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**POLICY PAPER**

# **FISCAL RULE OPTIONS FOR PETROLEUM REVENUE MANAGEMENT IN UGANDA**

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# Introduction

With oil production about to begin, Ugandan Members of Parliament are considering legislation that will manage oil revenues over the next decades. As RWI's policy briefs and previous analysis of the 2012 Uganda draft Public Finance Bill<sup>1</sup> outline, international experience indicates that in order to avoid common risks and ensure that these valuable, nonrenewable resources translate into higher long-term living standards, it is important to design precise rules for managing resource revenues that are adapted to Uganda's needs and fiscal balance. Equally important are the transparency and oversight mechanisms that enforce these rules.

In its February 2012 Oil and Gas Revenue Management Policy paper, the Ugandan Ministry of Finance, Planning and Economic Development committed to policy decisions for oil revenue management based on expert analysis and international lessons learned, including a fiscal rule to cap the amount of oil revenues available for budget spending in any given year. Although most of these principles have been incorporated into the current Public Finance Bill,<sup>2</sup> the fiscal rule has not.<sup>3</sup> The current absence of a fiscal rule in the Public Finance Bill creates significant risks for fiscal stability and Uganda's future economic growth. There is still time to fully implement Uganda's revenue management policy and design a rule that would best match the long-term interests of the people of Uganda with short- and medium-term development priorities.<sup>4</sup>

Chapter 7 of the draft Public Finance Bill provides for the creation of a Petroleum Fund that will receive all revenues from the oil sector. Under the current draft, spending of oil revenues would be planned through the Medium Term Expenditure Framework,<sup>5</sup> and Parliament would approve annual expenditures each year. This implies that the Petroleum Fund will only save revenues if the government and parliament agree on such savings each year. A fiscal rule could in theory be included in the Charter of Fiscal Responsibility,<sup>6</sup> but it is better placed at a level where it cannot be revised often — in the law itself. Otherwise, political pressure to spend could lead to pro-cyclical fiscal policy (where spending increases and decreases in line with volatile oil prices), wasteful spending and either early depletion of the Petroleum Fund or failure to save at all.

Many countries have created natural resource funds of the sort proposed in the Public Finance Bill, but such funds by themselves do not guarantee sound macroeconomic management. In fact, they may complicate budgeting and make public spending less accountable. Fiscal rules — multi-year constraints on government spending or public debt accumulation — can help commit successive governments to stable macroeconomic policy, which is necessary for growing and diversifying an economy dependent on large, finite and volatile natural resource revenues. Not all natural resource funds are governed by fiscal rules, but fiscal rules generally improve government performance and public financial management.<sup>7</sup> In the countries that manage their natural resource wealth most effectively, these rules are followed by governments of any political color and have become a critical element of national consensus over public finance management.<sup>8</sup>

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<sup>1</sup> Revenue Watch Institute, *Comments on Petroleum Revenue Management in the Draft Ugandan Public Finance Bill 2012*, March 2012, [http://www.revenuewatch.org/sites/default/files/RWI\\_comments\\_PFM\\_bill\\_Uganda.pdf](http://www.revenuewatch.org/sites/default/files/RWI_comments_PFM_bill_Uganda.pdf).

<sup>2</sup> The current Petroleum Revenue Management (PRM) chapter in the Public Finance Bill goes some way to addressing risks by protecting oil revenues from being used as collateral on public debt, providing some guidelines on the investment of revenues saved in an oil fund and including basic transparency and oversight mechanisms.

<sup>3</sup> IMF country report in July 2013 also indicated a strong support for the fiscal rules described in the Oil and Gas Management Policy: *Uganda: 2013 Article IV Consultation and Sixth Review Under the Policy Support Instrument, Request for a Three-Year Policy Support Instrument and Cancellation of Current Policy Support Instrument—Staff Report*, IMF Country Report No. 13/215, July 2013.

<sup>4</sup> A paper from Columbia University makes a similar recommendation: *Oil: Uganda's Opportunity for Prosperity* (School of International & Public Affairs, Columbia University, May 2012), as do previous RWI comments to the draft PFM bill (March 2012 and April 2013).

<sup>5</sup> The Medium Term Expenditure Framework was developed in Uganda in the 1990s to increase predictability in sector investment financing by linking multi-year expenditure priorities to the objectives of the National Development Plan.

<sup>6</sup> The Charter of Fiscal Responsibility acts as a performance contract between the government and parliament. According to the draft bill, it shall contain "a statement of the government's measurable objectives for fiscal policy for a period of no less than the next three financial years which are consistent with the fiscal policy principles" and "an explanation of the methodology to be used to measure the government's performance against the fiscal policy objectives," so that the government can be held accountable for following fiscal policy objectives to parliament.

<sup>7</sup> Several studies show that fiscal rules are associated with smaller primary deficits, restrained spending and a greater fiscal consolidation success rate, particularly at the national level. *Fiscal Rules – Anchoring Expectations for Sustainable Public Finances*, a paper from the IMF (2009), outlines some of the evidence: <http://www.imf.org/external/hp/pp/eng/2009/121609.pdf>.

<sup>8</sup> Chile, Peru and Norway and good examples of resource-rich countries that have enforced their fiscal rules through political transitions.

To ensure the effective implementation of any fiscal rule, a country needs three elements: the rule itself, institutions to manage it and oversight mechanisms. The Revenue Management Policy establishes fiscal rules, though they may need to be further refined. **The public finance bill should enshrine these rules in legislation and lay out their institutionalization and oversight so they can be implemented.**

To help Uganda decide which rule would best serve its interests, we have projected Ugandan oil and non-oil revenues and modeled the potential impact of different fiscal rules on public expenditure levels, stabilization of spending, and as savings and investment. Our projections are based on publicly available information and forecasts, which may be subject to updates. Our preliminary findings highlight three things:

- i. There is still significant uncertainty regarding how much revenue will be generated by oil production.
- ii. Uganda's level of oil dependency will depend largely on the success or failure of reforms in fiscal policy and tax administration beyond the oil sector; the more successful Uganda is in capturing non-oil revenues, the lower will be the risks of macro-economic distortion,
- iii. Taking into account i/ and ii/, the absence of a fiscal rule on oil revenue spending could create a major risk for the sustainability and stability of public expenditures.

In our model, we then compare different options for fiscal rules. Our findings are summarized below and detailed in Appendix I.

Given current projections, Uganda does not need a fiscal rule that saves an overwhelming portion of its oil revenues. Domestic investment needs are acute, public debt is currently above 35 percent of GDP and increasing, and expected oil revenues are small relative to the size of the economy, likely never to exceed 10 percent of GDP. That said, there are three reasons to enact a rule that saves a portion of oil revenues. First, the Ugandan government's capacity to scale up public investment quickly is limited due to the existence of absorptive constraints,<sup>9</sup> in both the public and private sectors. While the Ugandan public service performs well on selecting infrastructure projects, its performance on implementation and project evaluation is weak in comparison not only to global standards but also to neighbors Kenya and Tanzania.<sup>10</sup> Private sector capacity to hire new skilled workers and expand production well is also weak. As a result, additional government spending regularly leads to inflation, often above 10 percent, rather than real income gains. Second, petroleum revenues are exceedingly volatile due to price fluctuations and unstable production. As such, oil-rich governments around the world often spend unwisely on legacy projects and initiate social programs or wage increases when revenues are high, and then are unable to service these incurred liabilities when revenues decline. In short, volatility leads to poor public investment decisions and waste. Saving revenues in boom years and drawing on those savings in bust times can help mitigate the negative effects of revenue volatility. Third, Uganda is prone to environmental and economic crises. Savings could provide a source of revenue in times of great need.

**Based on our analysis, we recommend that the government of Uganda implement a fiscal rule that smooths expenditures to mitigate the negative effects of oil revenue volatility, with some frontloading of spending in the early portion of the production lifecycle if absorptive capacity allows it.** Such a system would save revenues for the benefit of future generations, improve the quality of public spending, and improve macroeconomic stability, a prerequisite for strong, sustainable and balanced growth. At the same time, the front-loading feature would help the government respond to political demands for immediate and visible benefits while binding spending at an appropriate level and effectively stabilizing public expenditures in response to highly volatile oil prices.

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<sup>9</sup> A detailed report on absorptive constraints has been published by the Ministry of Finance: *Absorptive Capacity Constraints, the causes and implication for budget execution*: [http://www.finance.go.ug/index.php?option=com\\_docman&task=doc\\_download&gid=270&Itemid=7](http://www.finance.go.ug/index.php?option=com_docman&task=doc_download&gid=270&Itemid=7).

<sup>10</sup> Era Dabla-Norris et al. Investing to Public Investment: *An Index of Public Investment Efficiency*. IMF Working Paper 11/37, <http://www.imf.org/external/pubs/ft/wp/2011/wp1137.pdf>.

# Projected oil revenues

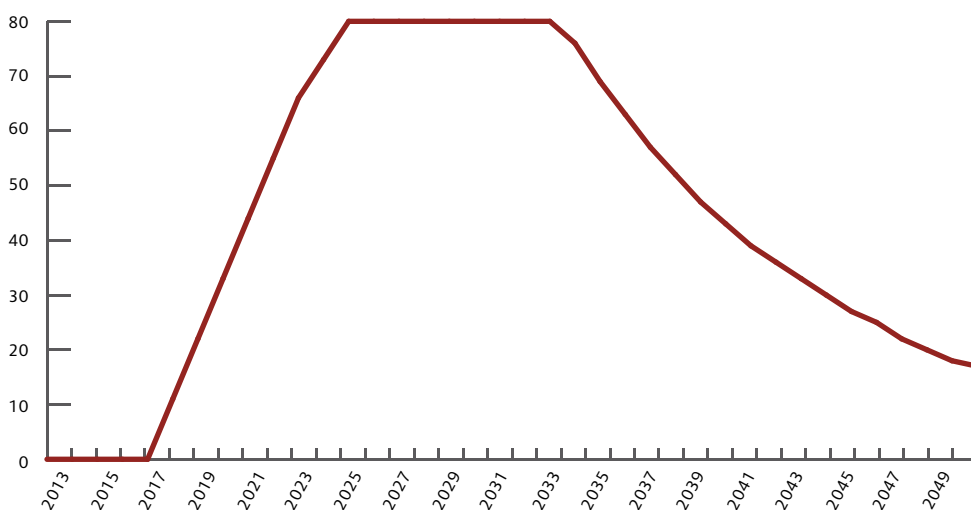
## BENCHMARK SCENARIO: A MODEST OIL BOOM

Behind the analyses in this paper is a model in which we project future oil revenues in Uganda. It must be noted here that a lot of uncertainty remains about various factors, which makes truly confident estimates of revenue flows difficult.<sup>11</sup> To the best of our knowledge, we have developed a benchmark scenario and assessed the sensitivity of our conclusions to varying hypotheses.

Proven oil and gas reserves in Uganda are now estimated at 3.5 billion barrels, according to the Ministry of Energy and Mineral Development,<sup>12</sup> with confirmed recoverable reserves of 1.2 billion barrels, with a recovery factor of around 35 percent. Estimates of actual recoverable reserves vary depending on commentators; in this paper, we use as a benchmark Tullow’s estimate of 1.7 billion barrels<sup>13</sup> of recoverable reserves in Lake Albert Basin. It could be argued that companies’ estimates of recoverable reserves could be influenced by their incentive to maximize potential investors’ confidence in their prospects; thus the benchmark figures for both the quantity of oil in the ground (“proven reserves”) and the recovery factor (“recoverable reserves”) could be inflated. The oil could prove harder to extract, and the recovery factor could drop to 20 percent or less — a plausible scenario, given the characteristics of Uganda’s crude<sup>14</sup> — which could reduce recoverable reserves to fewer than one billion barrels. Yet companies listed in major stock exchanges, and particularly Tullow in the London Stock Exchange, are subject to strict reporting requirements,<sup>15</sup> and reserves must be reported by a Competent Person, defined in the JORC code,<sup>16</sup> so recoverable reserves overestimation is not very likely.

Given these considerations and current the projections of oil extraction, production is now expected to begin in 2017/2018, reach a plateau of 220,000 barrels per day (or 80 million per year) in 2025 and last for about 25 years thereafter, as illustrated by **Figure 1**:

**FIGURE 1**  
PROJECTED OIL PRODUCTION (MILLION BARRELS PER YEAR)



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

<sup>11</sup> This could explain why no official forecast of oil revenue has been made public by the Government of Uganda.

<sup>12</sup> <http://www.newvision.co.ug/news/647819-oil-recovery-rates-to-improve.html>.

<sup>13</sup> <http://www.tulloil.com/index.asp?pageid=62>.

<sup>14</sup> The recovery factor globally ranges from 10% for heavy crude to 50% in the advanced North Sea field, averaging 30-35%.

<sup>15</sup> See PWC, *Executing a successful listing—Markets for Oil & Gas*, October 2013: [http://www.pwc.com/en\\_GX/gx/energy-utilities-mining/publications/pdf/pwc-executing-a-successful-listing-oil-and-gas.pdf](http://www.pwc.com/en_GX/gx/energy-utilities-mining/publications/pdf/pwc-executing-a-successful-listing-oil-and-gas.pdf).

<sup>16</sup> <http://www.jorc.org/competent.asp>.

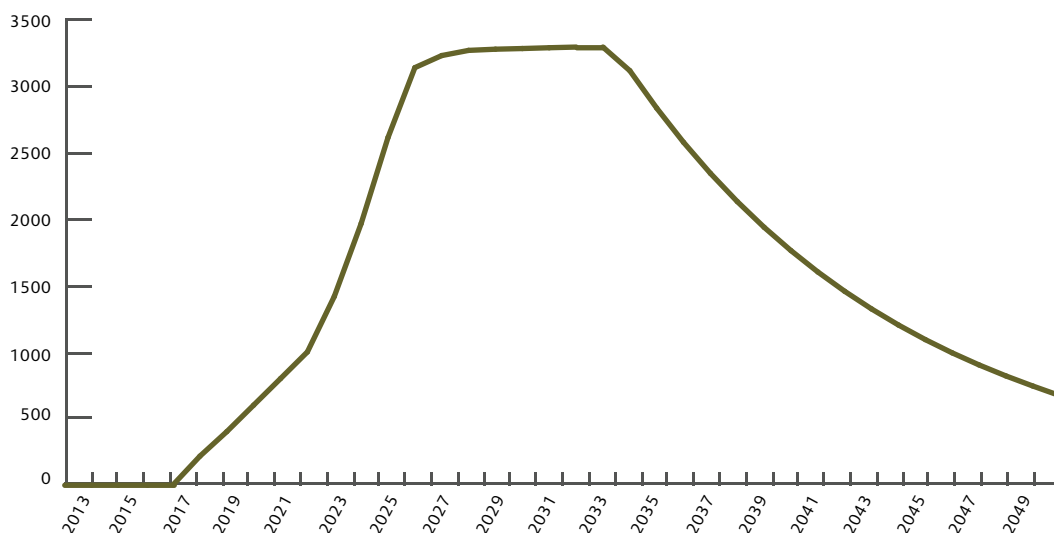
The second area of uncertainty is oil prices. Oil prices average \$100 USD/barrel today but are generally expected to decrease in the coming years. We estimate oil prices up to 2018 based on the IMF World Economic Outlook forecasts<sup>17</sup> and the future international benchmark oil price (2019 and after) at \$75 USD in real terms, with Uganda oil being valued with a discount of 5 percent to account for its lower quality.<sup>18</sup> However, as new discoveries are made, new technology increases known reserves, energy efficiency measures are taken and alternative sources of energy are developed, long-term global oil prices could drop sustainably below our benchmark scenario of \$75 USD/barrel. They could also rise, if demand peaked, if costs of new discoveries soared, or if major political turmoil affected OPEC or other major suppliers.

The investment and operational costs of an oil refinery and an oil pipeline are only estimates at this stage. Having both options in parallel might prove commercially feasible, but it might impose an additional charge to be recovered on future revenues, therefore reducing future government revenues. Our assumptions on investment costs, costs of extraction, refining and transport in Uganda are based on published analyses of the likely government take in the oil sector, all detailed in Appendix 2.

Based on these estimates, our financial model includes forecasts of Uganda’s oil prospects, including overall production, investment costs, extraction and processing/transport costs. This model allows us to project government oil revenues over a period covering 2013-2070. At our benchmark estimates, oil revenues could rise to \$3.3 billion USD/year by 2025/2026, stay on a plateau for about a decade and then decrease in current USD terms, along with production, to end in the 2050s. **Figure 2** illustrates the expected flow of oil revenues to the government, based on our model and the assumptions described above and in Appendix 2.

More oil discoveries in coming years could mean a higher production level and/or a longer production period. Although important, these additions would not substantially modify our conclusions or the impact of fiscal rules on oil revenue management.<sup>19</sup> If anything, additional oil revenues would make it more important to find an effective mechanism to stabilize public expenditures and allocate oil money effectively.

**FIGURE 2**  
PROJECTED REAL GOVERNMENT OIL REVENUES (2013 US\$ MILLIONS PER YEAR) BASED ON A LONG-TERM REAL INTERNATIONAL BENCHMARK PRICE OF \$75 PER BARREL



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

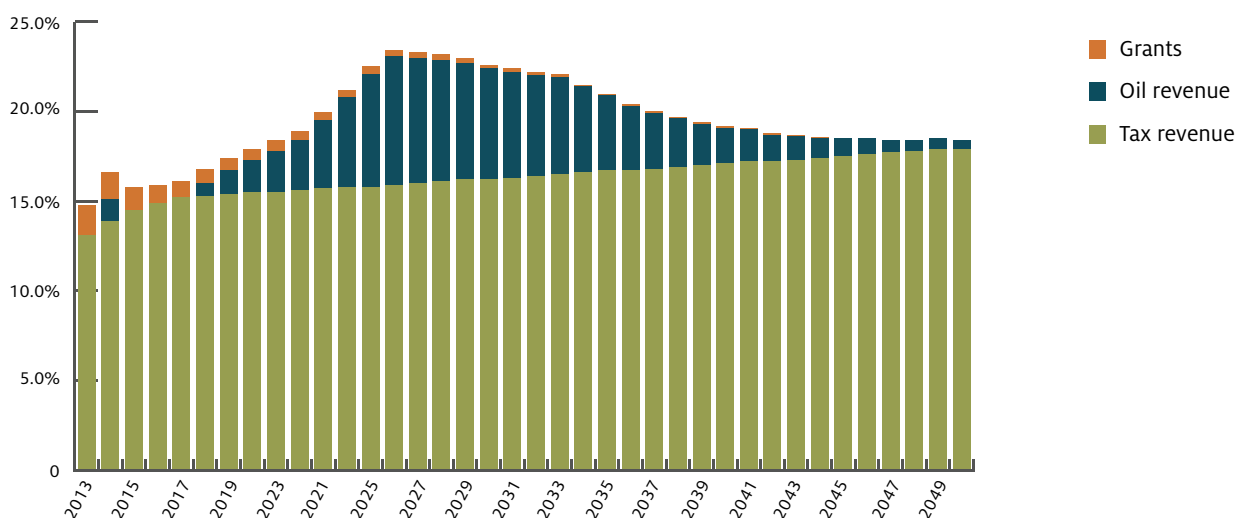
<sup>17</sup> Crude oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate and the Dubai Fateh, US \$ per barrel.

<sup>18</sup> “The crude oil discovered in Uganda’s Albertine Graben is sweet and waxy, with an API gravity ranging from 24–33° API and average sulphur content ranging from 0.1% to 0.2%. The oil is viscous; it is immobile at room temperature and must be kept at temperatures not less than 60°C to maintain mobility and prevent wax deposition in flow lines, such as pipelines. To be pourable, it must be kept at least at 40°C.” [http://wiki.openoil.net/index.php?title=Crude\\_Oil\\_Qualities\\_in\\_Uganda](http://wiki.openoil.net/index.php?title=Crude_Oil_Qualities_in_Uganda).

<sup>19</sup> In particular, Hassler et al. in a more recent paper have higher estimates for recoverable oil reserves and optimistic revenue projections based on today’s oil prices: <http://hassler-j.iies.su.se/PAPERS/UgandaOil.pdf>. Using their assumptions in our model does not change our main conclusions.

The figure of \$3.3 billion USD is large given the current size of the Ugandan economy — about as large as government tax revenue and almost 15 percent of 2013 GDP. However, at current GDP growth trends (approximating 7 percent per year, according to the IMF), by 2026 GDP and non-oil tax revenue should have increased substantially. We take a somewhat conservative assumption and estimate real non-oil GDP growth below total GDP growth, at 5 percent in the long run. Based on this assumption, we estimate that oil revenues will probably amount to less than 8 percent of non-oil GDP and less than 30 percent of tax revenue at peak production. This confirms the qualification of a “Modest Boom,”<sup>20</sup> which has been given to the expected oil sector development in Uganda. **Figure 3** illustrates this argument by showing projected oil, non-oil revenues and grants over the next decades in percentage of GDP terms.

**FIGURE 3**  
PROJECTED REVENUES, % GDP



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

To control for some of the uncertainties underlined above, if we assume pessimistic estimates of reserves, prices and costs (e.g., recoverable reserves at 800 barrels, long-term oil prices at \$60 USD/barrel, and investment and operational costs at 20 percent higher than the benchmark), government oil revenue could be much lower, never reaching more than \$800 million USD/year, in real terms, and only for a limited period of time. In such a pessimistic case, the macroeconomic impact of oil revenues would be less acute, though the recommendations of this paper would still apply. Nevertheless, it does stress the importance of managing expectations. In a pessimistic scenario, the revenue available to the government would be very short of transformative, and expectations among the Ugandan population would not be met, potentially creating frustrations that could translate into social and political upheaval. Informing Ugandan citizens of realistic estimates and uncertainty around oil production could help in managing increasing expectations among the population.

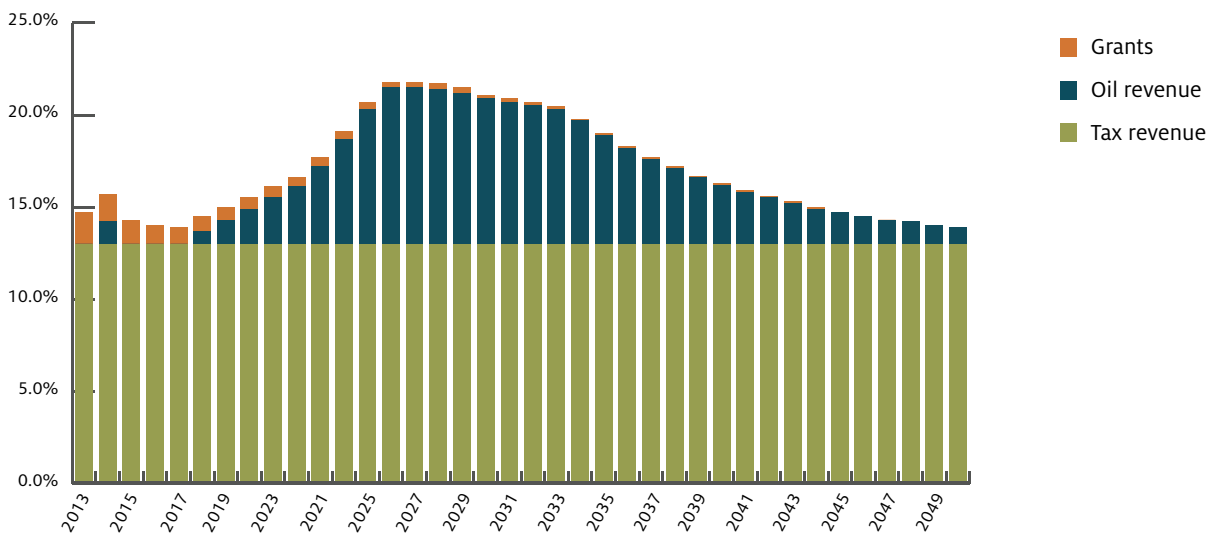
<sup>20</sup> Mark Henstridge and John Page, *Managing a Modest Boom: Oil Revenues in Uganda*. OxCarre Research Paper 90. <http://www.oxcarre.ox.ac.uk/images/stories/papers/ResearchPapers/oxcarrerp201290.pdf>.

## PREVENTING OIL-DEPENDENCY: THE IMPORTANCE OF NON-OIL TAX REVENUE

In our benchmark scenario, we have assumed an increase in non-oil tax revenue from 13 percent of GDP in 2012/2013 to 15 percent by 2017 and 18 percent by 2050. Given Uganda's past performance in raising tax revenue, and the tendency in resource-rich countries for non-tax revenue to decline as extraction ramps up,<sup>21</sup> these assumptions could be seen as fairly optimistic, though they are in line with current projections from the Ministry of Planning, Finance and Economic Development, as well as Uganda's tax capacity.<sup>22</sup> However, the level of tax revenue could actually affect matters substantially, because even a modest oil boom can have a deeply disturbing impact on an economy where the state only levies a low level of non-oil taxes. For instance, if tax revenue remained at today's level of 13 percent of GDP, oil revenues could potentially represent more than 50 percent of tax revenue. In a pessimistic scenario, non-oil GDP could also be growing more slowly, at 3 percent a year instead of 5 percent in the benchmark scenario; oil revenue would then amount to 70 percent of tax revenue, or 40 percent of total revenue in a given year. In such a case, illustrated in Figure 4, the risks in managing oil revenue would be even more acute.

Therefore, it should be a high priority to prevent oil dependency in the first place by building a strong economy and an efficient tax system and administration, to reach tax/GDP ratios similar to Tanzania's or Kenya's, aligned with Uganda's tax capacity. Implementation of the reforms in tax policy and tax administration that could lead to increasing the tax take should ideally happen before oil production begins, as natural resource revenues have often undermined tax efforts (in Kuwait or Libya, for example, where tax efforts are well below tax capacity).

**FIGURE 4**  
PROJECTED REVENUES, % GDP, IN OIL-DEPENDENCY SCENARIO



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

<sup>21</sup> Through lower tax rates, tax exemptions and lower incentives to enforce taxes in the non-resource sector. See Alun Thomas and Juan P. Treviño, *Resource Dependence and Fiscal Effort in Sub-Saharan Africa*, IMF WP 13/188.

<sup>22</sup> Estimated at 19.5% of GDP, given the country's levels of development, openness to trade, education, inequality and corruption, as well as the size of its agriculture sector, in Ricardo Fenochietto and Carola Pessino (2013): <http://www.imf.org/external/pubs/ft/wp/2013/wp13244.pdf>.



## SHOULD UGANDA SAVE SOME OF ITS OIL REVENUES? USING THE NATIONAL OIL AND GAS POLICY AND THE OIL AND GAS REVENUE MANAGEMENT POLICY AS GUIDELINES FOR A FISCAL RULE

Implicit in Uganda's National Oil and Gas Policy and Oil and Gas Revenue Management Policy is that oil and gas revenues are unlike other types of revenue:

- They can generate large and sudden inflows of foreign currency, stretching absorptive capacity constraints and causing Dutch Disease
- They are generally more volatile than other sources of revenue due to price and production volatility, making investment planning more difficult, harming the quality of public investment and causing macroeconomic instability
- They are exhaustible

As such, a primary objective of Uganda's National Oil and Gas Policy is "to ensure collection of the right revenues and use them to create lasting value for the entire nation." To these ends, the policy outlines principles for oil revenue management (p. 26), including:

- **Limiting spending growth in line with absorptive capacity constraints:** "Evaluate spending criteria for the revenues used to support the national economy based on absorptive capacity and forecast rates of return."
- **Saving for the benefit of future generations:** "Put in place a sustainable asset in form of a petroleum fund to store revenues not used in the national economy and creation of a permanent source of wealth as a provision for intergenerational equity."
- **Investing rather than consuming oil revenues:** "Support strategic areas of the national economy like education and research, development of infrastructure and other activities which contribute to the cost of doing business in the country."

The Oil and Gas Revenue Management Policy adds, as principles (p. 19):

- **Reducing the impact of oil revenue volatility:** "The oil revenue volatilities will not be allowed to spill into fiscal operations, to avoid the adverse effect on economic management, as well as undermine the medium term fiscal framework, and in the process constrain investment planning."
- **Preventing dependency on the oil sector:** "Given the volatility and finite nature of oil revenues, Government will remain committed to enhancing the non-oil related revenues."

Of the concerns cited in the National Oil and Gas Policy and Oil and Gas Revenue Management Policy, our analysis suggests that stabilizing expenditure so as to limit impact of volatility should be Uganda's top priority. Stabilization not only allows governments to plan multi-year projects with greater financial certainty but also introduces the right incentives for choosing development projects wisely, spending efficiently, delivering effectively and improving economic growth. If past movements in oil prices guide us, the future oil revenues of Uganda are likely to be very volatile. **Figure 5** illustrates one example of future revenue volatility, which contrasts to the stable benchmark forecasts presented in **Figure 2**. Given the unpredictable nature of future oil prices, it is impossible to formulate an exact forecast of revenues. **In anticipation of volatile inflows of oil proceeds, Uganda should arm itself with the best policy tools available to protect itself against this volatility.**

The National Oil and Gas Policy and Oil and Gas Revenue Management Policy recognize the tradeoff between investing oil revenues to enhance growth prospects and saving these revenues in order to keep a portion as a financial endowment for future generations and improve the quality of public investment today.

**FIGURE 5**  
PROJECTED REAL GOVERNMENT OIL REVENUES (2013 US\$ MILLIONS PER YEAR)  
UNDER VOLATILE OIL PRICE SCENARIO



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

In the case of Uganda, both the modest size of the predicted oil boom and the large need for investment in the national economy are reasons to prioritize investing over saving. The country has an important infrastructure gap, detailed in its National Development Plan 2011-2015, which implies high returns on public investment in infrastructure. Combined with decreasing foreign development assistance and still difficult access to world capital markets, this is an argument to spend oil revenues early. Economic welfare analyses confirm this.<sup>23</sup> High expectations about oil production among the population also put pressure on the government to deliver improvements in public infrastructure and human capital sooner rather than later. However, this does not mean that 100 percent of annual oil revenues should be spent: Absorptive capacity constraints and the need to build a rainy day funds are reason enough to put a limit on year-on-year spending.

As far as exhaustibility of resources is concerned, choosing between investing oil revenues to promote growth in the short and medium term versus saving to provide a flow of revenue from the Petroleum Fund for future generations should be based on what option maximizes Ugandans' welfare over the long term. Saving stems from the policy decision to spend the additional revenue from oil over a longer period than the actual oil production, to account for limits in absorptive capacity, provide a source of government financing when revenues decline or in times of crisis, or based on the principle of inter-generational fairness.

Many resource-rich countries do not save or invest for the benefit of future generations when they are receiving their revenue windfalls, leading to a long boom period followed by an economic recession or even a depression.<sup>24</sup> The larger the oil revenue respective to a country's economic output and other growth sectors and the lower the social returns on domestic investment, the more important savings for future generations should be, as in Norway or Kuwait. Given that Uganda has significant domestic investment needs and only in the range of \$1.4 billion USD per year over the next decade<sup>25</sup> — a marginal sum compared with Norway or Kuwait — the case for savings beyond what is necessary to stabilize the budget and prevent boom-bust cycles is weak.

<sup>23</sup> Hassler et al. (<http://hassler-j.iies.su.se/PAPERS/UgandaOil.pdf>), cited above, use a general equilibrium model to assess welfare under different scenarios of consuming oil revenues; consuming most of the revenues comes first, from a purely theoretical point of view.

<sup>24</sup> Nauru, a country rich in phosphates, is a case in point. It consumed its mineral wealth rather than saving or investing it. Following the start of large-scale production, Nauru went from being one of the world's poorest nations to one of its richest, with GDP peaking at \$25,500 per citizen (2005 dollars) in 1973. By 2007, it had once again dropped to one of the world's poorest nations, with GDP less than \$1,900 per citizen. The economy never recovered.

<sup>25</sup> R. Ranganathan and V. Foster, WB Policy Research Working Paper 5963: <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5963>.

Fiscal sterilization — placing government revenues in foreign accounts — may be useful when large sales of oil, gas or minerals draw foreign currency into a country, since large, sudden capital inflows can generate inflation or exchange rate appreciation and subsequently harm manufacturers. For example, Saudi Arabia has placed large sums of resource revenues in SAMA Foreign Holdings and invested them abroad to control inflation and exchange rate appreciation. However, given the expected size of Uganda’s oil economy, these effects (sometimes referred to as Dutch Disease) are likely to be relatively negligible.

## HOW A FISCAL RULE CAN HELP UGANDA, AND WHERE IT COULD BE INTRODUCED

Fiscal rules — multi-year numerical constraints on government finances — rank among the most important tools for managing oil revenues. Whether or not a government meets its stabilization or savings objectives depends almost wholly on the suitability, clarity and enforcement of its fiscal rules. First, they act as a commitment mechanism, binding successive governments to a long-term vision of public finances, which is critical in regions reliant on finite and unstable revenues. Overspending in boom times and painful bust periods in Cameroon, Egypt, Mexico and Venezuela, just to name a few oil-rich countries, reminds us that whenever possible, it is better to protect major fiscal policy decisions from political whims. Second, fiscal rules can facilitate the implementation of budgetary goals and improve the efficiency of the public financial management system. Third, they define the conditions under which deposits and withdrawals from sovereign wealth funds are made — conditions which can stabilize government spending or generate savings.

Fiscal rules are operationalized through fund deposit and withdrawal rules. These rules should be clarified in legislation, regulation or a binding policy document. Exceptions to these rules — for example, in cases of environmental or social crisis — should also be clarified.

No single rule is appropriate for every country; the design of fiscal rules should depend on context. That said, there must be political consensus on their suitability, and they must be enforced through strong internal controls and independent oversight if they are to last and work well.

An effective fiscal rule for oil revenue management in Uganda should fulfill the strategic objectives of the National Oil and Gas Policy and the Oil and Gas Revenue Management Policy and adapt to the country context. It should be able to stabilize budget expenditures even in a highly volatile economic environment, adapt to the pace of increase in the administration’s and the economy’s absorptive capacity, and allow oil revenues to be invested in the local economy when and where their positive impact would be the highest.

To act as a commitment mechanism, a **fiscal rule would be best located in the Public Finance Bill**. The current version of the Public Finance Bill envisions that prudent management of oil resources<sup>26</sup> would be included in the Charter of Fiscal Responsibility, a binding document that includes detailed medium-term fiscal targets and criteria to assess the economic performance of the government against these targets, proposed by the Minister of Finance and approved by every new incoming parliament. Including the rule in the Charter would be a second-best option, as that would mean it could be revised by every new parliament, whose members might not be fully familiar with oil revenue management issues and previous policy commitments. The current public finance bill also gives the Minister of Finance powers to deviate from the Charter in certain economic circumstances. A rule that is too easily revised loses its teeth and risks becoming irrelevant.

For the sake of illustration, Appendix 1 estimates what could happen to Uganda’s public finances in the absence of a fiscal rule: The risk would be high that volatile oil revenues would translate into volatile public expenditures, therefore reducing the quality of public investment and harming economic growth, without saving enough of the oil revenue for protection against economic downturns or for future generations. It could also saddle Uganda with debt, in an unsustainable fiscal position.

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<sup>26</sup> “Ensuring that the fiscal balance, calculated without petroleum revenue, is maintained at a sustainable level over the medium term” is a guiding principle of the Charter.

## SELECTING A FISCAL RULE

If a rule is to be prescribed in the Public Finance bill, what form should it take? As identified by the Government in the Oil and Gas Revenue Management Policy, there are several types of fiscal rules to choose from, including:

- **Revenue rules:** Limit on how much oil revenue may be appropriated into the annual budget in any given year; one example is the Permanent Income Hypothesis (PIH) rule, which limits spending of oil revenues to the expected interest on the nation's petroleum wealth.
- **Balanced budget rules:** Limit on overall, non-oil primary or current budget deficit.
- **Expenditure rules:** Limit on total, primary or current spending, either in absolute terms, growth rates or percent of GDP.

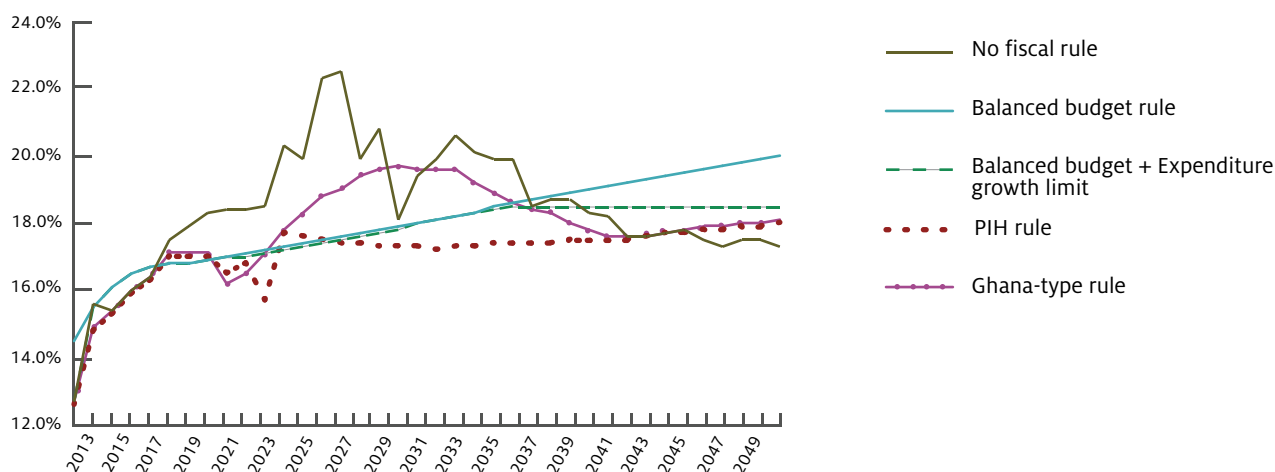
In the Appendix, we describe in detail, based on a simplified macroeconomic model, the implications of a status quo "no rule" scenario and four specific fiscal rules on public expenditures and government savings. These five scenarios are:

1. **No rule:** No fiscal rule is applied, and all oil revenues are spent in any given year.
2. **Ghana-type "benchmark revenue" rule (revenue rule 1):** 70 percent of an 11-year average of oil revenues is spent; the rest is saved. If actual revenues are lower than 70 percent of an 11-year average of oil revenues, money is withdrawn from the fund to make up for the shortfall.
3. **Permanent Income Hypothesis (PIH) rule (revenue rule 2):** Oil revenue spending is limited to 3 percent of petroleum wealth.
4. **Balanced budget rule:** The budget deficit may not exceed 3 percent of the non-oil GDP. Money from the fund can be withdrawn to sustain such a deficit when actual revenues are lower.
5. **Balanced budget combined with expenditure growth rule:** The budget deficit may not exceed 3 percent of the non-oil GDP, and current primary expenditures may not grow by more than 7 percent per year. Money from the fund can be withdrawn to reach the most binding of these limits when actual revenues are lower.

These scenarios were chosen for specific reasons. Scenario 1 is the worst-case scenario, should Uganda decide not to apply a fiscal rule in the Public Finance Bill or the Charter of Fiscal Responsibility. Scenario 2 incorporates our recommended fiscal rule. Scenario 3 is based on the IMF's historically preferred fiscal rule for resource revenue management. Scenarios 4 and 5 are drawn from the Ministry of Finance's Oil and Gas Revenue Management Policy.

We present the pros and cons of the four representative examples of fiscal rules in Table 1 (see Annex). Our main results show that all types of rules are capable of stabilizing public expenditures under volatile oil price scenarios (as illustrated by Figure 6:), which would be the main policy achievement of a Petroleum Fund. However, they do not all deal as well with non-oil revenue volatility, which has proven to be a significant issue for Uganda in recent years.

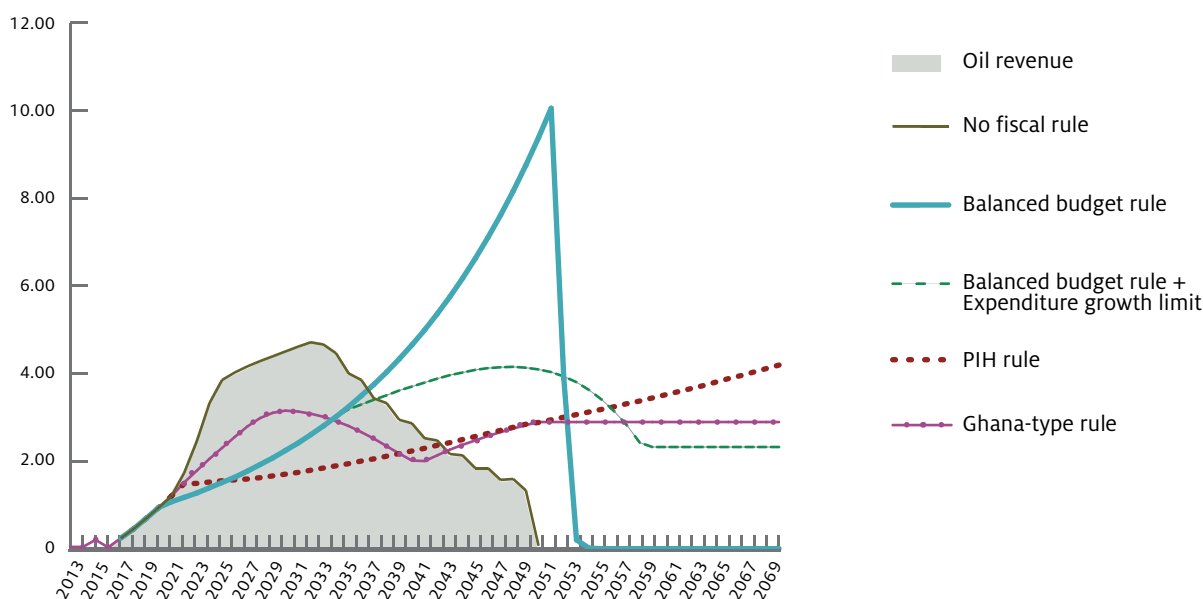
**FIGURE 6**  
PUBLIC EXPENDITURES (WITHOUT INTEREST PAYMENTS) UNDER VOLATILE OIL PRICES,  
FOR DIFFERENT SCENARIOS (IN % GDP)



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

In addition, not all the scenarios are sustainable over the long term. **Figure 7** shows oil revenues and the spending of oil revenues according to different fiscal rules, during and after oil production. Without an enforced fiscal rule, oil revenue is simply spent as it is earned, and there are no expenditures beyond the lifetime of the oil boom. A constant non-oil deficit in % of GDP terms cannot be sustained over the long term either, unless it is combined with an adequate expenditure growth limit. Both revenue rules can lead to sustainable spending of oil revenue. Among the three sustainable options, the difference is in timing: The Ghana-type rule allows frontloading of the oil revenue (highest in 2025-2035), the balanced budget rule with an expenditure growth limit backloads the revenue (highest in 2035-2055), and the PIH-type rule generates the highest income that can be sustained permanently (2055 and beyond). Uganda should choose a fiscal rule that matches its development plans and spending priorities at the right time.

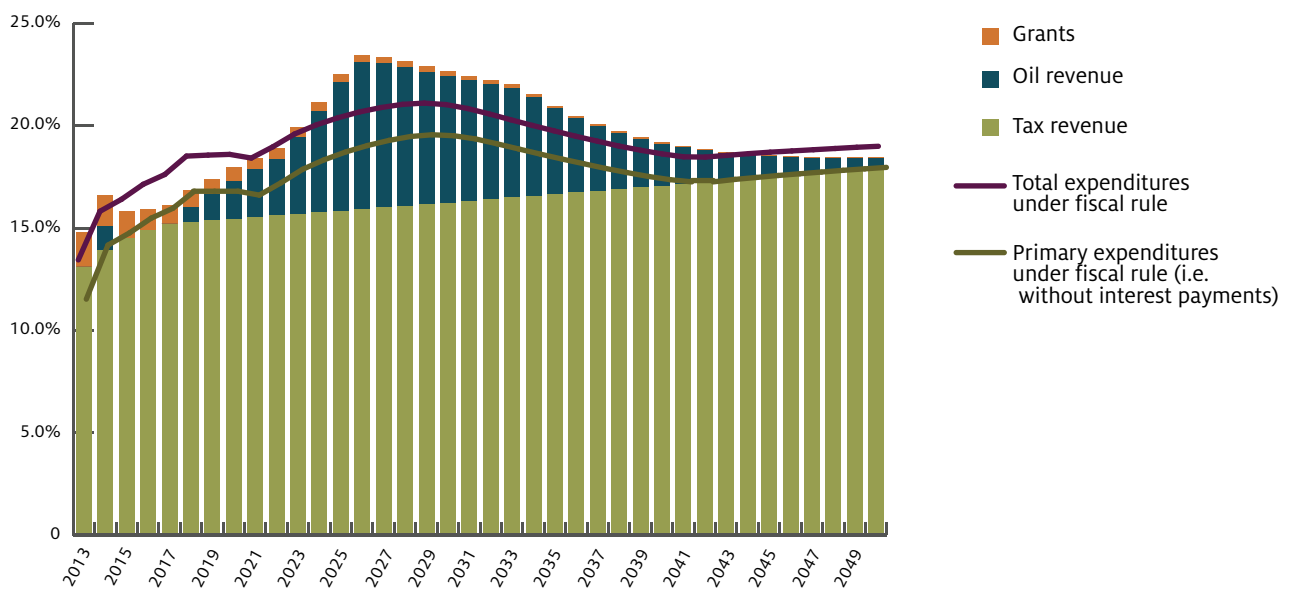
**FIGURE 7**  
OIL REVENUE EXPENDITURES UNDER DIFFERENT SCENARIOS (IN CURRENT USD BILLION, 2013-2070)



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

Based on this comparison and international experiences, and accounting for Uganda’s economy and policy objectives, we recommend adopting a revenue rule similar to Ghana’s. This type of rule would enable the government to invest a substantial part of oil revenues early, which could show Ugandans concrete benefits from oil extraction, help bridge the infrastructure gap, sustain economic growth and reduce poverty. As **Figure 8** illustrates, public expenditures would be allowed to rise to between 19 and 20 percent of GDP as oil production peaked, higher than with any of the other fiscal rules analyzed in this paper. In monetary (real USD) terms, **Figure 10** shows that the Ghana-type rule would create an additional fiscal space of between \$500 million and \$1 billion USD per year between 2025 and 2030, compared with other fiscal rules. At the same time, enough revenue would be set aside to create a buffer and stabilize national budget expenditures, to prevent adverse effects from volatility in revenues.

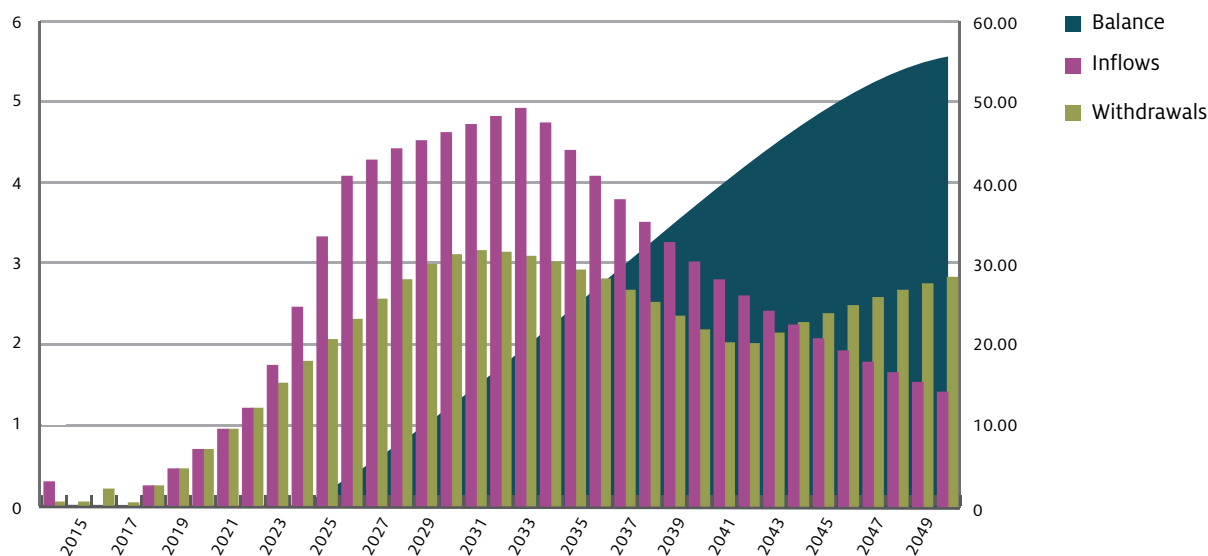
**FIGURE 8**  
REVENUES AND PUBLIC EXPENDITURES UNDER A GHANA-TYPE RULE (% GDP)



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

Depending on how much stabilizing public expenditures costs and whether Uganda prefers to use its petroleum fund to reimburse its debts or not, the Petroleum Fund could reach substantial levels, as illustrated in **Figure 9** — enough for a portion of the oil wealth to be used to maintain substantial spending levels after oil production. However, to be effective, this rule must be adjusted by setting the right limit between savings and consumption and creating the adequate transparency and oversight measures. It should also be complemented by reforms to improve the quality and delivery of public projects, as the rule does not take into account any bottleneck in absorptive capacity. In addition, it does not in itself bind the government to a sustainable net saving/debt position, which the balanced budget rule does. It would therefore need to be paired with a rigorous monitoring of Uganda’s sustainable debt level.

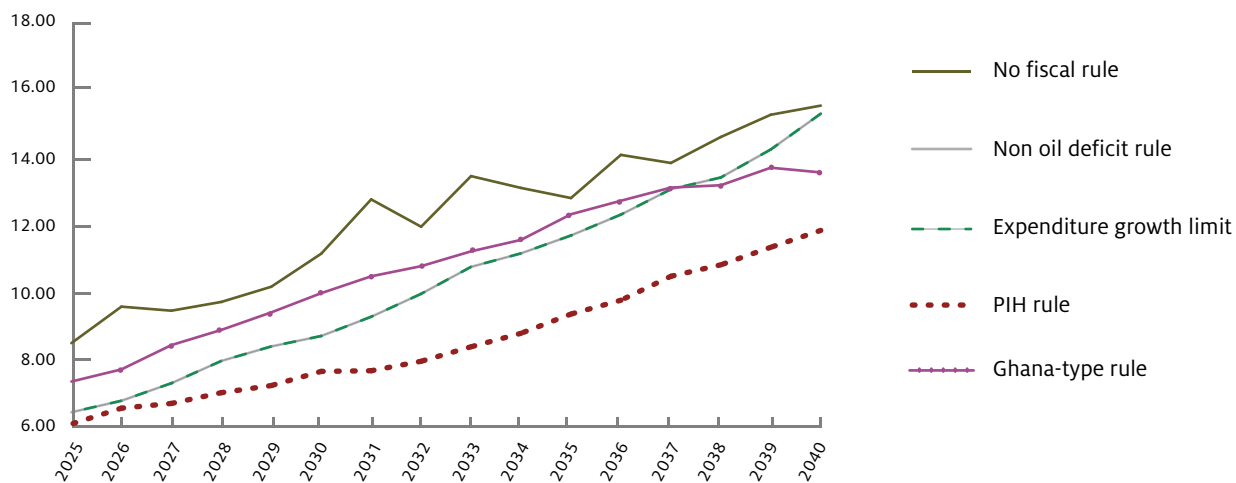
**FIGURE 9**  
**PETROLEUM FUND UNDER A GHANA-TYPE RULE (CURRENT BILLION USD)**



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

PIH-type rules tend to be conservative, as oil revenue cannot be frontloaded, especially for a country such as Uganda, which has limited access to financial markets. In our simulations, we see that the PIH-type rule would actually slow the pace of public expenditure growth during most of the oil production, allowing it to increase only much later, once the revenues from oil have all been turned into financial assets in the petroleum fund.

**FIGURE 10**  
**PUBLIC EXPENDITURES EXCLUDING INTEREST PAYMENTS UNDER DIFFERENT SCENARIOS WITH OIL AND NON OIL REVENUE VOLATILITY (REAL 2013 USD), 2025-2040**



Sources: IMF WEO database and article IV Uganda report (2013) and RWI projections

The Oil and Gas Revenue Management Policy mentions the expenditure growth limit as a potential addition to the non-oil deficit limit. Our analysis leads us to believe that combining the rules improves the outcome significantly. Such a combination would mean that at any given time the stricter of the two rules would bind the government's budget. In our scenario, this would mean that in an initial period public spending would be constrained by a limit on the budget deficit, but as total government spending grew the expenditure growth limit would limit public spending to a lower level of deficit. Given that Uganda's oil is finite, this would improve the sustainability of public spending compared with a simple fiscal anchor. This rule also has the additional benefit of limiting the government's debt level by targeting the budget deficit, including all spending items.

However, the main weakness of the combined rules is that they impose more constraints on spending in the beginning of oil production (2025-2035), which effectively prevents Uganda from frontloading some of its oil revenue to address the infrastructure gap. This effect is stronger if we take into account oil revenue volatility. The second weakness of a combination of these two rules is that the limit set on non-oil deficit and growth in expenditure would be arbitrary, not suited to all possible future economic scenarios and hardly adjustable to national spending priorities. By nature, this kind of fiscal rule is meant to be revised and is therefore harder to set in stone. As discussed previously, a fiscal rule is much more efficient if it is defined in the law, where it is not subject to frequent revisions that undermine fiscal credibility with investors and businesses.

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#### **NOTE ON USING FISCAL RULES TO IMPROVE PUBLIC FINANCIAL MANAGEMENT: A POSSIBLE MODIFICATION OF OPTION TWO**

Uganda's oil and gas policy acknowledges that public investment planning is "our most binding constraint" and sets forward the importance of improving project selection, management cycle planning, budgeting, execution, reporting and assurance. These components are captured in an IMF index called the Public Investment Management Index (PIMI).<sup>27</sup> An idea that could be developed would be to link increased withdrawals from the Petroleum Fund to improvements in Uganda's PIMI. This would be a strong measure against waste and would incentivize rapid improvements in public financial management.

For example, a rule could be devised along the lines of option 2. The difference would be that the amount distributed between the budget and a savings fund would be a function of performance based on the PIMI or a subset of these indicators. A schedule would be devised such that an x% increase in the PIMI would generate an x% increase in the amount transferred to the budget rather than the fund. The greater the index, the better the quality of spending, and the more fiscal space made available. At the same time, a provision to maintain a stabilization fund to address year-to-year volatility issues would be necessary. One constraint is that the index is not updated very often (every two years or more), so a rule linked to improvements in PIMI would not be responsive to short-term improvements in PFM, and its role as an incentive could be somehow limited.

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<sup>27</sup> <http://www.imf.org/external/pubs/ft/wp/2011/wp1137.pdf>.



## COMPLYING WITH FISCAL RULES

More than 80 countries have enacted a national or supranational fiscal rule.<sup>28</sup> Unfortunately, only a fraction of these rules are complied with fully; some governments manipulate rules to generate additional fiscal space. For example, the Ghanaian government systematically overestimates corporate income tax on oil production. This increases “benchmark oil revenues,” shifting funds from the stabilization and heritage funds to the budget. Some rules are only followed in certain years. The Japanese government has requested a waiver of the balanced-budget rule every year since 1975, except from 1990–93. In the most extreme cases, rules are simply ignored (e.g., in Azerbaijan).

There are actions the Ugandan government can consider to ensure compliance with its fiscal rule: generating internal agency or ministry pressures to follow the rules, pressuring government agencies or ministries from the outside to follow the rules, increasing transparency around the management of the Petroleum Fund, and achieving broad-based national consensus on the rules.

### Internal accountability

An appropriate institutional structure for natural resource funds can generate internal agency or ministry pressures to follow the rules. In most cases, management of deposits and withdrawals of resource revenues from natural resource funds and investments by natural resource funds is devolved between an operational manager (who manages day-to-day investments and reports on all activities), a manager (who oversees the operational manager) and a body with ultimate oversight (which oversees the manager). Which body plays which role is context-specific; however, the operational manager is usually the central bank or a capable public institution, the manager is usually the Ministry of Finance or a council of notables and/or ministers, and the body with ultimate oversight is usually the parliament and occasionally the president. This system of multiple levels of internal oversight encourages each body to act in accordance with the rules, provided that each level does its job. The proposed system in Uganda aligns with most elements of the model, but is lacking in independent oversight.

Within the operational manager, there can also be multiple levels of oversight. In Norway, for example, the executive board of the Norges Bank (the Norwegian central bank) has delegated responsibility over day-to-day management to a special body within the central bank called Norges Bank Investment Management (NBIM). NBIM is overseen by the Norges Bank Executive Board as well as by NBIM Risk Management and Compliance, another body within the central bank specifically tasked with ensuring NBIM’s compliance with the rules. NBIM is also subject to an external independent audit, which is made public.

### External accountability

Uganda may wish to consider ways of generating additional incentives to follow the rules, for which several policy options are available. First — and perhaps most important — parliaments are often tasked with reviewing, evaluating and approving selected activities of the fund and approving deposits and/or withdrawals. Legislative committees often hold hearings and report on legal compliance as well as identify cases of government mismanagement, as in Norway and the Canadian province of Alberta. In American state of North Dakota, withdrawal of the fund’s principal requires a two thirds majority in the legislative assembly.

Second, in many countries the courts are explicitly mandated to determine the constitutionality of legislation and ensure government compliance with laws, including those governing natural resource fund management. Where the courts are free from political interference, judicial review is a strong form of independent oversight, insofar as courts are able to enforce their decisions with the government. While this type of independent oversight is not commonly used to promote good fund governance, there have been cases of judicial review of fund operations. In 2008, the Timor-Leste appeals court found that a \$290.7 million withdrawal from the country’s petroleum fund was illegal. The rationale was that it violated the 2005 Petroleum Fund Law requirements that the government provide a detailed explanation for the withdrawal and that petroleum revenues be managed for the benefit of current and future generations.

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<sup>28</sup> IMF, *Fiscal Rules at a Glance* (2013), <http://www.imf.org/external/datamapper/FiscalRules/map/map.htm>

Third, some countries have established special government agencies to review performance of natural resource funds. For example, Norway's Supervisory Council, consisting of 15 members chosen by the Storting (Norway's parliament) from Norwegian society, public administration and industry, supervises the Norges Bank's activities and compliance with its rules, including the management of the Government Pension Fund Global. The council has a right to access all Norges Bank information and conduct independent investigations. In addition to its own investigations, it relies on the external auditor's statement to write its report, which is submitted to the Storting. In Chile, an independent committee can calculate the size of withdrawals.

Fourth, some funds, such as Botswana's Pula Fund and Trinidad and Tobago's Heritage and Stabilization Fund, are subject to audit by an auditor general. In these countries, the Office of the Auditor General has a degree of independence; however, this is not always the case. In other jurisdictions, independent external audits are also conducted to ensure integrity. For example, Chile's Economic and Social Stabilization Fund, Norway's Government Pension Fund Global and Texas' (USA) Permanent University Fund were last audited by Deloitte; Alaska's (USA) Permanent Fund was last audited by KPMG.

Fifth, some countries have established formal multi-stakeholder oversight bodies to reinforce and support the work of traditional bodies such as parliament and the judiciary, or to provide an additional source of oversight. In Chad, Ghana and Timor-Leste, civil society groups, such as chartered accountants, trade unions, religious organizations and traditional leaders, as well as those closer to the government, such as judges, politicians and central bankers, form formal oversight committees. Ghana's Public Interest and Accountability Committee (PIAC) is mandated by law to simply monitor the management of petroleum revenues as outlined in the Petroleum Revenue Management Act. Timor-Leste's Petroleum Fund Consultative Council must advise parliament on fund operations and compliance with the fund's mandate. Chad's Collège de Contrôle et de Surveillance des Ressources Pétrolières has a stronger mandate, not only to ensure that revenue management laws are followed but also to approve withdrawals from special oil revenue accounts.

Sixth, television, radio, newspaper and Internet coverage of fund management can encourage good fund governance. News of unjustified withdrawals from the petroleum fund can cause a degree of disenchantment and indignation among some voters. In Libya, for example, media coverage of Libyan Investment Authority mismanagement is anecdotally contributing to international and domestic congressional efforts to improve the fund's management and procedures.

Finally, a number of international organizations and think tanks provide independent assessments of fund operations and management. For example, the International Monetary Fund (IMF) includes regular assessments of natural resource fund performance in its Nigerian and Norwegian Article IV consultation reports. The International Working Group on Sovereign Wealth Funds (IWGSWF) government members have released a self-assessment of their own adherence to the Santiago Principles. RWI assesses natural resource fund transparency and management as part of its Resource Governance Index. And Edwin M. Truman at the Brookings Institution periodically grades sovereign wealth funds using indicators of structure, governance, transparency, accountability and behavior.

### **Public consensus**

Public and political consensus on the rules is key. The best way to ensure that governance rules are followed is for the population to recognize their importance and pressure the government to comply with them. Recognizing these preconditions for good revenue management, the government of Ghana carried out roadshows across the country to solicit the public's views on how much oil revenue to save and spend. In Norway, the major political parties agreed formally on the adoption of the country's fiscal rule. And the U.S. states of North Dakota and Wyoming held state-wide referendums. The government of Uganda may wish to solicit the public's views on how much oil revenue should be saved and spent, and how the revenue should be used.

## Transparency

Transparency is, in most cases, a prerequisite for compliance with fiscal rules. Oversight bodies cannot do their job unless they have adequate information on fund behavior. In terms of encouraging compliance with fiscal rules, the minimum following information is required:

- Clear fund objectives, denoted in legislation, regulation or government policies
- Clear relationship to the budget, denoted in legislation, regulation or government policies (already provided for in the draft Public Finance Bill)
- Clear deposit rules, denoted in legislation, regulation or a government policy document, including the types of payments to be deposited and the source of payments (e.g., kinds of companies)
- Clear withdrawal rules, denoted in legislation, regulation or a government policy document, including timing, approval process, conditions for withdrawal and revenue forecasting assumptions
- Clear roles and relationships between the executive, legislature, fund operator and fund manager
- Clear roles and powers of oversight bodies
- The size of the fund (in the annual report, according to the draft Public Finance Bill)
- Annual deposit and withdrawal amounts (in the annual report, according to the draft Public Finance Bill)
- Internal and external audits published promptly

In its current state, the draft Public Finance Bill provides for the publication of the annual plans and bi-annual performance reports on the Petroleum Revenue Investments managed by the Bank of Uganda; the publication of annual projected revenues, as well as annual and semi-annual reports on the Petroleum Fund prepared by the Ministry of Finance for submission to parliament, including the amount transferred to the budget for the preceding two financial years; the actual inflows and outflows of the fund; the volumes and values of the oil produced, and the source of the petroleum revenue. The names of the five members of the Advisory Committee on Petroleum Revenue Management will also be included when they are appointed.

We recommend that the bill also include a provision for a published, independent external audit to international standards in addition to the internal audits already provided for in the draft Public Finance Bill. At a minimum, the annual internal audits by the Auditor General should be published. The bill should also ensure easy availability of all information in the bulleted list above.

### Enforcing the Public Finance Bill

If Uganda wishes to increase the likelihood that the oil revenue management legislation is implemented as envisioned, we recommend creating a set of enforcement mechanisms to promote compliance with these rules. First, an independent oversight body could be tasked with monitoring compliance with the rules and overseeing the activities of any special fund. This body would report to the executive, parliament and the citizens of Uganda, and its report would be publicly available. In order to ensure independence, its members would be selected by the parliament of Uganda and specifically mentioned civil society groups, members would be given security of tenure over a given number of years, and the group would be guaranteed a minimum annual budget to cover operating expenses.

Second, any special fund would be subject to an independent external audit that meets international standards. This report would be made publicly available.

Third, using the independent oversight body's report and the external auditor's report as inputs, the parliament of Uganda would review the performance of any special fund annually and ensure compliance with fiscal rules. All withdrawals would need to be approved by parliament.

Fourth, any special fund would be obligated to produce a report that includes all the information listed in the section on transparency above.

Finally, legislation could clarify the roles and responsibilities of the president, central bank, Ministry of Finance, special fund executive and branches within the special fund to promote policy coherence.

Each of these elements — the fiscal rule and oversight and transparency requirements — would need to be operationalized and integrated into the existing institutional framework. For example, in terms of the fiscal rule, specific withdrawal rules from the fund would need to be added to the Public Finance Bill, describing in detail how much, when, and under what conditions withdrawals can be made. This specific language is available upon request.

Beyond the bill, Uganda might consider developing detailed regulations on the investment rules for petroleum investments and what constitutes “qualifying instruments.” In the current draft bill, qualifying instruments — assets which are allowed to be purchased with the monies from the Petroleum Fund — are limited to safe assets such as investment-grade-rated government bonds or currency deposits, which is a very prudent provision. However, the same clause in the bill leaves the qualification of any other asset as a qualifying instrument open to the discretion of the Minister of Finance, in order to help avoid financial mismanagement. Having a more detailed definition of potential qualifying instruments in regulations would limit the risks created by such a discretionary clause. In addition, to spread the risk of mismanagement of petroleum investments, we suggest creating a rule to prevent any single manager from managing more than a certain percentage of the petroleum investments (e.g., 10 percent).

## Conclusion

In this policy paper we argue that, in order to ensure that Uganda's oil revenues are translated into higher long-term living standards, it is important to design precise rules for their management that are adapted to Uganda's needs and fiscal balance and are enshrined in the law. In our models, we show that several different rules can achieve the government's macroeconomic objectives. However, given domestic investment needs, the small size of the expected oil revenues relative to the economy, expected revenue volatility and the need to frontload investment in Uganda, we recommend a Ghanaian-type rule that smooths expenditure using a 11-year average of oil revenues to control volatility, allows increased spending in early years of production, and generates only enough savings to cover unexpected downturns in oil revenues or to cover deficits in times of crisis.

We also recommend creating a set of enforcement mechanisms to promote compliance with these rules — to improve oversight, external control and transparency, and increase buy-in from a wide range of stakeholders — that would need to be operationalized and integrated into the existing institutional framework. The Revenue Watch Institute would be happy to provide specific language on these mechanisms upon request.

## ANNEX Table 1: Comparison of fiscal rules

	SCENARIO 2 Ghana-type revenue rule	SCENARIO 3 PIH rule	SCENARIO 4 Balanced budget rule	SCENARIO 5 Balanced budget rule with expenditure growth limit
Example	70 percent of an 11-year average of oil revenues (“benchmark revenue”) allocated to the budget; the remaining 30 percent and anything above benchmark revenues is saved in Petroleum Fund	All oil revenues deposited into Petroleum Fund; in any given year, 3 percent of “oil wealth” (as opposed to oil revenue) can be withdrawn from the fund for public spending	Public expenditure limited to satisfy a non-oil, non-grant budget deficit limit of 3 percent of GDP	Public expenditure limited to satisfy a non-oil non-grant budget deficit of 3 percent of GDP and a limit of 7 percent growth of public expenditure in real terms
Pros	<p><b>Stabilizing:</b> Protects against unexpected drops in oil revenues from oil price or production shocks</p> <p><b>Offers savings:</b> Provides a stream of revenue to be drawn on once oil revenues start declining</p> <p><b>Frontloads investment:</b> Provides a lot of fiscal space when production is ramping up and demands for spending are greatest</p> <p><b>Flexible:</b> Rules easily tailored to Uganda’s needs and absorptive capacity constraints</p> <p><b>Tailor-made:</b> Linked specifically to oil revenues rather than an arbitrary anchor</p> <p><b>Relatively easy to enforce:</b> The concept is easy to understand, and the necessary calculations can be verified independently</p>	<p><b>Stablizing:</b> Protects against unexpected drops in oil revenues from oil price or production shocks</p> <p><b>Fiscally conservative:</b> Limits long-term unsustainable growth in public spending</p> <p><b>Offers large savings:</b> Provides a large stream of revenues to be drawn on once oil revenues start declining</p>	<p><b>Fiscally conservative:</b> Limits unsustainable growth in public spending</p> <p><b>Prevents debt crises:</b> Could help prevent balance-of-payments problems</p>	<p><b>Fiscally conservative:</b> Limits long-term unsustainable growth in public spending</p> <p><b>Offers savings:</b> If the 7 percent expenditure growth limit is a constraint, the rule would require saving oil revenues or paying down debt; once oil revenues are depleted, the savings could be drawn on or Uganda would have a lower debt level</p> <p><b>Smooths expenditures:</b> Protects against oil and non-oil revenue volatility; government spending does not vary wildly from year to year, improving programmatic planning and quality of public investment</p> <p><b>Prevents debt crises:</b> Could help prevent balance-of-payments problems</p> <p><b>Tailor-made:</b> Rule is not based on an arbitrary anchor but on an assessment of absorptive capacity</p>

Table continued on next page

	SCENARIO 2 Ghana-type revenue rule	SCENARIO 3 PIH rule	SCENARIO 4 Balanced budget rule	SCENARIO 5 Balanced budget rule with expenditure growth limit
Cons	<p><b>Does not address fiscal balance or public debt:</b> The rule does not constrain the government from using oil revenues as collateral and spending unsustainably; would need to be coupled with thoughtful debt management</p> <p><b>Causes non-oil revenue volatility:</b> Does not smooth overall public expenditures, just those related to oil revenues</p> <p><b>Could affect savings:</b> The government may save less, leaving less of an endowment for future generations</p> <p><b>Potentially too flexible:</b> Subject to political manipulation; effectiveness would depend on setting the right limit and sticking to it</p>	<p><b>Overly fiscally conservative:</b> Uganda has substantial domestic investment needs; financing for development would be severely constrained by this rule</p> <p><b>Does not address fiscal balance or public debt:</b> The rule does not constrain the government from using oil revenues as collateral and spending unsustainably; would need to be coupled with thoughtful debt management</p> <p><b>Causes non-oil revenue volatility:</b> Does not smooth overall public expenditures, just those related to oil revenues</p> <p><b>Delays public investment:</b> Financing for development would be smoothed over an infinite period, making it difficult to respond to immediate demands on politicians to demonstrate tangible benefits from oil production</p> <p><b>Rigid:</b> The rule is not flexible and cannot be adjusted to meet Uganda's needs</p> <p><b>Petroleum wealth calculation:</b> The value of all of Uganda's petroleum wealth is subject to many assumptions, which are difficult to verify and easy to manipulate</p>	<p><b>Less stabilizing:</b> Ugandan GDP is relatively volatile; therefore using GDP as a fiscal anchor would not stabilize the budget</p> <p><b>Causes non-oil revenue volatility:</b> Does not smooth overall public expenditures, just those related to oil revenues</p> <p><b>Pro-cyclical:</b> When oil revenues decline, spending would decline, which, unless alternative sources of revenue could be found, would be pro-cyclical and bad for the economy</p> <p><b>Delays public investment:</b> Would not allow frontloading of public investment as in scenario 2</p>	<p><b>Overly fiscally conservative:</b> Uganda has substantial domestic investment needs; financing for development could be constrained by this rule</p> <p><b>Not related to oil revenues:</b> If the 7 percent expenditure growth rule is not a constraint and other sources of revenue do not emerge to replace oil revenues, there would be no revenues to draw on when oil is depleted</p> <p><b>Delays public investment:</b> Would not allow frontloading of public investment as in scenario 2</p>

