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Key messages

- The oil and gas sector it is not expected to transform Senegal's economy or public finances. Fields that have received a final investment decision are unlikely to generate revenues over 3 percent of GDP.
- Senegal already possesses some of the institutions needed to promote good revenue
 management of oil and gas revenues, including: (1) a relatively transparent and comprehensive
 annual budgeting process; (2) robust compliance with Extractive Industries Transparency
 Initiative (EITI) standards;¹ (3) a relatively free and vibrant media.²
- Given Senegal's acute domestic investment needs, the government's new sovereign wealth
 fund proposal may be ill-timed. Such funds are not the best vehicle for investing natural resource
 wealth domestically. Instead, the government should consider investing these funds through the
 budget. It could also be advisable to employ an expenditure rule limiting government spending,
 or a non-resource current balance rule preventing governments from squandering resource
 revenues by running a deficit in other areas, combined with a capital expenditure growth rule to
 mandate investment.
- The national oil company, PETROSEN's debt accumulation and revenue retention pose
 significant risks for public finances over the coming years. The government should consider
 strengthening oversight of PETROSEN, for instance by appointing independent board members,
 publishing independent audits and clarifying the company's dividend policy.
- Some fishing communities in Senegal are concerned about the impact of oil and gas projects on their livelihoods. If these negative impacts are confirmed, we recommend that the government consider compensation through environmental and social management plans, as opposed to allocating a fixed share of resource revenues to sub-national governments.

¹ Senegal achieved a rating of 93 percent compliance in the latest EITI evaluation (October 2021).

Initiative pour la Transparence dans les Industries Extractives du Sénégal. Validation 2021: Le Sénégal obtient un score « très élevé » dans la mise en œuvre de la Norme ITIE 2019 (2021), accessed 27 October 2021, itie.sn/2021/10/20/validation-2021-le-senegal-obtient-un-score-tres-eleve-dans-la-mise-en-oeuvre-de-la-norme-itie-2019/.

Executive summary

As of late 2021, Senegal is on the cusp of becoming a significant oil and gas producer. The revenues that it can expect to mobilize present it with an important opportunity to speed the country's development by increasing public investment. In preparation for this, Senegalese authorities are currently revising the country's framework for managing its oil and gas revenues, which remains a work in progress. In this report, we evaluate various aspects of Senegal's policy framework for managing oil and gas revenues and share recommendations as to how it could be strengthened.

Given the country's limited resource revenues to date, there are no special institutions for their management. Currently, Senegal's extractive revenues (hailing mainly from the mining sector) pass through the general budget, and general budget processes apply. This is moderately transparent (though not perfect – see the next paragraph): the budget document itself provides a significant amount of information and is accompanied by other documents to make it easier for civil society and ordinary citizens to assess its merits.³

Senegal could improve its fiscal processes by strengthening budget planning and execution (e.g., by giving more time to the process); publishing more (up-to-date) information on important aspects of fiscal policy, including on extractive revenues, as well as total public sector debt; and resolving inconsistencies in some fiscal statistics. The government further could, and is planning to, reduce the use of simplified spending procedures and sole public tendering, both of which present corruption risks. Greater public participation in the budgeting process would also be beneficial, which the government could support with a variety measures.

There are currently no specific policies in place for saving or otherwise earmarking oil and gas revenues in Senegal. In consequence, and similar to the budgeting process, these revenues are subject to the country's general macroeconomic policy framework – most notably, the convergence criteria of the West African Economic and Monetary Union (WAEMU) and the Economic Community of West African States (ECOWAS), respectively. Since resource-rich countries in sub-Saharan Africa have generally had a poor record of compliance with such supranational macroeconomic policies, and Senegal's record to date has been mixed, these criteria may not help to effectively manage its extractive revenues; a strong domestic framework may therefore be needed.

In line with this, the government has indicated that it is currently working on fiscal rules to save a certain amount of oil and gas revenues for future generations (and for a stabilization fund). Based on the latest information NRGI has received, the authorities have been considering saving a fixed percentage of annual oil and gas revenues in a national fund, and allocate the remainder to the general budget. However, it has not yet been decided whether to go ahead with this approach. We recommend that the government look at alternatives that mandate fiscal responsibility across all government spending, not just out of extractives (otherwise, the government may save extractive revenues while borrowing elsewhere, as has happened in some other countries). The government intends for the saved revenues to be invested in a national ("intergenerational") sovereign wealth fund and a stabilization fund. We contend that the authorities should consider focusing on investing resource wealth domestically and pass such investments through the general budget, to enhance

Examples include the pre-budget planning document to prepare responses in advance, the triennial financial framework to understand how the current year's budget relates to medium-term plans, and the citizen's budget which makes the process more accessible.

scrutiny of them. We further argue that the authorities should be aware of absorptive capacity constraints and avoid investing too much in any one year. Where revenues in a given year exceed what the economy can absorb, the government could consider paying down public debt (particularly more expensive debt) as an alternative to saving revenues through a sovereign wealth fund.

The intergenerational fund that Senegal plans to establish is set to be managed by the Fonds Souverain d'Investissements Stratégiques (FONSIS), a national strategic investment fund. We find that, if FONSIS is indeed to take on this new role, major changes to the fund's governance would be advisable beforehand. First, the fund should be more transparent – it does not currently publish its financial reports, nor any independent assessment of its performance. Second, FONSIS needs to build its capacity – managing the share of the country's oil and gas revenues for which it will be responsible will substantially expand the fund's capital and require a different approach to fund management. Finally, more specific operational rules could help to strengthen the fund's governance. This could include separating its domestic investments from its management of resource revenues, introducing a comprehensive code of conduct, prohibiting certain risky investments and bringing in clearer rules governing the conditions and timing of dividend payments to the state could all help.

Another important part of Senegal's oil and gas revenue management is the national oil company, PETROSEN, which we examine in section 6. PETROSEN owns 10 percent and 18 percent stakes in the GTA and Sangomar projects respectively, and will receive its share of the project's revenues as a joint venture partner (as well as some other fiscal receipts), some of which it can reinvest in the sector. PETROSEN very recently became more transparent, publishing its financial statements as well as the certification that the latest statement was audited. It could, however, further improve its governance by, e.g., becoming still more transparent, appointing independent directors to the board, streamlining its mandate to focus on core competencies and clarifying how much of the revenues it will return to the state.

Finally, this report asks whether Senegal should adopt rules to share a certain amount of its oil and gas revenues with sub-national governments. This issue has arisen as some fishing communities have voiced concerns that the offshore GTA and Sangomar projects will negatively affect their livelihoods. While it is important to acknowledge and address the challenges these communities are facing, we conclude that a sub-national revenue sharing formula is not advisable for Senegal's offshore oil and gas revenues. Authorities should instead focus on other approaches such as compensation for negative impacts of extraction (e.g., using environmental and social management plans).

In summary, some important criteria for sustainable management of Senegal's oil and gas revenues have already been met; for example, the country's fiscal processes are reasonably transparent, as are the financials of the national oil company. The authorities have further made several proposals to strengthen oil and gas revenue management before hydrocarbon revenues come on stream in 2023. Yet these are still a work in progress. The Senegalese authorities could add to their proposals by increasing transparency, strengthening macroeconomic policies for oil and gas revenue management and improving the governance of FONSIS and PETROSEN. If they do this, they will be on the right track for making the most of the country's oil and gas resources.

1. Introduction

Managing government revenues from extractives projects is a key challenge for resource-rich countries. When done well, it allows for these revenues to spur economic growth and development through investments that lead to greater productive capacity, economic diversification and, ultimately, a higher standard of living for residents. On the other hand, poor revenue management can mean squandering the opportunity that resource wealth provides (e.g., through wasteful spending), leaving little for future generations. Countries with particularly poor management of extractive revenues may be left even worse off than they were before the resources were discovered – overly ambitious spending plans may saddle the state with mountains of debt, and/or poorly planned infrastructure projects may overburden its limited capacities, without contributing to economic development. In extreme cases, poor extractives revenue management can even lead to civil unrest.

With two new oil and gas projects on track for production, the state of Senegal may receive modest (yet significant) proceeds from the sector, from 2023 on to at least until the late 2040s. The International Monetary Fund (IMF) estimates that government revenues from oil and gas will average 1.5 percent of GDP, or 6 percent of all government revenues over a period of 25 years. This means significant additional funds, though they would not make Senegal an oil-dependent country. They are insufficient to be transformative by themselves, but, if managed well, could increase living standards for Senegal's people, if only slightly. The government also has ambitious plans for local content and regarding use of its gas reserves to produce energy for the domestic economy, which could increase the hydrocarbon sector's contribution to Senegal's economy; however, a detailed assessment of the potential impact of such policies is outside the scope of the present report.

In this context, NRGI has recently published the report *Opportunities and Challenges for Senegal in Oil and Gas Production: Lessons Learned from Other New Producers*, which explored a broad range of issues, from managing expectations, managing the revenues from extractives, to tax policy and the country's gas-to-power plans. In the present paper, we take a closer look at Senegal's current and proposed arrangement for the management of oil and gas revenue – in particular, how much of these Senegal is likely to save, how those savings are invested, and how the institutions and processes involved are governed. We then compare Senegal's approach with lessons learned from previous research on other countries, and provide recommendations to

- 4 Common examples of wasteful spending are highways to nowhere, monuments, stadia that are used little or not at all.
- See, for example, Elise Must and Siri Aas Rustad, "Mtwara Will Be the New Dubai': Dashed Expectations, Grievances, and Civil Unrest in Tanzania," *International Interactions* 45, no. 3 (4 May 2019): 500–531, doi.org/10.1080/03050629.2019.1554569
- International Monetary Fund, IMF Country Report No. 19/28: Senegal Selected Issues (Washington, D.C.: International Monetary Fund, 2019), www.imf.org/~/media/Files/Publications/CR/2019/cr1928-Senegal-Sl.ashx
- 7 The projects are a) Sangomar (which will produce oil in its first phase, and possibly also gas and additional oil in later phases that are yet to receive a final investment decision; and b) Grand Tortue Ahmeyim (GTA), which is a natural gas project.
- 8 However, the revenues may significantly differ from this estimate, depending on the evolution of the oil price. The ongoing transition to renewable energy, in particular, will likely cause oil prices to decline in the long term. See section 2. 'Senegal's resource revenues' for further details.
- "Average resource revenues for Sub-Saharan Africa[n] (SSA) resource-rich countries represented about half of their total fiscal revenues and about 15 percent of GDP, on average, over the period 2006-2014...far above what is projected for Senegal." International Monetary Fund African Dept., Senegal: Selected Issues: Natural Resources in Senegal Before and After the Recent Oil and Gas Discoveries, IMF Country Reports (International Monetary Fund, 28 January 2019), www.elibrary.imf.org/view/ journals/002/2019/028/article-A001-en.xml

strengthen them to ensure effective management of these revenues for the country's long-term prosperity. Senegal already has in place some of the institutions needed to effectively manage extractives-sector revenues. For example, it has a fiscal regime that is, in some respects, relatively transparent; it plans for macroeconomic risks; and it has a national strategic investment fund that can be used to save revenues for future generations. Yet important gaps remain, perhaps stemming from the fact that Senegal has not had to deal with resource revenues of this size in the past. Though the country is not new to oil extraction, and is currently producing natural gas, these revenues have been small relative to the size of the economy, and much smaller than those predicted based on recent discoveries. The Senegalese authorities are currently considering revisions to the country's revenue management architecture to prepare for the advent of extractive-sector revenues from 2023 onwards, when extraction of the new oil and gas reserves is expected to start.

The structure of the brief is as follows. In section 2, we take a look at Senegal's resource revenues (its experience to date and projections for the future), to provide context. We then move on in section 3 to assessing the transparency and accountability of Senegal's existing extractives revenue management, and provide recommendations to strengthen governance in this area. Section 4 looks at Senegal's macroeconomic policies and proposals for a fiscal rule for managing extractive revenues. Sections 5 and 6 examines the roles of Senegal's strategic investment fund (FONSIS) which is slated to also manage a resource-based sovereign wealth fund, and the national oil company, PETROSEN, respectively. Section 7 looks at the potential for distributing resource revenues to sub-national governments, while section 8 concludes with a summary and recommendations.

Ensuring good governance of resource revenues requires coordinated action across the various areas covered in this report. For instance, without transparency and accountability (in all three phases, namely collecting, distributing and investing revenues), even if a country has an impeccable macroeconomic strategy for its revenues, this might not be implemented effectively. Conversely, if a country has highly transparent revenue management and strong oversight, this may go to waste if the macroeconomic policies directing their use are poorly designed. And if (as discussed in sections 5 and 6) public entities tasked with investing resource revenues are not sufficiently transparent, this can undermine revenue management arrangements that are otherwise strong. We therefore suggest that the government of Senegal consider the key recommendations from all sections in this report equally relevant, rather than selecting or prioritizing some over others.

2. Senegal's resource revenues

A. SENEGAL'S RESOURCE REVENUES TO DATE

Senegal has experience with resource revenue generation, both in the mining and oil and gas sectors. Extractives have been a small but significant contributor of economic activity in recent years, with value added from the sector representing 1-3 percent of the country's GDP from at least 1980 up to 2020. 10 In the natural gas sector, Senegal's Gadiaga/Diender well has been producing a small amount of gas since 2001; PETROSEN owns a stake in the project. The Diamniado field, which previously produced a small volume (7.6 billion cubic feet) of gas, was shut down in 2000. 11 There was also a small amount of oil production in the Diamniado area (34,000 barrels) before these projects were abandoned in 1962. 12

The contribution of extractive revenues to the government budget has been relatively modest. The extractive sector contributed around 5 percent of total government revenues including grants (i.e., grants to the government, from e.g., foreign governments or international organizations) in 2019, the most recent year for which data is available. The share has been rising steadily (to the level of 5 percent) over time. Moreover, extractives (mainly mining) play an important role in earning foreign exchange for the public and private sectors, accounting for around 18 percent of Senegal's total exports of goods and services in 2019.

B. STATUS OF FIELD DEVELOPMENT AND RANGE OF PROJECTED REVENUES

Currently, two oil and gas projects that have reached final investment decision (FID) are under development in Senegal – Sangomar, which is exclusively an oil project in its first phase (the only phase to have reached FID to date) and the first phase of Grand Tortue Ahmeyim (GTA), which is a natural gas project. ¹⁶ Each project has commissioned a number of supply contracts, and first oil/gas is expected in 2023 from both of them. See Annex 1 for further details.

- Authors' analysis of African Development Bank Group, AFDB Socio Economic Database, 1960-2021, Africa Information Highway, 11 June 2020, https://dataportal.opendataforafrica.org/nbyenxf/afdb-socio-economic-database-1960-2021; and African Development Bank Group, "OpenData Pour l'Agence Nationale de La Statistique et de La Démographie Du Sénégal: National Accounts (GDP)," Africa Information Highway, accessed 27 May, 2021, nso.senegal.opendataforafrica.org/miyyxy/national-accounts-gdp
- Jane Whaley, "Country Profile Africa: Senegal Revisited," GEO ExPro, 11 January 2015, www.geoexpro. com/articles/2015/01/senegal-revisited.
- 12 The World Bank, Report and Recommendation of the President of the International Development Association to the Executive Directors on a Proposed Credit in an Amount Equivalent to US\$9.5 Million to the Republic of Senegal for a Petroleum Exploration Project (The World Bank, 18 January 1991), documents1.worldbank.org/curated/en/725961468306916120/pdf/multi-page.pdf
- 13 When grants are excluded, this rises to around 6 percent. Authors' analysis of Comité National ITIE Sénégal, Rapport ITIE 2019 (Senegal: Initiative pour la Transparence des Industries Extractives au Sénégal, December 2020), 143, eiti.org/files/documents/rapport_itie-senegal_2019-vf.pdf; and "TOFE Tableau Des Operations Financières De L'état (Unité: Milliards De Francs CFA)," BCEAO Banque Centrale des États de l'Afrique de l'Ouest, accessed 25 May 2021, edenpub.bceao.int/rapportPredefini.php. For the definition of grants included in government revenues, see "Grants and Other Revenue (% of Revenue)," The World Bank | Data, accessed 13 August 2021, data.worldbank.org/indicator/GC.REV.GOTR.ZS
- 14 International Monetary Fund, IMF Country Report No. 19/28, 6.
- Authors' analysis of Comité National ITIE Sénégal, Rapport ITIE 2019, 154; and "Exports of Goods and Services (Current LCU) Senegal", The World Bank | Data, The World Bank, accessed 30 April 2021, data. worldbank.org/indicator/NE.EXP.GNFS.CN?locations=SN
- "Final investment decision" refers to investors' decision "[T]o move to implement an investment project—after this, major financial commitments take place". William Davis and David Mihalyi. Opportunities and Challenges for Senegal in Oil and Gas Production: Lessons Learned from Other New Producers (New York and London: Natural Resource Governance Institute, 2021), 3, resourcegovernance.org/sites/default/files/documents/opportunities_and_challenges_for_senegal_in_oil_and_gas_production.pdf

For GTA, PETROSEN indicated that work on phase 1 was around 65 percent complete by September 2021. For phases 2 and 3 of GTA, final investment decisions will be taken later, with late 2022 being the target for a final investment decision on phase 2; the partners contracted pre-front-end, engineering and design work for these two phases in April 2020. $^{18.19}$

For Sangomar, the joint venture has awarded several contracts for supply of services and the operator (Australian company Woodside) started drilling in July 2021, while one of the contractors has started construction of a turret mooring system. 20 According to PETROSEN, execution of the Sangomar project was about 32 percent complete by September 2021. 21 First oil is on track for 2023. 22

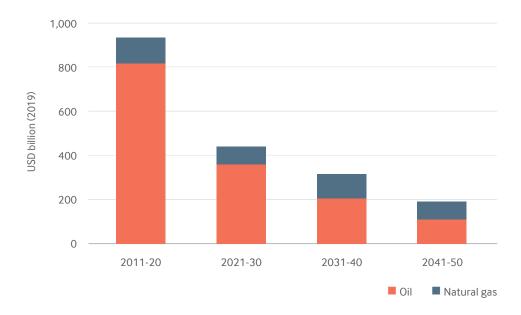
C. HYDROCARBON REVENUES

The IMF estimates that that oil and gas revenues from these two projects will go from an initial level of 0.5 percent of GDP (or 6 percent of total non-resource government revenue) up to 3 percent of GDP (or 16 percent of non-resource revenue) during peak production. Consequently, total resource revenues are expected to increase by up to two thirds from their 2019 level. These estimates rely on a USD 60/barrel oil price. The latest IMF program documents from July 2020 also plan for revenues of around XOF -200 billion (-0.8 percent of GDP) in the period from 2023 to 2025. Growth projections following oil and gas discoveries have historically proven overoptimistic, largely due to not factoring in base erosion, profit shifting and other tax avoidance measures, as well as the risk of technical difficulties during production. As any macroeconomic forecast for hydrocarbon producers, they are also based on assumptions around oil and gas prices, which are near impossible to predict; different players like futures markets, oil companies and forecasting houses all have radically different views on the long-term development of the oil price.

- Joseph O Medou, "Intervention by Joseph O Medou" (Réunion technique multipartite sur la gestion des revenus pétroliers et gaziers pour le développement durable organized by Partnership for Action on Green Economy, Virtual, 30 September 2021). Cited in Partnership for Action on Green Economy, "Réunion Technique Multipartite Sur La Gestion Des Revenus Pétroliers et Gaziers Pour Le Développement Durable: Compte-Rendu de l'atelier Virtuel Tenu Le 30 Septembre 2021" (Partnership for Action on Green Economy, 22 October 2021), 2.
- Moustefa Ouki. Mauritania Senegal: An Emerging New African Gas Province Is It Still Possible? OIES Paper: NG163, OIES Papers, Oxford: Oxford Institute for Energy Studies, October 2020, www.oxfordenergy.org/wpcms/wp-content/uploads/2020/10/Mauritania-%E2%80%93-Senegal-an-emerging-New-African-Gas-Province-%E2%80%93-is-it-still-possible-NG163.pdf, 20.
- 19 Kosmos Energy, "4Q 2020 Results," 12, investors.kosmosenergy.com/static-files/3bd3f0ef-3129-415d-94b8-841eb6938eca
- 20 OE Staff, "SOFEC Cuts First Steel for Sangomar FPSO Turret," *Offshore Engineer*, 5 January 2021, www.oedigital.com/news/484283-sofec-cuts-first-steel-for-sangomar-fpso-turret
- 21 Joseph O Medou, "Intervention", cited in Partnership for Action on Green Economy, "Compte-Rendu de l'atelier Virtuel Tenu Le 30 Septembre 2021," 2.
- 22 Sihle Qekeleshe, "Woodside to Begin Drilling Campaign in Senegal's Sangomar in 2021," Africa Oil & Power, 27 November 2020, www.africaoilandpower.com/2020/11/27/woodside-to-begin-drilling-campaign-in-senegals-sangomar-in-2021
- 23 International Monetary Fund, *IMF Country Report No. 19/28*, 14 and Davis and Mihalyi, *Opportunities and Challenges*.
- 24 James Cust and David Mihalyi. Evidence for a Presource Curse? Oil Discoveries, Elevated Expectations, and Growth Disappointments (World Bank, Washington, DC, July 2017), doi.org/10.1596/1813-9450-8140
- David Manley, Anna Fleming and David Mihalyi, A Race to the Bottom and Back to the Top: Taxing Oil and Gas During and After the Pandemic (New York: Natural Resource Governance Institute, October 2020), resourcegovernance.org/sites/default/files/documents/a_race_to_the_bottom_and_back_to_the_top_ taxing oil and gas during and after the pandemic.pdf
- A recent report by OpenOil, which is based on an assumption that oil prices will decline to under USD 20 by the late 2030s (a very low assumption), shows what might be considered to be a worst-case scenario for Senegal's oil and gas, in which revenues from the sector contribute only 2% of the total annual budget, and only from the 2030s onwards. Johnny West, Les Actifs Échoués Du Sénégal: L'impact Du Covid-19 et de La Transition Énergétique Sur Le Secteur Pétrolier Offshore (Berlin: OpenOil, November 2020), openoil.net/wp/wp-content/uploads/2016/12/Senegal v2-francais.pdf.

Furthermore, the ongoing transition to renewable energy means we are likely to see a sustained decline in oil prices over the longer term. According to the International Energy Agency (IEA), for instance, if the world achieves net zero greenhouse gas emissions by 2050 in line with its Net Zero Emissions scenario, net income from oil and gas sales in producer countries would fall progressively to around 20 percent of its current level by the 2040s. (See Figure 1 below.)²⁷





²⁷ International Energy Agency, Net Zero by 2050 - A Roadmap for the Global Energy Sector (Paris: International Energy Agency, 2021), 157, License: Creative Commons Attribution CC BY 3.0 IGO, iea.blob.core.windows.net/assets/ad0d4830-bd7e-47b6-838c-40d115733c13/NetZeroby2050-ARoadmapfortheGlobalEnergySector.pdf

²⁸ Based on International Energy Agency, *Net Zero* by 2050.

3. Oversight, approval and transparency of resource revenue collection and distribution

A. OVERVIEW OF CURRENT ARRANGEMENTS

As outlined in the Natural Resource Charter, unless parliaments and civil society have the power and the information to keep a national government's management of extractive revenues in check, officials can make poor decisions and/or misappropriate funds. ²⁹ Therefore, parliamentary oversight, transparency and accountability are all-important for effective extractives revenue management. In addition, it is vital for citizens to be able to participate in debates on the use of natural resource revenues. ³⁰ In this section, we review Senegal's current system for handling extractive revenues, as well as its proposals.

Currently, hydrocarbon revenues in Senegal enter the general budget (aside from those retained by the national oil company, PETROSEN) where they are not subject to any rules on how much must be saved or can be spent. There are also no rules earmarking funds from natural resources for specific uses, aside from a minor share of mining revenues that are allocated to sub-national authorities. This is perfectly justified given Senegal's limited fiscal revenues to date from the natural resource sector. However, the absence of special resource revenue management institutions increases the importance of open budget processes more generally, especially given the elevated risk of diversion of public assets from the oil sector. Despite some recent efforts from the government to improve public financial management (mentioned below), there are still several shortcomings that hinder effective budgeting, which we analyze below. Moreover, once the anticipated oil and gas revenues start to flow, it will be key for the country to be adapted to managing such revenues (e.g., through strengthening the medium-term public financial management framework).

There are key steps in the budgeting process that determine whether extractive revenues will be used in the public interest. In this section, we review the strength of governance of each of these, focusing mainly on transparency and accountability. These four aspects of the budgeting process are: i) accounting for natural resource revenues when they enter the budget; ii) the process of negotiating the budget, including public participation; iii) budget execution; and iv) scrutiny of the process by civil society and the media. In sections 5 and 6 below, we will also look at the importance of ensuring oversight of funds that are spent or invested by entities outside of the budgetary process of the central government (specifically FONSIS and PETROSEN), as these are not included here.

²⁹ Natural Resource Governance Institute, "Natural Resource Charter: Second Edition" (Natural Resource Governance Institute, 12 June 2014), 10, resourcegovernance.org/sites/default/files/documents/nrcj1193_natural_resource_charter_19.6.14.pdf

³⁰ Natural Resource Governance Institute, "Natural Resource Charter", 7.

^{31 &}quot;Senegal," Extractive Industries Transparency Initiative, 16 February 2021, eiti.org/senegal#revenueallocation

^{32 &}quot;Senegal 2020," PEFA, accessed 21 June 2021, www.pefa.org/assessments/summary/416

^{33 &}quot;Senegal 2020," PEFA, accessed 13 August 2021, www.pefa.org/node/416

First, in terms of accounting for extractive revenues (i), Senegal appears to be succeeding by international standards. The latest EITI report (covering data from 2019) was able to match payments reported by the government and those made by the companies, accounting for 99.93 percent of the government's total reported revenues.³⁴ The national court of auditors (*Cour des Comptes*) also audits extractive revenues collected by the tax authority, though its last published report was in 2017. Senegal publishes extractive revenues annually through the EITI report, while some West African countries, such as Ghana, are publishing extractive revenues on a semiannual or even quarterly basis.

In terms of the budgeting process (ii), key elements of good governance for this stage include: providing budget documents that give enough information for lawmakers and citizens to evaluate the government's proposals (including up-to-date information on expected extractive revenues and tax expenditures); providing information on macroeconomic risks and longer-term plans so that the current budget can be understood in context; and making it easy for citizens outside parliament to follow and influence the process. Senegal performs moderately well in these areas.³⁵

In particular, the government publishes a good amount of information which can help citizens and lawmakers to scrutinize the government's proposals. These include a draft budget law ahead of it being debated in, and eventually passed by, parliament, as well as a citizens' budget (a simplified version of the budget document designed to be more accessible for the general public). Budgets are also based on publicly available medium-term planning documents that provide some level of context (and are a good discipline for the government). The latest such document covers the years 2022-24 and includes forecasts for oil and gas revenues. Much of the relevant information on natural resource revenues is published through the EITI rather than the budget itself.

However, there are still some gaps in Senegal's approach to including extractives in budgeting, and its budgeting approach more generally, including the following points:

• Natural resource revenues are not currently separated out in budget documents, making it difficult to keep track in the budgeting process of how the government is using them. As a result, the National Assembly cannot benefit from this information on the level of expected extractive revenues when discussing the draft budget law. However, the government is planning to include hydrocarbon revenues in the budget in the future (see section 3.b below), and authorities already publish forecasts for oil and gas revenues in the multi-annual budgetary program document (as noted above). 38,39 Nor does the budget clearly separate out spending on fuel subsidies, which would help the National Assembly get a better

³⁴ Comité National ITIE Sénégal, *Rapport ITIE 2019*, 38.

³⁵ Senegal's oil and gas governance scores very well in the Resource Governance Index component on budgeting. This is due to the index's focus on disclosures relating to extractives, where Senegal is a leader – see Natural Resource Governance Institute, "Senegal Oil & Gas," Resource Governance Index, accessed 25 November 2021, resourcegovernanceindex.org/country-profiles/SEN/oil-gas?years=2021. In other areas of Senegal's budgeting process, however, there is room for greater transparency.

^{36 &}quot;Presentation," FONSIS Fonds Souverain d'Investissements Stratégiques, accessed 11 December 2020, www.fonsis.org/en/who-are-we/who-we-are/presentation

³⁷ The country's oil and gas governance has a good score (in applicable questions) for the 'national budgeting' dimension in the 2021 Resource Governance Index, which focuses on extractives-related aspects of budgeting. Natural Resource Governance Institute, "Senegal Oil & Gas."

³⁸ Ministère des Finances et du Budget République du Sénégal, "Document de Programmation Budgétaire et Économique Pluriannuelle (DPBEP) 2021-2023" (Ministère des Finances et du Budget République du Sénégal, June 2020), www.budget.gouv.sn///articles/fichiers/5ef5fb44-921c-41a2-9938-861c0a2a028a.pdf

³⁹ République du Sénégal, Loi N°2019-17 du 20 Décembre 2019 Portant Loi Finances Pour L'année 2020, 2019-17 § (2019).

picture of this important element of energy policy. The information has been communicated in other documents, such as the gas-to-power strategy, but it would be useful to include it in the budget on an ongoing basis. 40,41,42

- As mentioned above, and according to the International Budget Partnership (2019), Senegal could provide more information in its budget documents and do more to support public participation in the budgeting process. Such participation may take place through, for example, the government requesting submissions from citizens/civil society, focus groups or surveys. 43,44,45
- The time allowed for preparing the budget is relatively short, which could reduce
 the quality of the budget produced and contributes to Senegal's relatively low rate
 of budgetary execution (below).⁴⁶

In addition, there are a number of areas where the government does not publish as much information as it could to help lawmakers and citizens determine the fiscal sustainability of a proposed budget. More information is needed, for example, on the government's use of guarantees or contingent liabilities, and government liabilities related to Public-Private Partnerships (which are estimated to account for 6 percent of GDP).⁴⁷ In addition, the government does not currently provide information on "letters of comfort," which are guarantees of payment to suppliers (or banks).⁴⁸ In 2019, these were estimated to account for 1.9 percent of GDP.⁴⁹

In terms of the transparency and accountability of executing the budget in line with the approval of the national assembly (iii), Senegal is moderately transparent. The country publishes several reports on how the budget was actually spent, allowing for a significant degree of accountability and transparency. ⁵⁰ However, gaps remain, in particular the following:

- Budget execution could be improved actual taxation and spending patterns
 often differ significantly from announced budgets. ^{51,52} This could also be due to
 overly optimistic/pessimistic forecasts or economic shocks, rather than
 problems with the process of budget execution; but the differences are large
 enough to be noteworthy in Senegal, so it could still be worth trying to improve
 budgetary execution.
- In its 2018 Fiscal Transparency Evaluation, the IMF noted that some of Senegal's fiscal reporting practices made it difficult to reconcile different accounts.⁵³ A 2020 Public Expenditure and Financial Accountability program assessment also found
- 40 International Monetary Fund, IMF Country Report No. 19/34 Senegal Fiscal Transparency Evaluation, (International Monetary Fund: Washington, D.C., 2019), 65, www.imf.org/~/media/Files/Publications/ CR/2019/cr1934-senegal-fiscal-transparency.ashx
- 41 However, the Agence Nationale de Statistique et de la Démographie does show certain elements of it in its reports "Agence Nationale de Statistique et de La Démographie," Agence Nationale de Statistique et de la Démographie, accessed 4 November 2020, satisfaction.ansd.sn
- 42 République du Sénégal, Loi N°2019-17 du 20 Décembre 2019 Portant Loi Finances Pour L'année 2020.
- 43 International Budget Partnership, "2019 Open Budget Survey: Senegal" (International Budget Partnership), accessed 26 May 2021, www.internationalbudget.org/sites/default/files/country-surveys-pdfs/2019/open-budget-survey-senegal-2019-en.pdf
- 44 "Best Practices: Public Engagement in the Budget Process," GFOA, 28 September 2018, www.gfoa.org/materials/public-engagement-in-the-budget-process
- 45 GIFT: Global Initiative for Fiscal Transparency, "Public Participation Principles and Guide," 17 June 2021, www.fiscaltransparency.net/public-participation-principles-and-guide
- 46 "Senegal 2020."
- 47 International Monetary Fund, IMF Country Report No. 19/34, 59-61.
- 48 International Monetary Fund, IMF Country Report No. 19/34, 23, 35.
- 49 International Monetary Fund, IMF Country Report No. 19/34, 59.
- 50 International Budget Partnership, "Senegal.".
- 51 "Senegal 2020."
- 52 "Senegal 2020."
- 53 International Monetary Fund, IMF Country Report No. 19/34, 23-6, 39, 47.

that data on payment arrears was unreliable.⁵⁴ However, the IMF found that the level of 'statistical integrity' was good.⁵⁵

- While FONSIS also invests public money, it does not publish comprehensive financial reports (as discussed in section 5 below). ⁵⁶ The government's capital injections into FONSIS, however, have been included in the budget in the past.
- The government also currently uses simplified spending procedures (and carries out spending via *comptes de dépôt* deposit accounts); and public institutions use a variety of bank accounts, which can reduce accountability and transparency of public spending compared to using a treasury single account.⁵⁷ The authorities plan to reduce their use of *comptes de dépôt* (this is contained in the draft 2021 budget law) and have committed to integrate all bank accounts used by public institutions into the Treasury Single Account by 2022.^{58,59} The latter target is on track to be met, according to an IMF report from January 2021.⁶⁰
- Tax incentives to individual companies can significantly undermine revenues and have previously done so in Senegal.^{61,62} Though the government compiled reports on foregone revenue due to granting tax incentives to individual companies previously, it stopped publishing them in 2014. However, the Senegalese authorities have committed to start publishing information on the costs of tax incentives again (which should help civil society to hold the government to account on this point) and recently published reports on such incentives for 2015 to 2019.⁶³
- It appears that Senegal does not publish data on total public sector debt (i.e., including debt of state-owned enterprises and publicly guaranteed private debt), though data have been included in recent IMF reports. Such statistics are important for Senegal's civil society and citizens to check whether the country's overall debt position is sustainable.
- Public tendering continues to use sole and/or unsolicited bids, which can
 undermine the quality of procurement and lead to corruption risks.^{64,65} The
 government is planning to reduce their use.⁶⁶
- 54 "Senegal 2020."
- 55 International Monetary Fund, IMF Country Report No. 19/34, 23-6, 39, 47.
- 56 Davis and Mihalyi, Opportunities and Challenges.
- 57 International Monetary Fund, *IMF Country Report No. 20/225: Senegal First Review Under the Policy Coordination Instrument and Request for Modification of Quantitative Targets—Press Release; Staff Report; and Statement by the Executive Director for Senegal,*" (International Monetary Fund: Washington, D.C., 2020), 14 www.imf.org/~/media/Files/Publications/CR/2020/English/1SENEA2020003.ashx
- 58 International Monetary Fund, IMF Country Report No. 20/225, 14.
- 59 International Monetary Fund, "IMF Staff Completes Review Mission to Senegal," IMF, 17 November 2020, www.imf.org/en/News/Articles/2020/11/17/pr20341-senegal-imf-staff-completes-review-mission
- 60 International Monetary Fund, *IMF Country Report No. 21/18 Senegal Second Review Under the Policy Coordination Instrument and Request for Modification of Quantitative Targets—Press Release; and Staff Report,* IMF Country Reports (Washington, D.C.: International Monetary Fund, January 2021), 12, www.imf.org/-/media/Files/Publications/CR/2021/English/1SENEA2021001.ashx
- 61 See e.g., United Nations Economic Commission for Africa, *Economic Report on Africa 2019:*Fiscal Policy for Financing Sustainable Development in Africa" (Addis Ababa: UN, 23 March 2019),
 doi.org/10.18356/5d8e4ec9-en
- 62 International Monetary Fund, IMF Country Report No. 19/34, 21.
- 63 International Monetary Fund, "IMF Staff Completes Review Mission to Senegal;"; "Accueil," Ministère des Finances et du Budget, accessed 26 October 2021, www.finances.gouv.sn
- 64 International Monetary Fund, "IMF Country Report No. 20/225, 7.
- 65 Aaron Sayne, Alexandra Gillies, and Andrew Watkins. Twelve Red Flags: Corruption Risks in the Award of Extractive Sector Licenses and Contracts (Natural Resource Governance Institute, April 2017), resourcegovernance.org/sites/default/files/documents/corruption-risks-in-the-award-of-extractive-sectorlicenses-and-contracts.pdf
- 66 International Monetary Fund, IMF Country Report No. 20/225, 7.

The Public Expenditure and Financial Accountability program's assessment in 2020 contains additional recommendations.⁶⁷

Free and independent civil society and media (iv) are essential for holding the state to account on its management of extractive revenues. Gaps in checks and balances or in controls of the government's management activities can occur for many reasons – including failure of institutions designed to check the government's actions, for example in cases of state capture. In such cases, a functioning civil society and media can help by putting pressure on the state and thus stop, or prevent, poor revenue management. South Africa's recent experience of state capture under the previous President shows how poor governance can occur even in a country with seemingly strong checks and balances. This also underlines the key role of the media and civil society in bringing wrongdoing to light.⁶⁸

Ghana's Public Interest and Accountability Committee, established in 2011, is a prime example. The citizen-led statutory body effectively exercises its responsibility to monitor and evaluate the management of Ghana's petroleum resources by government and stakeholders. ⁶⁹ The committee, composed of representatives from various sections of the population, supports the work of parliament to ensure prudent management and utilization of petroleum revenues through its threefold mandate under the Petroleum Revenue Management Act:

- To monitor and evaluate the compliance of the government and other relevant institutions with the law in the management and use of oil revenues;
- To provide a space and platform for the public to debate whether the spending prospects, management and use of revenues are consistent with development priorities;
- To provide independent assessments on the management and use of oil revenues to assist parliament and the executive in the oversight and execution of their related functions, respectively.

Senegal has a relatively free and vibrant media that has shown a lot of interest in the country's oil and gas resources and their implications for national development. Though there have been some reports of intimidation of journalists, particularly when covering corruption, these are relatively rare compared to many other countries. There are also a number of civil society groups in the country that are involved in extractives governance. However, some civil society actors working on extractives have encountered serious difficulties with the Government, in one 2018 case going as far as the cancellation of the authorization to operate in Senegal. For media and civil society to be able to hold government to account on extractives management the availability of information is key, too, which could be improved, as outlined above.

^{67 &}quot;Senegal 2020."

⁶⁸ Judith February, State Capture: An Entirely New Type of Corruption (Institute for Security Studies, 2019), issafrica.s3.amazonaws.com/site/uploads/sar-25.pdf

⁶⁹ However, the PIAC still faces challenges – its members have, in the past, conducted little outreach on its reports to the public, and the report has generated little discussion, whether in the media or elsewhere. Jonathan Donkor, "Bridging the Gap between the PIAC and the Public to Bolster Accountability," *Ghanaian Times*, 17 May 2021, www.ghanaiantimes.com.gh/bridging-the-gap-between-piac-and-the-public-to-bolster-accountability

⁷⁰ Reporters Without Borders, "Senegal: New Press Code Doesn't Decriminalize Press Offences," RSF Reporters Without Borders, accessed 29 January 2021, rsf.org/en/senegal

⁷¹ Freedom House, "Freedom in the World 2020: Senegal," Freedom House, accessed January 29, 2021, freedomhouse.org/country/senegal/freedom-world/2020

In summary, though Senegal's current fiscal framework allows for a reasonably good level of parliamentary oversight and transparency, significant gaps remain that hamper the ability of the National Assembly, civil society and the Senegalese people to hold government to account on fiscal policy. This is relevant for natural resource management since natural resource revenues currently enter the general budget and will, in part, continue to do so in future (see sub-section 3.b. on the government's proposals for a new framework below). In addition, there are more significant challenges concerning the governance of funds handled by FONSIS and PETROSEN as detailed in sections 5 and 6 below.

B. THE GOVERNMENT'S PROPOSALS FOR A NEW FRAMEWORK

In anticipation of additional oil and gas revenues entering the budget, the government is proposing to revise the framework for managing such revenues. In particular, a draft law on the distribution of oil and gas revenues proposes that all such revenues must be identified in the budget document (which is currently made public); the distribution of resource revenues must be approved by parliament; withdrawals from the intergenerational and stabilization funds that the Senegalese authorities plan to establish will only be possible as approved by law; there will be annual reporting to parliament on the planned and actual uses of resource revenues; and the government will submit to parliament a multi-year plan as to how the revenues will be used (though this will only be for discussion, not be subject to parliamentary approval).⁷² There are also proposals for a numerical fiscal rule determining how much resource revenues will be spent or saved, which we discuss in sub-section 4.b. below. More broadly, the government is also planning a comprehensive reform of public financial management in the country.⁷³

These proposals have a number of positive aspects. First, they would strengthen parliamentary oversight of resource revenues relative to the status quo by providing more information and giving the National Assembly a vote on how they are used. As information on oil and gas revenues and their use will be discussed in parliament, this new framework will also be relatively transparent. There are, however, gaps and challenges in the proposed new revenue management framework, both in the area of oversight and transparency (particularly relating to FONSIS and PETROSEN – see sections 5 and 6 below), and in terms of macroeconomic policy (see section 4).

C. RECOMMENDATIONS

In the area of oversight, accountability and transparency of resource revenues (and the budget in general), we have three key recommendations for Senegal:

 Publish more information (including about extractives) relevant to the budgeting process, and ensure that it is more up to date. As outlined in sub-section 3.a above, there are a number of areas where the government could publish additional information related to the budget, as well as to extractive revenues. We recommend for the Senegalese authorities to pursue these opportunities for improving budgetary transparency. Current proposals to

⁷² Ministère des Finances et du Budget, République du Sénégal, "Projet de loi partage des revenus secteur pétrolier" (Ministère des Finances et du Budget, République du Sénégal, 2020).

⁷³ International Monetary Fund, *IMF Country Report No. 21/127 Third Review Under the Policy Coordination Instrument and Request for Modification of Quantitative Targets, and Requests for a Stand-By Arrangement and an Arrangement Under the Standby Credit Facility—Press Release; Staff Report; and Statement by the Executive Director for Senegal,* IMF Country Reports (Washington, D.C.: International Monetary Fund, June 2021), 14, www.imf.org/-/media/Files/Publications/CR/2021/English/1SENEA2021002.ashx

publish more information on extractive revenues are a welcome step forward. The government could also publish data on extractive revenues more frequently, and cut the time taken for audit reports from the Cour des Comptes (e.g., aim for a two-year lag rather than four years as is currently the case).

- Switch to spending practices that make it easier to hold fiscal policies accountable. This includes following through on existing plans to use a Treasury Single Account and cutting the use of simplified spending procedures; reducing the use of single tender procurement; and strengthening budget execution (for example, by allowing more time to prepare the budget in the first place).
- Support the participation of citizens, civil society and the media in the budgeting process. The authorities should protect civil society and the media and ensure their ability to scrutinize and potentially criticize the budget without fear of retaliation. It should further support greater involvement of individual citizens (e.g., through requests for submissions, focus groups or surveys).

4. Macroeconomic policy framework

A. OVERVIEW OF CURRENT ARRANGEMENTS

Fiscal policy

Senegal does not currently have a legal framework for determining how its oil and gas revenue specifically should be managed, beyond its general fiscal rules. The country is also subject to regional fiscal rules that, in theory, constrain public finances in general. This is relevant for extractive revenues, since they enter the general budget. As a member of WAEMU, Senegal is subject to the following convergence criteria:

- "First-order": A maximum budget deficit of 3 percent of GDP, maximum public debt of 70 percent of GDP and maximum 3 percent annual inflation.
 The WAEMU Council of Ministers can issue "directives" calling for corrective measures where first-order convergence criteria are not met.
- "Second-order": The government wage bill should not exceed 35 percent of tax revenues, and tax revenues should be at least 20 percent of GDP. These are less strict than the first order criteria, and the Council of Ministers may only issue "recommendations" for corrective action in the case of non-compliance.

Senegal's compliance with the WAEMU fiscal rules since 2010 has been mixed, with a good record of compliance on two out of three "first-order" criteria (debt and inflation) and one out of two second-order criteria (the government wage bill), but a poor record on the other two criteria (budget deficit and tax revenues). ⁷⁵ Senegal is also a member of ECOWAS, which has its own (similar) convergence criteria; the country has a similarly mixed record of adherence to these. In 2021, the bloc adopted new convergence criteria in the context of its push for a single currency by 2027. Resource-rich countries in sub-Saharan Africa for the most part have not complied with regional-level fiscal rules. ⁷⁶ It remains to be seen whether the increase in Senegal's resource wealth will impact its compliance record.

- 74 Hippolyte Balima et al. *IMF Country Report No. 19/91: West African Economic and Monetary Union Selected Issues*, IMF Country Reports (Washington, D.C.: International Monetary Fund, March 2019), www.imf.org/-/media/Files/Publications/CR/2019/1WAUEA2019002.ashx
- 75 Senegal has met the limits on public debt and inflation since 2010 (meeting those targets every year except the inflation target in 2011). But it failed to meet the budget deficit target for any of the years 2010-19, aside from 2017. For public debt, we use Senegal's general government gross debt, which may ignore debt held by public entities outside the government, e.g., state-owned enterprises. Currently, total public debt is within the 70 percent limit. For the second-order criteria, Senegal was able to meet the criterion on wages and salaries throughout 2010-18, but failed to meet the criterion on tax revenues at any point from 2010 to 2019. Authors' analysis based on:
 - Agence Nationale de Statistique et de la Démographie (ANSD), "Comptes Nationaux Provisoires de 2019 et Définitifs de 2018 (Base 2014)" (Agence Nationale de Statistique et de la Démographie (ANSD), December 2020), 5, satisfaction.ansd.sn/ressources/publications/Note%20analyse%20 comptes%20nationaux%202019.pdf
 - o "PIBN PIB et Ses Emplois En Valeur Nominale (En Milliards de FCFA)," BCEAO Banque Centrale des États de l'Afrique de l'Ouest, accessed 28 May 2021, edenpub.bceao.int/rapportPredefini.php
 - o "Tauxinfl_A Taux D'Infation En Moyenne Annuelle," BCEAO- Banque Centrale des États de l'Afrique de l'Ouest, accessed 28 May 2021, edenpub.bceao.int/rapportPredefini.php
 - o "TOFE Tableau Des Operations Financières De L'état (Unité: Milliards De Francs CFA)," BCEAO -Banque Centrale des États de l'Afrique de l'Ouest, accessed 28 May and 1 June 2021, edenpub.bceao. int/rapportPredefini.php
 - o International Monetary Fund, IMF Country Report No. 20/225, 51
- 76 Natural Resource Governance Institute, Resource Governance Index: From Legal Reform to Implementation in Sub-Saharan Africa (New York: Natural Resource Governance Institute, 15 April 2019), 24, resourcegovernance.org/sites/default/files/documents/rgi-from-legal-reform-to-implementation-subsaharan-africa.pdf

WAEMU heads of state have temporarily agreed on a suspension of the convergence criteria due to the pandemic, though the Senegalese government still intends to comply with WAEMU first-order budget deficit rules by 2023. The Senegal is also aiming to improve tax collection so that fiscal revenues constitute at least 20 percent of GDP by 2023, and has developed a corresponding medium-term revenue strategy. While these rules are designed to prevent excessive government borrowing or spending, they do not indicate how Senegal should manage (and potentially save) temporarily high oil and gas revenues. The government is currently considering new policies to this end – these are discussed below in sub-4.b.

Monetary policy

As a member of WAEMU, Senegal uses the CFA Franc (XOF) as its currency and its monetary policy is governed by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). Senegal therefore cannot independently use monetary policy to manage macroeconomic volatility, for instance from commodity price changes. In 2020, its GDP accounted for only 15 percent of WAEMU's total regional economic output. ⁸⁰ This suggests that, while Senegal is one of the larger economies (second in the bloc to Côte d'Ivoire), it is unlikely that the BCEAO would tailor its monetary policy to respond to economic shocks in Senegal, unless these affect other WAEMU countries, too. ⁸¹ Oil and natural gas rents only make a small contribution to the region's other economies (estimated to be less than 1 percent of regional GDP) ⁸² – in fact, WAEMU as a bloc is a net fuel importer, and would remain so even after adding Senegal's projected oil and gas exports from Sangomar and GTA's first phases. ⁸³

- 77 International Monetary Fund, "IMF Staff Completes Review Mission to Senegal.".
- 78 International Monetary Fund, *IMF Country Report No. 20/11: Senegal: Request for a Three-Year Policy Coordination Instrument—Press Release; Staff Report; and Statement by the Executive Director for Senegal,* IMF Country Reports, Washington, D.C.: International Monetary Fund, January 2020, www.imf.org/-/media/Files/Publications/CR/2020/English/1SENEA2020001.ashx
- 79 International Monetary Fund, IMF Country Report No. 20/225.
- 80 Authors' analysis based on "PIBN PIB et Ses Emplois En Valeur Nominale (En Milliards de FCFA)," BCEAO - Banque Centrale des États de l'Afrique de l'Ouest, accessed 25 May 2021, edenpub.bceao.int/rapportPredefini.php
- 81 Côte d'Ivoire is also a minor oil producer, but its total oil and gas government revenues accounted for just 0.4 percent of GDP in 2018 (the latest year for which data is available). Authors' analysis of Initiative pour la Transparence dans les Industries Extractives de la Côte d'Ivoire, Rapport ITIE 2018 (Initiative pour la Transparence dans les Industries Extractives de la Côte d'Ivoire), accessed 25 May 2021, eiti.org/files/documents/rapport-itie-ci-2018-version-finale-30-12-20.pdf.; and "PIBN PIB et Ses Emplois En Valeur Nominale (En Milliards de FCFA)," BCEAO Banque Centrale des États de l'Afrique de l'Ouest, accessed 25 May 25 2021, edenpub.bceao.int/rapportPredefini.php
- 82 Authors' analysis based on:
 - World Bank staff, "Oil Rents (% of GDP) Cote d'Ivoire, Burkina Faso, Togo, Senegal, Niger, Mali, Benin, Guinea-Bissau," The World Bank | Data, accessed October 25, 2021, data.worldbank.org/indicator/ NY.GDP.PETR.RT.ZS?locations=CI-BF-TG-SN-NE-ML-BJ-GW
 - o World Bank staff, "Natural Gas Rents (% of GDP) Cote d'Ivoire, Burkina Faso, Togo, Senegal, Niger, Mali, Benin, Guinea-Bissau," The World Bank | Data, accessed October 25, 2021, https://data.worldbank.org/indicator/NY.GDP.NGAS.RT.ZS?locations=CI-BF-TG-SN-NE-ML-BJ-GW
 - o "GDP (Current US\$) Cote d'Ivoire, Burkina Faso, Togo, Senegal, Niger, Mali, Benin, Guinea-Bissau | Data," The World Bank | Data, accessed 25 October, 2021, data.worldbank.org/indicator/NY.GDP.MKTP. CD?locations=CI-BF-TG-SN-NE-ML-BJ-GW
- 83 We assume a USD 60/barrel oil price and daily production of 100,000 barrels of oil and annual production of 2.45 million tons per year of liquefied natural gas with a liquefied natural gas price of USD 6.60/million British thermal units. Authors' calculations based on:
 - o BP, "Approximate Conversion Factors Statistical Review of World Energy" (BP), accessed 3 June 2021, 2, www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-approximate-conversion-factors.pdf. Chatham House, The Royal Institute of International Affairs, "Data," Resource Trade.Earth, accessed 3 June 2021, resourcetrade.earth. Morgan Stanley Research cited in Caroline Evans, "Morgan Stanley Says LNG Market Rebalance Near, Raises TTF, JKM Price Forecasts," Natural Gas Intelligence, 18 May 2021, www.naturalgasintel.com/morgan-stanley-says-lng-market-rebalance-near-raises-ttf-jkm-price-forecasts
 - o Ouki, Mauritania Senegal, 21.
 - United Nations Conference on Trade and Development, "Merchandise: Intra-Trade and Extra-Trade of Country Groups by Product, Annual," UNCTADStat, accessed 28 May 2021, unctadstat.unctad.org/wds/ TableViewer/tableView.aspx
 - o "Senegal," Woodside, accessed 3 June 2021, www.woodside.com.au/our-business/senegal

However, if and when Senegal joins the proposed ECOWAS common currency (the Eco), it would be in a net fuel exporting monetary union, where oil and gas rents (currently) account for around 6 percent of regional GDP.⁸⁴

Being in a monetary union has advantages and disadvantages for large oil producers. On the one hand, the exchange rate remains more stable relative to the oil producer having its own currency. ⁸⁵ On the other hand, large net capital inflows often express themselves in volatile interest rates and higher domestic prices, especially in non-tradables such as construction costs, internal transport and restaurants. In Senegal's case, capital inflows into its economy from the oil and gas sector to the public and private sectors are expected to remain modest; we therefore expect only minor effects on financial sector stability or prices.

B. THE GOVERNMENT'S PROPOSALS FOR A NEW FRAMEWORK

The Senegalese authorities are planning to introduce a numerical fiscal rule governing how much of the country's oil and gas revenues should be saved, and how much should be spent, each year. The Senegalese authorities have been considering transferring a fixed percentage of oil and gas revenues to the national budget and saving the rest – but the government has not taken a final decision on this.

These types of revenue rules can help draw attention to the collection and use of resource revenues. However, to be effective at preventing impulsive spending decisions or overspending generally, they must be accompanied by an expenditure rule (i.e., a limit on annual government spending) and/or a balanced budget rule (i.e., a limit on the government's budget deficit). He while it is true that, beyond a certain point, too many fiscal rules can create difficulties in implementation, the aforementioned constraints are crucial. In their absence, the government may be forced to save natural resource revenues on the one hand, but allowed to run large fiscal deficits and indebt itself on the other, as has happened in Ghana and Mongolia, for example. The net effect can be to seem fiscally responsible (by saving natural resource revenues) without actually acting responsibly (but rather running an overall budget deficit). This is why it is important to combine these sorts of "revenue distribution" rules with another fiscal rule (like those listed above).

Although Senegal has already signed up to follow WAEMU's deficit rule (see section 4.a above), we do not think this is enough to ensure prudent management of the country's oil and gas revenues. The main reason is Senegal's poor record of sticking to WAEMU's deficit rule (as mentioned above); and once it faces the political pressure from citizens (and within government) to increase spending that tends to come with higher extractive revenues, the country may be even less likely to keep

- 84 "World Development Indicators | DataBank," The World Bank, accessed 20 May 2021, databank.worldbank.org/reports.aspx?source=2&series=NY.GDP.MKTP. CD&country=BEN,BFA,CPV,CIV,GMB,GHA,GIN,GNB,LBR,MLI,NER,NGA,SEN,SLE,TGO#. United Nations Conference on Trade and Development, "Merchandise: Intra-Trade and Extra-Trade of Country Groups by Product, Annual."
- 85 If a country has its own currency (and wants to maintain an independent monetary policy), it could maintain a fixed exchange rate only if it imposes capital controls (as Senegal does). But fixed exchange rates can be vulnerable to speculative attacks if the central bank does not have enough reserves to defend the currency against such an attack.
- 86 Andrew Bauer, David Mihalyi, and Fernando Patzy *Discussion of Guyana's Green Paper on 'Managing Future Petroleum Revenues and Establishment of a Fiscal Rule and Sovereign Wealth Fund'* (Natural Resource Governance Institute, November 2018), 16, resourcegovernance.org/sites/default/files/documents/discussion-of-guyana-green-paper.pdf
- 87 This risk increases when the government (or the population) has unrealistic expectations about the revenues from extractive resources, and the level of spending they can sustainably finance. It's therefore important a) not to borrow based on expectations about uncertain revenues and b) to manage the public's expectations about what natural resources will mean for the country. See Davis and Mihalyi, Opportunities and Challenges, for further details.

its budget deficit within prescribed limits. Finally, the WAEMU deficit rule is not counter cyclical, since it is based on the respective country's GDP, and can therefore exaggerate booms and recessions. We hence think it's important for Senegal to adopt a domestic, counter-cyclical fiscal rule, rather than relying on those that it is subject to as a member of WAEMU.

Furthermore, without constraints on overall fiscal expenditures, Senegal could lose money by earning low interest rates on its petroleum savings while simultaneously borrowing at higher market rates. In such a scenario, for every dollar of oil money saved Senegal would pay more in interest costs on additional debt than it receives on its savings – rather than paying down public debt or spending on domestic projects with a higher social return than its natural resource fund(s) can achieve.

This scenario is not far-fetched. Senegal's USD-denominated government bonds maturing in 12 years are yielding nearly 6 percent. At the same time, most nascent small sovereign wealth funds earn no more than 2-4 percent on average per year in their first decade of existence. For instance, the Ghana Heritage Fund earned 2.5 percent on average per year since 2012. The Ghana Stabilization Fund earned 0.9 percent, the Chilean Pension Reserve Fund 2.1 percent, the Peruvian Stabilization Fund 0.6 percent and the Timor-Leste Petroleum Fund earned 3.7 percent. Funds that earned more either took significant risks (and occasionally experienced losses) or spent a decade building their experience before venturing into higher risk / higher return financial instruments.

According to the IMF, Senegal's debt is currently sustainable, though significant worsening of the country's fiscal position could change this. ⁹⁰ The country currently runs a fiscal deficit, and is projected to do so into the medium term.

Senegal still has time (until 2023) before oil and gas revenues start to flow. The authorities could use this time to consider alternative rules, such as the fiscal expenditure rules found in Grenada, Paraguay or Peru. ⁹¹ Expenditure rules are generally complied with, easy to implement and effective at mitigating political pressures to e.g., raise government salaries or make unsustainable public service hires once oil starts flowing. ⁹² The three countries mentioned above have expenditure rules that are also strongly counter cyclical, as the spending limits are decoupled from fluctuations in the country's GDP. (See footnote 91.)

Even if the authorities want to retain flexibility with their fiscal policy to use it to stabilize the economy (see section 4.a), we still think that this type of expenditure rule would be a good choice for Senegal. First, these rules do allow flexibility to respond to economic fluctuations, both through government spending and by cutting taxes. And second, there can be grave consequences of not limiting spending, as mentioned above.

- 88 "Senegal, Republik 6,25% 17/33", Börse Frankfurt, www.boerse-frankfurt.de/bond/xs1619155564-senegal-republik-6-25-17-33, accessed 2021
- 89 Andrew Bauer, "How Good Are Sovereign Wealth Funds at Investing Money Made from Natural Resources?," Natural Resource Governance Institute (blog), 13 June 2018, resourcegovernance.org/blog/how-good-are-sovereign-wealth-funds-investing-money-made-natural-resources
- 90 International Monetary Fund, IMF Country Report No. 20/225, 51.
- 91 Grenada's rule limits increases of real-terms primary expenditure to 2 percent per year. Paraguay's fiscal expenditure rule states that current primary expenditure by the government can only increase by up to 4 percent per year. Peru's rule stipulates that current expenditure (i.e., excluding investment or capital expenditure by the government) cannot exceed current revenues (i.e., revenues received on a regular basis, as opposed to one-off, irregular revenues).
- 92 Natasha Sharma and Tove Strauss. Special Fiscal Institutions for Resource-Rich Developing Economies: The State of the Debate and Implications for Policy and Practice, Research Report (London: Overseas Development Institute, May 2013), www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8393.pdf

An option that several countries use is a (structural) balanced budget rule, under which the government can spend only what it collects in revenue or, alternatively, average revenue over a 5-7 year period. But it can be challenging to accurately measure the current balance as opposed to the overall fiscal balance, which can make these rules difficult to implement. Furthermore, balanced budget rules are rarely adhered to since they provide no space for politically necessary increases in spending, especially when oil revenues start flowing and voters expect increased public spending. We would therefore discourage the Senegalese authorities from adopting this type of rule.

A third alternative would be to combine a non-resource current balance rule with a capital expenditure growth rule. Non-resource current balance rules specify that resource revenues and borrowing should be used for capital expenditure, not to run a deficit where current (i.e., regular) spending exceeds current revenues. When a non-resource current balance rule is combined with a capital expenditure growth rule, if the revenues to be allocated to capital spending exceed the country's estimated absorptive capacity (see Box 1 below), the excess must be invested in foreign assets or in paying down the national debt.

The government has indicated that it plans to establish a rule based on the primary deficit, excluding hydrocarbons. But this type of rule is not counter cyclical when non-resource revenues are volatile, as in Senegal's case; it was designed with high-income economies in mind. We therefore recommend an expenditure rule like those used in Grenada, Paraguay, or Peru, as explained above.

According to the Senegalese authorities, during an initial period after oil and gas production starts, Senegal's proposed fiscal rules will allow the government to change the "reference prices" used to calculate extractive revenues, so that the proposed stabilization fund can be filled more quickly. It seems advisable to sufficiently stock the stabilization with resources in order to prevent economic shocks; however, it is essential to make sure that reference prices are based on clear criteria going forward. It may therefore be better for the fiscal rule to instead save a certain portion of oil and gas revenues in the stabilization fund until the fund reaches a desired balance, and then reduces the share of revenues that go to the stabilization fund. We also recommend the government to use external/independent forecasts to determine the reference prices, so it can protect them from the risk of manipulation to circumvent fiscal rules. This would allow the stabilization fund to be filled rapidly, while protecting the integrity of the reference prices (and, ultimately, the fiscal rule itself) over the longer term.

Aside from formal fiscal rules, it is also important for governments to explicitly take into account fiscal risks (for example, lower-than-expected extractive revenues due to lower commodity prices or project delays) when making decisions on saving, spending and investments. Senegal has recently made greater efforts in this matter, and the government published a declaration on fiscal risks as part of the triennial budget program for 2022-24. ⁹⁴ The authorities have indicated that they have taken into account these risks in the draft law on managing hydrocarbon revenues.

⁹³ In some countries (e.g., Ghana and Trinidad and Tobago) ministries of finance have assumed higher prices or lower costs in order to allow for more spending or less saving and get around fiscal rules.

⁹⁴ Ministère des Finances et du Budget, République du Sénégal, "Document de programmation budgétaire et économique pluriannuelle (DPBEP) 2022-2024."

Given Senegal's acute investment needs, and ambitious plans for expanding energy access, it may be beneficial for the country to invest a large portion in upgrading its infrastructure (while staying within absorptive capacity limits - see Box 1), rather than save resource revenues in liquid assets/abroad. The government says that it is indeed planning to prioritize investment in infrastructure, reducing public debt and creating a stabilization fund. Any revenues that exceed absorptive capacity could be either used to pay down debt or saved in a stabilization fund, depending on interest rates at the time. ⁹⁵

Box 1. Senegal's capacity to absorb domestic investments

When assessing whether countries should invest domestically, one of the key questions concerns the extent to which the country can "absorb" the investment without triggering inflation due to supply bottlenecks. Inflation would not necessarily undermine the long-term productivity benefits of domestic investment, but would reduce the associated short-term macroeconomic stimulus. ⁹⁵ This may be particularly linked to the capacity certain industries related to public investment have, e.g., the construction industry. Another reason why it is advisable not to invest too much at once is that the government may face a limit on the number (and scale) of public investment projects that it can efficiently handle at one time, and the quality of government oversight of public investment may fall if too much is attempted at the same time. There can therefore be benefits to spreading resource-based investment over time. ⁹⁶

But what is Senegal's level of absorptive capacity? While we have not been able to locate official estimates for the country, research suggests that, when annual public investment exceeds 10 percent of GDP, the productivity of public investment projects tends to decline as public investment to GDP rises. ⁹⁷ For countries with lower investment efficiency, the productivity of public investment may tend to decline at an even lower threshold – from 7 percent of GDP upwards, as one study indicates. ⁹⁸ Other empirical research hints that rapidly increasing the ratio of public investment to GDP also tends to reduce the effectiveness of each individual investment. ⁹⁹ Evidence from Senegal itself, as well as Colombia and Mali, suggests that increases in the level of public investment indeed resulted in declining efficiency of each investment over the period 1980-2009. ¹⁰⁰

- 95 If Senegal is paying particularly high interest on its public debt, it could be preferable to focus on reducing debt rather than saving in a stabilization fund.
- 96 When investments demand more goods and services from various industries (e.g., construction) than they can supply, these sectors can increase their prices, with knock-on effects on other sectors downstream, ultimately increasing inflation. This is linked to the question of the 'output gap', i.e., the extent to which GDP can increase due to increases in demand without triggering inflation. While it is possible to estimate the output gap, we have not been able to find official estimates for Senegal; in any case, recent research suggests that looking at a range of different indicators could be more useful than estimates of the output gap. See Jiaqian Chen and Lucyna Górnicka, "IMF Working Paper WP/20/24 Measuring Output Gap: Is It Worth Your Time?" (International Monetary Fund, February 2020), www.imf.org/-/media/Files/Publications/WP/2020/English/wpiea2020024-print-pdf.ashx
- 97 Ha-Joon Chang and Amir Lebdioui, "From Fiscal Stabilization to Economic Diversification" (Helsinki, Finland: United Nations University World Institute for Development Economics Research, 2020), www.wider.unu.edu/sites/default/files/Publications/Working-paper/PDF/wp2020-108.pdf
- 98 See e.g., Daniel Gurara et al., "IMF Working Paper WP/20/48 On the Capacity to Absorb Public Investment: How Much Is Too Much?" (International Monetary Fund, 2020), www.elibrary.imf.org/doc/IMF001/28701-9781513529981/28701-9781513529981/Other_formats/Source_PDF/28701-9781513536606.pdf?redirect=true and Jonathan Isham and Daniel Kaufmann, "The forgotten rationale for policy reform: the productivity of investment projects," *The Quarterly Journal of Economics* 114, no. 1 (1999): 149-184., cited in Andrea F. Presbitero, "Too Much and Too Fast? Public Investment Scaling-up and Absorptive Capacity," *Journal of Development Economics* 120 (May 1, 2016): 17–31, doi.org/10.1016/j.jdeveco.2015.12.005
- 99 Daniel Gurara et al., "IMF Working Paper WP/20/48."
- 100 Presbitero, "Too Much and Too Fast?"
- 101 Salifou Issoufou, Mouhamadou Bamba Diop, and Rajesh Anandsing Acharuz, "Chapter 9. Making Public Investment More Effective: Lessons for Senegal," in Race to the Next Income Frontier: How Senegal and Other Low-Income Countries Can Reach the Finish Line (USA: International Monetary Fund, 2018), 171, www.elibrary.imf.org/view/IMF071/24349-9781484303139/24349-9781484303139/ch9.xml

The same report also argued that Senegal could improve its public investment management and thus strengthen the effects of public investments on growth. The authors noted that, on paper, Senegal's system for public investment management was adequate; the problem was, in practice, officials were not always following the rules.¹⁰¹

The Senegalese authorities may therefore wish to improve the efficiency of public investment management in the country (in particular, through better implementing existing rules), ideally before its oil and gas revenues are ready to be invested. This could include revising investment approval procedures and building capacities of relevant government departments. Issoufou, Diop and Acharuz (2018) provide a number of policy recommendations on how to do this. ¹⁰²

According to the IMF, Senegal has recently made progress with its public investment management system, including through improved ex-ante evaluations of public investment projects. ¹⁰³ The authorities have also revised the legal framework for public-private partnerships. ¹⁰⁴

In 2021, official documentation indicates that Senegal was planning public spending to be around 11 to 13 percent of forecast GDP during the period 2022-24. This would represent a significant increase over time – which, as mentioned above, can reduce the efficacy of public investment – since during the period of 2011-17, public investment in Senegal averaged 6.6 percent of GDP, peaking at 7.7 percent by 2017. The senegal averaged 6.6 percent of GDP, peaking at 7.7 percent by 2017.

Moreover, the most recent IMF reports estimated government investment to be 6.3 percent of GDP in 2018, 6.3 percent in 2019 and 6.9 in 2020. 107,108 If public investment increases significantly as increased natural resource revenues come on stream, it might be preferable to ensure that the increase is more gradual than what is planned for the period 2022-24, and to prioritize any remaining reforms to improve the efficiency of public investment.

The most successful oil-producing countries—such as Indonesia, Malaysia and the UAE—have drafted costed medium-term infrastructure or capital expenditure plans prior to the start of oil production in order to guide capital spending. This allows for governments to direct spending to projects that will unlock economic bottlenecks (e.g., ports, electricity, internet, clean water, scholarships) and avoid spending on legacy projects or unproductive infrastructure (e.g., superhighways to nowhere, monuments, stadiums).

¹⁰² Issoufou, Diop, and Acharuz, "Making Public Investment More Effective," 172-173.

¹⁰³ Ibid., 176-178.

¹⁰⁴ International Monetary Fund, IMF Country Report No. 20/225, 5.

^{105 &}quot;L'Assemblée Nationale Adopte Une Nouvelle Loi Sur Les Contrats de Partenariat Public-Privé (PPP)," Ministère de l'Economie, du Plan et de la Coopération, 22 February 2021, https://www.economie.gouv.sn/index.php/fr/articles/22-02-2021/lassemblee-nationale-adopte-une-nouvelle-loi-sur-les-contrats-de-partenariat

Authors' analysis of Ministère des Finances et du Budget, République du Sénégal, "Document de programmation budgétaire et économique pluriannuelle (DPBEP) 2022-2024," 59 and International Monetary Fund. IMF Country Report No. 21/127.

¹⁰⁷ Authors' analysis based on "IMF Investment and Capital Stock Dataset, 2019," International Monetary Fund, August 2019, www.imf.org/external/np/fad/publicinvestment/data/data080219.xlsx

¹⁰⁸ International Monetary Fund, *IMF Country Report No. 21/18*, 4.

¹⁰⁹ International Monetary Fund, IMF Country Report No. 20/108 Senegal Request for Disbursement Under the Rapid Credit Facility and Purchase Under the Rapid Financing Instrument—Press Release; Staff Report; and Statement by the Executive Director for Senegal, IMF Country Reports (Washington, D.C.: International Monetary Fund, April 2020), 11, www.imf.org/-/media/Files/Publications/CR/2020/ English/1SENEA2020002.ashx

Box 2. Resource-backed loans and other innovative extractives-based financing models

The Senegalese government is planning to prohibit any early transfer of ownership or mortgage of oil and gas resources. 110 In fact, several resource-rich countries have experimented with a financing model called resource-based loans (RBLs). 111 This type of lending includes all loans raised by a government or public enterprise and repaid with natural resources that serve either as payment in kind, collateral, or sources of revenue to meet repayments. While presenting many opportunities, these loans can reach into the billions of dollars, and the consequences of a bad deal or over-indebtedness can be disastrous. In light of this, it seems only sensible that Senegal plans to take a cautious approach to resource-based loans (it may not have to prohibit them entirely if they can be used judiciously), but it should make sure that its rules explicitly, clearly, and comprehensively cover the different types of loans involved. 112

We therefore encourage the government to take a more comprehensive approach that covers and details all forms of RBLs, such as prepayments and prefinancing of natural resources, loans in exchange for resource sales-receivable, pre-export financing, commodity-indexed loans, inter alia. The NRGI report *Resource-Backed Loans: Pitfalls and Potential* provides other recommendations to manage opportunities and risks linked to this type of loan. 114

C. RECOMMENDATIONS

With respect to the macroeconomic framework, we have four main recommendations for the Senegalese authorities to consider:

- The government should consider an additional numerical fiscal rule to complement any rule on how the country's hydrocarbon revenues should be used. The authorities could particularly consider a fiscal spending rule (of the Peruvian, Paraguayan or Grenadian type), since these are easy to implement, generally respected and effective in mitigating political pressures.
- Given Senegal's large investment needs, the government should invest a large portion of its hydrocarbon revenues in infrastructure upgrades subject to its absorptive capacity, rather than fiscal saving. Excess revenues could either be used to pay down debt or saved in a stabilization fund (which should invest in low-risk, liquid assets overseas), depending on interest rates.

For revenues saved in a stabilization fund, in line with the government's plans, it is important for these to remain liquid, so that they can be used at short notice to stabilize the economy in the event of a downturn; 115,116 they should also ideally be low risk, to reduce fluctuations in the portfolio that could lower its value just when it is needed

¹¹⁰ Ministère des Finances et du Budget, République du Sénégal, "Projet de loi partage des revenus secteur pétrolier."

¹¹¹ David Mihalyi, Aisha Adam, and Jyhjong Hwang. Resource-backed loans: Pitfalls and Potential (New York: Natural Resource Governance Institute, February 2020), resourcegovernance.org/sites/default/files/documents/resource-backed-loans-pitfalls-and-potential.pdf

¹¹² Article 3 of the draft law states: "[T]he hydrocarbon reserves cannot be the object of anticipated transfer, nor of mortgage." (NRGI translation of text from Ministère des Finances et du Budget, République du Sénégal, "Projet de loi partage des revenus secteur pétrolier.")

¹¹³ Mihalyi, Adam and Hwang, Resource-backed loans.

¹¹⁴ Ibio

¹¹⁵ Andrew Bauer, "Six Reasons Why Sovereign Wealth Funds Should Not Invest or Spend at Home," *Natural Resource Governance Institute* (blog), 4 August 2015, resourcegovernance.org/blog/six-reasons-why-sovereign-wealth-funds-should-not-invest-or-spend-home-0

¹¹⁶ Though Senegal is unlikely to experience large macroeconomic swings from its oil and gas sector, as noted elsewhere, a stabilization fund may still be useful to provide a buffer against other economic shocks.

for stabilization. ¹¹⁷ Finally, revenues saved in a stabilization fund should be invested overseas, since domestic investment can undermine public financial management for sovereign wealth funds (see section 5 below for details). ¹¹⁸

- Given the potential risks and consequences of resource-backed lending, we encourage the government to provide a legal framework on these types of loans, which can take many forms, by being as explicit as possible in the definition. The government has indicated that it plans to address this issue in the law on managing oil and gas revenues.
- We encourage the Senegalese authorities to maintain the integrity of reference prices used to calculate extractive revenues. If the government decides to prioritize achieving a minimum balance in the stabilization fund, it can do so through a rule explicitly prioritizing the use of resource revenues for this until a certain balance is reached.

¹¹⁷ Andrew Bauer, Malan Rietveld and Perrine Toledano. *Managing the Public Trust: How to Make Natural Resource Funds Work for Citizens* (Natural Resource Governance Institute and Columbia Center on Sustainable Investment, 2014), 63,

resourcegovernance.org/sites/default/files/NRF_Complete_Report_EN.pdf

¹¹⁸ Natural Resource Governance Institute, "Natural Resource Charter," 28-29.

5. Governing the sovereign wealth fund

A. BACKGROUND

FONSIS is Senegal's state-owned strategic investment fund. Its current objectives are to encourage the development of national champions in key sectors, achieving shareholder value for the Senegalese state (its sole shareholder) and promoting capital investment in Senegal. Although its governing law does allow investments of up to 25 percent of its capital, aside from financial reserves, to be invested abroad, the fund prioritizes investing in Senegalese enterprises and has invested exclusively in Senegal so far. ¹¹⁹ The government is planning for FONSIS to manage a new 'intergenerational' sovereign wealth fund that would invest hydrocarbon revenues to benefit future generations. FONSIS would at the same time continue to manage another "strategic" fund that would continue with its current mandate of developing local industries. The government also plans to establish a separate 'stabilization fund' that will focus on smoothing short-term economic shocks (and, presumably, on investing in more liquid assets) that will not be managed by FONSIS.

The Senegalese authorities plan to overhaul FONSIS' governance to prepare it for its new mission to invest Senegal's oil and gas wealth for the long term. However, some details of this revamp have not yet been published, including the question of how far the intergenerational fund will have different rules and procedures from the other funds. This section looks at FONSIS' current governance and the proposed changes (as well as proposals for the separate stabilization fund), to assess how suited they are to its proposed new mission of hosting a natural resource fund.

B. ASSESSING FONSIS' GOVERNANCE: CURRENT STATUS

According to FONSIS' self-assessment, the fund is compliant with the Santiago Principles, a set of generally accepted guidelines and practices for sovereign wealth funds. ^{120,121} As a limited company, the fund is also subject to the Uniform Act of the Organisation for the Harmonisation of Business Law in Africa (OHADA). We nonetheless have several concerns about how FONSIS is governed, given that it is a sovereign wealth fund. First, FONSIS remains a relatively opaque organization for the Senegalese public, which makes evaluating its performance and managerial decision-making near impossible for anyone outside of the government. ¹²² The fund would score poorly on a number of NRGI's Resource Governance Index indicators for transparency and accountability for sovereign wealth funds, for multiple reasons. ¹²³ For example:

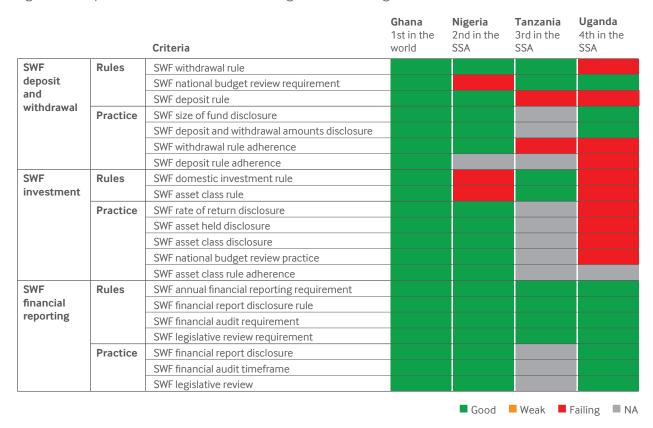
- The law establishing FONSIS does not require parliamentary review of the fund's financial reports.¹²⁴
- 119 "Loi N° 2012-34 Du 31 Décembre 2012," Journal Officiel, 9 February 2013, www.jo.gouv.sn/spip. php?article9611
- 120 FONSIS S.A., Santiago Principles Self-Assessment Fonds Souverain d'Investissements Stratégiques S.A, (International Forum of Sovereign Wealth Funds, n.d.).
- 121 "Présentation."
- 122 Though FONSIS reports on its financial performance to the Senegalese state, and is audited, neither its financial reports nor audit reports are published.
- 123 Though Senegal is assessed as part of the 2021 Resource Governance Index, FONSIS is not, since it is not yet acting as a natural resource fund.
- 124 "Loi N° 2012-34."

- The published version of the latest annual report does not provide any data on the actual returns achieved by the fund's investments.
- Neither FONSIS' financial reports, nor its audit reports are published.
- The fund's website does not specify who the members of its board are (aside from the chairperson), making it impossible to assess their qualifications or independence.¹²⁵
- No independent assessment of FONSIS' performance has been published or submitted to the National Assembly to date. (FONSIS indicates that the Inspection Générale de l'État – state general inspectorate – which has a reputation for independence, has been evaluating FONSIS since January 2021).

Box 3. Comparing performance across resource-based sovereign wealth funds

NRGI's Resource Governance Index (which measures the quality of governance in different countries' extractive sectors) has a component that assesses the governance of natural resource-based sovereign wealth funds through several criteria such as fund deposit, withdrawal rules, investment rules and reporting rules. In the 2021 version of the Index, Ghana's oil and gas-based wealth fund achieves the maximum score across all questions, indicating that it is a model of best practice (the only oil and gas fund to do so out of the nine assessed). In sub-Saharan Africa (SSA), natural resource sovereign wealth funds tend to do well in reporting, while the most common shortcomings are in the definition and enforcement of deposit and investment rules.

Figure 2. Comparison of resource-based sovereign wealth funds' governance



¹²⁵ FONSIS, "Rapport Annuel 2020" (FONSIS, February 2021), www.fonsis.org/sites/default/files/rapport-annuel/Rapport annuel 2020.pdf. FONSIS S.A., "Santiago Principles Self-Assessment."

That said, there are a number of reassuring aspects to FONSIS' governance. For instance, the fund has co-invested with the United Nations Capital Development Fund and the International Finance Corporation, and has partnerships with other organizations, which can be seen as a vote of confidence in its governance arrangements. 126,127

FONSIS' mandate to invest in the Senegalese economy (rather than overseas) is set to continue under the government's plans. While FONSIS indicates that it follows objective criteria to select the firms it invests in, such parallel extrabudgetary domestic spending often reduces public oversight; managers may be pressured to select politically-connected firms rather than the best vehicles for the $investment. ^{128,129,130} \ It \ can \ also \ undermine \ public \ financial \ management \ if \ investments$ through the fund are not coordinated with those conducted through the budget; and it can reduce public accountability by avoiding parliamentary scrutiny for individual investments (and/or by reducing transparency if the fund's financials are less transparent than the government budget). Consequently, it may be preferable for domestic investments to be carried out through the budget - for example, through a special account that is scrutinized and approved as part of the budgetary process.¹³¹ (Although the law on public-private partnerships prescribes an approval process for this type of investment, for larger-scale investments of the intergenerational fund, it would still be good practice for the approval process to be transparent and inclusive and for the National Assembly to have a say in it.) For example, Abu Dhabi (UAE), Botswana, Chile, Ghana, Kazakhstan and Norway have all prohibited their SWFs from investing in their respective domestic economies.¹³²

FONSIS does state that it "applies a number of criteria in selecting investments, including a minimum rate of return of 12 percent, consistency with the priorities of the *Plan Sénégal Émergent* and having a positive socio-economic impact," as well as ethics codes, all of which would help to ensure a minimum level of investment quality if applied faithfully. But since neither these principles, nor an evaluation of the fund's performance or its financial reports have been published, Senegalese citizens can't be sure that FONSIS is really following these principles. Moreover, for those outside of the government who don't have access to said ethics codes, it's not clear what they cover – do they prevent conflicts of interest, excessive risk taking, or payment of excessive fees, for example?

Another area where FONSIS' governance likely needs to be strengthened is the fund's capacity to manage large-scale investments. In particular, FONSIS' size will likely increase significantly once the government begins to transfer a share of hydrocarbon revenues to the intergenerational fund, which could necessitate new approaches to management and oversight. Currently, FONSIS' capital represents around 0.02

^{126 &}quot;Sénégal," UNCDF, accessed 22 June 2021, www.uncdf.org/fr/senegal

^{127 &}quot;Two Scaling Solar Projects in Senegal Advance to Construction with IFC Financing Package," IFC, 18 July 2019, pressroom.ifc.org/all/pages/PressDetail.aspx?ID=16849

¹²⁸ David Manley and Rob Pitman, *Natural Resource Charter Benchmarking Framework*, (New York: Natural Resource Governance Institute, 2017), resourcegovernance.org/sites/default/files/documents/natural-resource-charter-benchmarking-framework-report-2017-web 0.pdf

¹²⁹ Bauer, "Six Reasons Why Sovereign Wealth Funds Should Not Invest or Spend at Home."

¹³⁰ Rafael Marques de Morais, "Stealing with Presidential Decrees," Maka Angola, 2017, www.makaangola. org/2017/03/stealing-with-presidential-decrees

¹³¹ Bauer, "Six Reasons Why Sovereign Wealth Funds Should Not Invest or Spend at Home."

¹³² Natural Resource Governance Institute and Columbia Center on Sustainable Investment, Natural Resource Fund Governance: The Essentials (New York: Natural Resource Governance Institute and Columbia Center on Sustainable Investment, August 2014), resourcegovernance.org/sites/default/files/ NRF Overview EN.pdf

¹³³ Davis and Mihalyi, Opportunities and Challenges.

percent of Senegal's GDP. ¹³⁴ Based on the government's estimate that oil and gas revenues would equal 0.3 percent of GDP in the first year of production, if 20 percent of this (i.e., 0.06 percent of GDP) is saved, this would amount to a threefold increase *in the fund's capital in the first two years of oil and gas revenues alone*. ¹³⁵ In the long term, the Senegalese authorities intend to transfer shareholdings worth over 100 times its current capital to FONSIS. ¹³⁶

As outlined above, FONSIS' investments are currently focused on developing the local private sector. ¹³⁷ Once it starts to receive oil and gas revenues, the fund will likely need to expand its objectives and investment mandate to include foreign assets. Investment in foreign money market instruments, fixed income and equities requires developing different skills from those currently available at the fund. It may also require a different, more cautious approach to investing, and enhanced controls to prevent corruption and/or political influence, given the larger share of national wealth that it will be managing. FONSIS would need to develop expertise in portfolio asset management and learn how to effectively supervise external asset managers. It may be advisable to create a clear separation between investments made by FONSIS for the purposes of local private sector development on the one hand, and investments for savings purposes on the other, as the two funding pools have different objectives and fund managers, and are governed by different rules.

In line with this, FONSIS has indicated that the government does plan to create two different funds within the organization – the intergenerational fund and a strategic investment fund (the latter will continue with FONSIS' current mandate of supporting local private sector development). ¹³⁸ Each of these vehicles will have its own investment strategy; the state (rather than FONSIS' board) will authorize the intergenerational fund's strategy. The stabilization fund will also have its own investment strategy. ¹³⁹

As FONSIS expands and takes on broader objectives than local private sector development, it may become necessary for the intergenerational fund to restrict investment in certain asset classes. Currently, the fund does not invest in certain assets on ethical grounds, but it has not excluded asset classes based on financial risk (in contrast to most other sovereign wealth funds). For example, derivatives investments can lead to financial losses that exceed the initial investment value, and are prohibited by many sovereign wealth funds, including in Chile, Ghana, Peru and Timor-Leste. The Senegalese authorities may wish to consider introducing such rules as part of their risk management framework or investment guidelines.

C. THE GOVERNMENT'S PROPOSALS FOR CHANGES TO FONSIS' GOVERNANCE

The government of Senegal is currently preparing a new governing law for FONSIS to strengthen its governance before larger-scale oil and gas revenues start to flow. At the same time, the draft law on the management of oil and gas revenues will

¹³⁴ Authors' calculations based on 2019 current-price GDP figure from Agence Nationale de Statistique et de la Démographie (ANSD), "Comptes Nationaux Provisoires de 2019 et Définitifs de 2018 (Base 2014)," 5.

¹³⁵ International Monetary Fund, IMF Country Report No. 19/28, 11.

¹³⁶ Papa Demba Diallo, "Le Mot Du Directeur Général," FONSIS Fonds Souverain d'Investissements Stratégiques, accessed 1 June 2021, www.fonsis.org/fr/qui-sommes-nous/le-mot-du-directeur-general

¹³⁷ FONSIS, "Rapport Annuel 2020."

¹³⁸ Tabara Sy, "Intervention by the representative of FONSIS" (Réunion technique multipartite sur la gestion des revenus pétroliers et gaziers pour le développement durable organized by Partnership for Action on Green Economy, Virtual, 30 September 2021).

¹³⁹ International Monetary Fund, IMF Country Report No. 21/127, 71.

also specify rules for the intergenerational and stabilization funds. ^{140, 141} While NRGI has not yet seen the content of the proposed law, a draft law on distribution of oil and gas revenues (dated 24 March 2020) does touch on the governance of the intergenerational and stabilization funds that will receive the oil and gas revenues to be saved. The provisions on these funds' governance contained in the draft law raise a concern. In particular, while we understand that the Senegalese authorities are planning to require annual audits of the relevant funds, the draft revenue distribution law seen by NRGI does not specify which body will carry out these audits; nor does it specify whether they will be published. ¹⁴² We urge the government of Senegal to ensure that qualified and impartial auditors carry out the audits, and that results are published, to prevent financial mismanagement in either one of the funds. According to FONSIS the government is planning to legally require FONSIS to share reports with the National Assembly; we do not know, however, what information these reports will include. The government has also stated that it plans to clarify the rules for the payment of dividends by FONSIS to the Senegalese state.

D. RECOMMENDATIONS

To prepare FONSIS (and the proposed stabilization fund) for their roles as natural resource funds, the Senegalese authorities should consider the following measures:

• Separate FONSIS' domestic investments from its management of resource revenues. As outlined above, FONSIS' management of Senegal's natural resource revenues will require different rules, skills and personnel to those involved in its current focus on local private sector development. We therefore recommend creating a clear separation between the two mandates along these lines. The government has indicated that it does plan to separate the intergenerational fund from FONSIS' investments aimed at supporting the local private sector (FONSIS' current mandate). But, as argued above, the intergenerational fund also needs to have personnel and rules fit for its mandate.

In addition, despite FONSIS' rules and internal checks (such as the required of approval by the board and technical and financial supervision by the authorities), it is preferable for domestically invested resource revenues to pass through the budget, rather than FONSIS deciding which investments to undertake.

- Ensure that FONSIS has the capacity to manage the intergenerational fund. Investing Senegal's resource revenues will require several new skills from FONSIS' investment managers; moreover, the fund's portfolio is likely to substantially increase in size. FONSIS needs to ensure it has adequate capacities to handle this, and will likely need to recruit new personnel. It has indicated that it is preparing for this new role, and has mentioned that technical assistance in this regard could be helpful. Similar (though not identical) skills and personnel will be needed for the stabilization fund (which will not be managed by FONSIS).
- Prohibit certain risky investments. Senegalese authorities should consider introducing rules excluding certain risky asset classes in their risk management framework or investment guidelines. For example, purchasing derivatives could

¹⁴⁰ International Monetary Fund, IMF Country Report No. 20/225, 18.

¹⁴¹ We see no problem per se with Senegal having multiple funds with different objectives. What is important is for the objectives to be clear, and for each fund's operational rules to be appropriate to achieving them. Bauer, Rietveld, and Toledano, *Managing the Public Trust*, 20.

¹⁴² The draft law states that the stabilization and intergenerational funds can be audited, but not that they must be. Nonetheless, NRGI understands that the Senegalese authorities plan to audit the funds. Ministère des Finances et du Budget, République du Sénégal, "Projet de loi partage des revenus secteur pétrolier."

be prohibited since they can result in financial losses greater than the value of the initial investment.

• Ensure transparency and accountability. The authorities could require through legislation that a) FONSIS publishes its financial reports and related audits (and any separate reports/audits for the intergenerational fund); and b) such audits are carried out independently of government and on an annual basis. FONSIS could also benefit from publishing a comprehensive code of conduct for its personnel.

All of these principles should also apply to the stabilization fund. We further encourage the government to publish the investment strategies for the intergenerational and stabilization funds, once these have been decided. Finally, we recommend that FONSIS publish the names and profiles of its board members in an easily accessible manner.

6. PETROSEN's role in managing Senegal's oil and gas revenues

A. ASSESSING PETROSEN'S GOVERNANCE: CURRENT STATUS

PETROSEN, Senegal's national oil company, holds a 10 percent stake in GTA and an 18 percent stake in Sangomar. The company can therefore expect to collect revenues from its share in the two projects' production once GTA and Sangomar have recovered their costs (and presumably once PETROSEN has repaid to the private companies the cost of its "carried interest" 143 in the project). PETROSEN also collects various other revenues from the oil and gas sector (it can do so under the terms of Senegal's research and production sharing agreements with oil and gas companies). 144 The Senegalese state, as PETROSEN's main shareholder, can in turn expect dividends from the company. 145 However, it remains unclear how much of these collected revenues PETROSEN will be able to retain (to invest in other projects), and how much it will transfer to its shareholders. The draft revenue distribution bill seen by NRGI does not clarify how PETROSEN is to use the revenues it receives. 146 Based on the latest data from Senegal's EITI report, PETROSEN retained 74 percent of the oil and gas revenues that it collected in 2019 (the most recent year for which data was available), totaling around XOF 2 billion (which equated to around USD 3 million at that point); however, it appears that it did not pay a dividend in 2019 since it made a financial loss that year. 147 PETROSEN might have retained such a high share of the revenues it received because overall they were modest in size, and it needs them to cover its running costs.

It is unclear what share PETROSEN will retain of its (likely more significant) revenues from GTA and Sangomar – but this is a fundamental issue for two main reasons, as discussed below: a) the company's size and its broad mandate, and b) the context of a global transition to renewables.

Regarding the company's size and mandate, PETROSEN will be a significant fiscal actor in Senegal through managing its stake in the country's oil and gas projects. It might also use its revenue to pursue its own agenda, outside of the one determined by

^{143 &}quot;Natural Resource Governance Glossary," Natural Resource Governance Institute, 8 February 2017, resourcegovernance.org/analysis-tools/tools/natural-resource-governance-glossary

¹⁴⁴ Comité National ITIE Sénégal, Rapport ITIE 2019, 13.

¹⁴⁵ The Senegalese state holds a 99 percent stake in PETROSEN, with 1 percent held by the Société Nationale de Recouvrement, which is a state-owned company.

¹⁴⁶ Neither PETROSEN's statutes, nor the 2019 petroleum code or the 2020 gas code indicate how this is to be done. Though the 1990 law on state-owned enterprises does govern PETROSEN's profits, it does not specify how much the company can retain. Société des Pétroles du Sénégal, "Statuts Mis A Jour", Société des Pétroles du Sénégal, 9 December 2010, itie.sn/?offshore_dl=2704;

Républiqe du Sénégal, "Loi N°90-07 Du 26 Juin 1990 Relative à l'organisation et Au Contrôle Des Entreprises Du Secteur Parapublic et Au Contrôle Des Personnes Morales de Droit Privé Bénéficiant Du Concours Financier de La Puissance Publique," Pub. L. No. 90–07 (1990), www.courdescomptes.sn/loi-n90-07-du-26-juin-1990-relative-a-lorganisation-et-au-controle-des-entreprises-du-secteur-parapublic-et-au-controle-des-personnes-morales-de-droit-prive-beneficiant-du-concours-financier-d;

o Républiqe du Sénégal, "Loi N°2019-03 Du 1er Février 2019 Portant Code Pétrolier," Pub. L. No. 2019–03, 2019–03 (2019), www.petrosen.sn/wp-content/uploads/2020/07/Senegal-Code-2019-petrolier.pdf. And République du Sénégal, Loi n°2020-06 du 7 février 2020 portant Code gazier, Pub. L. No. 2020–06 (2020), www.petrosen.sn/wp-content/uploads/2020/07/Loi-n°2020-06-du-07-février-2020-portant-Code-gazier-1.pdf

¹⁴⁷ Authors' calculations based on Comité National ITIE Sénégal, Rapport ITIE 2019, 12-13; "Entreprises d'Etat," Initiative pour la Transparence dans les Industries Extractives du Sénégal, accessed 18 August 2021, itie.sn/entreprises-detat

the state, as has been the case with some other countries' national oil companies .¹⁴⁸ PETROSEN's mandate is quite broad, which, in theory, would give it some latitude to interpret and use funds from its holdings in GTA and Sangomar to fulfil its mandate in way that it sees fit. In particular, under the 2019 petroleum code, it is charged with promoting the Senegalese sedimentary basin and undertaking prospecting, research, exploitation, transport and trading of hydrocarbons at the request, and on behalf, of the state (in addition to representing the state's interests in petroleum contracts with companies).¹⁴⁹

Lack of clarity on what share of revenues national oil companies retain (and how they may be spent/invested) is particularly risky given the ongoing transition to renewable energy; national oil companies may be prone to invest in projects that are at high risk of not being commercially viable as the world moves away from fossil fuels. ¹⁵⁰ Senegal's proposed future oil projects (e.g., future phases of Sangomar and others in the Rufisque, Sangomar and Sangomar Deep area that have not yet secured a final investment decision) are relatively high-cost; this puts them at increased risk of becoming non-viable if the oil price falls to a level consistent with the Paris Agreement on climate change (estimated to be around USD 50 per barrel). ¹⁵¹

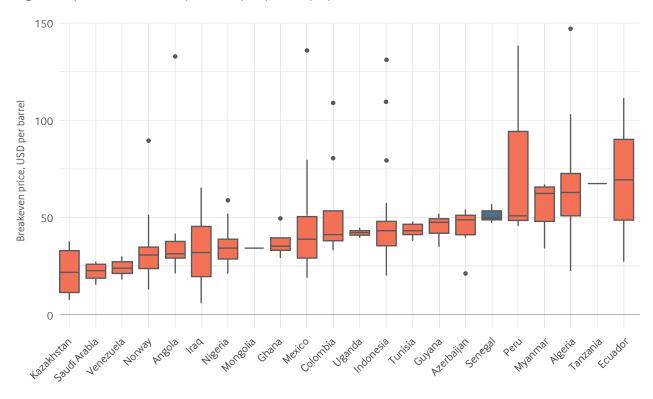


Figure 3. Spread of breakeven prices for prospective projects in selected countries¹⁵²

¹⁴⁸ Patrick R. P. Heller, Paasha Mahdavi, and Johannes Schreuder. *Reforming National Oil Companies: Nine Recommendations* (Natural Resource Governance Institute, July 2014), resourcegovernance.org/sites/default/files/documents/nrgi 9recs eng v3.pdf

¹⁴⁹ Républiqe du Sénégal, "Loi N°2019-03 Du 1er Février 2019 Portant Code Pétrolier," Pub. L. No. 2019– 03, 2019–03 (2019), 7, www.petrosen.sn/wp-content/uploads/2020/07/Senegal-Code-2019-petrolier.pdf

¹⁵⁰ David Manley and Patrick R. P. Heller. *Risky Bet: National Oil Companies in the Energy Transition* (Natural Resource Governance Institute, February 2021), resourcegovernance.org/sites/default/files/documents/risky-bet-national-oil-companies-in-the-energy-transition.pdf

¹⁵¹ Davis and Mihalyi, Opportunities and Challenges, 15.

¹⁵² David Manley, David Mihalyi and Anna Fleming. A Race to the Bottom and Back to the Top: Taxing Oil and Gas During and After the Pandemic (Natural Resource Governance Institute, 22 October 2020), resourcegovernance.org/analysis-tools/publications/race-bottom-taxing-oil-gas-coronaviruspandemic

Some national oil companies can serve as models of good practice in this area. Among smaller national oil companies (which may be the most relevant peer group for PETROSEN), Suriname's Staatsolie is a strong example for a narrow and clearly defined mandate – the company has consistently focused on facilitating efficient management by operating partners and maximizing the return to the state, rather than trying to develop massive commercial/operational capabilities. Colombia's Ecopetrol also has a well-defined and strategic mandate. Regarding rules on revenue retention, Ghana has set strong, transparent rules on what revenues the national oil company may use, founded in the Petroleum Revenue Management Act. The Act specifies the maximum share of petroleum gross revenues that the national oil company can accrue from its carried and participating interests, and establishes a robust, transparent system for reporting on revenue flows.

PETROSEN's strategic positioning in Senegal's oil and gas development framework has naturally impacted its financial governance. To date, PETROSEN has been heavily dependent on operating subsidies received from the state. The company ran deficits in 2018 and 2019, while its return on equity (ROE) fell from 2 percent to -19 percent between 2015 and 2019. A low return on equity is reasonable given that PETROSEN's revenues from current production are small relative to the investments it is making in new projects. But these levels are extremely low even when compared to the experiences of other national oil companies that are also in pre-production phase. 153 The fact that PETROSEN is out of step with its pre-production peers in this way may, in fact, be a good sign – it seems to indicate that PETROSEN is not engaging in the kinds of non-core activities that other national oil companies can become involved with, which spending can lead to the development of a "parallel state", where the company pursues spending that should be put through the budget, leading to a reduction in accountability. We welcome the fact that, based on 2019 data (the most recent available to the authors of this report), PETROSEN did not make any such "quasi-fiscal expenditures". 154

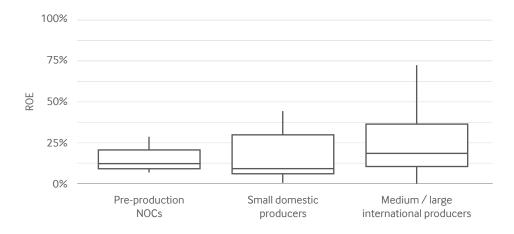


Figure 4. Return on equity (ROE) by production level and by region, 2015-19155

¹⁵³ Authors' analysis of Natural Resource Governance Institute, "National Oil Company Database," National Oil Company Database, May 2021, www.nationaloilcompanydata.org

^{154 &}quot;Entreprises d'Etat."

¹⁵⁵ Authors' analysis of Natural Resource Governance Institute, "National Oil Company Database,".

National oil companies are effective vehicles for mobilizing debt finance and typically carry a significant portion of public debt; in some cases, this can lead to large and costly bailouts from the public purse. PETROSEN has taken on loans from BP and Kosmos to finance its participation in GTA, and from Woodside to finance its participation in Sangomar, totaling \$885 million. The loans are USD-denominated, with an interest rate of 6.5 percent per year, which seems reasonable given that the interest on Senegal's sovereign debt is around 6 percent. Based on the estimated costs of the projects, PETROSEN may need to raise around a further USD 890 million to finance its full participation. In fact, the government raised a XOF 508 billion Eurobond (around \$933 million) in June 2021, part of which will be used to finance Senegal's participation in oil and gas projects.

Sub-Saharan African national oil companies in the pre-production phase generally borrow less than those in other parts of the world. PETROSEN's debt level has been rising quickly, reaching a 52 percent debt-to-asset ratio in 2019. 161

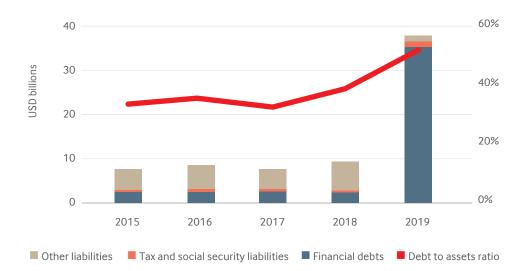


Figure 5. Evolution of PETROSEN's debt, 2015-2019¹⁶²

¹⁵⁶ Patrick R. P. Heller and David Mihalyi. Massive and Misunderstood: Data-Driven Insights into National Oil Companies (New York: Natural Resource Governance Institute, April 2019), resourcegovernance. org/sites/default/files/documents/massive_and_misunderstood_data_driven_insights_into_national_oil_ companies.pdf

^{157 &}quot;Entreprises d'Etat."

¹⁵⁸ These loans are technically unsecured. However the companies will be repaid out of profit from oil/gas from the GTA and Sangomar projects, which potentially offers a higher degree of security for repayment than for other unsecured loans. Equally, if profits are insufficient to cover the loan, it is unclear to the authors of this report how this will affect repayment obligations.

¹⁵⁹ The development costs for the two projects have been estimated at USD 10 billion (a separate estimate for Sangomar indicates development costs of around USD 4.2 billion, which would imply that the cost of GTA was around USD 5.8 billion). This would suggest a PETROSEN cost share of around USD 1.3 billion, or around 5 percent of the country's 2020 GDP. Sources: Davis and Mihalyi, *Opportunities and Challenges*, 11, 19; "GDP (Current US\$) - Senegal," The World Bank | Data, accessed 18 August 2021, data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=SN; "Entreprises d'Etat."

¹⁶⁰ Le Ministère des Finances et du Budget, "Le Sénégal lève avec succès 508 milliards de FCFA d'eurobonds," Ministère des Finances et du Budget, 2 June 2021, www.finances.gouv.sn/le-senegal-leve-avec-succes-508-milliards-de-fcfa-deurobonds. The conversion to US dollars is based on Board of Governors of the Federal Reserve System (US), "U.S. Dollars to Euro Spot Exchange Rate," FRED, Federal Reserve Bank of St. Louis (FRED, Federal Reserve Bank of St. Louis), accessed 25 November, 2021, fred.stlouisfed.org/series/EXUSEU

¹⁶¹ Authors' analysis of "Etats Financiers," PETROSEN, accessed July 2021, www.petrosen.sn/index.php/publications/etats-financiers-petrosen-2015-2019.

¹⁶² Authors' analysis of "Etats Financiers."

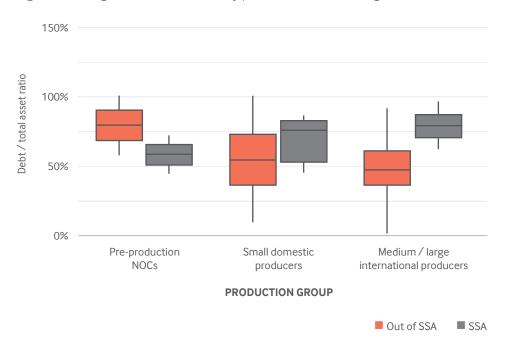


Figure 6. Average debt-to-asset ratio by production level and region, 2015-2019

In addition to its heavy dependence on the state budget and the high risk of debt-related fiscal burden, PETROSEN has experienced episodes of illiquidity, similar to some other national oil companies in the pre-production phase. This situation is expected to be transitory and to improve during the production phases, based on the experience from other national oil companies. 163

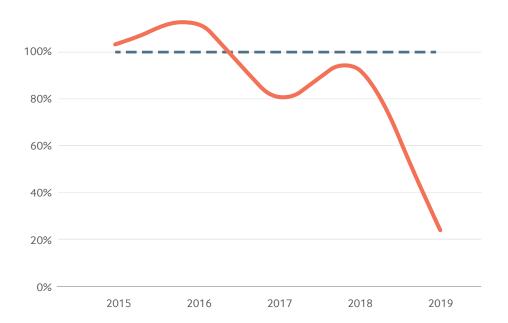


Figure 7. Liquidity ratio of PETROSEN¹⁶⁴

¹⁶³ Authors' analysis of Natural Resource Governance Institute, "National Oil Company Database." 164 Authors' analysis of "Etats Financiers".

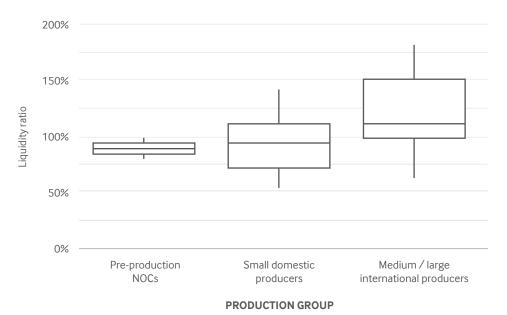


Figure 8. Average liquidity ratio by production level and region, 2015-2019¹⁶⁵

In 2019, PETROSEN's risk mapping revealed liquidity, solvency, profitability, performance, and debt risks. ¹⁶⁶ In addition, a recent OpenOil study highlights the sensitivity of both the Sangomar and the GTA project's economics to any disruption that could cause operational delays. ¹⁶⁷ These findings demonstrate the sensitivity of the decisions that will be made and the importance of optimal management of the organization to take full advantage of oil and gas development.

To achieve this, it will be important for PETROSEN to be more transparent and accountable, beyond the progress the company has made in the publication of financial statements. Because national oil companies tend to be so large, shortcomings in their reporting pose several economic risks such as over-indebtedness and dependence, among others. ¹⁶⁸ In Senegal, there is no current legislation or regulation requiring publication of annual reports by PETROSEN (though the company is obliged to prepare financial reports and have them audited, including by an accounting commissioner, a *commissaire aux comptes*) nor is there a requirement to submit them to the legislature.

However, according to the government, PETROSEN plans to introduce a code of conduct for its personnel and other measures to improve its governance. We would encourage PETROSEN to publish this code of conduct and submit it for approval to the National Assembly.

The composition of the board of directors is also critical to the governance of a national oil company. Board members must be politically autonomous and appointed through an open and competitive process based on technical competence – independent or independently appointed board members can significantly improve decision-making at the company. It is also important that the members have the time

¹⁶⁵ Authors' analysis of Natural Resource Governance Institute, "National Oil Company Database."

¹⁶⁶ Ministère des Finances et du Budget, République du Sénégal, "Document de Programmation Budgétaire et Économique Pluriannuelle (DPBEP) 2022-2024."

¹⁶⁷ West, "Les Actifs Échoués Du Sénégal."

¹⁶⁸ David Manley, David Mihalyi, and Patrick R P Heller, "Hidden Giants: It's Time for More Transparency in the Management and Governance of National Oil Companies," Finance & Development, December 2019, www.imf.org/external/pubs/ft/fandd/2019/12/pdf/national-oil-companies-need-more-transparencymanley.pdf

and technical expertise to provide rigorous oversight, to reduce the risk of delaying the decision-making process. The board of directors of PETROSEN is composed of government officials. ¹⁶⁹ We recommend appointing independent board members to limit political interference in technical decisions and changing PETROSEN's governing statute to require independent board members on an ongoing basis; ideally, most of the board members should be politically autonomous. ¹⁷⁰

The company recently published its financial statements for 2015-2019, as well as the certification following an audit of the 2019 financial statement. PETROSEN should continue with this good practice; the government should consider introducing legislation requiring the company to publish financial reports and the results of independent audits of them on an annual basis.

B. RECOMMENDATIONS

- The government should make PETROSEN more transparent. The government of Senegal should consider requiring PETROSEN to publish its annual reports, including information on how much the company is transferring to and receiving from the government. More broadly, the authorities may wish to consider publishing production plans and results of its planned oil trading or any quasi-fiscal activities (though there currently are none of these). They might further consider changing PETROSEN's statutes to require publication of these documents as well as the company's financial reports and results of independent audits (the latter are already published, but this is apparently at the company's discretion). 171,172 PETROSEN should make quantitative data in the reports available in a machine-readable format to facilitate independent analysis, and consider publishing more governance-related information beyond its financials (e.g., , the company's organigramme, its corporate charter, long-term commercial strategy and progress against objective benchmarks). 173
- The Senegalese authorities should consider naming independent board members for PETROSEN, or allowing non-executive entities (e.g., legislature; professional associations; NGOs) to nominate members to reduce the risk of political interference and improve decision-making.
- The authorities should define PETROSEN's mandate more clearly and put in place more specific rules on the amount of revenues it is able to retain. Regarding the legislation organizing PETROSEN's activities, the Senegalese authorities would benefit from clarifying PETROSEN's mandate by focusing it on its core competencies. A clear mandate can help ensure that the company does not become a state within a state through significant (and opaque) retention of hydrocarbon revenues.

^{169 &}quot;Etats financiers."

¹⁷⁰ Société des Pétroles du Sénégal, 'Statuts Mis a Jour' (Société des Pétroles du Sénégal, 9 December 2010), itie.sn/?offshore_dl=2704. Natural Resource Governance Institute, "Natural Resource Charter", 23

^{171 &}quot;Reforming National Oil Companies: Nine Recommendations," Natural Resource Governance Institute, 10 July 2014, resourcegovernance.org/analysis-tools/publications/reforming-national-oil-companies-nine-recommendations

¹⁷² Natural Resource Governance Institute, "State Participation in Oil, Gas and Mining," (New York: Natural Resource Governance Institute, January 2015), 3, resourcegovernance.org/sites/default/files/documents/nrgi_stateparticipation_20150311.pdf

¹⁷³ Ibid.,

7. Sharing oil and gas revenues with sub-national governments

A. CURRENT STATUS

In many resource-rich countries, special budgetary rules earmark a fixed portion of resource revenues to go to the country's sub-national governments. This might happen for different reasons, several of which might apply at the same time. Allocating resource revenues like this might be: a) a response to local communities' demands for ownership over natural resources in their area, or for a greater share of the benefits, b) a form of compensation for negative impacts of resource extraction on the local environment, c) substitution for lack of other types of local benefits (e.g., jobs, local content); and/or d) a way to defuse (or forestall) conflict over resources. ¹⁷⁴

It is unusual for countries to distribute revenues from *offshore* oil and gas to local areas in this way. Offshore extraction is less impactful on local populations than onshore activities, and communities rarely feel a sense of ownership over marine territory. Only six countries—Brazil, Canada, Italy, Malaysia, Nigeria and the U.S.—currently share offshore oil/gas revenues with the nearest sub-national jurisdiction and all but one (Italy) are highly decentralized or federal states, unlike Senegal. The Senegalese government does not have plans to establish a sub-national resource revenue sharing system for offshore oil and gas, nor are there provisions for such a system in the 1998 Petroleum Code or other laws or contracts. ¹⁷⁵

However, some fishing communities, for example in the Senegalese region of St. Louis, have argued that offshore extraction *will* negatively affect them, and according to some commentators, it is doing so already. In particular, they are concerned that the oil and gas projects will reduce fish stocks and fishing opportunities in the surrounding areas.

In light of such cases, the Senegalese government may ask itself whether resource revenue sharing would be appropriate for offshore hydrocarbon revenues. Currently, aside from these fishing communities, there are few demands for such a system and it is unclear which problems it would solve, and how. Oil and gas revenue sharing could also create additional challenges – not only for public financial management, but also for peace and security. First, local governments may not have the capacity to manage volatile oil revenues; resource revenue sharing has been known to cause local boombust cycles and even local Dutch disease. ¹⁷⁶ Second, resource revenue sharing can

¹⁷⁴ Andrew Bauer et al. *Natural Resource Revenue Sharing* (Natural Resource Governance Institute and United Nations Development Programme, September 2016), 5, 8, resourcegovernance.org/sites/default/files/documents/nrgi_undp_resource-sharing_web_0.pdf

¹⁷⁵ Senegal already has a resource revenue sharing system in the mining sector. As of October 2020, 20 percent of royalties, duties and surface fees are distributed directly to sub-national jurisdictions. 60 percent of this amount is distributed as follows: 25 percent to the regions where the mines are located and 75 percent to the departments and communes by a formula (85 percent to communes by population; 15 percent to departments collectivités territoriales). The remaining 40 percent of the sub-national share is allocated to the "Fonds d'equipement des collectivites territoriales", which makes allocations to sub-national jurisdictions based on a complex formula where mining revenues are treated identically to non-mining revenues. The collectivités also collect some small local taxes directly from mining companies, such as property taxes, and receive some social payments. See Comité National ITIE Sénégal, Rapport ITIE 2019, Section 4.4.8.

¹⁷⁶ For an explanation of Dutch disease, see Natural Resource Governance Institute, "NRGI Reader: The Resource Curse - The Political and Economic Challenges of Natural Resource Wealth" (Natural Resource Governance Institute, March 2015), 3, resourcegovernance.org/sites/default/files/documents/nrgi_primer_resource-curse.pdf

cause conflict between those jurisdictions that receive significant transfers and those that do not. On some measures, St. Louis is already one of the better-off provinces in Senegal, with the fourth-lowest poverty rate (40 percent) among 14 provinces; most others have poverty rates of over 60 percent. ¹⁷⁷ Resource revenue sharing in this context may not just increase regional inequalities but also lead to protests by neighboring jurisdictions. ¹⁷⁸

It is standard for extractive-sector companies to provide compensation for negative impacts on local communities; this is an alternative to using revenue sharing to address negative local impacts. These are usually addressed through the project's Environmental and Social Management Plan, which foresees an annual budget for compensation of affected communities. Such plans can provide sufficient compensation for negative impacts on local communities, when well-designed. GTA and Sangomar are not explicitly planning compensation for fishing communities; but both projects provide for mechanisms to address grievances raised by either industrial fisheries or artisanal fisherfolk. ¹⁷⁹ BP and Woodside, the operators, have indicated that they do not expect major disruptions to fishing opportunities. ¹⁸⁰ BP has also said that GTA has a social investment program to benefit local communities around the project.

B. NRGI RECOMMENDATIONS

If Senegal's oil and gas projects will indeed negatively impact local communities (despite the conclusion of the environmental and social impact assessments that they will not), it would be important to assess the degree of the impact and provide adequate compensation. For Sangomar, this would mean introducing compensatory measures, while for GTA there would need to be an assessment of whether the project's current community support program is adequate – if not, additional support would need to be provided.

Other countries have introduced alternative policies to address the negative impacts of extraction on the fishing industry. These include direct compensation from companies for loss of livelihoods, as well as consultations between field operators and local populations to determine how best to mitigate negative impacts. ¹⁸¹

We recommend that the Senegalese authorities consider these as an alternative to distributing a certain share of resource revenues to sub-national governments.

- 177 Authors' analysis of "ANSD Agence Nationale de Statistique et de La Démographie," ANSD Agence Nationale de Statistique et de la Démographie, accessed 9 June 2021, satisfaction.ansd.sn. Data relates to 2011.
- 178 Bauer et al., Natural Resource Revenue Sharing, 9.
- 179 GOLDER et al., Greater Tortue / Ahmeyim Phase 1 Gas Production Project Environmental and Social Impact Assessment: Consolidated Final Report Including Regulatory Reviews from Mauritania and Senegal, Volume 3 of 7 (bp, Kosmos Energy, PETROSEN, SMHPM, République Islamique de Mauritanie and République du Sénégal, June 2019), www.bp.com/content/dam/bp/country-sites/en_sn/senegal/home/pdf/esia-eports-/esia_gta1_c_en_1906_vol3.pdf Woodside, Earth Systems, and Xodus Group, SNE Field Development Phase 1 Environmental and Social Impact Assessment: Final Report (Woodside, Earth Systems and Xodus Group), accessed 16 August 2021, 486-492, files.woodside/docs/default-source/current-consultation-activities/senegal-activities/draft-sne-development-phase-1-environmental-and-social-impact-assessment-(english).pdf?sfvrsn=6acc7c9a 12
- 180 Woodside, "Sangomar Field Development Phase 1 Protecting the Marine Environment," May 2021, 6, files.woodside/docs/default-source/current-consultation-activities/senegal-activities/sne-field-development-phase-1-protecting-the-marine-environment.pdf?sfvrsn=c2d81efb 12
- 181 For case studies of examples of countries/regions using direct compensation, please see Lena Guesnet et al. Compensation Matters: Securing Community Interests in Large-Scale Investments (Berlin: Bonn International Center for Conversion (BICC), Arbeitsgruppe Tschad/Groupe Tchad and Brot für die Welt, March 2014), 27-33, www.bicc.de/uploads/tx_bicctools/Compensation_Matters_e.pdf on Chad's oil and gas sector and Bauer et al., Natural Resource Revenue Sharing, 88, on Kyrgyzstan.

Conclusion

Senegal can expect modest oil and gas revenues to start to enter the government budget from 2023 onwards. As outlined in this report, these are unlikely to cause wide macroeconomic swings or Dutch disease, due to their relatively small size. 182 Yet there are a number of challenges for the government if it aims to manage these revenues well. Chief among them is to avoid over-spending or overly ambitious investments in response to these revenues, which might leave Senegal with unsustainable debt, or poorly designed, overpriced infrastructure projects.

The government should also avoid enacting complex petroleum savings rules and arrangements – these may not be justified by the scale of revenues that the country will receive. The adoption of simpler numerical fiscal rules that constrain overall public spending, on the other hand (such as an expenditure rule) can help the government steer clear of over-spending driven by elevated expectations of oil revenues.

Another key challenge for Senegal is to improve the transparency and accountability of its revenue management institutions, particularly FONSIS and PETROSEN. The country's overall fiscal policy is relatively transparent and the government's plans to improve reporting on natural resource revenues (and how they are spent) are commendable. However, the authorities may wish to ensure that the planned new law on FONSIS's governance makes the institution more transparent before it starts managing oil and gas revenues. For instance, full financial reports, including lists of assets and returns by asset class, should be made public along with independent external audits. Similarly, PETROSEN could be more transparent, particularly by publishing annual reports and results of regular audits, and by committing to a continued publication of financial reports on an annual basis. The media and civil society play an important role in holding extractives management to account, too – the state must ensure an environment for them to do so freely and without fear of repercussions.

The rules governing PETROSEN's activities and finances may also need to be strengthened before large-scale production begins. Specifically, the government may wish to circumscribe PETROSEN's mandate and control revenue retention more tightly. Thus, it would encourage the company to focus on its core competencies, prevent it from becoming a "state within a state" and ensure that the revenues from the oil and gas sector are indeed used to pay for healthcare, education, infrastructure and other items that will improve the lives of Senegal's citizens.

Finally, FONSIS needs to develop expertise and a governance framework to become a portfolio asset manager. The fund is set to play a key role in managing the country's oil and gas resources but is currently a small-scale strategic investment fund targeted at growing local businesses. It will need to make structural changes to be fit to deal with its future tasks. In particular, we recommend that the Senegalese authorities follow through on their apparent plans to create firewalls between FONSIS' two mandates (strategic domestic investment and risk-adjusted foreign investment), and also publish clear investment guidelines for each mandate. It will also be equally important for FONSIS to hire and train staff with the necessary qualifications and experience to manage portfolio investments.

¹⁸² At least, this is the case for the country's oil and gas sector. Senegal's gold sector — which accounts for 11 percent of the country's exports — may pose a greater risk of macroeconomic fluctuations. Authors' calculations based on Comité National ITIE Sénégal, Rapport ITIE 2019 and "Exports of Goods and Services (Current LCU) — Senegal."

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