consultation—Joint IMF–World Bank Debt Sustainability Analysis," April 2019, IMF, Washington DC.





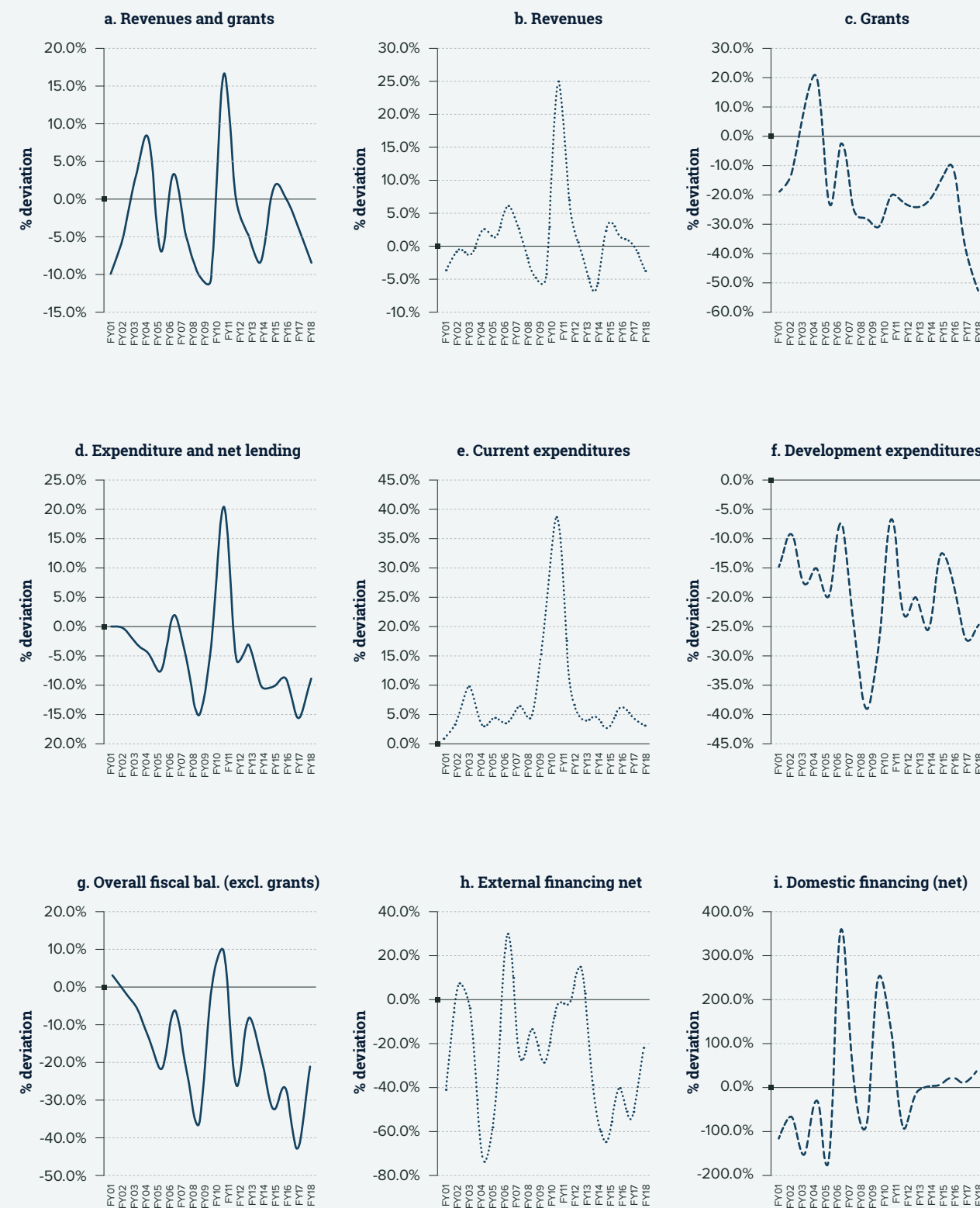
**The moderate deficits and corresponding debt levels exclude accumulated domestic payment arrears of the central government, totaling about 3 percent of GDP.** According to the Auditor General's Office, the stock of verified arrears stood at U Sh 2.9 trillion (equivalent to 3.2 percent of GDP) in FY 2016/17. Arrears stagnated in FY 2017/18 at U Sh 2.8 trillion, which in GDP terms was a reduction to 2.8 percent. The bulk of these arrears arise from (a) delinquent obligations for payment of services for utilities (owing to underbudgeting and a prepayment system that is functional for only a few types of utilities); (b) contributions to international and regional organizations; (c) court awards, over which the ministries have no control; and (d) supply of other goods and services. The reliability, coverage, and accuracy of the arrears data have been under scrutiny. The continued accumulation of arrears undermines public confidence in fiscal policy and the government's ability to meet future payment obligations. This accumulation of arrears is in addition to other economywide impacts, like the cash flows of private suppliers and contractors and the quality of credit in the banking system.

**Persistent under execution of the budget has undermined the predictability of fiscal policy.** In line with the second NDP, the fiscal framework had budgeted total government expenditures averaging more than 20 percent of GDP from FY 2015/16 to FY 2019/20, resulting in an average fiscal deficit of 6.5 percent every year during the implementation of the second five-year NDP. Over the four years of implementation so far, the fiscal deficit averaged 4.8 percent of GDP, almost 2 percentage points below the forecast. For

budgeting, development expenditures accelerated faster in this front-loading scenario and overtook the contribution in share of the total compared with recurrent expenditures. However, actual spending was lower by about 2 percentage points. The deviation from the budget is most severe and always negative on the development side. In contrast, the recurrent side has always been higher than the budget, consuming any additional, unexpected revenues (as was the case in FY 2010/11 when the fiscal revenue surged on account of capital gains from a farm down in the oil sector). So, recurrent spending still takes a larger share of the budget than development spending. Such persistent inconsistencies raise credibility issues around the budget and the capacity of the authority to use fiscal policy to influence real outcomes.

**A significant underexecution of the infrastructure budget reflects capacity gaps, significantly weakening the effect of the fiscal policy and overall development program.** During the implementation of the first NDP, from FY 2009/10 to FY 2014/15, the level of actual development expenditure remained well below the levels envisaged under the plan. According to Uganda's Public Investment Plan, only 78 percent of planned investments were realized in this period. As a result, the value of the backlog of planned infrastructure investments had increased by more than US\$1 billion by the end of the first NDP. Underexecution continues to undermine the effectiveness of fiscal policy by lowering the multiplier effect, especially from expenditures that have on average fallen below the planned amount by about 2 percentage points each year (figure 3.2).

**Figure 3.2:**  
Deviation of actual from budget nominal values: 2001-2018



Source: Ministry of Finance, Planning, and Economic Development.





Gas outlet for final consumer in Mukono, Uganda

**Enactment of the PFM Amendment Act 2015 was a major step in strengthening the fiscal framework.** The PFM Act 2015 strengthened the fiscal framework by doing the following:

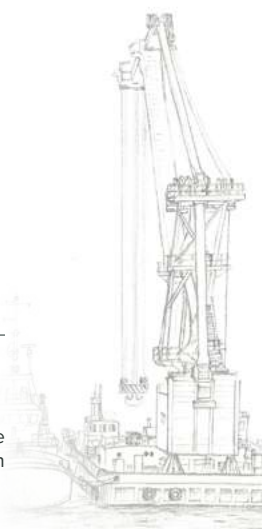
- a. Streamlining the budget processes to align them with the parliamentary processes. The requirement for the budget to be approved by the Parliament by May 31, ahead of the beginning of the budget's financial year, ensures that spending is fully in line with the budget. This is a significant contrast to the previous arrangements, where spending was based on votes on account, with the budget only approved by the Parliament in the first quarter of each year, which provided more parliamentary oversight of the budget.
- b. Instituting a form of fiscal rules by adopting the CFR, which sets boundaries for fiscal policy over five years, consistent with the political cycle. The PFM Act requires that within three months of the first sitting of the Parliament, a new government submits a CFR for the next five years with measurable objectives for fiscal policy, for the Parliament's approval. The first CFR, approved in December 2016, covers the five-year period FY 2016/17 to FY 2020/21, setting medium-term fiscal objectives for the fiscal balance and public debt. The CFR sets the fiscal deficit target of 3 percent of GDP for FY 2020/21, in line with the East African Monetary Union Convergence Criteria, and debt not to exceed 50 percent of GDP in net present value terms.
- c. Enhancing transparency through publication of annual budget framework papers that report on the budget outputs, including performance on the CFR objectives, the outlook through five-year rolling targets for fiscal deficits, and the publication of debt sustainability analysis reports.
- d. Setting up the Petroleum Fund, into which all oil revenues will be deposited before savings and investment decisions are made.

**Rising spending pressures have hampered operationalization of the fiscal framework under the CFR as required by the PFM Act.** First, the CFR targets for the end of the five-year period ending FY 2021/21 are not likely to be met. According to the budgetary framework and FY 2019/20 budget, the fiscal deficit was expected to reach 7.7 percent of GDP (which has since increased to 9.6 percent because of the COVID-19 pandemic)—well above the 3 percent target—as government expands spending on infrastructure projects such as roads related to oil and tourism development. For FY 2020/21 and FY 2021/22, the deficit is expected to remain above 5 percent before declining in the medium term, making it impossible to live within the CFR target of 3 percent by FY 2020/21. With this increase in fiscal deficit, the public debt reached 41 percent in FY 2019/20. Moreover, with new spending pressures demonstrated by the third NDP, which becomes effective in FY 2020/21, public debt could easily overrun the target of 50 percent in subsequent years.

**Furthermore, there is an inconsistency between the CFR and the PFM Act in the period over which the fiscal targets are binding.** The PFM Act requires that the CFR provide measurable objectives of fiscal policy for a period of not fewer than three years. If the CFR targets are for only three years, it would leave room for discretionary fiscal policy during the last two years of the charter (FY 2019/20 and FY 2020/21), which also happen to face potentially strong election-related spending pressures and potential policy changes from the new government.

**Another source of weakness is the abundant flexibility implied in the CFR fiscal rules with only one end target, ambiguous clauses for departure from the rule, and weak incentives for adhering to the rule.** First, the target fiscal deficit of 3 percent of GDP to be achieved by FY 2020/21 allows for flexibility in fiscal policy in the interim period, but it could be a source of instability if fiscal authorities correct for runaway deficits just before the end of the period, which adjustment could be costly for the economy. Second, whereas section 7(1) of the PFM Act 2015 provides the circumstances in which deviation from the CFR may occur, these are not clearly defined. It is not clear what the unanticipated severe economic shock and significant unforeseen event that cannot be funded under the PFM Act 2015 or using prudent fiscal policy mechanisms imply and whether they could not allow for discretionary fiscal policy. Finally, the CFR is quite strong on reporting, but it is not very clear on any other incentive to encourage compliance (for example, penalties for nonperformance in case of failure to achieve the targets).

<sup>7</sup> This ratio was 8.7 percent of GDP before the rebasing of national accounts by the Uganda Bureau of Statistics.  
<sup>8</sup> With the rebasing of GDP, the debt-to-GDP ratio in FY 2019/20 was almost 10 percentage points lower than previously estimated.  
<sup>9</sup> Section 7(1) of the PFM Act 2015 provides the circumstances in which deviation may occur owing to force majeure and be approved by the Parliament. These circumstances are (a) a natural disaster, (b) an unanticipated severe economic shock, and (c) any other significant unforeseen event that cannot be funded under the PFM Act 2015 or using prudent fiscal policy mechanisms.



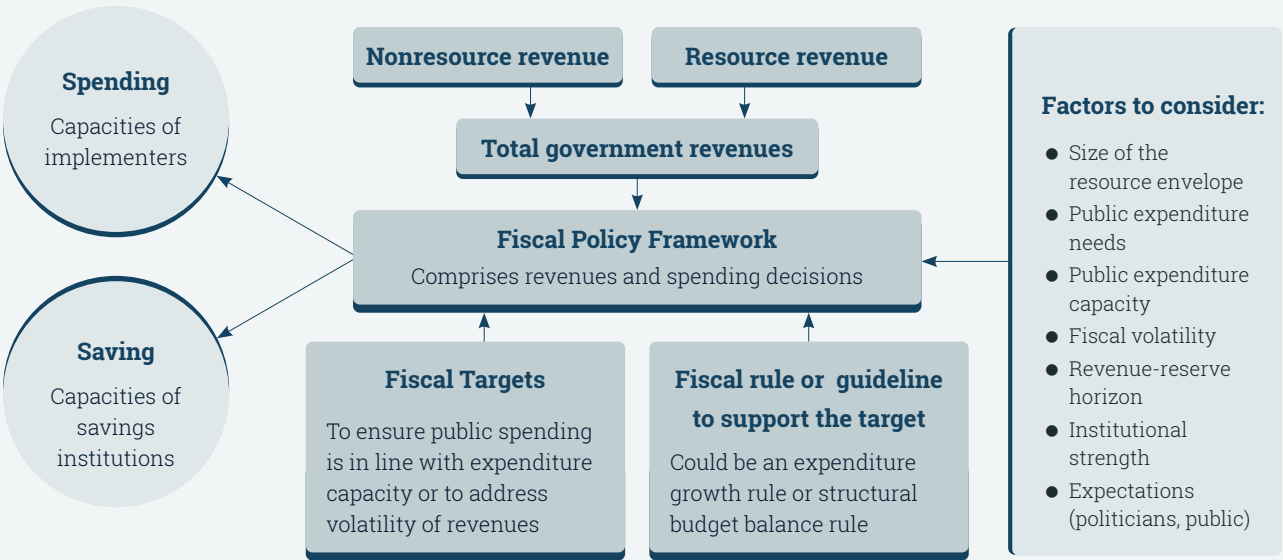
### 3.2. Specific Fiscal Issues That Could Constrain Oil Revenue Management

As in the case of the advent of natural resource flows that increase the amount of resources to the government, the fiscal framework needs to pay attention to several other issues. The 2012 Oil and Gas Revenue Management Policy provides the framework for managing and integrating oil revenue into government systems. To be effective, the policy depends on the highest standards of transparency and accountability in the management of oil and gas revenues. The policy will also need to be reviewed and updated in line with the global and sector fiscal frameworks, as discussed in greater detail in section 4.2, to ensure that it remains relevant and useful to guide the fiscal framework to manage the oil and gas revenues.

**Resource-rich economies face special challenges to their fiscal frameworks.** These include (a) the size of the revenue flows and respective shares of resource and nonresource revenues; (b) the country's development needs that could be met through increased public spending; (c) the capacity of public agencies to implement activities effectively in areas where resources for spending have been increased;

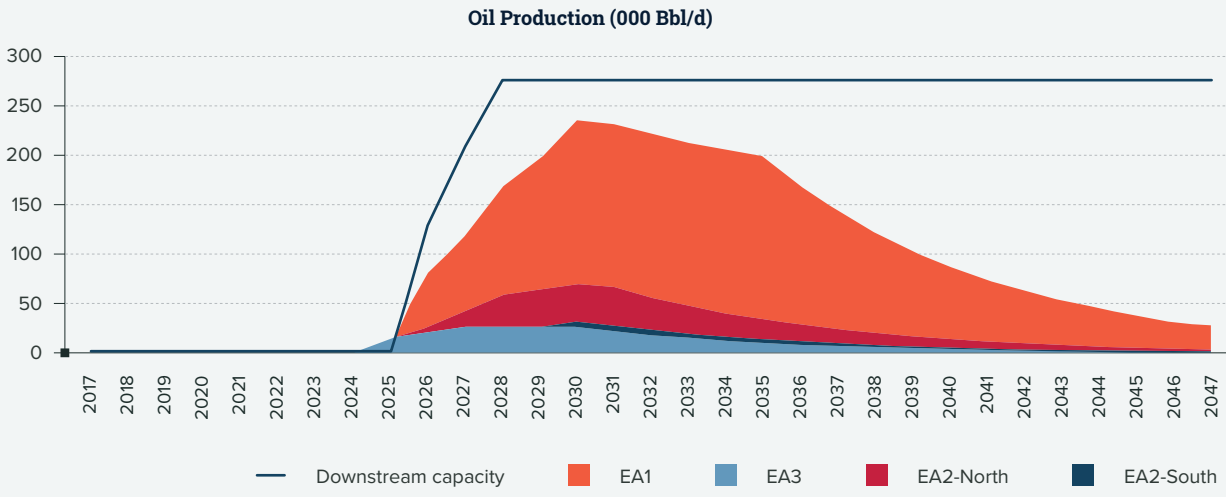
(d) the volatility of revenue flows, to avoid unchecked expenditure growth and prevent procyclicality in fiscal policy; (e) the sustainability of the revenue flows, that is, the projected resource revenue horizon and its implications for fiscal sustainability and intergenerational equity; (f) the strength of public institutions to ensure efficient, effective, transparent, and accountable use of resource revenues (reliable, free from undue influence, and with sufficient technical capacities); (g) the expectations formed by politicians and the public on the use of natural resource revenues, as well as misconceptions about the sustainability or exhaustibility of the resource; (h) the public sector's appetite for borrowing against these resources; and (i) a weaker social contract between the government and the people and reduced incentive for the population to hold the government accountable for the quality of its policies and services, if oil revenues come with a deterioration of tax effort. Figure 3.3 summarizes the types of decisions facing Uganda's policy makers and the factors they would need to consider in designing an appropriate fiscal policy framework.

**Figure 3.3:** Conceptual Framework for Fiscal Policy in a Resource-Rich Developing Country



Source: Adapted from World Bank 2014.

**Figure 3.4:** Production of Oil Under the Baseline Scenario (Brent Price of US\$60 per Barrel)

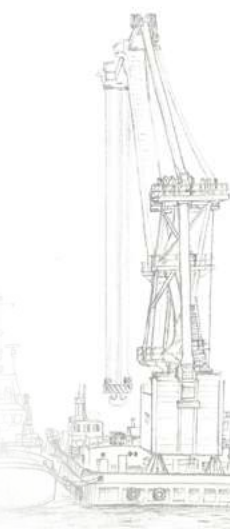


**Source:** Staff estimates using data from the Ministry of Energy and Mineral Development and the Petroleum Authority of Uganda.  
**Note:** Bbl/d = barrels per day; EA1 = represents production area 1, which covers the area along the river mouth of the Victoria Nile flowing into Lake Albert, for which concession was granted in 2004; it is believed to hold more than 70 percent of Uganda's oil reserves and is currently operated by Total E&P; EA2 = represents production area 2, which covers the northern parts of Lake Albert and the Buliisa District north of the town of Masindi, with wells like Mputa, Waraga, and Nziz, where the first commercial levels were established; it is estimated to hold around 20 percent of proven recoverable reserves and is operated by Tullow Uganda Ltd; EA3 = represents production area 3, which covers the southern parts of Lake Albert and the Simliki Basin in the Bundibugyo and Ntoroko Districts, but only the southern part of Lake Albert (EA3A) has proved commercial viability; it is estimated to hold 10 percent of proven reserves and operated by the Chinese National Offshore Oil Company.

If oil production ensues according to plan, Uganda can expect to enjoy some significant amounts of additional revenue for about 15 years, depending on the capacity of production and volatility of oil prices on the international market. The size of the revenue will be driven by the overall size of the production combining outputs from various wells, as well as by the government's decision to build a refinery with the capacity to produce 60,000 barrels per day and a pipeline with the capacity to carry up to 200,000 barrels of crude oil per day for export. Currently, the MEMD estimates that peak production will reach 230 million barrels per day and will be able to recover only 1.05 million barrels, based on the first phase of oil production. The government expects that more exploration efforts (as new exploration areas are licensed) and technological improvements may convert a higher level of the 6 billion barrels stock of oil in place into recoverable reserves. If this expectation is not

merely speculative, Uganda would be a rare case, as recovery does not normally go beyond 20 percent of reserves.

The risks and variation to these factors notwithstanding, the production path is predicted to be bell-shaped. The expectation is that the volumes of production will sharply increase to peak in about five years, with levels sustained at relatively high volumes of greater than 200,000 barrels per day during the subsequent 10 years, before gradually declining over the following 10 years (figure 3.4). Government revenues are expected to follow a similar path, which raises concerns similar to front-loading. Analysis based on the price of US\$60 per barrel suggests that during peak production, government revenues could reach between 3 and 4 percent of non-oil GDP, which would be enough to substitute for external financing of the government budget today (US\$1,375 million by FY 2017/18).



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In addition to production capacity, supply and demand conditions on the international market will continue to determine the price, with an increasing risk of prices remaining too low to make Uganda's oil profitable. Between 2014 and the beginning of 2020, international oil prices fluctuated between US\$35 and US\$100 per barrel (see figure 3.5).<sup>10</sup> The average monthly price plunged to US\$33 per barrel in March 2020 as global demand contracted in response to the COVID-19 pandemic, while competition between major suppliers for market dominance increased supply. This situation has major implications for Uganda's oil industry, whose break-even price for production was estimated at US\$60 per barrel and whose quality may fetch a discounted price on the world market (World Bank 2016). The World Bank's 2016 Uganda Country Economic Memorandum estimated that if the price was to remain at US\$100 per barrel, recorded before the sharp decline between 2014 and 2016, the oil revenue for the government would average close to US\$2.5 billion per year (World Bank 2016). If the price for one barrel of oil remains at US\$50, average oil revenue will only amount to about US\$800 million per year. The gap between the two figures depicts the level of uncertainty the government must manage, arising from the price

of oil alone. As discussed in section 2, although prices of commodities have historically exhibited significant volatility, this uncertainty is further exaggerated by the rapidly evolving policy and regulatory responses to curb rising carbon dioxide emissions, which are having an impact on the energy industry globally.

Overall, 70 percent of the net present value of oil production revenues will go to the government and reach 40 percent of current domestic revenues. This government share compares favorably with the take in other new oil-producing countries. For example, in Ghana, the government's share of the net cash flow of offshore oil fields is about 69 percent. Based on the existing PSAs for the production blocs in Kilenga and Kingfisher and on an assumption of a long-term price of oil of US\$60 per barrel, government revenue would average US\$1.3 billion per year and reach a peak of US\$2.4 billion in 2035, the peak production year, as shown in figure 3.6.<sup>11</sup> With this price scenario, the average annual flow is about two-fifths of domestic revenue in FY 2018/19. The various scenarios assume that the increase in production to the full capacity of the refinery and pipeline will be gradual.

<sup>10</sup> World Bank Commodities Price Data, <http://www.worldbank.org/commodities>.

<sup>11</sup> An evaluation by the MEMD, based on cumulative production of 1,046 million barrels from the first phase, suggests an undiscounted revenue flow of US\$43.7 billion with the biggest value coming from upstream activities.

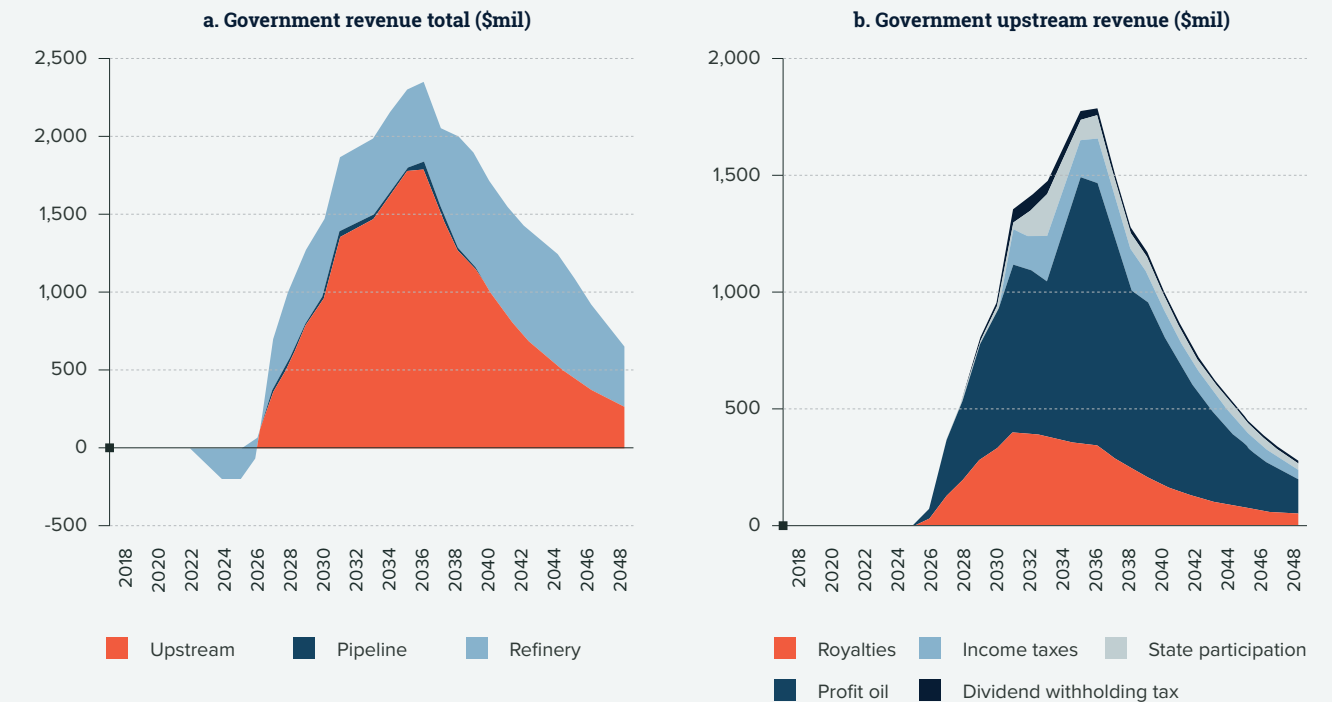
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**Figure 3.5:**  
World Price of Crude Oil (Brent), January 2014–March 2020



Source: Sources: World Bank, Commodities Price Data (April 2020); World Bank 2016.

**Figure 3.6:**  
Production of Oil Under the Baseline Scenario (Brent Price of US\$60 per Barrel)



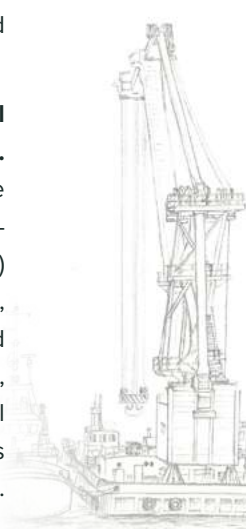
Source: Staff estimates with data from the Ministry of Energy and Mineral Development and the Petroleum Authority of Uganda.

Uganda is undertaking investments in critical infrastructure to support oil production and its commercialization, starting with roads. The Hoima-Kaiso-Tonya Road, which connects the oil wells, was completed in 2014, and the Nyamasoga Oil Treatment Plant was completed in 2015. The government is securing more resources to construct and rehabilitate roads in the oil region, including the Masindi-Biiso, Kabaale-Kiziranfumbi, and Hohwa-Nyairongo-Kyarusesa-Butoole roads.

The government also has decided to build a refinery, which would have first call on the crude oil, to achieve the objective of processing 60,000 barrels per day (about one-third of the oil produced domestically). The contract for a scalable oil refinery was signed in 2018, and, at the time of writing this report, the lead investor was making detailed designs for the final

investment decision. The refinery, which will be the first in the region, will supply domestic and regional markets. It will be built and operated by a consortium of U.S. and Italian companies in the Albertine Graben Refinery Consortium, and it is expected to be completed by 2025.

In addition, an international airport to serve the oil region and an industrial park has been developed. The East African Crude Oil Pipeline is expected to have a carrying capacity of 200,000 barrels per day (two-thirds of the crude oil produced in the Albertine region) over 1,443 kilometers from Hoima, Uganda, to Tanga, Tanzania, for export. The pipeline had been planned to be completed in 2023, but this remains uncertain, as Total E&P Uganda (the largest of the international oil companies) announced a suspension of activities on the pipeline after the Tullow farm down collapsed.



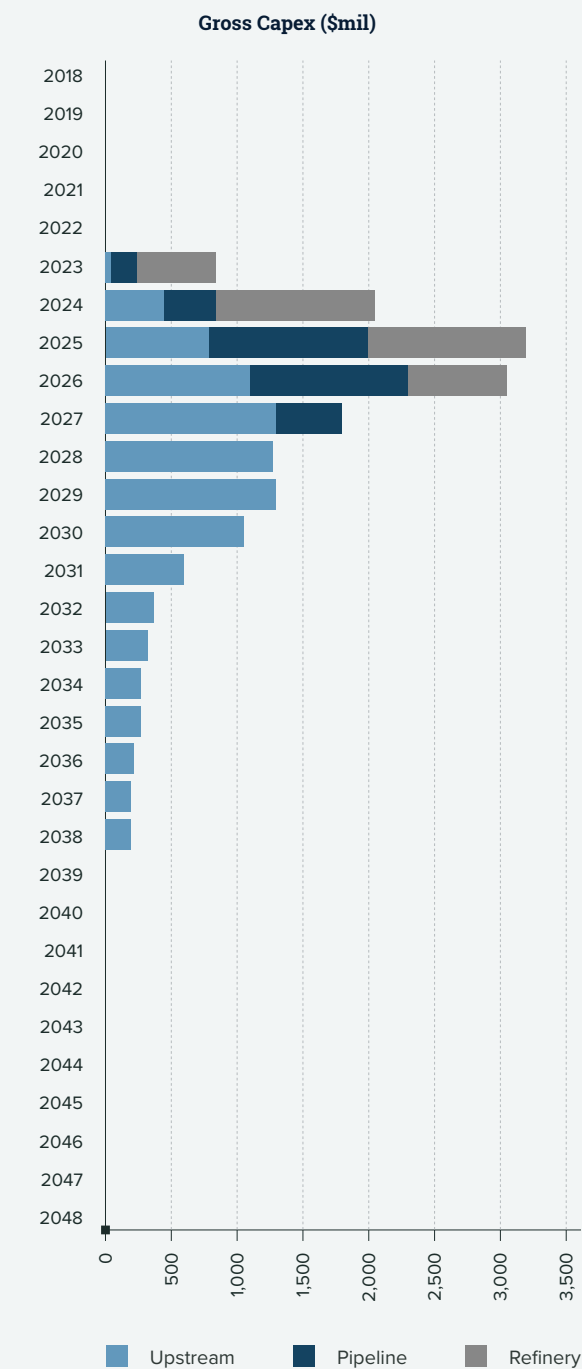
The other key investments related to managing the oil development program are Hoima (Kabaale) International Airport and an industrial park that is being developed to support investments in oil-related industries, such as petrochemicals. The works on the airport were disrupted by COVID-19 but reached 50 percent completion by the end of December 2020. (see appendix A for details on midstream and downstream activities).

**A significant amount of public resources is still required for the government to pay its stake or to be recovered by the private sector when oil starts to go to market.** Whereas an estimated US\$3.5 billion has been spent during the exploration phase, additional investments are required for the upstream activities, including the development of the fields and associated infrastructure. The Uganda National Oil Company estimates that construction of the refinery could cost between US\$3 billion and US\$4 billion—excluding working capital costs, which are yet to be estimated. In addition, the total cost for the construction of the pipeline is estimated at about US\$3.5 billion, and it is estimated that the pipeline could be operated for an equivalent amount over the course of its life. The cost is to be shared between Uganda and Tanzania.

**Overall, capital investment for oil is envisaged to grow rapidly in the early years, before it declines.** Overall, a total of about US\$10 billion, or about one-third of Uganda’s current GDP estimate of about US\$30 billion, will be spent before realizing oil revenues. The government of Uganda’s contribution to these projects is through UNOC and currently estimated to reach US\$725 million to fulfill its obligations to the contracts it has signed with the oil companies. This amount will only become concrete once key decisions on Uganda’s equity stake have been made. Because oil companies must recover costs, it implies that there may not be much revenue to save in the first five years, as the capital expenditure takes all the resources generated, as is illustrated in figure 3.7.

**Determining how to spend the resource revenues should be guided by the objectives of the overall fiscal policy framework.** There is no doubt that government is concerned about many factors, including limiting revenue volatility, building its capability to increase public spending quickly, managing the macroeconomic

**Figure 3.7:**  
Evolution of Government Capital Expenditure for Oil Production in the Baseline Scenario



**Source:** Staff estimates, with data from the Ministry of Energy and Mineral Development and the Petroleum Authority of Uganda.

impacts of resource exports, or a combination of factors. Once the appropriate level of spending meeting these criteria has been determined, additional resource revenues should be saved for the future.

**Given its considerable development challenges, Uganda is planning to prioritize public investment in infrastructure, notwithstanding the capacity issues, which would undermine the credibility of the existing fiscal framework.** According to the PFM Act 2015, Uganda plans to use petroleum revenues to finance government infrastructure and development projects—not recurrent expenditures. According to the medium-term fiscal framework, the fiscal deficit could reach almost 9 percent of GDP before subsiding to 3.5 percent of GDP by FY 2020/21, as per the CFR.<sup>12</sup> This calculation is made with knowledge of the need for large-scale investments in a country where the infrastructure deficit is a key binding constraint to growth and where long-term development financing is scarce. It also carries an implicit assumption that the expected return on such investments in a country at such a low level of development is potentially higher than the return that could be earned from the accumulation of financial assets invested abroad. This is notwithstanding global experiences showing that many countries that took this approach (for example, Angola, Gabon, and Nigeria) continue to suffer from high levels of poverty, low human capital development, and a capital stock that is scarcely adequate for the post-oil era. Therefore, a key concern remains on how the current fiscal framework can be adjusted to allocate resources to the right areas and be able to account for the various challenges, including resisting politically motivated spending pressures.

**Furthermore, the extent of the current, upfront use of oil revenues (or frontloading) raises fiscal sustainability concerns over the medium to long term.** As part of its technical assistance work in oil revenue management, the IMF has highlighted the need to strengthen the macro and fiscal frameworks, particularly to address likely volatility and fiscal risks; to contain excessive spending pressures and escalation of debt; and to strengthen the underlying PFM systems, such as budgetary management, reporting, and

transparency. The PFM Act also introduced a framework for setting aside some financial resources in the form of savings. This decision of spending for today’s needs versus saving for the future is a critical component of maximizing the effect of oil for Uganda’s development.

**Other challenges around the fiscal framework emanate from contradictions and omissions in the PFM Act 2015, the main legal framework for managing oil revenues.** The PFM Act, part VIII, covering sections 55 to 75, illustrates key issues related to the collection, deposit, management, investment, and expenditure of petroleum revenue. However, more clarity and, in some instances, reviews or amendments are required to strengthen these efforts and remove contradictions that could encumber the smooth management of the petroleum revenues. The areas identified as requiring further strengthening include definitions for petroleum revenues and the policy framework and technical guidelines for the management of the savings.



<sup>12</sup> These figures will need to be adjusted in line with the extended dates for the start of oil production.

**First, whereas the definition of petroleum revenues included in Uganda’s law meets international good practice, there have been proposals to revise the law following recent allocation of resources from the Petroleum Fund.** Section 3 of the PFM Act defines the petroleum revenue to mean taxes paid under the Income Tax Act on income derived from the petroleum operations, government share of production, signature bonus, surface rentals, royalties, proceeds from the sale of the government’s share of production, dividends due to the government, proceeds from the sale of the government’s commercial interests, and other duties or fees payable to the government from contract revenues under a petroleum agreement. However, during FY 2018/19 and FY 2019/20, some funds were not allocated to the Petroleum Fund on the justification that taxes (that is, the capital gains taxes from transactions such as between Tullow and Heritage Oil and Gas Limited) are not oil revenues, but rather part of the overall non-oil revenues collected by the Uganda Revenue Authority. This justification is not consistent with the PFM Act and implies a need for amending the law to provide more clarity, while introducing penalties to remove this discretion in the use of oil revenues.

**Second, there is still a lack of clarity on the technical rules to guide decisions on the allocation between spending and saving.** Section 57 of the PFM Act requires that all petroleum revenues are collected into the Petroleum Fund, from which withdrawals granted by an appropriation act and warrant of the Auditor General will be permitted to go into (a) the Consolidated Fund (for spending in the annual budget) and (b) the PRIR as the savings fund for future use. This implies three

critical decision points that require clear quantitative fiscal rules: the spending and saving allocation decision, the optimal investment framework for the financial resources that have been put aside for future use, and the decision on how the two will interact.

**Third, there is a contradiction related to the allocation decision in reference to the treatment of balances in the Petroleum Fund.** Clause 59(4) suggests that there may be balances in the Petroleum Fund, which will need to be invested by the Bank of Uganda but remain available to the budget at call. But clause 62(6) suggests that any balances in the Petroleum Fund, after appropriation, shall be transferred to the PRIR. There is concern that such contradictions could allow for discretion, especially on withdraws from the Petroleum Fund, which may present a challenge depending on the political environment. It is important that these contradictions are rectified and that the legal framework is streamlined to avoid discretion.

**In view of these weaknesses, there is an imperative to improve the fiscal framework through clear technical guidance as well as the introduction of more substantive legal constraints for appropriate allocation of petroleum resources between investment and growth and for the Petroleum Fund and accumulation of assets in PRIR.** Technical specificity will help to ensure that the allocation mechanism is insulated from political interference or the influence of short-term pressures. Drawing on global experiences, the following recommendations will strengthen the fiscal framework for managing oil revenues.

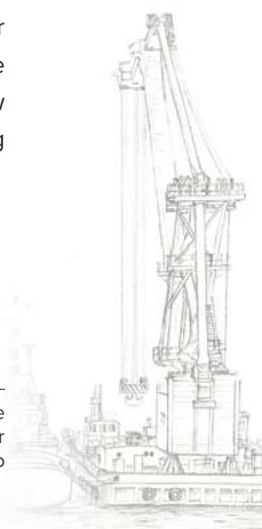
## A. Adopt a Fiscal Sustainability Framework That Is Consistent with the Challenges of Oil Revenue Management

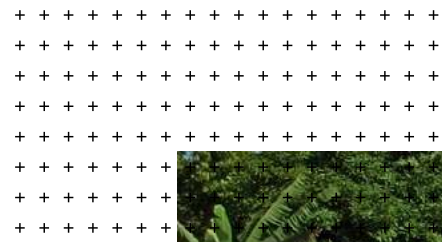
**The planned increase in public investment spending should not exceed absorptive capacity and must not be incompatible with long term fiscal sustainability.** The PFM Act 2015 states that petroleum revenues will only finance infrastructure and development projects. Indeed, if the returns on public investments in infrastructure or improved health and education services are higher than the returns that could be earned from financial assets, frontloading makes good economic management sense and, if it is implemented well, would benefit future generations and contribute to the sustainability of the income generated from oil. However, the level of frontloading needs to be evaluated on the basis of several trade-offs and constraints. First, there are limits to how fast any public sector can grow while continuing to use fiscal resources, effectively implying that there are diminishing returns to public investments. Second, accelerated public expenditure could exceed the country’s absorptive capacity, leading to overheating and Dutch disease—well-documented adverse effects of a natural resource boom on a country’s economic development in the absence of quality institutions and governance. Further, expectations of the returns to spending domestically versus saving (in financial assets) should be evaluated not only based on return expectations, but also on considering the financial and other risks of these decisions and the willingness and ability of policy makers to assume and manage these risks on an ongoing basis. Thus, the fiscal sustainability framework needs to be developed and adapted to guide decisions on investment and savings, based on analysis by policy makers of the returns within specific risk tolerance levels, from investments in relation to financial assets, maximum point of returns, and absorptive capacity of the economy.

**Uganda should adopt a fiscal sustainability framework that allows for scaling up public investments in line with the absorptive capacity and aims to accelerate growth in the nonresource sector.** The fiscal sustainability framework recognizes that natural resources are finite; but instead of translating natural resources into financial wealth (to be saved in an SWF), it allows for increases in public investments in line with the country’s absorptive capacity to transform natural resource wealth into other forms of wealth—the type of approach that has been followed by successful resource-rich countries (World Bank 2014). Other frameworks, such as “a bird in hand,” would not be appropriate for Uganda, as they place more emphasis on preserving the resource revenues in financial assets and, hence, underestimate the development needs of the country.

**A sound fiscal sustainability framework would be underpinned by fiscal targets aimed at providing a realistic expenditure path that is consistent with macroeconomic stability, absorptive capacity, and management of the volatility of revenues.** One such target is an expenditure growth target that ensures that spending is consistent with absorptive capacity and addresses volatility issues. Synonymous with the Permanent Income Hypothesis, such a target assumes that the government can spend up to a certain limit and save the rest, and vice versa.<sup>13</sup> This target will not only guide spending, but it will also help manage popular expectations about the pace and scale of resource revenue spending, as well as encourage a realistic view among public agencies on their prospective funding trajectories.

<sup>13</sup> Under the Permanent Income Hypothesis, expenditures are assumed to be at a level that is consistent with the expected long-term average income, derived as the net present value of oil revenues over the duration for which the country will be producing oil. The total spending over this period must equal the income. Thus, although in some periods spending may be higher than the oil flows (hence the use of borrowing to close the gaps), in others, it will be lower than the expenditure target, thus allowing for savings.





A fuel station under construction in Uganda

**Strengthening the fiscal rules.** Fiscal rules that establish clear limits on spending can foster more realistic expectations and provide a clear, understandable policy goal. In addition to the ability to signal the government’s commitment to fiscal discipline, fiscal rules will strengthen the government’s fiscal credibility if there is reliable adherence to them (Debrun and Kumar 2007). Whether there is oil revenue or not, in the next CFR, it will be important to clearly define (a) the annual targets to reduce the flexibility of the rules, while allowing for a smooth transition to the final targets; (b) the circumstances under which a rule can be adjusted, including the types of shocks that could be considered for such a deviation; and (c) the consequences for violation of the rules and the course of action that would be required to correct for the deviation. Strengthening fiscal rules would require amending the PFM Act to match the new requirements of a more binding fiscal rule.

**A key element of the fiscal sustainability framework is a fiscal rule that is adjusted to the realities of the oil era to provide a quantitative restraint on expenditures, which in turn will inform the fiscal targets.** In specific reference to natural resources, countries that have established clear fiscal rules determining how initial oil revenue should be spent generally have been the most successful in their transition from net oil consumer to net oil producer. As of the end of 2012, 75 countries had one or more fiscal rules in place, of which 28 were advanced economies and 47 were developing countries (Bova, Carcenac, and Guerguil 2013).

**The fiscal rule should also adhere to the principles laid out in the 2012 Oil and Gas Revenue Management Policy.** This policy stated that Uganda would use the non-oil, non-grant fiscal deficit as an anchor for public expenditures. Unlinking the expenditure profile from volatile oil and grant revenues would limit total spending to the sum of domestic non-oil revenue and the deficit target. This step would ensure that the government remains in control of the fiscal policy stance.

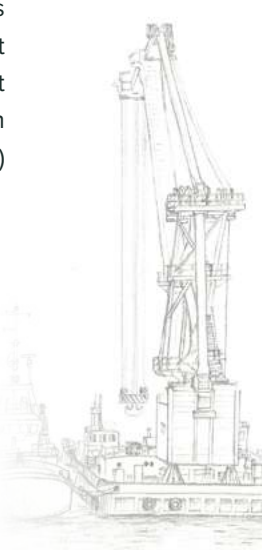
**The fiscal rules would also need to recognize the expected pattern of oil revenues and planned investments and be clear on how they will meet the multiple objectives, to make implementation more feasible.** With current domestic revenue barely reaching 13 percent of GDP, a non-oil, non-grant fiscal deficit target of 5 percent would limit today’s expenditure to 18 percent of GDP, which is not different from the average spending over the past five years. If set at a prudent level, the non-oil, non-grant fiscal deficit rule could prevent a too-rapid increase in expenditure, yet the fiscal rule implied in the CFR does not take this into account. Furthermore, a fixed target of the non-oil, non-grant budget deficit does not take into account the bell-shaped nature of the oil production path in relation to the frontloading of government investments, both of which imply high fiscal deficits in the early years and low deficits when oil production peaks by the mid-2020s. Therefore, the proposed non-oil, non-grant fiscal deficit limit would need to be revised every three to five years in line with the inflow of oil revenue. Clear guidance on the fiscal deficits and implied levels of

spending and on links to the longer-term NDP to inform the allocation decision is still required. Without such clear technical guidance, there is a risk of spending too much or too little, both of which could have implications for the economy, while undermining the objective of the PRIR (among others, ensuring intergenerational equity transfer of the oil revenue benefits), if too little or nothing is allocated for saving.

**The fiscal sustainability framework would need to be accompanied by a mechanism to enforce, including to ensure adherence to the fiscal rules and expenditure targets, and to penalize noncompliance with the framework.** Some of the key characteristics of successful fiscal frameworks include simplicity of rules, discretion to respond to shocks, and an exceptional circumstances clause that may allow for temporary deviations from the fiscal rules and targets under certain specified conditions. These characteristics need to be enforced with care, so that they do not loosen the framework. Previous attempts to establish a fiscal rule through the CFR (discussed in section 3.2) have so far not been successful, pointing to the need for appropriate enforcement mechanisms to be in place. This challenge is shared across other oil-producing countries. In Nigeria, the institutional framework for managing oil revenues includes a savings mechanism (the excess crude account) and a sovereign investment fund, both with rules governing how they operate. But successive governments in Nigeria have not transferred funds to the savings account as they were supposed to do, and in other instances drew down

from the account when they were not supposed to do so, because there was no mechanism to stop them ex ante or impose sanctions or reverse actions that breach the rules ex post. The framework should be monitored and enforced through a well-designed legal and institutional framework, including an appropriate statutory basis, strong oversight mechanisms, clear-cut transparency and accountability provisions, and effective enforcement procedures. Finally, all fiscal rules should be grounded in a broad national consensus on their nature and purpose and a common understanding of their benefits (Kopits 2001; Sanchez 2011).

**The fiscal sustainability framework needs to be in place immediately to inform the current spending decision, which seems to have a connected bearing on prospects for oil revenues.** Whereas the current legislation requires prudent and sustainable fiscal policy objectives in managing oil revenue that unlinks spending with oil flows, a framework to implement these objectives must be in place. Government efforts to establish the framework (with support from development partners, especially the IMF and Norway) must be accelerated.



## B. Design and Publicize a Framework for Determining the Size and Variability of Oil Revenues

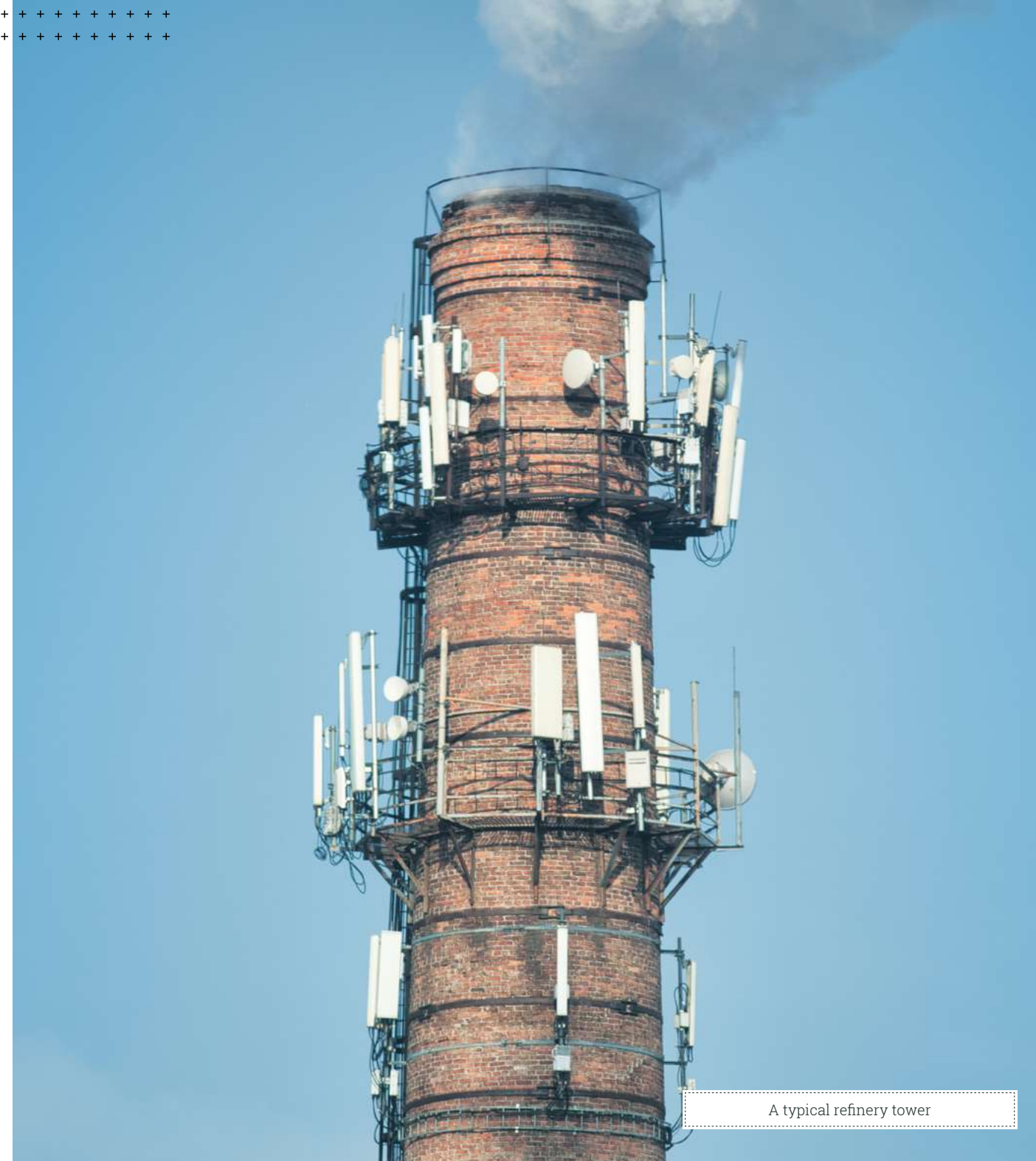
Uganda should adopt a transparent framework to support the formulation of fiscal policy and to help manage expectations. With its relatively strong track record in budget transparency, Uganda is currently ranked second in Africa on the Open Budget Index.<sup>14</sup> The country can build on this to enhance its fiscal transparency around oil by (a) providing more information about the fiscal framework, including the targets and rules being used and (b) engaging the public on fiscal issues to anchor their expectations. In the case of oil revenues, information about the size of the revenues and expected drivers of changes in key variables is crucial for the public and helps raise awareness about the challenges the government would potentially face in managing these resources. The management reports of the Petroleum Fund that focus on the expenditure side are a good starting point toward greater transparency. The framework should build on the important steps the country has taken to streamline its membership under the Extractive Industry Transparency Initiative.<sup>15</sup>

It will also be useful to provide some degree of clarity and transparency around the savings from the revenues and the management of the PRIR. The PFM Act 2015 stipulates that revenues that are not allocated to spending will go into the PRIR, which is supposed to operate like an SWF. However, how the volumes of savings and their management are determined should be more transparent.

The PFM Act should establish an annual threshold for the appropriation of the Petroleum Fund into the Consolidated Fund (for fiscal purposes) and into the PRIR (for investment). The lack of certainty about the annual appropriation makes the investment projection for the PRIR a challenge, complicating the efforts of putting in place an effective framework to manage this fund. Policy makers should estimate the fund's potential inflows under various fiscal and oil price scenarios over

the medium- to long-term horizon to inform the design and implementation of governance and institutional arrangements for the Ugandan SWF. As such, a solid and prudent fiscal framework is extremely important to ensure that a portion of the petroleum revenues is

retained for future generations. This framework design can be part of the important steps the country has taken to become a member of the Extractives Industry Transparency Initiative.



A typical refinery tower

## C. Strengthen the Legal and Regulatory Framework to Align It with the New Realities of Oil

The government of Uganda will need to revise the PFM Act 2015 to address the challenges of oil revenue management. The PFM Act 2015 already anchors issues such as collection, deposit management, investment, and expenditure of oil revenues. To close the gaps in the legal framework, the following are proposed for revision:

- Redefine and clarify what constitutes the petroleum revenues in the act, and ensure that the interpretation of use of these revenues sticks to the definition by including penalties for abuse of the definition and use of oil revenues outside the legal framework.
- Formulate regulation to clarify the interpretation of the law (section 57 of the PFM Act) on the fiscal rules for the decisions between spending and savings allocations, the optimal investment framework for the financial resources that have been put aside for future use, and the decision on how the two will interact.
- Redefine clauses 59(4) and 62(6) to remove the contradiction related to the treatment of balances in the Petroleum Fund. This issue is expounded in part 4 of this report, which focuses on the PRIR.

Management of the savings and accumulation of financial assets needs to be efficient too, to complete the cycle of oil revenue management. The PFM Act 2015 (section 57) puts in place a legal framework for the allocation of residual oil revenues to the PRIR as savings. In tandem, the government has established the Petroleum Investment Fund and in May 2019 appointed an Investment Advisory Board, both of which form the institutional framework for managing the national savings for the future. However, gaps remain that should be filled to ensure that accumulated funds are managed properly and achieve the intended purpose. The next section delves into these issues.



<sup>14</sup> Open Budget Index, <https://www.internationalbudget.org/publications/open-budget-survey-2017/>

<sup>15</sup> Uganda became a member of the Extractive Industry Transparency Initiative in 2019.

## D. Take Other, Broader Reforms to Strengthen the Overall Fiscal and Public Finance Management

The highlighted challenges demonstrate a need to strengthen overall PFM, public investment management, and the operational environment for fiscal management in Uganda to create the foundation for oil revenue management. With the time line for the first oil revenue still more than three years away, this foundation would benefit from the following:

- Improving management of domestic arrears. Preventing the accumulation of arrears would take a dedicated effort to implement and meet the objectives of the Domestic Arrears Strategy formulated in March 2018, including establishing a comprehensive and reliable database for verified arrears, clearing existing arrears, strengthening measures that inhibit the diversion of domestic arrears resources, and stopping the creation of new arrears. Verification of the arrears to determine the actual age and eligibility of creditors, as well as consistent reporting of arrears by ministries and agencies' departments, will remain crucial to allocation for clearance without room for diversion. Implementation of the PFM reform strategy, too, will ensure that multiyear commitments are accurately reflected in annual budgets, that commitment controls (including reporting and clearing of arrears) are reinforced, and that PFM compliance is improved through better incentives and sanction mechanisms.
- Strengthening public investment management to raise the capacity for absorption and credibility of the budget. Whereas the government is taking the necessary steps to strengthen public investment management, this reform is yet to materialize in gains in time spent and rapid execution of the

budget. It is crucial that the government implements its Public Investment Management Action Plan to streamline and strengthen its institutional arrangements and capacity; to standardize the information and documentation that are needed to guide the entire project cycle; to rationalize projects and improve costing and baseline information in the Public Investment Plan; and to ensure that the public investment management is underpinned by an appropriate legal and regulatory environment that strengthens planning, mandates, incentive structures, and accountability.

- Improving domestic revenue mobilization. This can be done by closing leaks in the policy instruments, expanding the tax base, and raising the efficiency of revenue administration. Whereas the government has formulated a domestic revenue mobilization strategy, it needs to ensure that it is systematically implemented.
- Improving debt management, including for nontraditional sources like contingent liabilities. This improvement requires strengthening the budget process to make the budget targets more binding, public spending and public debt management more effective and comprehensively monitored, and fiscal risks transparent.
- Improving allocative efficiency. The government needs to adjust its allocation framework to match the existing capacities. Although allocating resources consistently with ambitions is useful as indicated in the NDP, the credibility and predictability of the budget will greatly improve if the variations from the budget are minimized.



Drilling at Ngege in Buliisa-Hoima, Uganda





4.

**MANAGING UGANDA'S  
NATIONAL SAVINGS:  
SETTING UP A SOVEREIGN  
WEALTH FUND**

Uganda intends to put aside some of the oil revenues in savings for the future, as articulated in the PFM Act, and this will need to be operationalized through the fiscal framework.<sup>16</sup> Without operationalizing the framework, the magnitude of the savings can only be estimated based on assumptions about the amount of oil that will be produced, actual revenues generated, and proportion of these revenues that will be put aside for savings, all of which will vary in line with price changes.

Gross oil revenues into government coffers could reach an average of US\$2 billion per year over the lifetime of the oil project, just enough to allow Uganda to achieve the East African Community deficit target. In the baseline scenario, assuming an average oil price of US\$60 per barrel, revenues would reach about US\$2 billion per year, or 1.9 percent of GDP.<sup>17</sup> On the assumption that Uganda will continue to pursue a fiscal policy stance that aims to support stabilization, it is expected to focus on policies that can ensure that the deficit is maintained within a reasonable level. Uganda could bring the overall deficit close to the 3 percent target of the East African Monetary Union (assuming it will maintain this same target beyond FY 2020/21) if its non-oil, non-grant deficit target was kept at 5 percent of GDP over the first five years of oil production, because the overall deficit would average about 3.2 percent of GDP.

The deficit targets will therefore be crucial to manage the savings that will be left after resources have been allocated for investment. The lower the deficit target, the higher the amount of savings and hence the more critical the institutions for managing these savings will be. Given the strong bias toward investment, we can assume that a large proportion of the revenues will be invested, especially during the early years. For the price scenario of US\$60 per barrel, fiscal deficits that result into respective residual savings of 10, 25, and 40 percent, out of the net government cashflow from the oil resource, would result into average savings ranging between US\$158 million and US\$630 million per year, with a possibility of reaching almost US\$942 million per

year during the peak production years, as is presented in figure 4.1. This does not rule out the possibility of savings being higher, especially given the possibility that the absorptive capacity could put a limit on the level of investments and the desire of some technical parts of the government of Uganda to see higher savings for ensuring intergenerational equity.

Variations in price could also spill into the level of savings. For the low-price scenario of US\$45 per barrel, residual savings of 25 percent of net government oil revenues amount to an average of US\$264 million per year. A high price of US\$85 per barrel would yield residual savings of up to US\$628 million per year, which could possibly reach US\$930 million per year during the peak production years, as is presented in figure 4.2. Accordingly, under this scenario of a savings rate of 25 percent, cumulative flows into the PRIR could reach about US\$6 billion under the low-price scenario of US\$45 per barrel, whereas a higher price of US\$85 per barrel would see this more than doubled to US\$13 billion.

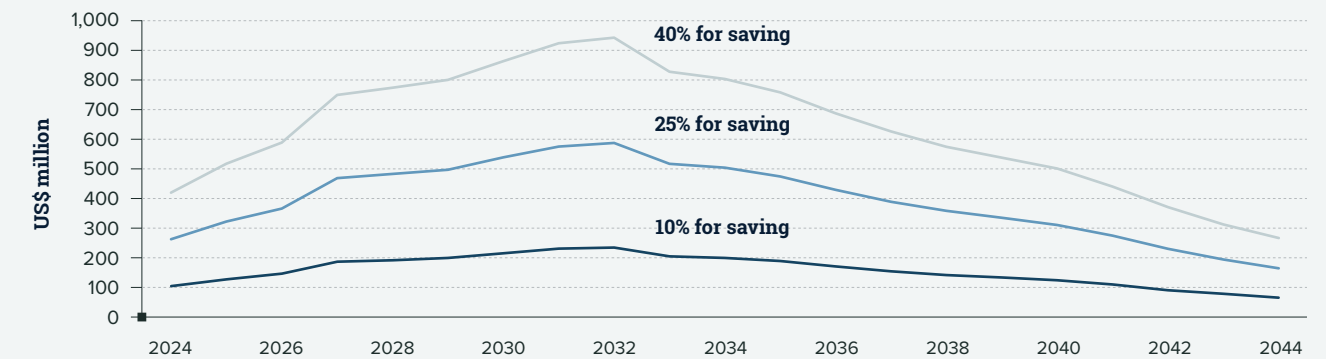
The amount of savings also has implications to the type of institution to build to manage the savings. Under a lower savings rate of 10 percent of net government flows, the cumulative savings would range between a lower bound of US\$2.2 billion for average prices of US\$45 per barrel to an upper bound of about US\$5.2 billion for US\$85 per barrel, as depicted in figure 4.3. By contrast, under a higher savings rate of 40 percent of net government flows, the cumulative savings could range between US\$8.9 billion for average prices of US\$45 per barrel and US\$21 billion for US\$85 per barrel. In comparison, Uganda's international reserves, currently managed by BOU, have grown by about US\$ 1 billion over the past 10 years from US\$2.4 billion in June 2010 to US\$ 3.9 billion by June 2020. The institution responsible for keeping the savings must build the capacity to manage a much bigger pool of resources than what BOU has managed in the past.

<sup>16</sup> This section draws on extensive hands-on experience of the World Bank Treasury's Reserves and Advisory Management Program, which has been providing technical and capacity-building services to central banks and SWFs since the establishment of the program in 2001.

<sup>17</sup> Average revenue accruing to the government is calculated as a residual.

Figure 4.1:

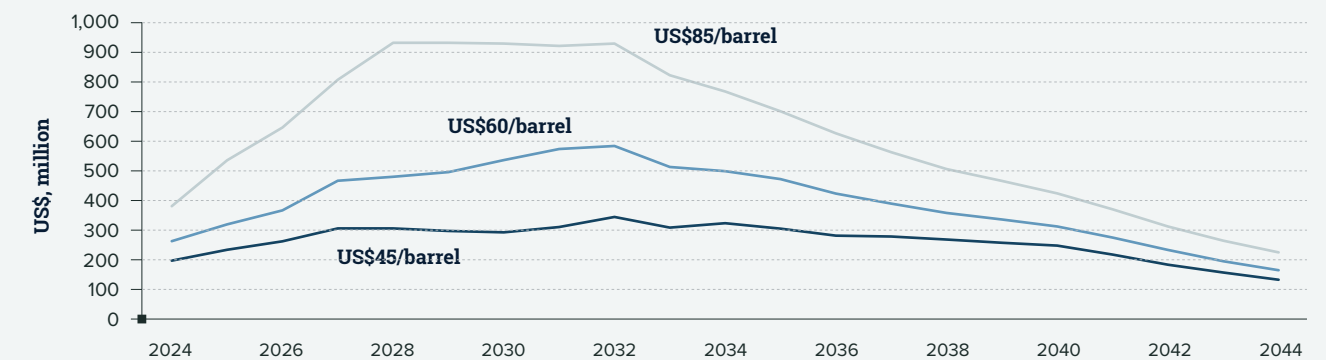
Savings from Government Revenue Flows, with the Price of Oil at US\$60 per Barrel



Source: Staff calculation using data from Ministry of Energy and Mineral Development & Petroleum Authority  
Note: The values in the legend are residual savings rates out of net government cashflow.

Figure 4.2:

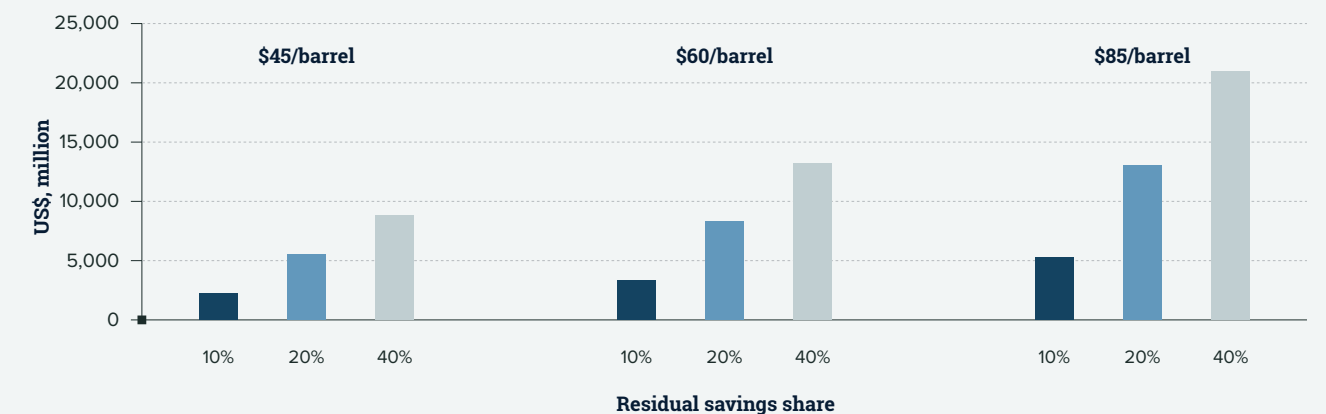
Savings from Total Government Revenue Flows, with Various Prices of Oil



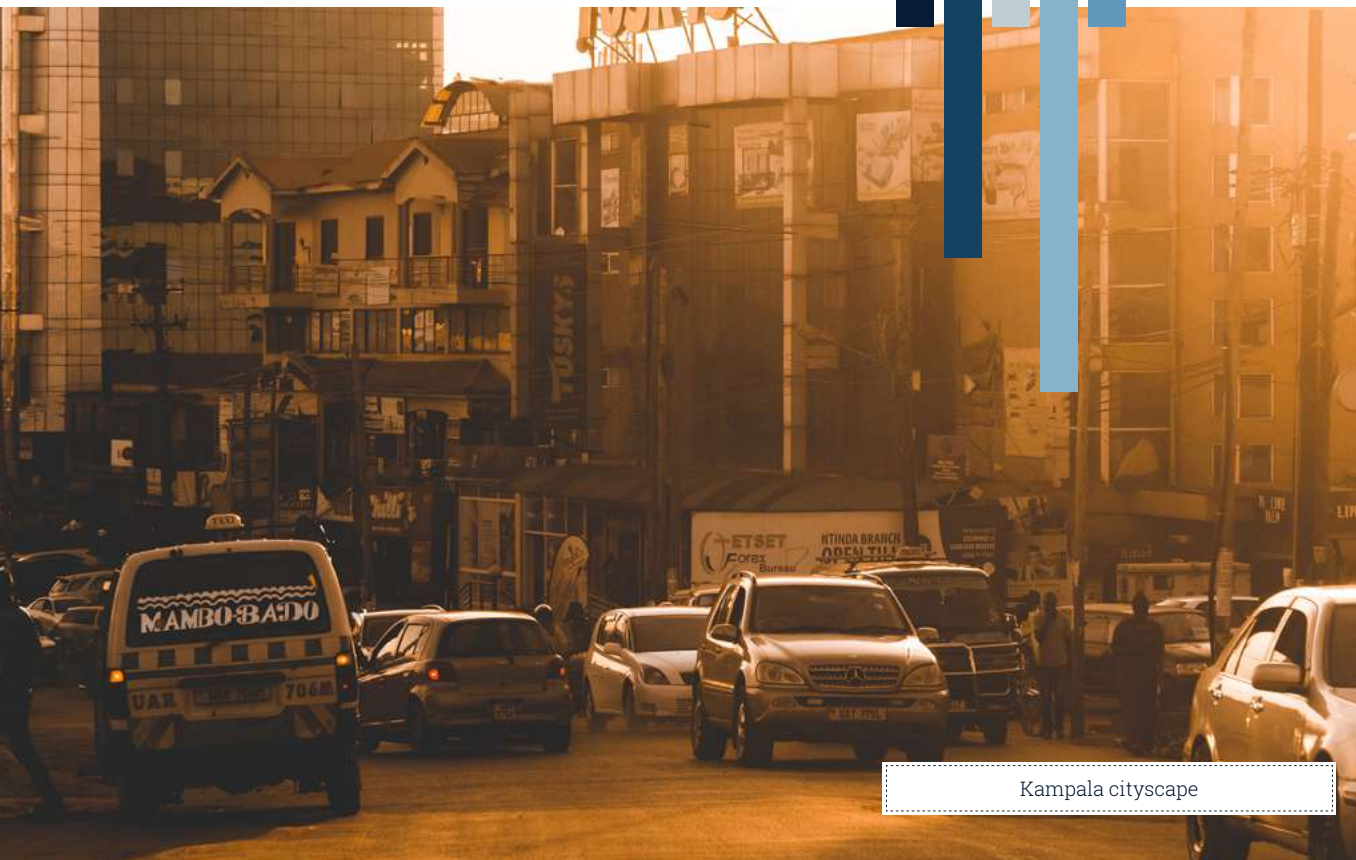
Source: Staff calculation using data from Ministry of Energy and Mineral Development & Petroleum Authority.

Figure 4.3:

Scenarios for Cumulative Savings, with Various Prices of Oil, 2024–44



Source: Staff calculation using data from Ministry of Energy and Mineral Development and Petroleum Authority.



Kampala cityscape

Countries that establish SWFs typically follow a systematic, sequential process to put in place a system to manage commodity-related revenue. A successful process involves extensive stakeholder consultations, policy development grounded in empirical analysis, passing of relevant legislation and related acts, and subsequent implementation of institutional arrangements and operational management. In Uganda, selected operational assets of the national SWF have already been set up and are functioning—such as the Petroleum Investment Fund Department in the BOU since 2015 and the IAC since 2019—while critical policy design that will affect the overall profile of the fund once the revenue starts flowing into it is still being developed.

The current setup of the PRIR may not be sustainable, given the contradictions and various interpretations of its objective by those engaged in its policy development and operational management. Officials engaged with the World Bank team noted that the

current operational setup is based on the policy that was approved in 2012 under a domestic and global environment that was considerably different from the currently more constrained environment.<sup>18</sup> Furthermore, the understanding and interpretation of the nature of the fund and its objectives differ significantly across different agencies. If the status quo remains and if the government of Uganda continues to implement the SWF as is defined in the current legislation, it is likely to lead to an unsustainable or ineffective SWF setup, as evidenced by international experiences of managing commodity-related revenues across different contexts.

This part of the report discusses policy and operational considerations based on the Santiago Principles and informed by international best practice from different contexts, summarizes Uganda’s existing setup, recommends actions to align Uganda’s SWF with appropriate best practices going forward, and describes elements that influence SWF design and institutional arrangements.

## 4.1. Brief Overview of the Santiago Principles

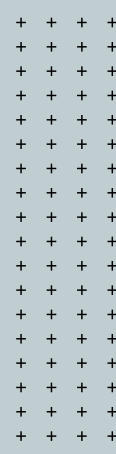
Put together by the founding members of the International Forum for Sovereign Wealth Funds and adopted in 2008, the voluntary Santiago Principles were drawn from a review of international codes and guidelines and common practices and principles existing among SWFs. The aim of the Santiago Principles is to support the institutional framework, governance, and investment operations of SWFs that are guided by their policy purpose and objectives and consistent with a sound macroeconomic policy framework.

The Santiago Principles broadly cover three key areas. As summarized in box 4.1, these areas are (a) legal framework, objectives, and coordination with macro and fiscal policies; (b) institutional framework and governance structure; and (c) investment and risk management framework. These areas are closely linked where a clear legal framework and policy objectives underpin a robust institutional framework and governance structure that help develop investment strategies that are consistent with the SWF’s stated policy objectives. Details of the 24 Santiago Principles are presented in appendix C. Section 4.2 provides an overview of the team’s observations on Uganda’s current SWF framework based on the Santiago Principles, and section 4.3 offers recommendations for aligning the existing framework with best practice.

### Box 4.1: Main Elements of the Santiago Principles

The Santiago Principles consist of 24 generally accepted principles and practices voluntarily endorsed by members of the International Forum for Sovereign Wealth Funds (see appendix C). The Santiago Principles promote transparency, good governance, accountability, and prudent investment practices.

- Governance and accountability
  - A clear objective
  - A sound legal framework
  - Adequate reporting systems
- Integration in domestic policy formulation
  - Appropriate coordination
  - Clear rules on funding and withdrawal
  - Incorporating Sovereign Wealth Fund data into macroeconomic data sets
- Management of the nation’s wealth
  - A clear investment policy
  - Diligence, prudence, and skill in investment practices
  - A robust risk management framework
  - A transparent and sound operational control and risk management system
- Investment motivation
  - Public disclosure of the policy purpose and governance framework and relevant financial information
  - Refraining from the pursuit of objectives other than maximization of risk-adjusted financial returns
  - Public disclosure of the general approach to voting and board representation
- Fair competition in markets
  - Respecting and complying with all applicable host country rules, laws, and regulations
  - Not seeking advances of privileged information
- Impact on global imbalances and capital movements
  - Disclosure of relevant financial information
  - Description of the use of leverage or disclosure of other measures of financial risk exposure
  - Execution of ownership rights consistent with the Sovereign Wealth Fund’s investment policy



<sup>18</sup> World Bank missions occurred between April and July 2019, with focused deliberations on the operationalization of the PRIR.

## 4.2. Design and Institutional Setup of Uganda's SWF

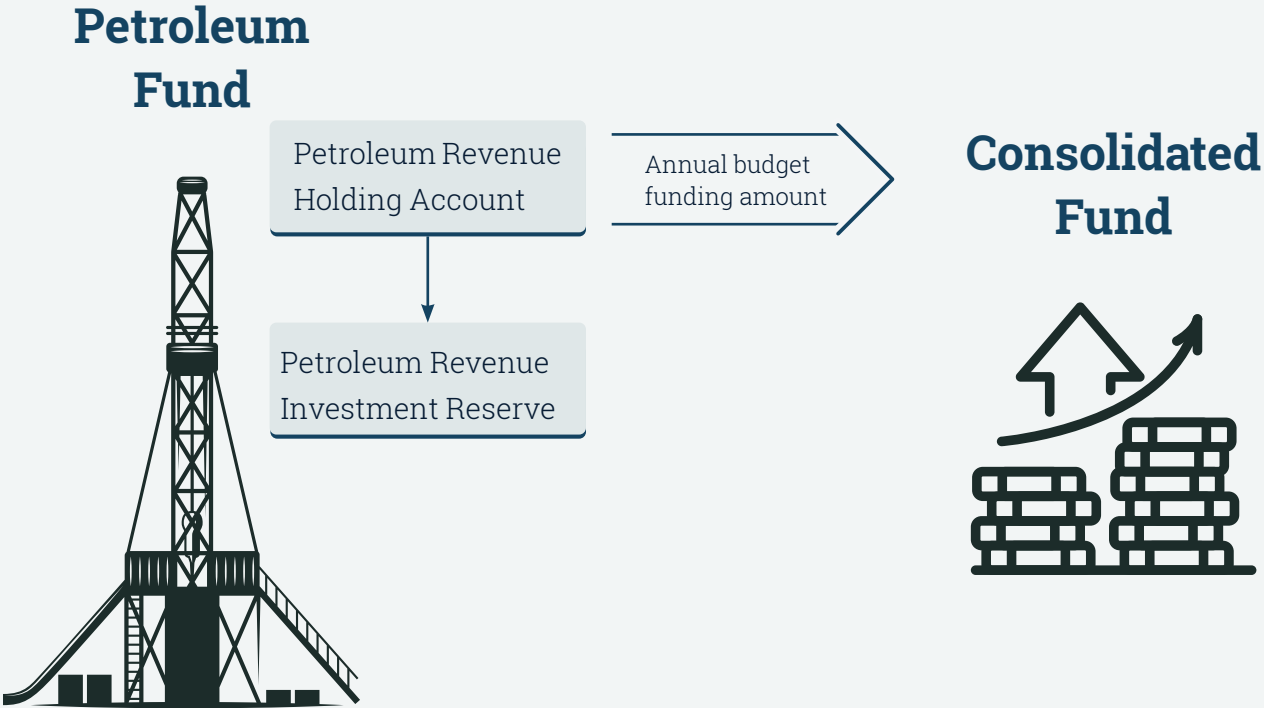
### A. Legal and Policy Framework

The PFM Act 2015 established a Petroleum Fund to manage overall petroleum revenues based on the Oil and Gas Revenue Management Policy adopted in 2012. The Oil and Gas Revenue Management Policy sets out the key considerations that inform the design of the SWF, and the PFM Act lays out the key tenets of the fund's setup, governance, and operations. More specifically, the PFM Act defines that the petroleum revenues must be deposited in the Petroleum Fund, which serves as the parent vehicle for the collection of petroleum revenues. Withdrawals from the Petroleum Fund can be made into only two child funds: (a) the

Consolidated Fund to support the annual budget and (b) the PRIR for saving, at the authorization of the Parliament in an appropriation act and a warrant of the Auditor General (section 58) (figure 4.4). The objective of the Consolidated Fund states that petroleum revenue shall be used for financing government infrastructure and development projects and not government recurrent expenditure (clause 59(3)). The objectives of the PRIR are not explicitly defined in the act. There are no provisions in the PFM Act on withdrawals from the PRIR.

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Figure 4.4: Petroleum Fund Mechanism



Source: Government of Uganda, Oil and Gas Revenue Management Policy 2012.

### B. Institutional Framework and Governance Structure

The PFM Act defines the governance structures and roles and responsibilities of the Petroleum Fund and its subfunds (Consolidated Fund and PRIR). The act states that the finance minister is responsible for the overall management of the Petroleum Fund, as well as for the oversight of flows into and from the fund (section 56 (3)). On the management of the PRIR, the act specifies that its investment policy is issued by the minister in consultation with the Secretary to the Treasury and on the advice of the Investment Advisory Committee. The act does not provide specific details about investment objectives or relevant parameters to guide the development of the investment policy to be consistent with policy objectives. The act further defines that the BOU is responsible for the operational management of the PRIR (section 64) "in accordance with the petroleum investment policy" and "in accordance with principles of portfolio management," on the basis of maximizing return without undue risk, including reputation risk. The relationship between the ministry and the BOU is governed by the framework of a written agreement entered between the minister and the governor.

The PFM Act defines specific details of the IAC's composition and functions. Section 67 defines the composition of the IAC comprising representatives of ministries responsible for finance, petroleum activities, and national planning and four persons who "are not public officers."<sup>19</sup> Section 68 defines that the areas of the IAC include investment policy; investment benchmarks; PRIR performance; management agreement between the ministry and the BOU; eligible instruments; standards of reporting; ethical guidelines; balance of risk and return; use of derivatives; management of credit, liquidity, operational, currency, market, and other financial risks; exercise of voting rights of equity investments; and prohibited or restricted investment or any investment constraints. In performing these functions, the act states that the IAC should take into account the economic, market, and BOU operational contexts and could seek the advice of relevant technical experts.

### C. Objectives and Investment Management Framework

The PFM Act provides implicit indications on the PRIR's intended purpose of the fund without explicitly defining its objective(s). Stakeholders who were consulted by the World Bank team acknowledged that existing reference in the act to investment objectives and investment policy were ambiguous and open to interpretation. Some stakeholders referred to the policy that informed the current design and functioning of the fund, while others interpreted the act as accommodating flexible interpretation of relevant provisions on the basis of pressing policy priorities or needs. Some stakeholders referred to the policy's founding principle that the objectives of the fund were to accumulate national wealth in financial assets through exposure to global financial markets and insulated from domestic pressures and national idiosyncratic risks. Other stakeholders expressed their views that, given that Uganda's economic and fiscal situation has changed since the policy was developed and approved, the PRIR balances present a potential source of capital that could be used for domestic development.

The PFM Act specifies a narrow set of eligible instruments, limited to deposits and investment grade fixed income instruments, and allows discretion to the minister to expand the eligible instruments. Section 63(2) (a)-(b) defines eligible instruments as "an internationally convertible currency deposit" or a fixed income debt instrument "that is of an investment grade." Section 63 (2) (c) allows "any other qualifying instrument prescribed by the Minister." There is no explicit reference in the act as to whether the PRIR should invest exclusively in foreign assets or whether investments in domestic assets are eligible. Section 63 (4) states that when the minister issues a new instrument, it should "lay the same before the Parliament." The act does not define the process or guidance for new instruments to be considered and included. Nor is it clear if the Parliament will play an approving role or only should be informed about the changes in the investment authorization.

<sup>19</sup> The current composition of the IAC is Samuel Seijaaka (independent consultant and formerly chair of the Board of Uganda Development Bank) as chairperson; Jennifer Muhuruzi (accountant and Acting Director of Treasury Inspectorate and Services Management); Agnes Tibayeita (lawyer and Corporation Secretary and Head of Legal for the National Social Security Fund); Joseph Muvawala (economist and Executive Director, National Planning Authority); Honey Malinga (geophysicist and Director for Petroleum Exploration); Saad Asmahaney (Secretary General of East Africa Law Society); and Arthur Wandera (banker, Head of Markets, Barclays Bank).

### 4.3. Recommendations to Align Uganda's SWF with Best Practice

**Recommendation 1. The government should update the 2012 Oil and Gas Revenue Management Policy to reflect the prevailing domestic and global environment and market expectations.** The policy was developed and approved in 2012 in a very different global context, as global oil prices were experiencing their highest nominal levels, increasing from about US\$20 per barrel in the 1990s to about US\$100 per barrel in the early to mid-2000s, as presented in figure 4.5. Furthermore, the market expected that the price of oil would continue to increase, as illustrated in figure 4.6, leading to commodity exporting countries' rising expectation of ever-increasing revenue from oil extraction.

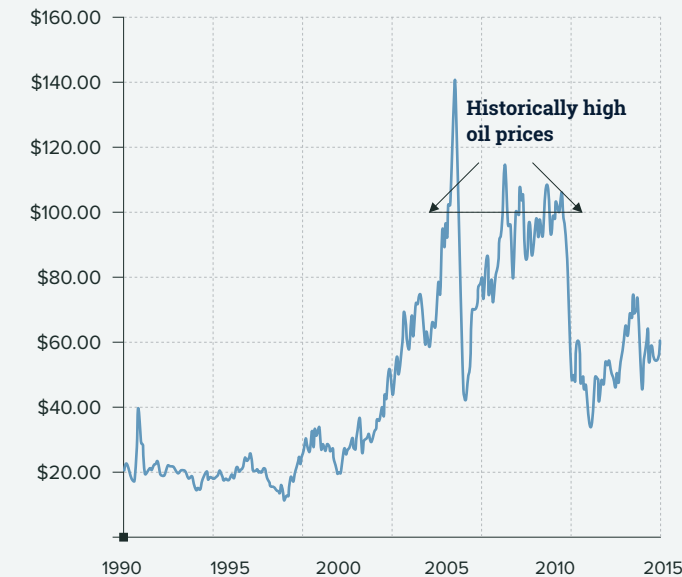
**Driven by the surge in oil prices and inspired by the successful example of Norway's (1990) and Botswana's (1983) funds, many commodity exporting countries established SWFs.** Among those countries were Azerbaijan (2000), Chile (2006), the Russian Federation (2008), Timor-Leste (2005), and Trinidad and Tobago (2007); many more countries aspired to set up such funds linked to existing deposits or new discoveries. Until the early 2000s, most SWFs were set up with stabilization and intergenerational equity transfer objectives and designed to invest all or almost all of their assets abroad. SWFs avoided significant domestic investments, primarily to avoid the Dutch disease and increased inflationary pressure on the domestic currency. During this period, fewer institutions were created to manage government holdings, such as Temasek (Singapore) in 1974, or to invest in domestic assets, such as Khazanah (Malaysia) in 1993. However,

by 2015, oil prices structurally declined, putting pressure on countries' fiscal resources. Policy makers saw the potential role of SWFs evolving beyond the classical model of accumulating financial assets for stabilization or savings; they began to consider the role of SWFs in domestic or capital market development. An increasing number of funds, especially those created in the past decade in developing countries, have an explicit objective to invest domestically to galvanize local economies and help finance domestic infrastructure. More recently, funds have been established that integrate several of these objectives. Nigeria, for example, has set up a fund that achieves stabilization, wealth generation, and investment in infrastructure.

**Furthermore, as discussed in section 2, the global policy and regulatory landscape has evolved significantly over the past decade, in recognition that climate change presents significant risks that require collective action.** According to the United Nations Principles for Responsible Investment, a policy response to climate change is increasingly inevitable.<sup>20</sup> The policies introduced in response to the climate change challenges and how the effects will manifest themselves will result in a highly uncertain regulatory environment. In addition, the falling prices of renewables coupled with the strengthening of climate policies are expected to result in falling demand for fossil fuels and an acceleration of the energy transition. As global temperature continues to climb, consumers change their behavior, and governments begin introducing policies to curb carbon emissions, uncertainties will increase for policy and decision makers.

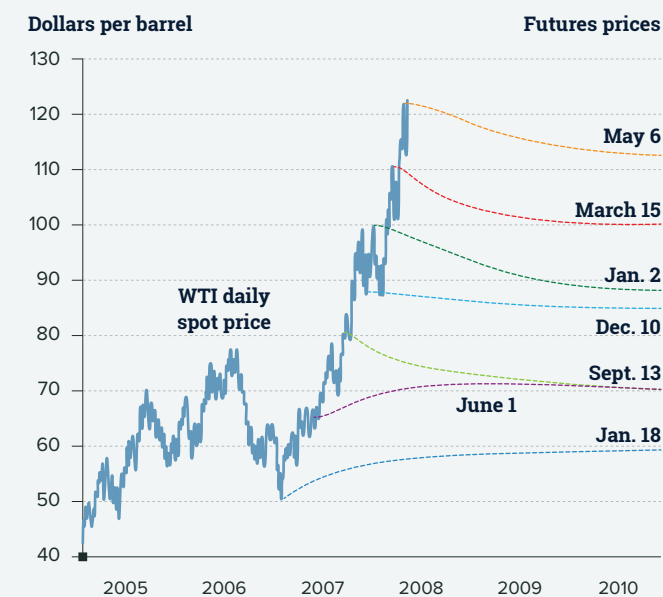
<sup>20</sup> For more details, see Principles for Responsible Investment (PRI), "What Is the Inevitable Policy Response?," PRI, London, <https://www.unpri.org/inevitable-policy-response/what-is-the-inevitable-policy-response/4787.article>

**Figure 4.5:**  
Historical Nominal Oil Prices



Source: Marcotrend, <https://www.marcotrend.net/1369/crude-oil-price-history-chart>

**Figure 4.6:**  
Market Expectation of Rising Oil Prices



Source: "Insights from the Federal Reserve Bank of Dallas," May 2008, <https://www.dallasfed.org/-/media/documents/research/eclett/2008/el0805.pdf>

**Recommendation 2. The Oil and Gas Revenue Management Policy should be updated using an analytical model based on expected oil production, analysis of varying commodity price expectations and policy scenarios, and an evaluation of future inflows into the fund consistent with fiscal sustainability.** Although the policy provides a comprehensive list of policy considerations that influenced the design and implementation of Uganda's SWF framework before the recent oil price adjustment, the document lacks quantitative analysis to inform specific decisions on the SWF setup based on Uganda's long-term policy priorities and objectives. At this stage, an analytical foundation is crucial to implement the SWF grounded in explicit expectations of the future inflows into the fund under different economic, market, and global regulatory scenarios. Specifically, this paper recommends that the government of Uganda develops an analytical model based on expected oil production and conducts scenario analysis for varying commodity price expectations. The results of this analysis should inform the next steps in implementing the SWF.

**Recommendation 3. The government should update the PFM Act consistently with (potentially) revised policy and implementation parameters for the SWF setup.** The main areas for revision include the (a) governance structure, (b) fund purpose and investment objectives, and (c) eligible fund instruments. In view of this, the following are recommended:

- a. **The PRIR governance process and structure should be further clarified in the PFM Act.** As is currently presented in the act, the PRIR’s governance structure lacks clarity in the definitions of the roles and delegation of responsibilities of various governing bodies to the asset owner, fund manager, custodian, and administrator. Such lack of legal certainty and clarity contributes to differences in views among key stakeholders on their mandates, functions, and accountabilities. Some functional roles of the IAC overlap with the operational management of the PRIR, which should be the responsibility of the fund manager—designated as the BOU—whereas other functions should be the responsibility of the asset owner, namely, the ministry. Further, the composition of the IAC should be refined, as its current definition is not aligned with the committee’s functional responsibilities and overlaps with roles that should be delegated to the fund manager, the BOU. These issues are discussed in more detail in section 4.4.
- b. **The PRIR’s purpose and investment objectives should be explicitly defined in the PFM Act, in line with the revised policy.** Clear and explicit articulation of the fund policy and investment objectives is the foundation of the best governance principles and accountability, as is also articulated in the Santiago Principles. In Uganda, differing interpretations of the PRIR’s purpose are appropriate at the early stages of policy development. At that stage, selection of optimal policy objectives should be grounded in empirical analysis of various options and evaluation of their effects and trade-offs. At the implementation stage, however, against the ambiguity in the existing legislation, these policy disagreements provide legal and policy room to manage the PRIR funds based on short-term pressures and political expediency, rather than on nationally agreed upon long-term interests and objectives. International experience of resource funds indicate that such environments are typically associated with less than successful outcomes.

- c. **All eligible instruments should be explicitly defined in the legislation by their asset classes, including the provision on whether the fund is allowed to invest in domestic instruments.** On the one hand, the current act provides a highly restricted list of eligible instruments limited to investment grade fixed income instruments, which are appropriate for managing short-term liquidity and stabilization portfolios. On the other hand, the act allows the discretion of the minister to add any other instruments that could be interpreted as domestic investments, as well as any global public or private instruments. All instruments eligible for investments and risk management should be explicitly included in the legislation, whereas discretion allowed to the minister should be removed from the legislation. Such a revision will be consistent with the fund’s stated policy objectives, as is further discussed in section 4.4. Furthermore, although the section on eligible instruments does not mention derivatives, other parts of the act discuss the use of derivatives in portfolio risk management. The act should provide clear authorization for what the fund is allowed to invest in and should list all eligible instruments, whether for portfolio or risk management purposes.

**Recommendation 4. All stakeholders and technical teams should be involved in policy and operational discussions, to broaden their understanding of resource funds across different contexts.** During the World Bank team’s mission in July 2019, various agencies expressed interest in learning more about institutional arrangements and investment practices in other countries. The BOU’s Petroleum Fund has been making study tours to countries with established funds to learn from their practices directly; it is considering joining the International Forum for Sovereign Wealth Funds for peer-to-peer learning from practitioners in the field. We recommend that lessons learned from these exchanges be disseminated widely with all stakeholders’ technical teams, especially as, outside the BOU, understanding of the successes and failures in SWF management in developing countries is limited. Norway has been providing support to the government of Uganda on policy aspects of managing oil resources, and it has an established presence in Uganda through its full-term successive representatives seconded from select Norwegian ministries. This partnership has clearly contributed to a productive exchange of information, in which Norway has been providing its own experience in managing oil wealth. Still, given the significant differences in the two countries’ levels of development, BOU Petroleum Fund’s engagements with SWFs in developing countries should include representatives from agencies involved in SWF policy and operational efforts.



Crude oil barrels from test oil, Hoima

## 4.4. Considerations That Influence SWF Design and Institutional Arrangements

### A. Governance Structure and Institutional Arrangements

Although resource funds hold considerable promise, international experience has been mixed, and the advantages of resource funds appear to be largely contingent on the underlying quality of national and fund governance. Even a fund with a well-designed governance structure and professional investment management may fail to maximize the benefits of resource extraction. A recent study suggests that in countries with resource funds, government spending is less sensitive to resource-revenue volatility, but the same study also finds that countries that established resource funds already tended to be less vulnerable to commodity price shocks (Davis et al. 2003). Research also indicates that resource funds with stabilization and savings functions have been more successful in countries with a strong commitment to fiscal discipline and sound macroeconomic management (Fasano-Filho 2000).

Resource funds entail several risks that must be weighed against their potential benefits, and governance is again a critical determining factor. Several risks are involved in resource funds, particularly in weak governance environments. These include the potential for (a) direct raiding the fund, in which the fund’s rules are violated and its resources are used for purposes not originally intended; (b) indirect raiding, in which unsustainable fiscal policies are encouraged and effectively underwritten by the fund; and (c) inefficient fund management, in which suboptimal investments, in some cases motivated by political objectives or personal gain, reduce the value of returns. Moreover, the presence of these risks may lead to political disagreement about the usefulness of the fund as a policy tool or spur controversy over its governing rules and investment strategy, and political interference itself represents a significant threat to the effective operation of a resource fund. Box 4.2 provides an example of drastically different outcomes for two countries with similar governance issues: Kiribati and

Nauru. Both countries started their SWFs with funds from exhaustible commodities. Kiribati’s fund has grown to become one of the largest funds compared with its economy, while Nauru’s fund has been fully depleted.

**The SWF must be situated in a strong institutional framework and closely linked with the budget cycle.** The fund should be integrated with the budget and withdrawals should be spent as part of a unified budget execution process. The following are well-established governance and institutional arrangement principles based on best practices and lessons learned from international experiences to inform the design of an SWF:

- a. The government should be the owner of the fund, with the Minister of Finance acting on its behalf.
- b. The Parliament adopts the laws that establish the SWF’s formal structure and the rules for its management.
- c. The central bank typically manages the fund that invests solely in foreign assets, as the central bank has the technical capacity to manage financial assets in concert with management of the country’s foreign exchange reserves.
- d. The government must establish a clear and transparent division of roles and responsibilities between the fund’s governing bodies, particularly the owner of the fund and the manager of the fund’s assets. This is essential to minimize political interference and promote asset management solely on the basis of technical expertise.
- e. It is necessary to limit the discretionary authority of policy makers and to prevent undue political influence in the fund’s management through simple, straightforward, and enforceable rules (for example, for deposits and withdrawals) that avoid overspending and safeguard the integrity of resource fund management.

Existing SWFs span a broad spectrum of circumstances on the basis of the country’s economic development and the quality of national governance. Respectively, the institutional setups of SWFs are varied owing to the differences in overall objectives in managing sovereign assets and to the differences in political and executive institutions. This subsection presents common principles that should be considered essential in setting up well-governed, long-term public funds and even allowing for different governance models because of country-specific differences.

**The nature of natural resource revenue is distinct from other sources of government revenue, as it is generated from exploiting exhaustible natural resources that belong to the public, arguably to current citizens and future generations.** As a result of the fundamental nature of these resources, the key starting point in establishing the governance system to manage them is to recognize that the bodies established to manage the assets of the fund are essentially the trustees of the people. Thus, the fundamental concern would be to ensure that decisions taken in managing the fund reflect the best interests of the people as the ultimate owners of its assets; at the same time implementing these decisions should be done on the basis of specialized expertise. Consequently, the governance system should be built to balance two complementary demands: first, informed policy making and the ownership of the risk and return profile of the portfolio to meet its strategic objectives at the highest level of sponsorship and second, delegating authority and accountability for implementation to a specialized financial entity best suited to achieve the stated objectives. The lack of an appropriate framework to separate policy decisions from implementation can lead to imposing inefficient constraints on investment parameters that would be inconsistent with the fund’s mandated objectives leading to inferior financial results over time.

#### Box 4.2: Role of Governance in the Sustainability of Sovereign Wealth Funds

The past several decades offer insights into the successes and failures of Sovereign Wealth Funds as a policy tool to manage sovereign and national commodity assets. Since 1950, countries with structural sovereign asset balances, whether owing to fiscal or foreign exchange surpluses, have started to develop and implement policies and institutions to accumulate and manage sovereign balances over the long run. The first wave of such funds included Saudi Arabia (1952) and Kuwait (1953) because of significant oil-related revenue. By the mid-1950s, two small Pacific islands states, Kiribati and Nauru, very similar in their geographic and socioeconomic makeup as two of the smallest and poorest countries, established their sovereign funds, capitalized by phosphate royalties.

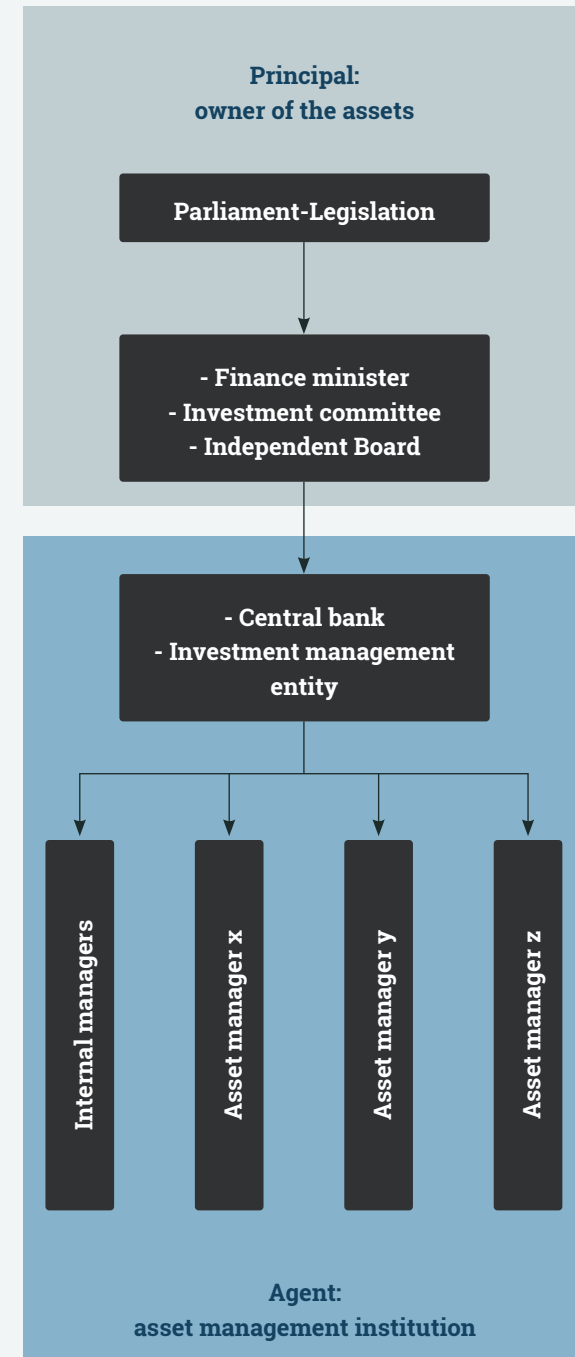
By 2019, Kiribati’s fund of about \$A 1.3 billion was nearly five times the country’s gross domestic product. The fund is currently among the largest sovereign funds as compared with the size of the country’s economy. The fund has been providing substantial contributions to the country’s budget, particularly as the phosphate deposits were exhausted in 1979.

By contrast, Nauru’s fund was fully depleted by 2001, owing to inadequate management, as the funds were invested in failed investments in property, aviation, and other ventures domestically and abroad. The fund’s assets were also pledged for government and other commercial debt.

These two countries’ examples offer important insights as their funds had complete life cycles, from the discovery of resources to their depletion and from accumulating significant financial assets to substitute for the decline in the resource revenue in Kiribati to fully depleting financial assets in Nauru. Kiribati’s example shows the prominent role of a Sovereign Wealth Fund in the country’s public finances long after its natural resources have been exhausted. Nauru’s example shows the extreme of how poor governance can lead to depletion of a significant base of financial assets, leaving the country without financial income from investment management of those assets to substitute for commodity revenue after it has been exhausted.



**Figure 4.7:**  
Governance Diagram for Management  
of Sovereign Assets



Source: World Bank Treasury.

The governance system for managing sovereign assets should be thought of as a system of delegated asset management where the authority to invest is delegated from the top of the governance system, through the various governing bodies, and down to the individual (internal or external) asset managers. The Parliament would adopt the laws that govern the management of the fund and, in most cases, the full government (the cabinet or council of ministers) or the finance minister will carry out the functions of the owner of the fund. In the case of SWFs, typically MOFPED is entrusted with the formal ownership of the sovereign assets. The Ministry of Finance, in turn, delegates asset management responsibility to an asset management organization such as the country's central bank, a specialized investment management entity, or a combination of both. In this respect, the Ministry of Finance can be regarded as the principal, with the management organization being the agent in the operational asset management (Al-Hassan et al. 2013). Figure 4.7 depicts the governance arrangements from the highest level of governance representing the ownership function to the operational asset management function and individual specialized asset managers.

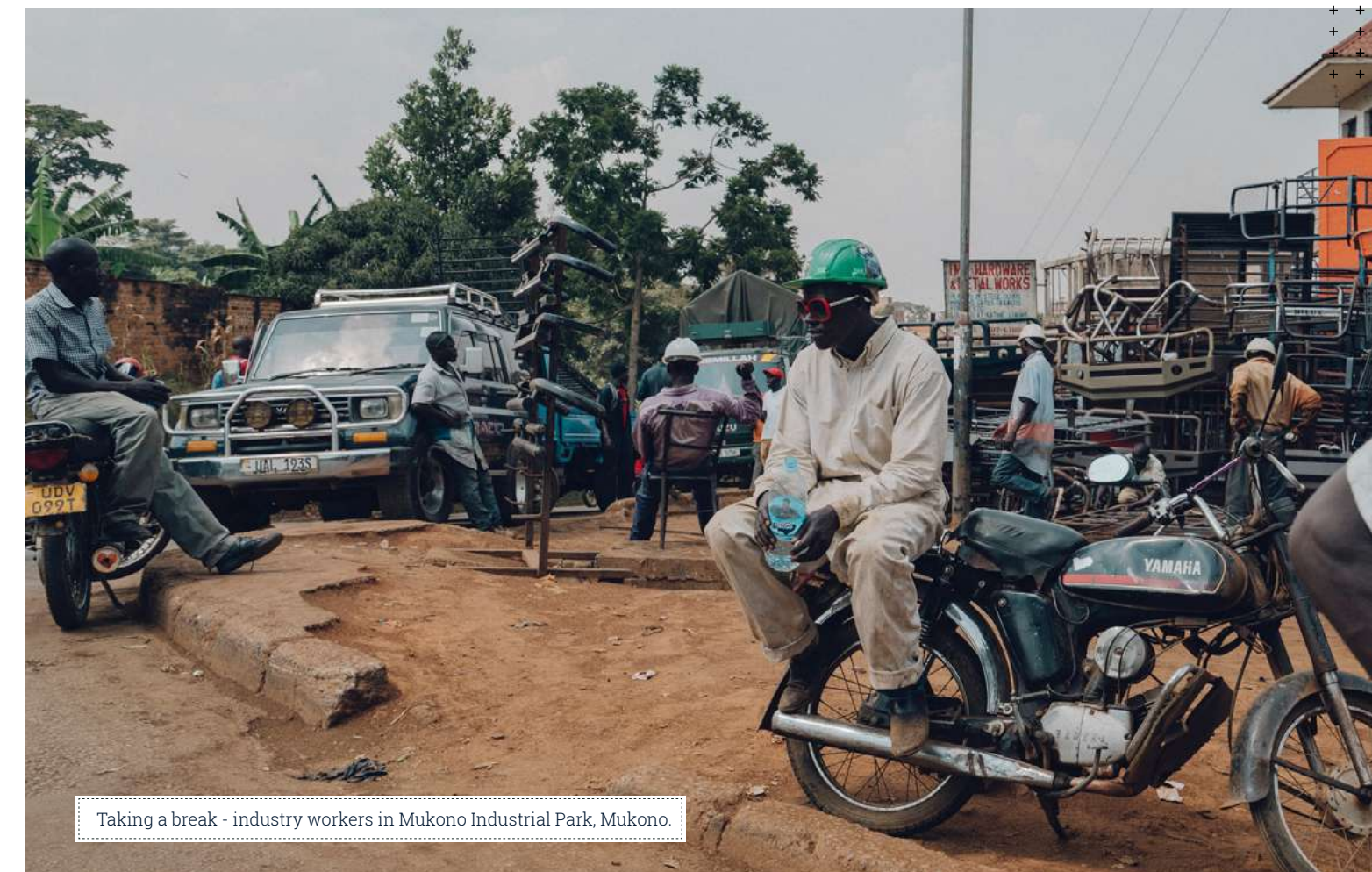
Central banks have typically been the institution of choice to manage sovereign assets, especially stabilization funds. Although in Uganda this decision has also been settled in favor of the country's central bank, the distinguishing feature of the PRIR is its (implicit) objective as a wealth-generating fund over the long-term horizon. Central banks in some countries have managed such wealth funds, most notably in Norway and Botswana, but there are significant differences in governance and institutional arrangement requirements that need to be taken into account to ensure the fund's long-term sustainability and legitimacy, as discussed in appendix E.

Although there is no single model that spans the variety of structures for managing a long-term public fund, the most important criteria for success are (a) compatibility of the model with the country's overall government structure and (b) the government's ownership of the fund's performance while providing managerial flexibility for implementation. Among 20 countries with commodity-funded sovereign funds, nearly twice as many of the high-income countries set

up an independent entity to manage the sovereign assets as those that used their central banks for that purpose. Chile, Norway, Russia, and Trinidad and Tobago use their central banks as the operational manager of the sovereign assets. These countries have expanded their central banks' operational capacity to invest in additional asset classes beyond those eligible for foreign exchange reserve management, such as, for example, corporates, public equity, and even real estate, as in the case of Norway. Other high-income countries (Australia, Bahrain, Brunei, Canada, Kuwait, Qatar, and the United Arab Emirates) set up independent entities to manage their SWFs.

In low- and middle-income countries, twice as many central banks manage the country's SWFs investing in foreign assets as do independent agencies. In Algeria, Botswana, Colombia, Ghana, Kazakhstan, and Peru, the central bank manages the country's SWF

or the fund components that invest in foreign assets. Compared with their peers in high-income countries managing SWF assets, apart from Botswana, central banks in low- and middle-income countries manage the sovereign assets more conservatively and limit eligible asset classes to the fixed income universe. The management of these funds is more closely aligned with the management of the foreign exchange reserves. The three countries that have set up independent entities are Angola, Azerbaijan, and Nigeria. In Azerbaijan, an independent entity is managing the country's SWF, and, although it invests in a broad spectrum of asset classes, nearly 80 percent of its portfolio is in fixed income. In Angola and Nigeria, new agencies have been set up recently and are currently in the process of developing their operations. Appendix D provides examples of institutional and governance setups for the SWFs in Botswana, Ghana, and New Zealand.



Taking a break - industry workers in Mukono Industrial Park, Mukono.



## B. Objectives and Investment Management Framework

**Depending on its design, an SWF can advance several critical national objectives.** The funds serve as a buffer against revenue volatility, keep public spending in line with the capacity of public agencies, mitigate the macroeconomic effect of expenditure increases, and promote intergenerational equity. Savings can be kept in a fund with two main purposes. First, a stabilization fund addresses the volatility of resource revenues. When commodity prices are high, excess revenues are deposited into the fund, and when prices are low, withdrawals are made to cover the resulting budget shortfall. Stabilization revenues must be available for withdrawal on short notice, and investments should focus on low-risk, high-liquidity instruments. Second, a savings fund preserves wealth for future generations and creates financial assets to compensate for the depletion of natural wealth. Savings funds have much longer investment horizons and involve riskier, less liquid assets. The two functions are complementary, and in many countries—especially low- and middle-income countries—the same resource fund serves both purposes, as in Botswana, Nigeria, and Timor-Leste, among others.

**When deciding on the nature of the savings fund, decisions will need to be made on where to invest national savings—abroad, domestically, or both.** SWFs that were established before the 2007–2008 Global Financial Crisis, including those in Chile, Botswana, and Norway, invest exclusively in foreign assets. Since the financial crisis and especially after the collapse of commodity prices, interest has been growing in many resource-rich countries to invest in domestic assets because of significantly lower fiscal resources for economic development. Some argue that the domestic investments undertaken by SWFs (rather than through the budget process) could potentially be used to promote economic diversification and offset Dutch disease effects by boosting the competitiveness of nonresource tradable sectors such as manufacturing.

**Whereas expectations are that returns on domestic investment may be higher than those on investment in foreign assets, several risks are associated with an investment portfolio focused on domestic investments, which are highly dependent on specific circumstances of a country.** Furthermore, a strategy to diversify risks in the investment portfolio would suggest investing abroad because the value of domestic assets (and therefore the government's ability to make withdrawals from the fund for whatever needs) would decline in the face of a slowdown in the domestic economy. The search for higher returns domestically may lead the fund to invest in areas that are already receiving significant private investment (in an economy that may be overheating) as well as expose the fund to significant country-specific idiosyncratic (undiversifiable) risks. Decisions on where to invest should take Uganda's policy objectives and the risks entailed into account and achieve a balanced investment portfolio.

**Although SWFs are a heterogenous group of government-owned funds managed in a variety of institutional setups and structures, from independent financial corporations to operations in central banks, their financial returns and risks are determined by the underlying investment policy.** A successful investment strategy process is important not only for financial returns, but also for maintaining the legitimacy of the SWF. An SWF can only exist in the long run if it has the public's support. Whereas the development of an appropriate investment policy and strategic asset allocation for PRIR is outside of the scope of this report, box 4.3 summarizes the current state of SWFs' investments and appendix F provides an overview of the technical process that should drive the development of the SWF's investment policy and strategic asset allocation.



Road to Hoima, Albertine region

**Box 4.3:**

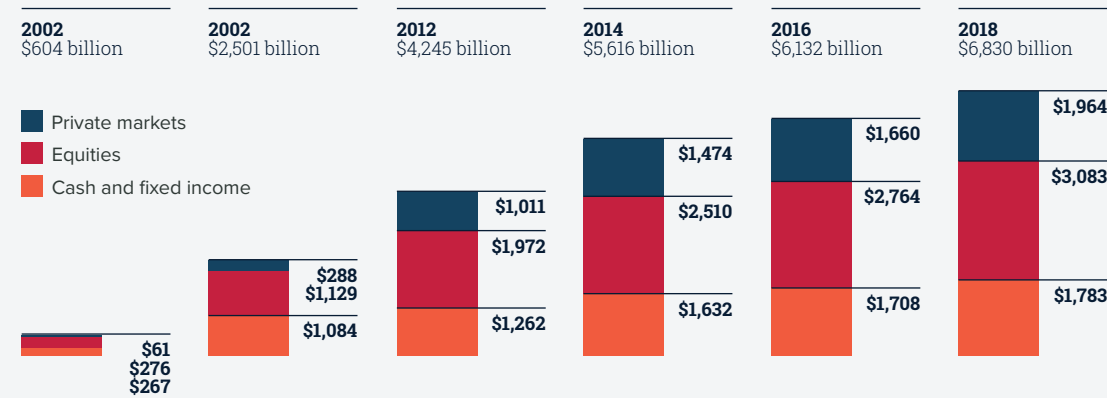
How Do SWFs Invest?

Sovereign Wealth Funds (SWFs) are a diverse group of global asset owners, invested under a range of investment mandates. The January 2020 white paper “How Do Sovereign Wealth Funds Invest?,” by State Street Global Advisors, covers 35 of the largest SWFs located in 26 different jurisdictions. Just over half of the assets of these funds (51 percent) belong to the 19 SWFs that originated from oil (“oil SWFs”), whereas the other 16 were sourced either from other commodities or from excess foreign-exchange reserves unrelated to specific commodity exports (“non-oil SWFs”). The following key highlights about the way SWFs invest are worth noting:

The report presents the evolution of SWFs’ asset allocation across three broad asset classes: cash and fixed income, public equities, and alternatives and private markets. The investment policy of each of the 35 SWFs has evolved under a unique set of circumstances determined by age and the size of the institution. Figures B4.3.1 and B4.3.2 present the evolution of aggregate and average strategic asset allocation of SWFs as they accumulated assets and matured as institutions.

**Figure B4.3.1.**

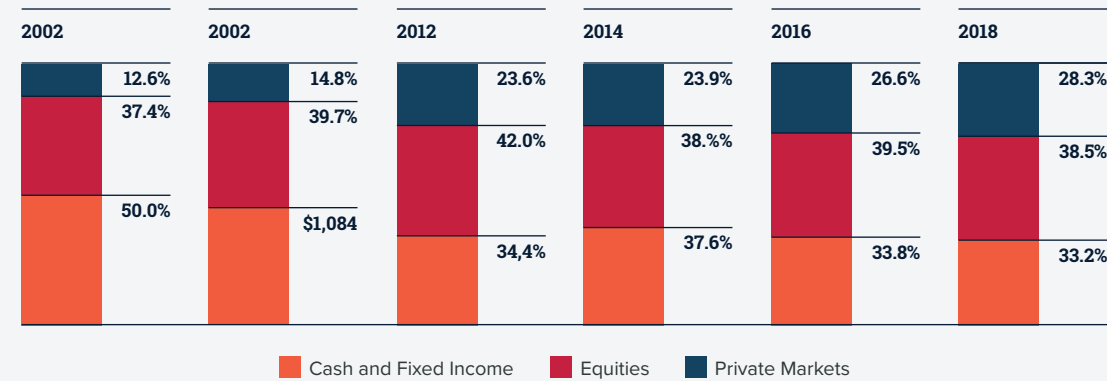
Aggregate Strategic Asset Allocation of SWFs



Source: SWFC, State Street Global Macro Policy Research, based on 35 largest SWFs; allocations may not add to 100% due to rounding.

**Figure B4.3.2.**

Average Strategic Asset Allocation of SWFs

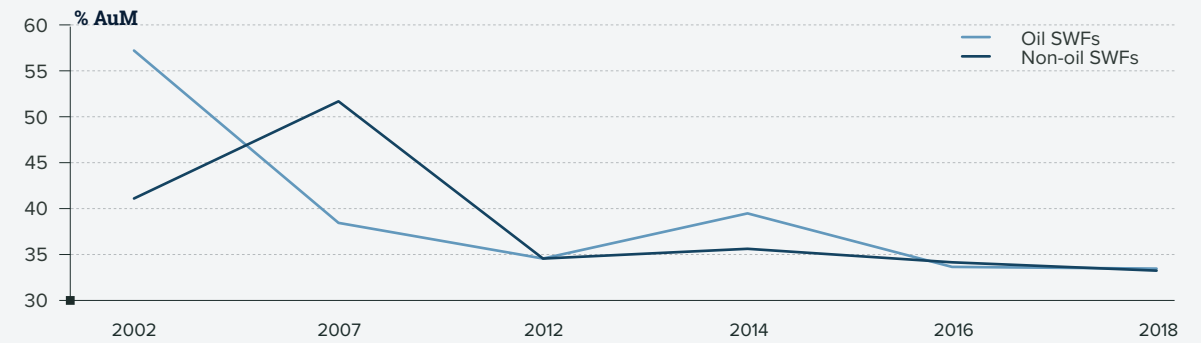


Source: SWFC, State Street Global Macro Policy Research, based on 35 largest SWFs; allocations may not add to 100% due to rounding.

Another factor of the differences in how SWFs have been investing is the underlying source of their wealth. Oil is a particularly volatile commodity and many oil-based economies accumulated wealth relatively quickly in the early part of 2000s; non-oil wealth comes either from commodities that are less volatile but also less likely to generate abnormal profits or from foreign exchange reserves accumulated over very long periods. At inception, oil funds started with a higher proportion of the portfolio invested in fixed income than their non-oil peers as illustrated on figure B4.3.3. The oil funds also increased their allocations to fixed income in 2012–2014 when the oil price collapsed, likely owing to the greater underlying fiscal uncertainty of the oil rich countries. After the 2014 oil price shock, oil SWFs have either dwindled or readjusted to the new reality, and their investment behavior somewhat converged with the non-oil ones. The report also found that the size of the SWFs is an increasingly important factor in how the fund is invested, as illustrated in figure B4.3.4, as smaller funds maintain a relatively more stage allocation to fixed income than their larger peers, which are in a better position to develop their internal capacity and investment infrastructure to invest in other asset classes.

**Figure B4.3.3.**

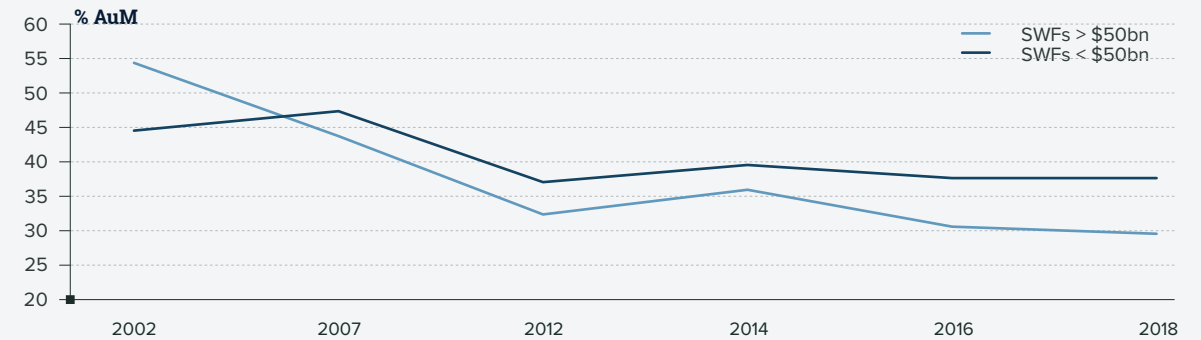
SWF's Allocation to Fixed Income by Fund Source



Source: SWFC, State Street Global Macro Policy Research, based on 35 largest SWFs.

**Figure B4.3.4.**

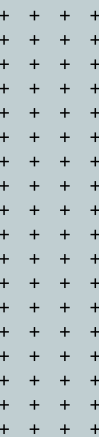
SWF's Allocation to Fixed Income by Fund Size



Source: SWFC, State Street Global Macro Policy Research, based on 35 largest SWFs.

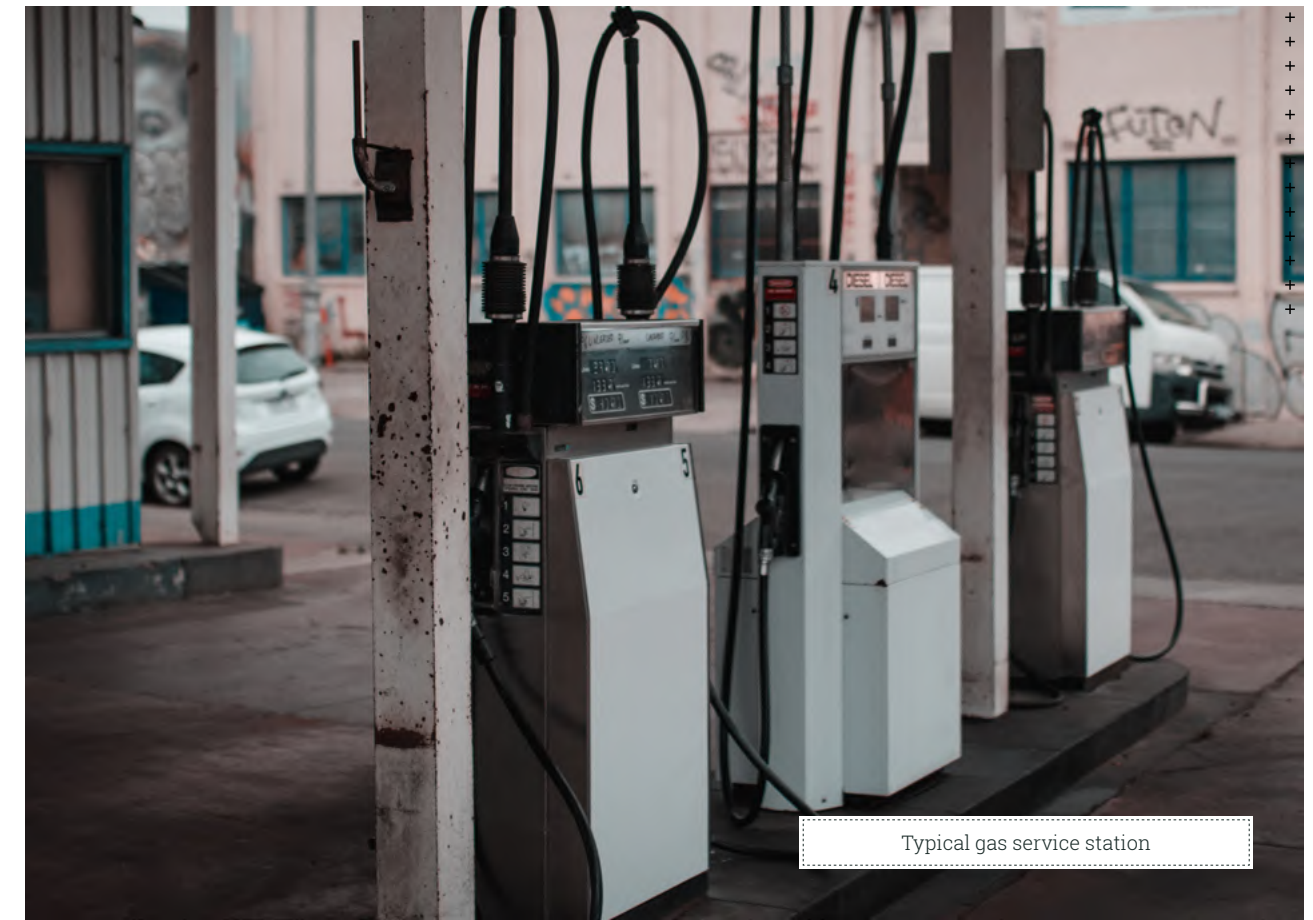
The report also shared important policy findings. One key finding is that most oil SWFs continue to reduce their assets to help their host government with fiscal problems that have persisted since the drop in the oil prices in 2014. At the same time, non-oil SWFs are focusing investment policies to generate income and on more efficient use of existing resources. Most important, the report found that SWFs have gained importance in the broader fiscal framework of their host governments, and the changes in their assets are increasingly considered alongside the broader fiscal framework. Consequently, big changes in SWFs would occur if and when these frameworks are reviewed, which is a broader policy issue, ultimately.

Source: Hentov and Petrov 2020.



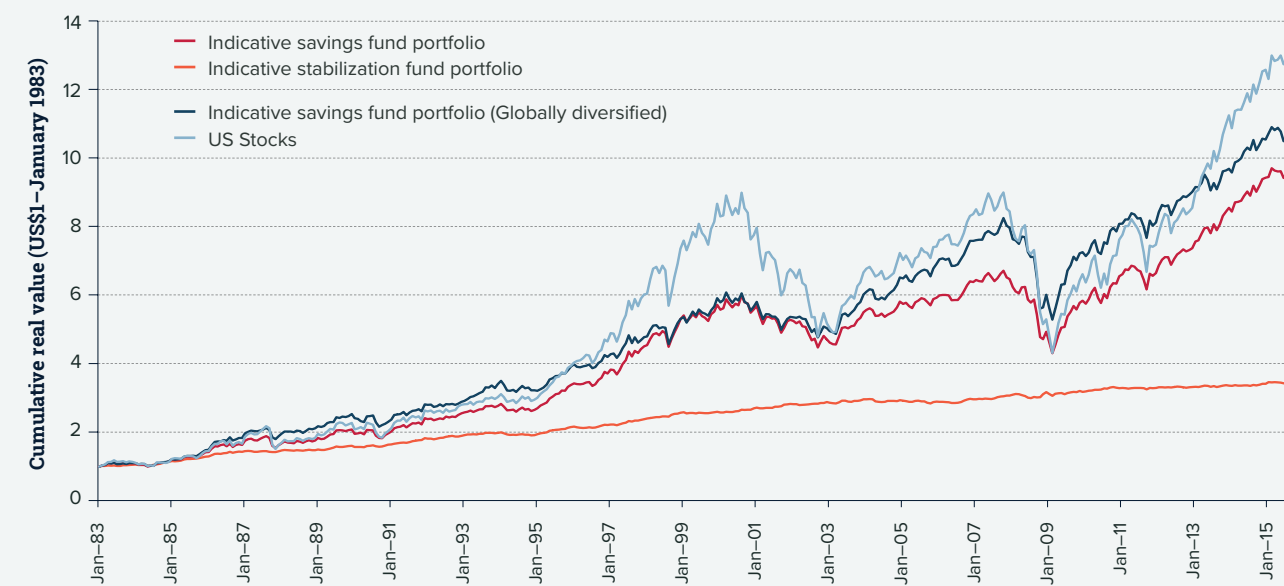
Although the 2012 policy defined the purpose of the PRIR as the fund for future generations, specific provisions in the act are in direct contradiction with this purpose or are ambiguous. The fund's eligible instruments are restricted to liquid and relatively low-risk, fixed income investment grade instruments, suggesting an overall conservative portfolio that is inconsistent with the intended long-term nature of the fund. Such instruments are appropriate for short-term stabilization funds and not for the funds for future generations, as the instruments would fall short of the stated objective to generate wealth over the long-term horizon. Figure 4.8 illustrates how differences in fund profiles—short term versus long term—affect the accumulation of wealth over time. An indicative stabilization portfolio (green line) would have grown steadily to three times its original size over 30 years, while indicative savings portfolios (red, orange, and blue lines) would have increased between 8 and 12 times over the same period, despite being affected by several crises during that time. While the savings portfolios generated cumulative wealth by investing in a broader set of investments, the stabilization portfolio maintained its low-risk profile to provide liquidity if needed at any point throughout the period.

The PFM Act should explicitly define its strategic objective and align the rest of the act with the stated objective. The strategic objectives of a fund are key for defining its investment habitat and investment results over time. Thus, the eligible investment universe should be aligned to the stated objectives. Figure 4.9 illustrates the currently defined instruments are inconsistent with the universe of instruments required to generate real wealth over the long term. The figure presents the spectrum of risk and return characteristics of various asset classes, from relatively low-risk profile instruments, such as fixed income, to higher risk, such as public and private equities and alternatives (for example, commodities, real estate, and so forth). In the figure, a savings portfolio invested primarily in public fixed income and equities would populate the green oval area on the risk-return spectrum, with orange points depicting portfolios ranging from 20/80 percent equities/fixed income (lower risk) to 80/20 percent equities/fixed income (higher risk). The eligible instruments listed in the act are limited to the fixed income universe (orange oval area), which is consistent with a stabilization fund objective, but not with the long-term, wealth-generating objective.



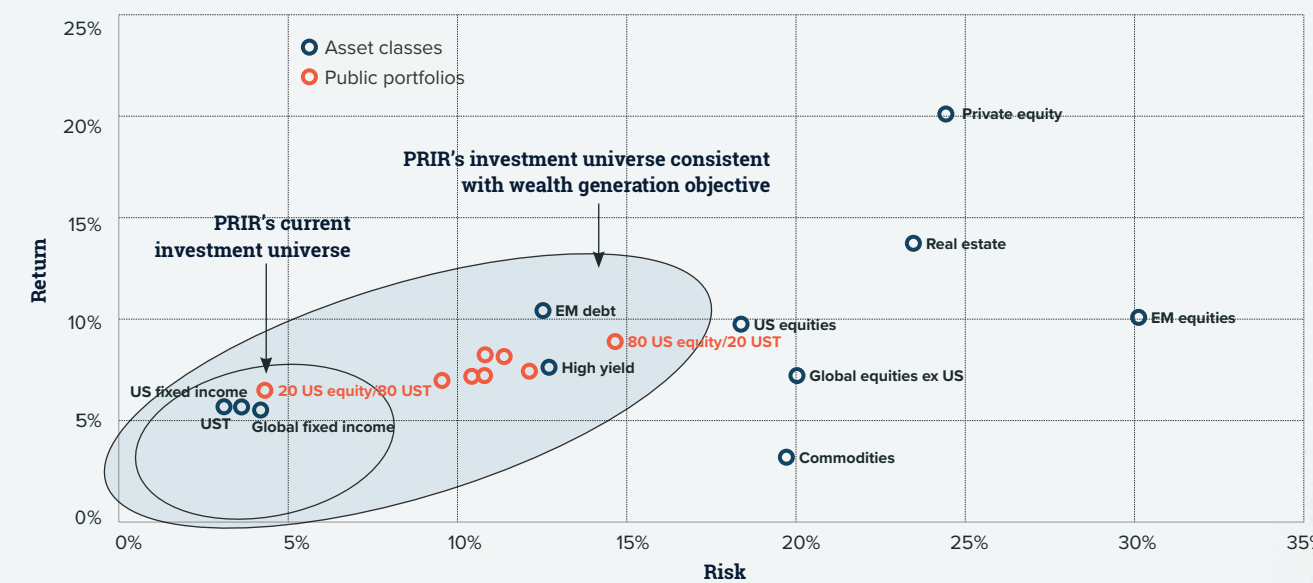
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**Figure 4.8:**  
Cumulative Sizes of Investment Funds with Different Risk Profiles



Source: World Bank Treasury's calculations.

**Figure 4.9:**  
Historical Risk-Return Characteristics of Available Investment Choices (1996–2016)



Source: World Bank staff illustration.



5.

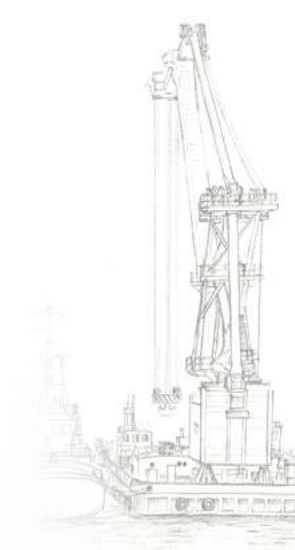
# CONCLUSIONS AND CLOSING REMARKS



This paper identifies a number of areas where improvements to Uganda’s legal and institutional frameworks would help realize the potential from the country’s oil reserves. First, Uganda has not moved into oil production, although commercial oil reserves were confirmed in 2006. The immediate priority for the government of Uganda is to streamline the oil sector’s decision making, being aware of the increasing risk of being locked out of oil production, as Uganda continues pushing its production time line forward. Although maximizing the country’s tax take from the sector is paramount, that tax amount needs to be balanced with the risk of making Uganda’s oil production project too risky a venture for prospective investors, especially as changes in the global environment (including climate change) drive the transition to clean technologies. The COVID-19 crisis notwithstanding, Uganda urgently needs to make an investment decision that will allow the country to move forward with oil production. Second, there are still gaps in the framework for managing oil revenues.

A strong fiscal framework will be the cornerstone for effectively managing oil revenues, given the central role that fiscal policy plays in maintaining the country’s net worth as the natural asset is depleted. Whereas the fiscal authority’s mandate is to mobilize revenues and manage spending, natural resource revenues present challenges that require more stringent fiscal rules to guide these decisions. The challenges include the volatility and uncertainty of oil revenues, how to balance expected returns on investing domestically in relation to accumulating (foreign) financial assets, the absorptive capacity of the public sector and the economy at large to take on accelerated investments, and the volume and time line of oil revenues before being depleted. An effective framework for fiscal management of natural resources, among other parameters, would have clear targets and fiscal rules to guide questions of how much to spend and save. Uganda’s current fiscal framework needs to adopt these technical rules, improve transparency, and close legal gaps to help it manage oil revenues more effectively.

Finally, although Uganda has put in place a resource fund (the PRIR), international experience suggests that its usefulness will largely depend on the underlying quality of national and fund governance. Even a fund with a well-designed governance structure and professional investment management may fail to maximize the benefits of resource extraction. Several risks are involved in resource funds, particularly in weak governance environments. These include (a) the potential for direct and indirect raiding of the fund using its resources for purposes not originally intended and (b) unsustainable fiscal policies that are encouraged and effectively underwritten by the fund. Other funds fail because of inefficient fund management, in which suboptimal investments, in some cases motivated by political objectives or personal gain, reduce the value of returns. As Uganda has already set up institutions to manage the oil revenue savings in the PRIR, its setup, governance, and investment framework require significant adjustment for the PRIR to fulfill its intended purpose.





**A.**  
**APPENDICES**

## Appendix A. Activities and Planned Management

### A.1. Upstream Activities

The blocks that are already licensed for development in the Tilenga project (with 3.3 billion barrels of stock tank oil initially in place) and Kingfisher (with 0.6 billion barrels) are to be run under the Joint Operating Agreement between the three licensees—Tullow Oil, Total E&P Uganda, and China National Offshore Oil Corporation—that currently hold equal shares in the production agreements. The Joint Operating Agreement allows for 15 percent state participation in each of the fields operated, through the Uganda National Oil Company (UNOC). In May 2019, the government of Uganda issued exploration licenses to two other firms—Armour Energy Limited (Australia) and Oranto Petroleum Limited (Nigeria). Whereas exploration will continue, the shift to development of the fields and actual production is yet to materialize.

In January 2017, Tullow announced its intent to sell 21.57 percent of its interest in each of the three exploration areas to Total E&P Uganda at a transaction value of US\$900 million. This transaction's negotiation failed because of a misunderstanding on the tax treatment of the transaction between the government of Uganda and the oil companies. On August 30, 2019, the transaction was terminated, thereby creating uncertainties in the sector, which had expected that the final investment decision by the three players would be signed by the end of December 2019. Uncertainty further increased by COVID-19 until in April 2020, the transaction concluded with Total E&P Tullow's entire stake in Uganda at US\$575 million.

### A.2. Planned Midstream and Downstream Management

The management of the midstream component of the petroleum value chain has evolved significantly (figure A.1). Under UNOC, two subsidiary bodies were formed, the National Pipeline Company (NPC) and the Uganda Refinery Holding Company Limited, to provide midstream and downstream management.

The NPC (Uganda) Limited is responsible for the ownership, operation, and maintenance of oil and gas

pipelines (crude and product); terminals (Jinja Storage Terminal, Kampala Storage Terminal); and related facilities and services, including downstream trading operations, such as importation, storage, wholesale, and exportation of petroleum products. Key among the NPC (Uganda) Limited's responsibilities is the East African Crude Oil Pipeline—1,443 kilometers long and 24 inches in diameter—which is an export pipeline between Hoima (in Uganda) and the Port of Tanga (in Tanzania). Given the waxy texture of the crude oil that is planned to be exported, the pipeline will have to remain heated above 50 degrees Celsius. The Inter-Governmental Agreement was signed May 26, 2017. By the time of writing this report, negotiations of the host government agreements were still ongoing in Uganda and Tanzania. Through the NPC, Uganda aims to be a 15 percent shareholder in the East African Crude Oil Pipeline. However, several contentious issues could protract this process, including two areas. First is land titles. Whereas Tanzania has proposed to issue a single land title for the about 1,000 kilometers through which the pipeline is supposed to pass, Uganda may have difficulty with such a proposal because land titles across the pipeline path are held by individuals who will have to be compensated. Second, several authorities, including district authorities, the National Environmental Management Authority, and others, must consent to all terms of the agreement. Currently, there are about six clauses in the draft host government agreement on which there is yet to be agreement.

Alongside the pipeline, NPC (Uganda) Limited will also manage the storage terminals in Jinja and Kampala. The Jinja Storage Terminal was established in the 1970s as a strategic reserve to enhance the security of the petroleum supply in Uganda, but it remained not very active owing to financing and management challenges. The government decided to revamp this terminal as part of the overall oil industry development, with the Ministry of Energy and Mineral Development (MEMD) handing over the terminal to UNOC in May 2017. In a joint venture with M/S One Petroleum Ltd, the terminal has been rehabilitated and plans are under way to construct facilities to receive fuel by barge from Lake Victoria. Another terminal is the Kampala Storage

Terminal, which is to be constructed on 300 acres of land. UNOC and NPC have been mandated to develop and operate the Kampala Storage Terminal. UNOC and NPC are to secure a joint venture partner with funding and experience in the development and operation of petroleum terminals, and UNOC and NPC are to hold controlling interest in the terminal.

The NPC also holds licenses for the downstream trading operations (bulk trading) issued in April 2018. Therefore, it will be responsible for the importation, storage, wholesale distribution, and exportation of bulk petroleum products. This business will initially be buttressed by investment in storage terminals (Jinja and Kampala storage terminals).

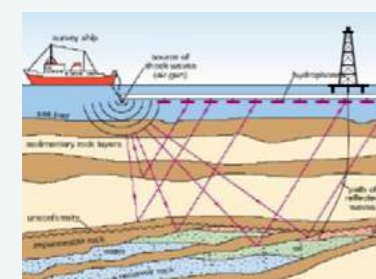
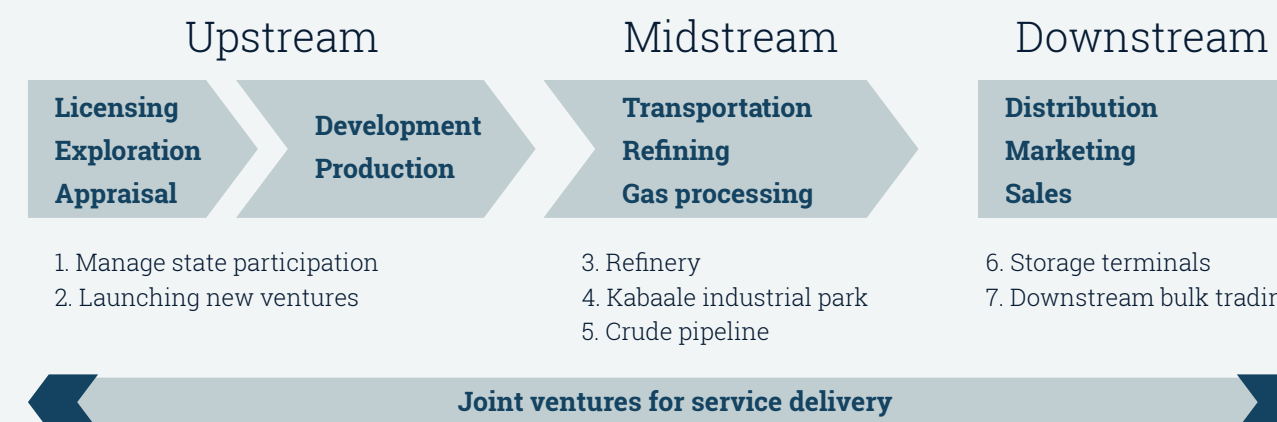
Uganda Refinery Holding Company Limited is responsible for refining and petrochemical businesses (including the refinery and Kabaale Industrial Park). The Uganda Refinery Project has planned to refine 60,000 barrels per day in the Hoima region and approximately 210 kilometers of multiproduct pipeline. Projected capital expenditure is estimated at US\$3.5 billion.

The Refinery Project Framework Agreement between Albertine Graben Refinery Consortium, MEMD, and UNOC was signed in April 2018. Uganda will be a shareholder in the refinery project through the Uganda Refinery Holding Company, aiming at 40 percent. UNOC will eventually embrace other shareholders into this subsidiary. Those could include East African Community member states and public institutions.

The Kabaale Industrial Park development has begun, as the MEMD acquired 29.57 square kilometers of land to be developed into an oil and gas industrial park in Kabaale, Hoima District. The MEMD handed UNOC the role of leading the development, thus operating and managing the industrial park with a strategic joint venture partner. Kabaale Industrial Park is to accommodate Uganda's second international airport, a crude oil export hub, the Uganda refinery, and petrochemical industries. Strategic partners have expressed interest and those proposals are being evaluated.

**Figure A.1:**

Management of the Petroleum Value Chain



Source: National Oil Company.

## Appendix B. Taxation and Development of the Oil Sector

### Uganda's oil tax regime is regulated by production-sharing agreements (PSAs) and the Income Tax Act.

The regime includes royalties, production sharing linked to production volumes above the levels necessary for cost recovery, corporate income tax (30 percent rate), and dividends for the government's stake. The development costs are fully covered by the private partners. The government's share of these costs will be recovered from its share in profit oil. A special fiscal regime for the oil pipeline was established under the 2017 Inter-Governmental Agreement. The regime provides a 10-year tax holiday and concessions on value-added taxes and withholding tax for the pipeline operation. This was designed to reduce the pipeline tariff, thereby increasing the upstream profits. The pipeline tariff has been proposed at US\$12.77 per barrel. However, the tax treatment of turnover and costs in Uganda and Tanzania is still being negotiated as part of the host government agreement with the private operators. No special tax regime for the refinery is currently being considered. With the activities in the sector still on the upstream side, that is where disputes have occurred.

**Income tax is expected to be a key source of oil revenue, beyond the royalties, profit oil, and dividends.** In the preproduction phase, income tax is a major source of revenue for the government, supporting it to develop much-needed infrastructure. However, taxing investments or production rather than returns on investments can be a major obstacle to planned investments, especially if the tax is interpreted as a government tool to squeeze the oil companies. However, taxing profits is appropriate and can contribute to the country's domestic revenue effort; in addition, it can create a level playing field for businesses inside and outside the oil sector. As Uganda maneuvers the delicate balance between these two

issues, the country's oil tax regime has been revised seven times since 2008. As of 2008, the gains arising from farmout agreements were not taxable. The law was amended in 2009 to introduce an income tax at the rate of 30 percent on gains arising from the sale of PSA interests. Other revisions were made in 2010, 2011, 2012, 2015, 2017, and 2018. The most recent deadlock between the government of Uganda and oil companies that has arisen on tax treatment is over (a) the payment of capital gains tax on what is supposedly capital earmarked for investment, (b) the denial of the tax deductibility of acquisition costs, and (c) the capping of expenses deductible for tax for each year of income. Unfortunately, the disagreement is threatening to delay the final investment decision, which in turn will push production well beyond 2025 (oil production start dates have been shifting from 2009 to 2023).

**With the oil activities still mainly in the upstream segment, the government has focused on taxing the sale and transfer of interests.** The Uganda Income Tax Act, as amended, imposes capital gains tax on the disposal of interest in PSAs. If holders of PSAs are nonresidents, their income is taxed using section 79 (g) of the Income Tax Act as follows:

- Disposal of an interest in a PSA (section 79g)
- A direct or indirect change of more than 50 percent of ownership in a company (section 79 (ga) inserted in 2018)
- Recovery or recouping of a previously deducted expenditure, bad loan, or loss (section 79 i(ii))
- Any other activity attributable to Uganda (section 79(s)).

In 2018, the law was amended to capture disposal of interests in PSAs done by way of farmouts.<sup>21</sup> A farmout is where a contractor (seller) divests their interest in a PSA by requiring the buyer (transferee) to undertake some or all their work commitment under the PSA, including interest retained by the seller. In this case, the law, section 89GE, provides the following:

- The value of work the buyer undertakes to carry out on behalf of an interest retained by the seller is considered a consideration given by buyer to seller and is included as part of the taxable income derived by the seller.
- Where money or cash is paid to the seller, the law considers such money as income received by the seller, since it is considered a recovery of a cost previously deducted or available for recovery.

**This income tax regime has not been implemented without challenges, as witnessed in the sale and purchase transactions concluded in 2010 that ended in court cases, hence delaying progress in the sector.**

The first two sale of rights transactions were between Heritage Oil and Gas Limited (HOGL) and Tullow Oil and between Tullow Oil, Total E&P Uganda, and China National Offshore Oil Corporation (CNOOC), initiated by agreements signed in January 2010 and October 2010, respectively. However, these two transactions were not fully disposed of until February 2015 and June 2015. Whereas Uganda consented to the transfer of HOGL interests on July 4, 2011, HOGL left the country and Tullow subsequently sold some of its interest later to Total E&P Uganda and CNOOC. Court disputes were determined by February 2015, after which Tullow paid

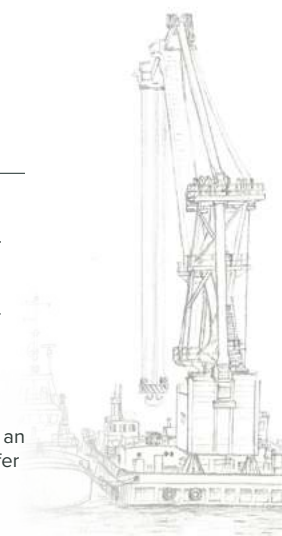
taxes by June 2015. The government earned about US\$435 million and US\$467 million from the two farm downs (see box B.1). However, the time lost and costs involved in litigation, especially uncertainties in the sector, have not been evaluated.

**A 2019 disagreement about tax treatment yet again shifted the prospect of commercial production starting by the end of 2023 by some more years.**

Raising finance is critical for contractors to proceed to the final investment decision. Contractors raise finance using various avenues, including farm down of interests. One such transaction, preceding the final investment decision, is the conclusion of a farm down that was expected to be signed in 2019, for Tullow to relinquish two-thirds of its shares to Total E&P Uganda and CNOOC, arguably to raise capital for investing in the development phase (of block 3A). In this case, when Tullow announced its intent to sell 21.57 percent of its interest in each of the three exploration areas to Total E&P Uganda in January 2017, the transaction value of US\$900 million was structured as follows:

- US\$200 million cash was to be payable as follows: (a) US\$100 million on completion of transaction, (b) US\$50 million on making the final investment decision, and (c) US\$50 million on first oil.
- US\$700 million was to be payable in deferred consideration and representing reimbursement in cash of a proportion of Tullow's past exploration and development costs. The deferred consideration is to be used by Tullow for its 11.76 percent share in developing the oil fields and pipeline.

<sup>21</sup> Wikipedia: In the oil and gas industry, a farmout agreement is an agreement entered into by the owner of a production-sharing agreement or mineral leases, called the "farmor," and another company that wishes to obtain a percentage of ownership of that lease or leases in exchange for providing services, called the "farmee." The typical service described in farmout agreements is the drilling of one or more oil or gas wells. A farmout agreement differs from a conventional transaction between two oil and gas lessees, because the primary consideration is the rendering of services, rather than the simple exchange of money. Farmout agreements typically provide that the farmor will assign the defined quantum of interest in the lease(s) to the farmee upon the farmee finishing (a) the drilling of an oil or gas well to the defined depth or formation or (b) drilling of an oil or gas well and the obtaining of commercially viable production levels. Farmout agreements are the second most commonly negotiated agreements in the oil and gas industry, behind the oil and gas lease. For the farmor, the reasons for entering into a farmout agreement include obtaining production, sharing risk, and obtaining geological information. Farmees often enter into farmout agreements because they wish to obtain an acreage position, need to use underused employees, need to share risks, or desire to obtain geological information. A farmout agreement differs from its sister agreement, the sale and purchase agreement, in that the latter addresses an exchange of money or debt for immediate transfer of assets, whereas the farmout agreement addresses an exchange of services for a transfer of assets, and that transfer is often delayed until a later date (such as when the "earning barrier" has been met).







## Appendix C. The Santiago Principles: Details

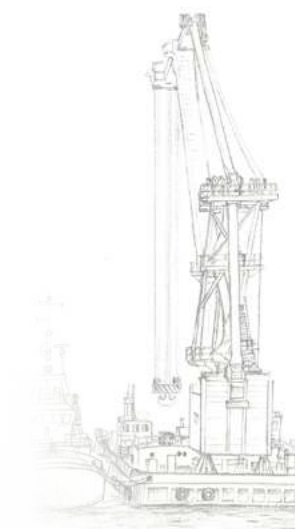
The Santiago Principles consist of 24 generally accepted principles and practices voluntarily endorsed by the International Forum for Sovereign Wealth Funds members.<sup>22</sup> The Santiago Principles promote transparency, good governance, accountability, and prudent investment practices. Among the objectives are to ensure that Sovereign Wealth Funds (SWFs) invest on the basis of economic and financial risk and return-related considerations and to ensure that SWFs have in place a transparent and sound governance structure that provides adequate operational controls, risk management, and accountability. The Santiago Principles are as follows:

1. *Sound legal framework.* The legal framework for the SWF should be sound and support its effective operation and the achievement of its stated objective(s).
2. *Clearly defined objective.* The policy purpose of the SWF should be clearly defined and publicly disclosed.
3. *Consistency with the overall macroeconomic policies.* Where the SWF's activities have significant direct domestic macroeconomic implications, those activities should be closely coordinated with the domestic fiscal and monetary authorities, so as to ensure consistency with the overall macroeconomic policies.
4. *Clearly defined fiscal rules.* There should be clear and publicly disclosed policies, rules, procedures, or arrangements in relation to the SWF's general approach to funding, withdrawal, and spending operations.
5. *Transparency to the asset owner.* The relevant statistical data pertaining to the SWF should be reported on a timely basis to the owner, or as otherwise required, for inclusion where appropriate in macroeconomic data sets.
6. *Clear and effective governance system.* The governance framework for the SWF should be sound and establish a clear and effective division of roles and responsibilities, to facilitate accountability and operational independence in the management of the SWF to pursue its objectives.
7. *The asset owner sets the SWF features.* The owner should set the objectives of the SWF, appoint the members of its governing body(ies) in accordance with clearly defined procedures, and exercise oversight over the SWF's operations.
8. *Governing bodies act in the best interests of the SWF.* The governing body(ies) should act in the best interests of the SWF and have a clear mandate and adequate authority and competency to carry out its functions.
9. *Independence of operational management.* The operational management of the SWF should implement the SWF's strategies in an independent manner and in accordance with clearly defined responsibilities.
10. *Clear accountability.* The accountability framework for the SWF's operations should be clearly defined in the relevant legislation, charter, other constitutive documents, or management agreement.
11. *Effective regular reporting.* An annual report and accompanying financial statements on the SWF's operations and performance should be prepared in a timely fashion and in accordance with recognized international or national accounting standards in a consistent manner.
12. *Regular independent audit.* The SWF's operations and financial statements should be audited annually in accordance with recognized international or national auditing standards in a consistent manner.
13. *Defined code of professional and ethical conduct.* Professional and ethical standards should be clearly defined and made known to the members of the SWF's governing body(ies), management, and staff.
14. *Rules-based outsourcing.* Dealing with third parties for the purpose of the SWF's operational

management should be based on economic and financial grounds and follow clear rules and procedures.

15. *Compliance with regulations of countries, where the funds operate.* SWF operations and activities in host countries should be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which they operate.
16. *Public disclosure of governance framework and objectives.* The governance framework and objectives, as well as the manner in which the SWF's management is operationally independent from the owner, should be publicly disclosed.
17. *Public disclosure of financial information.* Relevant financial information regarding the SWF should be publicly disclosed to demonstrate its economic and financial orientation, so as to contribute to stability in international financial markets and enhance trust in recipient countries.
18. *Investment policy consistent with objectives and risk tolerance.* The SWF's investment policy should be clear and consistent with its defined objectives, risk tolerance, and investment strategy, as set by the owner or the governing body(ies) and be based on sound portfolio management principles.
19. *Commercial orientation.* The SWF's investment decisions should aim to maximize risk-adjusted financial returns in a manner consistent with its investment policy and based on economic and financial grounds.
  - a. If investment decisions are subject to other than economic and financial considerations, these should be clearly set out in the investment policy and be publicly disclosed.
  - b. The management of an SWF's assets should be consistent with what is generally accepted as sound asset management principles.
20. *Restrictions against using privileged information.* The SWF should not seek or take advantage of privileged information or inappropriate influence by the broader government in competing with private entities.
21. *Equity investment management consistent with investment policy.* SWFs view shareholder ownership rights as a fundamental element of their equity investments' value. If an SWF chooses to exercise its ownership rights, it should do so in a manner that is consistent with its investment policy and protects the financial value of its investments. The SWF should publicly disclose its general approach to voting securities of listed entities, including the key factors guiding its exercise of ownership rights.
22. *Effective publicly disclosed risk management.* The SWF should have a framework that identifies, assesses, and manages the risks of its operations. It should be publicly disclosed.
23. *Proper reporting of performance.* The assets and investment performance (absolute and relative to benchmarks, if any) of the SWF should be measured and reported to the owner according to clearly defined principles or standards.
24. *Ongoing compliance with the Santiago Principles.* A process of regular review of the implementation of the Santiago Principles should be engaged in by or on behalf of the SWF.

<sup>22</sup> Details here of the Santiago Principles are based on the International Forum for Sovereign Wealth Funds website, <https://www.ifswf.org>



# Appendix D. Country Examples of Sovereign Wealth Fund Governance and Institutional Setups

## Botswana

Botswana's Pula Fund was established in 1993 by the 1975 Bank of Botswana (BOB) Act. In 1996, the act was updated to reflect the establishment and management of long-term investment funds and to provide greater flexibility for the management of BOB assets. Effectively, the Pula Fund represents the country's surplus reserves rather than a separate legal entity for the management of the sovereign assets. The BOB evaluates the appropriate level of reserves, and surpluses are allocated to the Pula Fund. Consequently, Botswana's sovereign assets and BOB assets are physically commingled. The assets in the Pula Fund are owned by the BOB rather than by

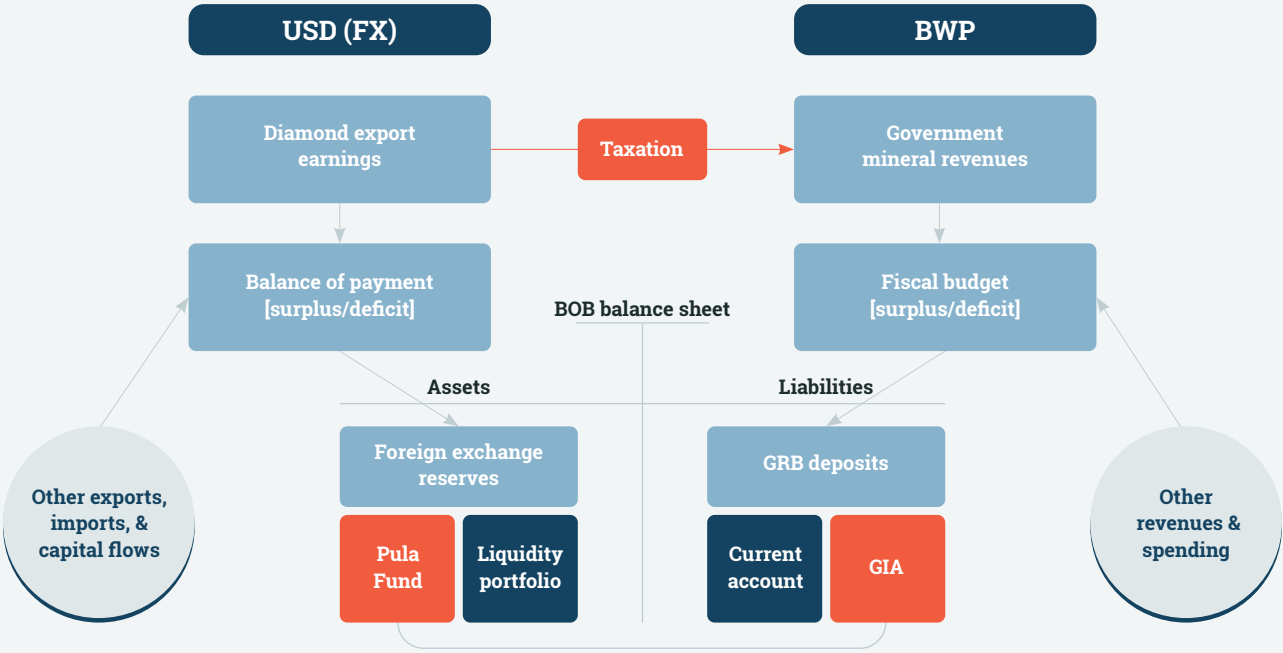
the central government. The BOB retains decision-making authority for the operational management of the fund and is responsible for its implementation. The investment mandate for the Pula Fund is not explicitly defined, and its investment objectives are interpreted by the BOB to combine stabilization and savings objectives. The Pula Fund's assets are invested in a mix of fixed income and public equity assets, and the fund combines internal management with the use of external asset managers for specialized mandates. Figure D.1 presents a diagram of Botswana's financial flows from mineral revenue and the treatment of the Pula Fund on the BOB's balance sheet.

## Ghana

Among the newer established Sovereign Wealth Funds (SWFs) is Ghana's. In 2010, the government approved the Petroleum Revenue Management Act establishing Ghana's Petroleum Funds (GPFs), comprising a stabilization fund and a fund for future generations. Since 2011, the oil revenue started to be accumulated in the stabilization fund. The institutional framework described clear separation of complementary roles between the Parliament, Ministry of Finance, Bank of Ghana (BOG), Ghana Revenue Authority, National Oil Industry, and Auditor General. The Parliament, through the Ministry of Finance, assumes the asset owner function, whereas the asset management role is delegated to the central bank, the BOG. The Ghana Petroleum Funds Investment Mandate defines the investment parameters for the management of the sovereign assets, and the Operations Management Agreement defines the operational relationship between the Ministry of Finance and the BOG. To

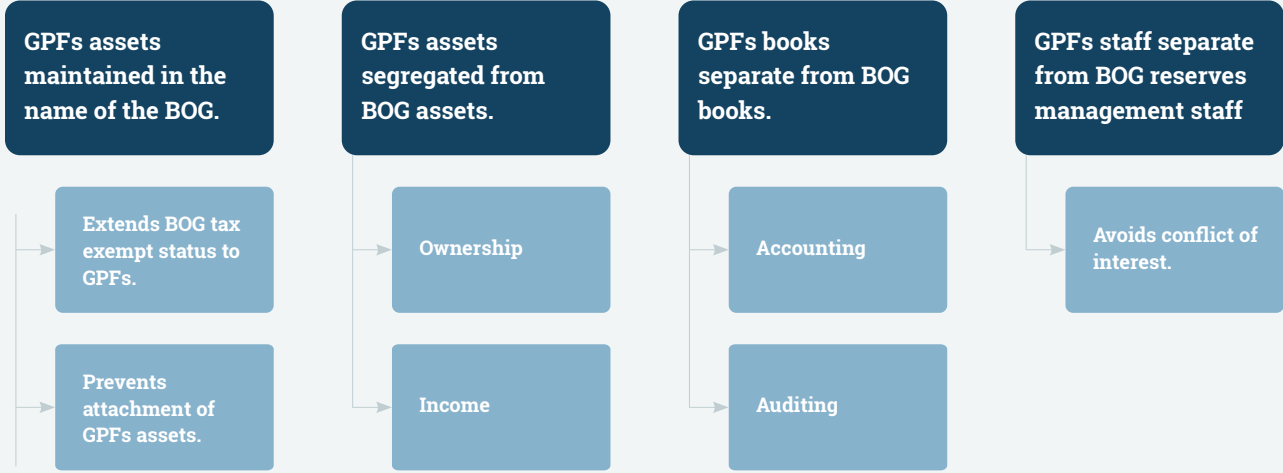
extend the BOG's tax exempt status to the sovereign assets and mitigate the risk of possible attachment, the funds' assets are maintained in the name of the BOG. As a reflection of different ownership of the GPFs from that of the central bank's own assets, the assets of the SWFs are segregated from the foreign exchange reserves and managed separately. To avoid any potential conflict of interest, the technical staff managing the SWFs are separated from the BOG staff responsible for the management of the bank's foreign exchange reserves. The BOG has the authority to contract external asset managers for asset classes outside its expertise. Currently, the funds are invested similarly to the country's foreign exchange reserves and are limited to investing in fixed income only. In the future, it is envisioned that the BOG will develop its capacity to manage more complex investment portfolios when the GPFs start accumulating revenue in the long-term fund. Figure D.2 presents key operational management principles for the management of the GPFs.

**Figure D.1:** Botswana's Pula Fund: Mineral Revenue Flows and the Bank of Botswana's Balance Sheet



Source: World Bank International Conference on SWF Management March 2013.

**Figure D.2:** Ghana's Petroleum Funds: Operational Management Principles



Source: Nana Aba Ashun, Head of Ghana Petroleum Funds Secretariat, Bank of Ghana, December 2012.



- b. *Operational capacity.* A closely related consideration when selecting an appropriate institution is its operational capacity, including, among other things, technical expertise and investment management infrastructure. Central banks are already responsible for management of the country's foreign exchange reserves. In that role, central banks have established market presence, operational capacity, and infrastructure to manage portfolios in various currencies. Consequently, central banks have established their names in the international markets and entered into key contractual and partnership relationships with relevant financial and other institutions to execute transactions in the markets. These considerations make the choice of the central bank quite appealing as a starting point for managing the country's sovereign assets and, in particular, stabilization funds. Still, in many countries, the core mandate of the central bank is to manage liquidity portfolios and, on the basis of our experience, some central banks could face significant internal constraints to expanding their existing practices to accommodate investment portfolios requiring different specifications. Establishing a new institution with no legacy constraints could potentially offer an opportunity to implement more advanced investment management operations based on current best industry practices. However, such management operations are often quite complex and resource and time consuming, and they would require building and enabling institutional development over time that is consistent with best practices.
- c. *Political and operational independence.* Independence from political interference is critical for the long-term success of the fund, and potential for political interference is even more pronounced in countries with a lower level of national governance. In many countries, the central bank tends to be among the technical institutions that are more independent from the government and, thus, it could become the institution of choice in countries with a low level of national governance.

But in countries with poor governance practices or a high level of corruption, or both, independent agencies could potentially be even more vulnerable to poor governance. Several notable examples of direct interference in the governance of the institution led to substantial investment losses owing to politically motivated investment decisions, such as a highly publicized court case involving the Libyan Investment Authority. In some countries with insufficient control of corruption, the creation of an independent institution could be perceived by the public as an instrument to avoid public scrutiny on the management of public assets. Although in practice this institutional setup would still be subject to controls and oversight to ensure that the assets were managed properly, such public perception could indicate the lack of public support for the country's approach in managing its sovereign assets and could affect its legitimacy over time.

- d. *Institutional ability to attract and retain qualified staff.* Asset management requires employees with a high skill level, and proper delegation to professional staff is required to successfully implement SWF investment strategies. One of the key considerations is the availability and institutional ability to hire and retain appropriate technical skills, to carry out strategic policy and day-to-day operational responsibilities. In developing countries, especially those with an underdeveloped financial sector, the central bank tends to attract the most qualified staff, especially for analytical and entry-level positions. However, competition with the financial industry is fierce for skilled staff. In many countries, public sector regulation and human resources policies are seen as a significant constraint to retaining talent in central banks bound by these policies, which present a particular challenge to attracting the advanced asset management skills required for more sophisticated investment portfolios. For example, Norway's central bank, the Norges Bank, set up asset management operations for the country's sovereign assets outside the public

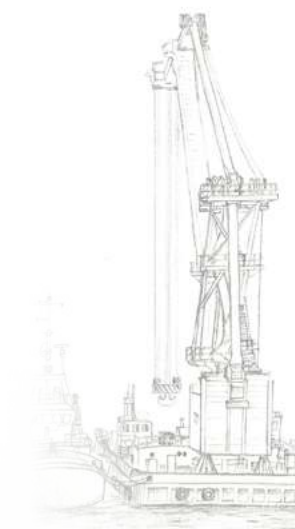
sector regime. In most other countries, such a significant change in the central bank's organization is deemed untenable. Hence, an institution that is not bound by the public sector's human resources requirements is often the reason for setting up an independent asset management entity, especially in countries with a developed financial industry and sophisticated private financial institutions.

- e. *Legal issues.* The institutional setup should be carefully evaluated on its implications for legal issues, in particular, issues such as immunity of assets. Specialized legal professionals should be involved in the design and implementation of the fund. Although examination of legal considerations is outside the scope of this appendix, legal concerns on the risk of attachment of sovereign assets have been predominant in some countries' efforts in setting up a long-term savings fund. Countries have chosen to use arrangements with the central bank in such a way that it minimized the risk of attachment. Correspondingly, when considering establishment of an independent entity, legal matters, especially those related to immunity and taxation, should be assessed carefully, as the asset management institution would be subject to international and domestic regulation.



## Appendix F. Overview of the Technical Process That Should Drive the Development of the Sovereign Wealth Fund's Investment Policy and Strategic Asset Allocation

- a. *Articulating objectives and identifying liabilities* make it easier to understand expected funding and withdrawal patterns and how to measure risk. Governments have liabilities and their Sovereign Wealth Funds (SWFs) may have clearly defined explicit liabilities or more implicit liabilities, especially related to the costs of adjusting spending in the short term. Although asset liability management for governments and SWFs is difficult to do accurately, other parts of the sovereign's balance sheet than the SWF should be considered when determining the investment strategy. These considerations can provide important understanding of how the sovereign is exposed to factors such as economic growth, inflation, liquidity, currencies, commodity price risk, financial sector risk, and the investment horizon.
- b. *Forming investment beliefs* will provide guidance on the parts of financial markets in which the SWF may invest and how these investments should be implemented. These beliefs should not be based only on financial research, because this is not a hard science with laws of nature. Instead, the results are often inconclusive, change over time, depend on investor characteristics, and are highly uncertain. Investors must therefore form their own beliefs about the financial markets in their specific context. Institutional investors typically publish their beliefs on the investment horizon, diversification, active management, costs, management organization, and innovation.
- c. *Quantifying return and risk expectations and modeling* provide decision makers a statistical sample space for the future real value of the SWF. The future value of the SWF will predominantly be determined by the future returns on the fund's capital, but the value will also depend on the government's gross inflow to the fund and withdrawals (spending). The financial industry standard is to do some form of mean-variance modeling, which unfortunately is very sensitive to estimates of means, volatilities, and correlations. Thus, mean-variance optimization for simple investment alternatives should only be used where robust long-term statistics exist or to impose constraints. Constraints help because they bring back unconstrained portfolio weights to economically reasonable positions. SWFs should also consider analyzing more than just the mean and the variance, using different risk measures and stress and scenario analyses.
- d. *Setting the strategic asset allocation* expresses the risk-bearing capacity and is normally done through deciding between different asset allocation alternatives for where the statistical sample space is described. According to the fund separation theorem, investors' risk aversion can be expressed through allocation between a risk-free asset and an optimal risky portfolio. In practice, the choice for SWFs is often between a low-risk, fixed income portfolio with desired currency composition and duration and a performance-seeking equity portfolio that may include alternative assets and exposure to a set of systematic factors. The choice of asset allocation represents a trade-off between the preference for high expected return and the preference for low risk. A larger share of performance-seeking assets will increase the expected return and the contribution to funding the fiscal budget; but, at the same time, it will entail more volatility in the value of the fund.
- e. *Operationalizing the strategic asset allocation* ensures that the actual portfolio will be aligned with the investment strategy. This operationalization is usually done through selecting benchmark indexes that represent the preferred exposure to the markets. Investors should start with selecting off-the-shelf indexes from index providers based on a list of desired properties. The most commonly used benchmarks for public equities and fixed income markets are market capitalization indexes, which have several favorable properties. The selected off-the-shelf indexes should then be tailored to fit the preferences of the SWF. The tailoring should include setting specific weights to different indexes and rebalancing rules, and it should result in the fund's strategic benchmark index. The actual portfolio will deviate from the strategic benchmark. Such deviations are often regulated through a relative risk measure, such as tracking error. The lack of good indexes for private markets makes it difficult to use the same implementation approach as for public markets. It is instead common to set strategic allocation limits or targets for specific asset classes, each with its own return target or benchmark. The benchmarks can be based on indexes of funds (common in private equity). Or, for direct investments (common in real estate), the benchmarks can be absolute (like a real return plus a spread) or based on public market indexes (like a small cap index plus an illiquidity premium). Risk in private markets is usually limited through exposure limits and diversification requirements. The investment goals, benchmarks, and risk limits should be clearly defined and described in the SWF's investment guidelines.
- f. *Regular and well-documented reviews* should be conducted to ensure that the investment strategy is up to date. It is common practice to review the strategic asset allocation every three to five years or more often if there has been a significant change to the fund's objectives or liabilities, investment beliefs, market expectations, or risk tolerance. The strategic changes should not be done ad hoc but should follow the steps described in this appendix. Having a robust process in place and an investment strategy that rests on a solid fundament will reduce the risk of making procyclical strategy changes, which tend to lead to low return. The considerations and choices in the strategic asset allocation process should be well documented. This will benefit coming reviews, and it may be a useful tool in communicating the fundamentals for the investment strategy to stakeholders and may provide the basis for courage to stay the course when it is most needed.



## References

Al-Hassan, Abdullah, Michael Papaioannou, Martin Skancke, and Cheng Chih Sung. 2013. "Sovereign Wealth Funds: Aspects of Governance Structures and Investment Management." IMF Working Paper 13/231. International Monetary Fund, Washington, DC.

Bova, Elva, Nathalie Carcenac, and Martine Guerguil. 2013. "Fiscal Rules and the Procyclicality of Fiscal Policy in the Developing World." IMF-World Bank Conference on Fiscal Policy, Equity and Long-Term Growth in Developing Countries, April 21–22, Washington, DC.

Davis, Jeffrey, Rolando Ossowski, James Daniel, and Steven Barnett. 2003. "Stabilization and Savings Funds for Nonrenewable Resources." In *Fiscal Policy Formulation and Implementation in Oil Producing Countries*, edited by J. M. Davis, R. Ossowski, and A. Fedilino, chapter 11. Washington, DC: International Monetary Fund.

Debrun, Xavier, and Manmohan S. Kumar. 2007. "Fiscal Rules, Fiscal Councils and All That: Commitment Devices, Signaling Tools or Smokescreens?" International Monetary Fund, Washington, DC.

Fasano-Filho, Ugo. 2000. "Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries." IMF Working Paper. International Monetary Fund, Washington, DC.

Hentov, Elliot, and Alexander Petrov. 2020. "How Do Sovereign Wealth Funds Invest? Less and Less Contrarian." White Paper Sovereign Investment Trends. State Street Global Advisors, Boston, MA.  
<https://www.ssga.com/library-content/pdfs/official-institutions-/how-do-sovereign-wealth-funds-invest.pdf>

Kopits, George. 2001. "Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?" IMF Working Paper. International Monetary Fund, Washington, DC.

Peszko, Grzegorz, Dominique van der Mensbrugghe, Alexander Golub, John Ward, Dimitri Zenghelis, Cor Marijs, Anne Schopp, et al. 2020. *Beyond Stranded Assets: Climate Strategies for Fossil Fuel Dependent Countries*. Washington, DC: World Bank.

Sanchez, Teresa Daban. 2011 "Strengthening Chile's Rule-Based Fiscal Framework," IMF Working Paper. International Monetary Fund, Washington, DC.

World Bank. 2014. "Generating Sustainable Wealth from Mozambique's Natural Resource Boom." Report 86802. World Bank, Washington, DC.

———. 2015. "Uganda Country Economic Memorandum: Economic Diversification and Growth in the Era of Oil and Volatility." Report No: 97146-UG. World Bank, Washington, DC.

