

Setting Up Uganda's National Mining Company to Boost Sustainable Development

ANDREW BAUER, PAUL BAGABO AND THOMAS SCURFIELD

MARCH 2025

Natural Resource Governance Institute

Contents

Key messages 3

Summary 4

Introduction 6

The legal framework for the Uganda National Mining Company 8

The global experience with national mining companies 9

Recommendations for the Uganda National Mining Company 20

Conclusion 27

Appendix 28

Endnotes 30

Cover image: SeventyFour for iStock

Key messages

- A Natural Resource Governance Institute survey of national mining companies (NMCs) provides useful lessons for the newly established Uganda National Mining Company (UNMC), as the Ugandan government and UNMC Board of Directors work to operationalize the company.
- With a limited commercial mandate, UNMC could play a valuable role in unlocking Uganda's mineral potential by investing in geological surveys and co-financing exploration to derisk projects for experienced exploration companies.
- A cautious approach would be beneficial, given the considerable opportunity cost of using public funds and the risky nature of exploration, especially in the early years as the company builds experience.
- UNMC could learn from other NMCs that have struggled to benefit from minority state equity and reconsider these plans. If it continues to seek minority equity, its strategy for negotiating shareholder agreements and dividend rights will be critical and could involve guaranteed dividends or preferred shares.
- Regardless of UNMC's mandate, a clear funding model, along with strong management, oversight and transparency, is essential for the company to successfully contribute to Uganda's sustainable development.

Summary

The Government of Uganda recently established the Uganda National Mining Company (UNMC) as part of its effort to increase the nascent mineral sector's contribution to sustainable development. While the government is yet to release a detailed mandate for the company, the law states that UNMC will manage the state's commercial interests in the mineral sector, including undertaking exploration and mining operations where private entities are unwilling to do so. In November 2024, the Ministry of Energy and Mineral Development named the Board of Directors to begin operationalizing the company.

To support this process, we have compiled the global experiences of national mining companies (NMCs). Most of the more than 62 other NMCs around the world have a commercial mandate to manage the state's majority or minority equity participation in mines. Operational mandates are less common, primarily because most NMCs do not have the technical or financial capacity to efficiently operate mines. Where NMCs are operational entities, they generally have either taken over assets from private mining companies; are legacies of central planning; or were forced into becoming operators when the private sector was unwilling to invest due to weak profitability or high country risk. While some governments have allocated NMCs with regulatory and commercial mandates simultaneously, most have split regulatory and commercial roles to avoid conflicts of interest and reduce the risk of corruption.

NMCs can help the government exercise greater control over the sector; speed up technological and human-capacity development; address market failures; generate additional revenue; and ensure responsible mining. Some NMCs have successfully achieved their objectives as well as long-term profitability. However, many have considerable weaknesses or struggle to fulfill their mandates.

NMCs that have a controlling interest in or operate mines often suffer from high costs and weak revenue generation. NMCs with minority or non-controlling equity in mines have also generally suffered financial disappointments. Unless a government makes dividend payments mandatory, majority shareholders of mines can retain earnings, reinvest profits or shift profits to offshore subsidiaries or other related parties to lower dividends on state equity. In response, some countries have introduced guaranteed advance payments, priority shares or preferred dividends that function as an additional royalty or profit tax. Other countries have converted their right to dividends into royalties directly.

NMCs can also play a role in production-sharing arrangements if a government opts to receive its production share in kind, taking physical delivery of the minerals. Production sharing has been rare in the mining sector, partly due to the limited uniformity of production and the varying size and liquidity of markets across minerals. However, it is increasingly being considered, including by Uganda. While production sharing can help mitigate some transfer pricing risks, for some countries, it has generated new challenges associated with transportation, warehousing and negotiating sales contracts.

A few NMCs invest further along the value chain in smelting, refining and other downstream activities. However, many of their projects have been unprofitable and failed to stimulate the establishment or expansion of other sectors. While each case is distinct, NMC involvement generally has not changed the reality that access and proximity to mineral deposits plays only a small role in determining the feasibility of moving along the value chain.

The challenges faced by several NMCs have been compounded by investment in non-core activities without the requisite expertise, and by suboptimal funding models. NMCs can often retain an excessive proportion of revenues and fail to distribute dividends to the government. Many NMCs are also overindebted or borrow on unfavorable terms, adding to state liabilities.

The global experiences of NMCs hold useful lessons for UNMC on how to ensure it contributes to growing the minerals sector and the sustainable development of the country. Based on these experiences, we provide ten recommendations for the Ugandan government and UNMC's Board of Directors as they operationalize the company.

1. Set a clear, limited mandate focused on addressing market failures to unlock Uganda's mineral potential.
2. Reconsider paying for non-controlling equity in a mine's development and operational phases.
3. Carefully consider production sharing, including UNMC's capacity to do so.
4. Invest in value-addition activities only where they align with a clear, evidence-based strategy.
5. Limit non-commercial and non-core roles.
6. Allocate start-up capital based on a realistic plan, budget and assessment of opportunity costs.
7. Allow only the retention of revenue from own investments and set a high payout ratio to government.
8. Engage experienced consultants to support setting up UNMC to align with its mandate.
9. Ensure parliament reviews operations and finances and approves large investments, and that external auditors conduct annual audits.
10. Require the highest standards of transparency.



Photo by Matyas Rehak for Shutterstock

Introduction

Amid growing global demand for minerals, the Ugandan government increasingly views the minerals sector as being central to the country's sustainable development. Uganda's recent tenfold-growth strategy has mineral-based industrialization as one of four key drivers. Similarly, Uganda's Vision 2040 and National Development Plan for 2025/26–2029/30 identify the sector as a driver of industrialization, jobs, government revenue and foreign exchange.[1] The government is aiming for the sector to contribute at least 7 percent of the economy's gross domestic product (GDP) by 2040, up from 2.2 percent in 2022/23 and only 0.3 percent in 2009/10.[2]

This focus comes after decades of only artisanal and small-scale mining (ASM). After significant activity in the 1950s and 1960s, Uganda's mining sector went into decline. ASM has generated jobs but little government revenue and limited benefit for the country. Weak regulation resulted in unlicensed activities, tax evasion, suspected smuggling, and negative environmental and social impact.[3]

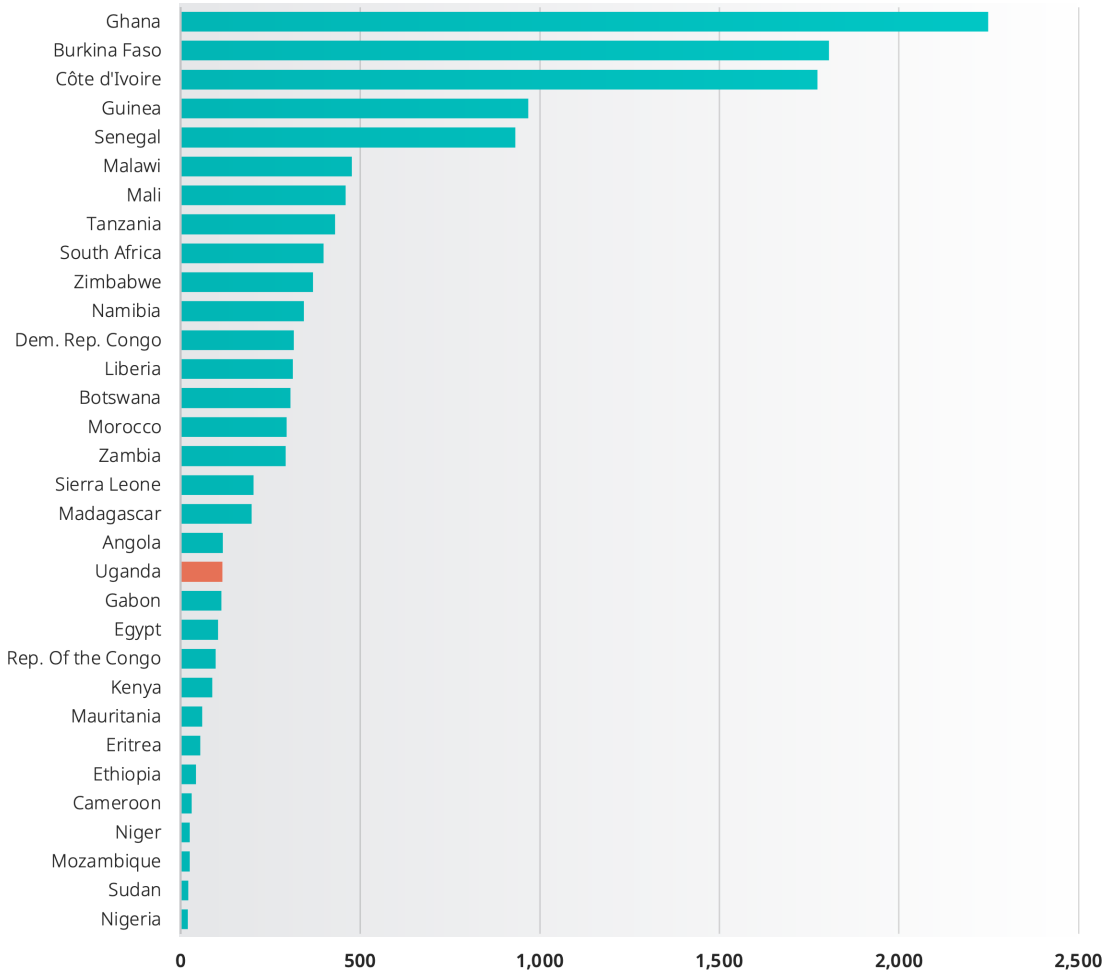
Recent geological surveys commissioned by the Ugandan government have demonstrated the country's minerals potential, with mineral-rich belts in the bordering Democratic Republic of Congo (DRC) and Tanzania appearing to extend into the country.[4] Uganda hosts a wide range of deposits, including copper, cobalt, graphite, gold, iron ore, phosphates, rare earths, tin and development minerals (such as marble, silica sand, aggregate and limestone). Companies are at various stages of planning and developing large-scale operations. The country's first large-scale mine for several decades—the Makuutu rare earths project—is currently expected to start production in 2026.[5]

However, Uganda needs significantly more investment to realize its potential. Although it is increasing, exploration spend in the country over the past five years was in the lowest quartile globally (even after accounting for the country's relatively small size). As Figure 1 (on the next page) shows, exploration spend has also remained significantly lower in Uganda than most of Africa's established mining countries.[6]



Photo by Matyas Rehak for Shutterstock

Figure 1: Exploration spend per square kilometer in African countries in 2019–2023[7]



To increase mineral activity and ensure that people in Uganda benefit from it, the government passed the Mining and Minerals Act, 2022 (MMA).[8] This act made several key changes to governance of the sector, including establishing a new licensing regime to be administered by a mining cadastre department; establishing the Uganda National Mining Company (UNMC); providing for production-sharing arrangements; and introducing new local content provisions. This act sits alongside statutory instruments, including a ban on the export of certain unprocessed minerals (such as iron ore, tin and tungsten) to encourage value addition.[9]

In November 2024, the government appointed the UNMC Board of Directors to begin work on operationalizing the company.[10] With this report, we aim to offer the government and the UNMC Board considerations on the opportunities, challenges and risks exhibited by other NMCs around the world.

The report begins with the legal framework for UNMC, followed by an overview of the global experience of NMCs, and concludes with recommendations for UNMC as it moves forward.

The legal framework for the Uganda National Mining Company

UNMC has been incorporated under the Companies Act, 2012, and will be wholly owned by the government. Section 22 of the MMA sets out six functions of UNMC:

a) To manage the state's strategic commercial interests in the mineral subsector

b) To optimize value to its shareholders

c) To participate in accordance with the terms of mineral agreements, in joint ventures in which it holds an interest on behalf of the state

d) To participate in meetings of the operating committees in furtherance of its participation in the respective joint operating agreements

e) To study and propose new mining ventures locally and internationally

f) To undertake the exploration and mining operations in the best interest of the state where private entities are unwilling to do so

Section 23 of the MMA also refers to the UNMC Board advising the Minister of Energy and Mineral Development on production-sharing agreements, but this is not listed as a specific function of UNMC.

The government has yet to release a more detailed mandate outlining how UNMC will implement these functions, including whether the Ministry of Energy and Mineral Development will regulate UNMC in the same way as other mining companies, and whether UNMC will compete with the private sector.

The nine-person Board of Directors, at least three of whom must be women, is chosen by the Minister of Energy and Mineral Development and approved by Cabinet, both of which the board must report to.

Section 23 of the MMA is unclear on the qualifications of board members other than stating that they "shall be diverse with qualifications, experience and demonstrable competence in geoscience, mining, metallurgy, mining economics, business administration and mining law." While the current board members are each linked to the government in some way, they appear to be highly qualified and cover the competencies set out in the MMA.[11]

According to Section 25 of the MMA, UNMC shall be financed by the Consolidated Fund (that is, the national budget) and "other sources" as directed by the Minister of Finance, in accordance with the Public Financial Management Act, 2015 (PFMA). However, the government is yet to specify what these other sources are. For example, it is unclear whether UNMC or the Uganda Tax Authority will collect any proceeds of the state's potential 35 percent equity in mining projects (comprising up to 15 percent free equity and up to 20 percent paid equity).[12] Neither the MMA nor any other law requires any profits from UNMC to be returned as dividends to the Consolidated Fund.[13] The government's arrangement with other Ugandan state-owned enterprises (SOEs) suggests it likely intends to agree to a dividend policy specific to UNMC.

The MMA is silent on several key governance rules, including eligible or prohibited investments as well as the role of senior managers and independent oversight bodies. While the MMA requires UNMC to submit audited annual reports and accounts to the annual general meeting, there are no requirements for any reports to be made public or on auditing or accounting standards. The MMA also does not contain any other transparency requirements.

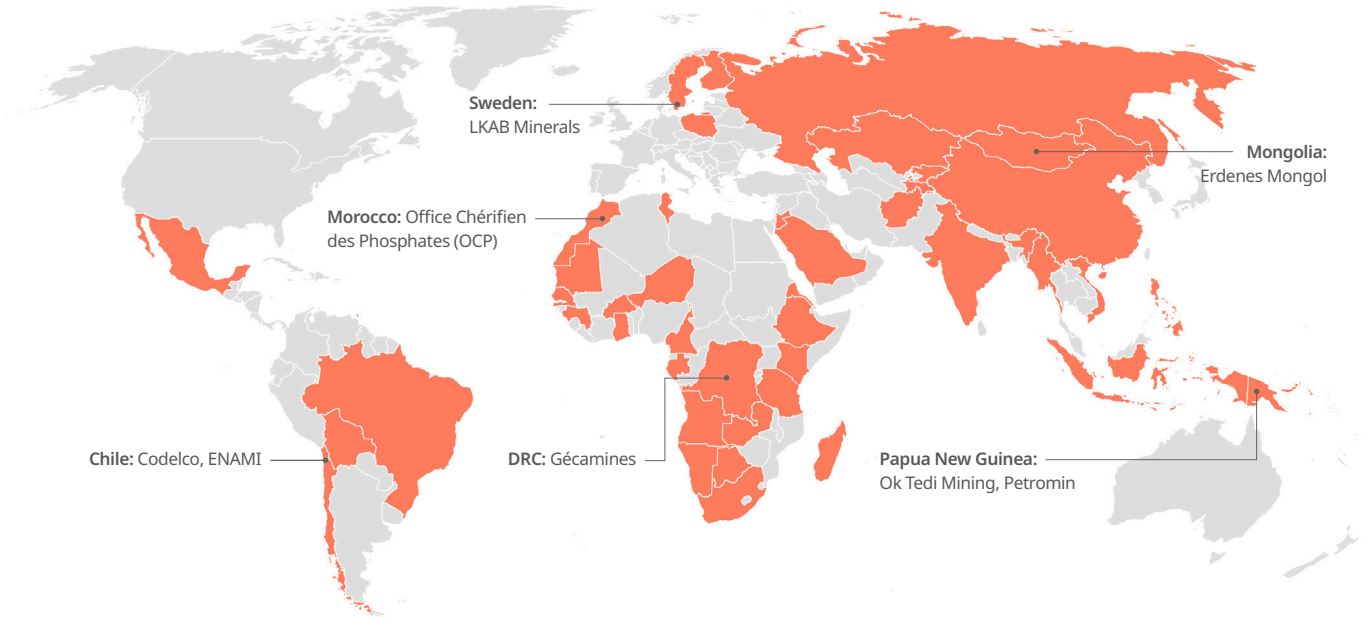
The global experience with national mining companies

NMCs can be described as business-oriented, majority government-owned entities that manage state equity; participate directly in mining sector operations or are involved in the sector in other ways; and keep their own balance sheets. Based on our survey, at least 62 NMCs in 45 countries have been established in the upstream mineral sector (see Figure 2 and the Appendix); many more have been established at the subnational level in China.

NMCs often play important, sometimes critical roles in exploiting minerals and managing the mineral sector in their respective countries. NMCs can also be important outside their borders since, in combination, they control much of the world's mineral supplies. Several of the world's largest mining companies by market capitalization are state owned, including Brazil's Vale, China's Zijin Mining, Coal India and Saudi Arabia's Ma'aden.[14]

Figure 2. National mining companies across the world

View our online interactive version of this map here



Countries

Afghanistan
Angola
Bolivia
Botswana
Brazil
Burkina Faso
Cameroon
Chile
China
DRC
Eritrea
Ethiopia
Finland
Gabon
Ghana
Guinea
India
Indonesia
Jordan
Kazakhstan
Kenya
Kyrgyzstan
Madagascar
Mauritania
Mexico
Mongolia
Morocco
Myanmar
Namibia
Niger
Papua New Guinea
Philippines
Poland
Russia
Saudi Arabia
Senegal
South Africa
Sweden
Tajikistan
Tanzania
Trinidad and Tobago
Tunisia
Vietnam
Zambia
Zimbabwe

The mandate of national mining companies

Governments can task NMCs with any combination of the following mandates:

Commercial. The NMC may manage the state's majority or minority equity participation in mines. Examples include Angola's ENDIAMA, Chile's Codelco, Kyrgyz Republic's Kyrgyzaltyn, Tanzania's STAMICO and Zambia's ZCCM-IH.

Operational. The NMC may participate directly in mining-sector operations: for example, by managing project implementation, drilling, or supplying extractive projects with goods or services.[15] Examples include Botswana's Debswana, Brazil's Vale, Chile's Codelco, Indonesia's ANTAM, Mongolia's Erdenes Mongol, Saudi Arabia's Ma'aden and Zambia's ZCCM-IH.

Marketing. The NMC may collect, warehouse and sell minerals that the government receives either through a production share or as payment in kind for royalties or taxes. Examples include DRC's Gécamines, Indonesia's ANTAM, Morocco's OCP, Myanmar Gems Enterprise (MGE) and Saudi Arabia's Ma'aden.

Regulatory. The NMC may negotiate or allocate mining contracts and licenses on behalf of the government, monitor compliance or enforce legislated and contractual terms. Examples include Guinea's SOGUIPAMI and Myanmar's Mining Enterprise 1 (ME1) and Mining Enterprise 2 (ME2).

Administrative. The NMC may collect fees, royalties, taxes and dividends on free equity on behalf of the state, and administer records, such as the mining cadastre and licenses.[16] Examples include Cameroon's SONAMINES, DRC's Gécamines, Myanmar's ME1, ME2 and MGE as well as Zambia's ZCCM-IH.

Development. The NMC may train nationals in mining-sector skills, build infrastructure, invest along the value chain, promote energy security, contribute to economic development in producing areas, or engage in policymaking, such as drafting legislation. Examples include DRC's Gécamines, Kyrgyz Republic's Khaidarkan Mercury, Mongolia's Erdenes Mongol, Morocco's OCP and Tunisia's Compagnie des phosphates de Gafsa.

Nearly all NMCs have a commercial mandate to manage the state's majority or minority equity participation in mines. Operational mandates are less common, primarily because many NMCs do not have the technical or financial capacity to efficiently operate mines. Most NMCs that are operational entities either took over assets from private mining companies, and therefore inherited the technologies and employees from the private sector, or were forced into becoming operators since the private sector was unwilling to invest due to weak profitability or high country risk. In post-Soviet and other centrally planned states, many state-owned mines are a legacy of state-led development of the mining sector. Of the operational NMCs, some own and operate a single mine or operate in a single region of a country; others operate domestically but have wide-ranging commercial interests and scope; and still others operate and compete both domestically and internationally (see Table 1 on the next page).

Some governments have allocated NMCs with regulatory and commercial mandates simultaneously, such as Guinea's SOGUIPAMI and Myanmar's ME1 and ME2. However, most governments have split regulatory and commercial roles to avoid conflicts of interest and reduce the risk of corruption. Those NMCs that have regulatory responsibilities can influence regulations to advance their own interests, which may not always be fully consistent with those of the country. These can also give an NMC considerable influence on the wider sector and economy, and therefore a disproportionate influence on the political economy of the country.

Table 1. Examples of national mining companies by geographic scope

Operates a single mine or in a single region of a country	Operates domestically but has wide-ranging commercial interests and operations	Operates and competes domestically and internationally
Ghana's Prestea Sankofa	DRC's Gécamines	Brazil's Vale
Madagascar's Kraoma	Jordan's JPMC	China's Zijin Mining
Papua New Guinea's Ok Tedi Mining	Kazakhstan's Tau-Ken Samruk	Coal India
Senegal's MIFERSO	Mongolia's Erdenes Mongol	Sweden's LKAB Minerals
South Africa's African Exploration Mining and Finance Corporation	Saudi Arabia's Ma'aden	
Tunisia's Compagnie des phosphates de Gafsa	Zambia's ZCCM-IH	

NMC managers are often the ones to dispense exploration, production and supplier contracts or licenses. Frequently, these contracts call for the exchange of huge sums of money, providing managers with considerable political and economic power. As such, NMCs help determine who has access to resources and who does not, strengthening and legitimizing economic elites and networks. Providing an NMC with regulatory responsibilities can further increase these challenges. It is encouraging that the Ugandan government has not suggested any regulatory responsibilities for UNMC in the MMA.

Given that the MMA describes UNMC as largely having a commercial and operational mandate, this report primarily focuses on the experience of other NMCs in carrying out such mandates. It also briefly discusses the experience of NMCs involved in marketing, given the MMA's provision for production sharing, along with the experience of NMCs that have invested in value-addition activities, given the government's ambitions to move along the value chain.

Controlling interests and operator roles

A government may establish an NMC with the mandate to have a controlling interest in or operate mines for several reasons:

1. A government may be able to exercise **greater control over the sector** by planning extractive developments through an SOE.[17] For example, NMCs in Chile and Jordan have each slowed mineral production at certain times to maximize revenue; minimize "high grading" practices that are common among private companies;[18] and save resource production for future generations. As opposed to private companies that are generally focused on short-term profit, NMCs may focus on long-term maximization of production and year-to-year stability.[19]
2. NMCs can **speed up technological improvements and human-capacity development**, fostering expertise not just in the mining sector but also in skills that are transferable to other sectors. While private companies may be more efficient operators in the initial stages of mining-sector development, governments can use NMCs to build domestic knowledge and experience.

3. NMCs can help **address market failures**. For instance, private companies are sometimes hesitant to invest in a country due to political risk or uncertainty about the commercial viability of a project. In these circumstances, NMCs can step in to fill gaps left by the private sector (for example, Papua New Guinea's Ok Tedi Mining).

4. NMCs can **generate additional revenue**. Where tax avoidance or lack of dividend payments on minority state equity become major challenges, governments can choose to nationalize mines. Kyrgyz Republic's recent nationalization of the Kumtor gold mine has led to a significant increase in government revenue. The previous owner, Centerra Gold, paid the government an average of USD 116 million a year in 2013–2020. However, once the mine was nationalized, in exchange for a large transfer of Centerra shares from SOE Kyrgyzaltyn back to Centerra, the NMC generated $674 million in profit, and paid $584 million to the government in 2022–2023. Yet nationalization can also generate new liabilities for a government. For example, the Kyrgyz government has taken full ownership of a mine nearing the end of its lifecycle, and will potentially have to spend over a billion dollars in environmental cleanup costs.[20]

5. Finally, NMCs can **ensure responsible mining**. Some governments view their NMCs as a way to directly reduce environmental and social harms rather than doing so through creating and maintaining regulations. For example, Chile's plans to increase state participation in its lithium sector include use of technologies that reduce environmental impacts, such as water consumption.[21]

Some NMCs that control or operate mines have successfully achieved their objectives, as highlighted above. Several NMCs, such as Sweden's LKAB, have achieved long-term profitability.

Even so, several empirical studies suggest that SOEs are, in the aggregate, less efficient than their private-sector counterparts.[22] Many NMCs struggle to generate significant profit from the mines they control or operate. Several majority state-owned mines lose money outright. As a result, their countries have experienced lower government revenue, higher state liabilities, and reduced exploration and investment in mining projects than would likely have been the case otherwise.

A key challenge is that state-owned mines often suffer from higher costs per ounce or metric ton of production than private-sector operators.[23] This is often partly a result of more limited technical capacity. However, there is also often political pressure to use state-owned mines to generate employment, inflating labor costs.[24] NMCs can also inflate capital and operational costs unless there are strict controls on corruption in procurement and effective contract-management systems. NMCs are motivated not simply by profit, but also to maximize production, create jobs and keep mines open. Because of this, they generally exploit higher cost deposits than private companies. For instance, Zambia's ZCCM-IH has continued to operate the Ndola limestone mine despite years of losses. In 2021, it purchased the failing Mopani copper mine from Glencore by borrowing $1.5 billion, only to lose hundreds of millions of dollars operating the mine.[25]

When NMCs keep loss-making mines open, it can have severe consequences. First, taxpayers must cover mine losses and liabilities, and this has implications for the national budget deficit and debt. Second, there is an opportunity cost. Keeping a loss-making mine open not only acts as an implicit transfer of income from taxpayers to mine workers and suppliers, but also diverts money that could have been invested in education, healthcare, infrastructure or programs that generate more jobs. However, it may be worthwhile to keep a mine open even if it is not making a profit when the net benefit—in terms of employment and incomes for workers and suppliers—is greater than the loss to the state and the wider population.[26]

Non-controlling interests

Minority state ownership in projects is more common. In some countries, NMCs have co-invested with private companies in exploration to address market failures by reducing the financial, social or political risks of exploring in a high-risk environment. For example, Kazakhstan's Tau-Ken Samruk has minority stakes in several high-potential exploration projects, including a 20 percent stake in each of the East Star Resources-owned Rudny Resources, exploring for copper, and Chu Ili Resources, exploring for gold. It also owns 20 percent of Esan Eczacıbaşı-owned South Ural Resources, exploring for a range of minerals.[27] Mongolia's Erdenes Mongol had a 34 percent share of Badrakh Energy, which successfully explored for uranium in the country, and the Zuuvch Ovoo project is now proceeding to development.[28]

Most governments that take minority stakes do so during the development or operational phase of a mine, rather than during exploration phase. Unfortunately, as discussed below, this type of state participation in mining projects has been disappointing for many countries.

Minority state participation in a profitable, operating mine has the potential to generate extra cash flow for the government. Any dividends that are paid can be an additional source of revenue that increases the government's share of profits. However, governments may need to offer concessions in other parts of the fiscal regime or wider regulatory framework in exchange for their equity stake. For example, during contract negotiations in 2009, the Mongolian government granted tax concessions to the Oyu Tolgoi copper mine, and the extent to which these concessions are linked to agreement on its equity stake is unclear.

Minority state participation can also generate financial, environmental and social obligations for the state. Depending on the terms of equity participation, the government may be required to finance cash calls, cost overruns and any additional capital expenditure required to maintain or expand the project. It may also be liable for its portion of cleanup costs, mine rehabilitation costs and compensation to landholders. Government budget cycles are often delinked from such financing needs, leading to challenges for both the mining project and the government. If the government cannot pay its share of the required financing, the private mine operator will often lend to the NMC in order to cover its cash calls, which can delay or even negate any dividend payments to the NMC. This was the case for Mongolia's equity in the Oyu Tolgoi mine until the debt was written off.[29] Alternatively, the operator might choose to finance the cash call through either: (i) debt, which will normally be repaid ahead of the issuance of dividends to the state and where interest expenses will reduce the corporate income tax base; or (ii) retain cash in the company to cover a portion of the future cash needed, thereby postponing the declaration of a dividend. In some cases, the shareholding of the state is diluted instead.

Dividends often disappoint for other reasons, too. Unless a government makes dividend payments mandatory, majority shareholders of mines can retain earnings, reinvest profits in the mining operation, or shift profits to offshore subsidiaries to lower dividends on state equity. Dividends are subject to more avoidance risk than almost any tax. One common approach that companies use to reduce dividend payments is to borrow money from a related entity in a lower-taxed jurisdiction at high interest rates, thereby reducing the profitability of the entity that the NMC has equity in. For example, DRC's Gécamines sought to dissolve a joint venture with Glencore in 2018, blaming the lack of dividends from one of the country's largest copper and cobalt mines on excessive debt financing by the majority shareholder.[30]

Dividends from minority state equity rarely meet expectations or are as large as initial projections. Companies owning mines with minority state equity often do not declare significant dividends, or they only do so after many years. For example, Zambia's ZCCM-IH has faced a considerable challenge collecting dividends since taking a minority stake in most projects since 2000.[31] Over the last decade, majority shareholders have avoided paying dividends on all but three projects in Zambia—Konkola, Kansanshi and Luanshya—by reinvesting earnings and minimizing paper profits through base erosion and profit shifting. Even among the projects that regularly pay dividends—Konkola and Kansanshi—payments have been lower than expected, averaging $43 million per year in 2017–2021.

Table 2: Experiences with dividend payments on minority state equity[32]

Country	Examples of state share in operating mines	Dividend payments	Notes
DRC	5–20% of 8 operating mines held directly by the government (as of 2021). 20–49% of 12 operating mines held by NMCs; significant minority NMC shareholdings in exploration and development projects.	No dividends paid on any minority shares held directly by the government, despite decades of production at some mines. NMCs receive some dividends from minority shares in mines, but these are generally retained by the NMCs to cover their losses and are not transferred to the national treasury. In 2020–2021, NMCs paid no dividends to the state.[33]	
Ghana	10% share—held directly by the government—in most of the 14 operating large-scale mines. Some exceptions: the government holds 0.04% equity (as of 2022) in AngloGold Ashanti's global operations rather than its domestic mines; 10% in Newmont's mines is interest in its net cash flow; 20% in one bauxite mine is held by an NMC. Another NMC mainly extracts gold from old tailings.	Only two to three mines have historically paid any dividends. Five mines paid dividends in 2020–2022: $40 million in 2020 (around 4% of government revenue from mining); $115 million in 2021 (around 13%); $72 million in 2022 (around 8%).	Two of the five mines that paid dividends are owned by AngloGold Ashanti, so payments were from the foreign-listed parent company. Two others are owned by Newmont and subject to guaranteed dividend payments in certain circumstances. The other payment was made by the Kinross-owned Chirano gold mine in 2020, which coincided with its request for a 15-year extension of its mining leases.
Kyrgyz Republic	Until 2022, 26.6% share in Canada-based Centerra Gold, which owns the Kyrgyz's Kumtor gold mine in addition to other mineral assets around the world; Kumtor was nationalized in 2021.	$11.8 million paid in 2015 (approx. 10% of fiscal revenues from mining); $8.8 million paid in 2016; no dividends in 2017–2021; $140 million in 2022; $151 million in 2023.	In May 2021, the government nationalized the Kumpor mine. In 2022, the government ceded its 26% stake in Centerra Gold.
Mali	10–20% share in 14 operating mines.	In 2021, four of the 14 mines paid dividends, in each case representing 4–14% of net profits.	
Mongolia	34% share in Oyu Tolgoi copper mine.	Oyu Tolgoi has not paid any dividends to date; independent modelling suggests that dividends will not be paid before 2035, though government projections suggest earliest would be 2045, if at all.	Rio Tinto recently wrote off the government's $2.3 billion in debt to be paid out of state dividends given its impact on payments.

These challenges have led some countries to exchange their equity or right to dividends for more certain revenue streams. For example, ZCCM-IH entered into an agreement with First Quantum in 2022 to retain its 20 percent shareholding, along with two out of ten board seats in the Kansanshi mine, while foregoing dividends in favor of a 3.1 percent gross royalty over the lifespan of the mine. Payments to ZCCM-IH from its minority shareholding quadrupled in the first year of the agreement and were twice as large as the historical average in 2023.[34] Similarly, as part of negotiating the investment agreement for the Zuuvch Ovoo uranium project, Mongolia passed a law in 2024 that enabled it to exchange its equity stake of 34 percent for preferred shares of 10 percent and an additional royalty of 5 percent (adjusted for deposit characteristics).[35]

Other countries have introduced the concept of guaranteed advance payments, priority shares or preferred dividends. These arrangements can function as an additional royalty or profit tax when a project meets a certain threshold, such as a specified number of years of production or the declaration of profitability.

In one of the few cases of a private mining company paying significant dividends in Mali, for example, Barrick Gold paid $37 million in dividends from its Loulo and Gounkoto gold mines in 2022, and $48 million in 2023, representing 23 percent and 32 percent of all net payments from Barrick to the government respectively.[36] These large dividend payments are thanks to a contractual provision stating that "as soon as the [Loulo and] Gounkoto mine reports a profit, a 10 percent preferential dividend will be paid on declared profits."[37] Similarly, as noted in Table 2, Ghana has historically received limited dividends from its minority state equity. In 2018, then Vice-President Mahamudu Bawumia lamented that the government's 10 percent carried interest in mining operations was "virtually useless [...] because we are earning zero from it."[38] However, since then, the government has received higher dividend payments, partly thanks to requirements in renegotiated mining agreements.[39] Yet, given that such arrangements act as additional royalties or profit taxes, governments could possibly have achieved the same increase in revenues by directly negotiating for higher rates of these instruments. This latter approach would have avoided adding to administrative challenges by further complicating the fiscal regime.

In theory, a minority shareholding provides more than just dividends. Particularly if NMC representatives sit on the Board of Directors, being a shareholder can provide an opportunity to learn about company strategy; receive information not normally transmitted to regulatory authorities (such as technical designs and plans, quarterly updates as well as safety issues); and have a say in decisions about the company. The extent to which a government can achieve these goals depends on both the capacity of its representatives as well as the specifics of the shareholder agreement. Among other issues, these agreements set out the rules around decision-making processes, such as approval thresholds for certain key decisions.[40] Similarly, governments can secure greater influence on decision-making than the size of their equity stake implies through negotiating preferred voting rights, such as a golden share. For example, the Brazilian government's golden shares in Vale give it veto power on certain decisions.[41] However, in most countries, there is limited evidence of governments achieving greater influence or access to information through their minority equity.

In fact, private shareholders may benefit more from state-appointed board members than the state will. Minority state equity can align state and corporate interests, easing business for corporate elites by opening direct channels of communication with NMC managers and related officials at the responsible ministry or in the prime minister or president's office. Board members appointed by the government often act as spokespeople for the NMC within the government. This can be helpful for corporate interests when there are conflicts with regulatory authorities, such as over implementing costly environmental or social governance regulations.

Still, minority free state shareholding in mines is becoming more popular in Africa. For example, under Kenya's Mining Act, 2016, the government

is allowed to take a 10 percent free carried interest in large-scale mining projects, with the possibility of purchasing additional participation at fair market value. Similarly, amendments to Tanzania's Mining Act in 2017 require that new mining operations accept a non-dilutable 16 percent free equity interest by the state, and up to 34 percent more in paid equity.[42] This is likely at least partly because of its political appeal. Politics aside, it is unclear why governments generally seek equity in projects rather than additional royalties, withholding taxes or fewer deductions on corporate income taxes (with the optimal alternative depending on the fiscal regime configuration that aligns with a country's context, objectives and project economics). While some politicians conflate "equity" with "benefits", equity may be more palatable for the private sector since most mines are unlikely to pay dividends, or those dividends will be paid far into the future.

Production sharing

NMCs can also have a role in production-sharing arrangements. These arrangements are reasonably common in the oil and gas sector, partly due to the relative uniformity of production and large, liquid markets. However, they have been rare in the mining sector. Azerbaijan, DRC, Gabon and Myanmar have each experimented with production sharing in the mining sector. Egypt replaced its long-standing production-sharing regime with a royalty-tax regime in 2020, while Côte d'Ivoire included a production-sharing regime in a draft update to its mining code in 2014 but then removed it. Yet, like Uganda, Burundi, Papua New Guinea, the Philippines, Senegal and Zambia have introduced the option to enter production-sharing contracts into their laws or are considering doing so.[43]

The Ugandan government's intention around production sharing remains unclear. It signed its first production-sharing contract in early 2025 but has yet to disclose its contents.[44] Governments can configure production-sharing arrangements in various ways. Production sharing can function similarly to a royalty or to a profit tax, though with differences in implementation.[45]

Governments can also receive their production share in different ways. Often, they ask oil or mining companies operating or participating in the project to sell the state's share of production on its behalf, then transfer the proceeds to the state.[46] Alternatively, governments can choose to take their production share in kind and receive the physical minerals.

If a government decides to receive physical minerals, the country's NMC is typically responsible for managing and marketing them. This may require the NMC to organize transportation and warehousing, as well as negotiate sales contracts to secure the best possible price. Given that mineral quality can vary significantly from shipment to shipment, production sharing may also necessitate enhanced in-country laboratory testing. NMCs may find these responsibilities challenging to fulfil. Capacity challenges can be exacerbated when production volumes—or the government's share of them—are relatively small, which weakens the NMC's bargaining position. This is also the case when markets for the minerals being traded are relatively small or opaque, requiring particularly specialist knowledge to navigate. Governance challenges can further worsen outcomes.

Some countries have managed to effectively navigate these challenges. For example, the Gabonese government built the capacity of Société Équatoriale des Mines, its NMC, before introducing production sharing. It hired Gabonese professionals with industry experience while training a new cohort of young professionals. As a result, the NMC has been able to successfully sell its minerals since production sharing was introduced.[47]

However, in other countries, similar challenges have emerged as those faced by governments when dealing with private companies. Minerals have gone missing, costs of storage and management have been inflated, and NMCs have sold the minerals below the market price—potentially negating the benefit of being able to discover prices as a marketer and reduce the risk of transfer pricing abuse by other companies. The DRC recently struggled with these challenges as

its weakly governed NMC Gécamines negotiated to sell its 20 percent share of copper from the Tenke Fungurume mine to several global copper traders.[48] Myanmar has tried to address similar challenges by selling its share of lead, zinc, nickel and tin back to the operator at market prices. However, the government's reliance on private-sector sales has reintroduced the transfer pricing challenges that its production-sharing contracts were designed to help eliminate.

Value addition

A few NMCs invest further along the value chain, such as Gécamines' investments in foundries and a copper wire factory. Many of these projects have been unprofitable and failed to stimulate the establishment or expansion of other sectors. While each case is distinct, the financial losses have generally been driven by the challenging economics of the project. NMC involvement has not changed the reality that access and proximity to mineral deposits plays only a small role in determining the feasibility of moving along the value chain.[49]

The few NMCs that have been successful at establishing downstream industries have done so when the success factors for moving along the value chain have already existed. For example, JPMC's fertilizer factories in Jordan can tap the world's sixth largest phosphate reserves. In Chile, Codelco's copper smelters benefit from both high copper production levels and the long distance to its largest markets in Asia, which results in significant cost savings by transporting a smaller volume of cathodes instead of large quantities of ore and concentrate. Ma'aden's fertilizer and aluminum facilities in Saudi Arabia benefit from an abundance of cheap energy.

Quasi-fiscal expenditure

While not typically stipulated in their formal mandate, some NMCs are burdened with quasi-fiscal expenditure responsibilities. For instance, in addition to its mining operations, Angola's ENDIAMA operates a hospital in Luanda, a football club, an aviation company and social programs. Mongolia's Erdenes Mongol has restaurants, hotels, a power plant and a steel complex.[50] Zambia's ZCCM-IH has interests in a maize-milling company, a bank, a hotel, an electricity company and a cement manufacturer, all of which (other than the electricity company) lost money in 2023.[51]

NMCs can often incur high costs in these roles, harming their profitability and eating into dividend payments to governments. There is also the question as to whether an NMC is best placed to be making these investments. Conglomerates—whether publicly or privately owned—tend to receive a "conglomerate discount" of 10–15 percent. Investors tend to value them less than their individual assets would suggest because of the challenges in operating successfully across diverse sectors.[52] Similarly, other government entities may have more expertise and make more rational investments than NMCs in non-mining sectors. For example, DRC's Gécamines is involved in telecommunications, microfinance and power generation despite the role of other public entities in these sectors (SOGATEL, SIMCO and CTL respectively).[53] NMC involvement, particularly when other public entities are already active in an area, also risks crowding out the private sector. Generally, these investments are not based on financial or economic assessments of profitability and impact, but rather as opportunistic political or patronage-based state capital injections that draw on revenue retained by NMCs and bypass parliamentary or other types of public oversight.

Financing national mining companies

The performance of NMCs across the world demonstrates the importance of the funding model for encouraging an NMC to achieve its objectives and operate efficiently. Insufficient capital can inhibit the company from paying salaries or making necessary investments, while there can be a sizeable opportunity costs associated with excessive revenue retention or capital injections. Excessive revenue retention can encourage wasteful spending and growth at the expense of broader societal goals.

Governments typically provide the initial capital for an NMC through a budget allocation from the national treasury (though there are also instances of NMCs being primarily debt financed). However, models for ongoing funding of NMCs differ considerably between countries. Funding models consist of rules on the following: (i) the entity which makes revenue-retention decisions; (ii) revenue retention; and (iii) state capitalization and debt.[54]

Financing decision-making processes

While the Board of Directors decides annual revenue retention or dividend payments in some countries, in others, dividend payments are subject to government-mandated guidelines or are determined by the primary shareholder, such as a state-owned holding company, ministry or cabinet. In some countries, the board decides, but the decision is subject to approval by the ultimate shareholder. China, for instance, sets a national financing policy for different sets of SOEs, including NMCs, yet allows individual boards to determine dividends subject to this policy. In Kazakhstan, the state-owned holding company Samruk Kazyna, controlled by the executive branch, sets the dividend for its companies, including Tau Ken Samruk. In Poland, the national treasury formulates annual guidelines that consider individual companies' financial performance and future investment plans, with annual dividend levels being determined at the annual general meeting. The government shareholders of Saudi Arabia's Ma'aden base its dividend on a proposal by the board.

Revenue retention

A large proportion of NMCs retain much of their revenue (see Table 3). For many NMCs, there appears to be limited justification for a low payout ratio (that is, the percentage of a company's earnings that is paid out to shareholders as dividends). Revenue retention tends not to be clearly linked to investment needs. Profitability among NMC operators is usually driven by commodity prices and geology rather than board or manager strategy and competence, similar to private-sector operators. In many cases, NMC revenues are generated through the collection of passive income, namely the dividends on free state equity, royalties, proceeds of state-asset sales or returns on shares from nationalized mines. NMCs do not earn any of these revenue streams through their own activities. These revenues are therefore unrelated to company performance. To encourage better NMC performance, governments in countries such as Chile and Myanmar require their NMCs to transfer passive revenue streams to the national treasury, or for the national tax authority to collect them.

Table 3: Dividend payout ratio for selected commodity-based national mining companies (parent companies only)[55]

Country	Company	Year	Payout ratio
Chile	Codelco	2023	100%
China	Zijin Mining	2023	100%
Myanmar	Mining Enterprise 1	2023	100%
Indonesia	Antam	2022	50%
Saudi Arabia	Ma'aden	2023	30%
India	Coal India	2024	27%
Tanzania	Stamico	2023	10%
DRC	Gécamines	2023	0%

Any dividend and capitalization policy should be a function of the NMC's mandate and be based on a well-planned, costed multi-year budget to achieve that mandate, as well as any need for precautionary savings, such as to cover cash calls or unexpected emergencies.

Some governments set explicit dividend rules or guidelines with a target payout ratio. For example, the Chilean government requires Codelco and ENAMI to distribute 100 percent of their net income to the state in the form of dividends. In China, most NMCs are subject to a policy requiring that, unless there is a special circumstance, the company's accumulative profit distribution for the previous three years must not be less than 30 percent of the total amount of accumulative distributable profits realized over the same period. In practice, the payout ratio is usually well above this minimum, usually between 40–100 percent.[56]

SOE boards in Sweden set multi-year payout targets. The Ghanaian parliament determines the budget of Prestea Sankofa's parent company, the Ghana National Petroleum Corporation, but it must be a maximum of 55 percent of the company's carried and participating interest. In Poland, the dividend guidelines are set on a company basis and consider individual companies' financial performance and future investment plans. The guidelines also stipulate that company owners waive the right to collect a dividend if the state treasury provided the company with subsidies, loan guarantees or payment of its debts during the year in question. There have been recent examples of extraordinary dividend payouts resulting from a decision by shareholders based on the excess capital and strong financial position of the concerned SOEs. In other countries, such as the DRC and Zambia, the NMC board and the government annually negotiate dividend payments. This latter approach has made financing in these countries less predictable, and susceptible to political horse-trading.

State capitalization and debt

In addition to their retained revenue, NMCs may need capital injections when facing non-trivial financial obligations, such as cash calls. In these cases, they may receive grants or loans from the state, or borrow from partners or the open market.

State support is common, but several governments restrict it to prevent abuse. In Sweden, for example, state support for LKAB is rare and only offered for the purpose of funding special tasks. In Chile, recapitalizations from the public budget can only occur following approval by Congress, and the state guarantees SOE debt only up to a limit.

It is considered best practice for all NMC debt issuances to be approved by the government. Nevertheless, many NMCs are overindebted or borrow on unfavorable terms. For example, in 2023, Zambia's ZCCM-IH held $3.2 billion in liabilities, mainly for Mopani copper mine debt. In the same year, interest expenses alone cost ZCCM-IH $200 million—paid out of revenue and royalty payments—largely to service the loan from Glencore to purchase the Mopani mine. The sale of 51 percent of the Mopani mine in 2024 still leaves the company with roughly $1.5 billion in debt today.[57]

Even in countries where SOEs do not receive explicit guarantees, NMC debt is usually implicitly guaranteed, meaning that creditors are normally aware that the government would step in and service the debt rather than allow the company to default. In some cases, NMC debt has directly cost taxpayers. For example, New Zealand's state-owned coal company, Solid Energy, began borrowing heavily in 2012 when it accumulated losses and received government bailouts. The company has now been liquidated, having cost taxpayers approximately $130 million in bailouts and a portion of its roughly $300 million in accumulated debt.[58] That said, the opportunity cost to the state of granting money to the NMC, direct borrowing by the NMC, and revenue retention by the NMC may differ in terms of net present value and risk terms, but otherwise may be nearly identical.

Recommendations for the Uganda National Mining Company

The Uganda National Mining Company's mandate and investment strategy

The experience of other NMCs suggests that UNMC's mandate and investment strategy should be clarified and drafted appropriately for the Ugandan context. Below, we outline five recommendations to this end.

Recommendation 1: Set a clear, limited mandate focused on addressing market failures to unlock Uganda's mineral potential

Internationally, the most successful NMCs started operations either as state operators of nationalized mines or as exploration companies that slowly built out their business, filling gaps that the private sector was unwilling to fill. As noted above, exploration in Uganda remains limited. It will hopefully continue increasing given government efforts, particularly with the completion of another geological survey. However, investment may be constrained by the country's relatively high level of risk.[59] As part of a clear strategy for how the minerals sector will contribute to the country's industrialization and broader sustainable development, UNMC may wish to focus on projects that will unlock Uganda's mining potential, namely by: (1) investing in continued geological surveys; and (2) co-financing with experienced exploration companies to reduce private-sector risk, build technical expertise within the NMC and benefit from the upside of any commercial discoveries.[60] These investments in exploration could focus on a limited set of minerals—for example, the priority minerals identified in the National Development Plan—to enable UNMC to develop specific expertise and increase impact.[61]

However, caution will be necessary. Investing in these areas will likely have substantial costs, which presents a challenge with the country's scarcity of public funds. The government is already facing high debt levels and constrained tax revenues. According to Ministry of Finance data, debt was 46.9 percent of GDP at the end of 2022/23, close to the ceiling of 50 percent of GDP set out in the government's Charter of Fiscal Responsibility.[62] Tax revenues are also constrained at around 13.5 percent of GDP in 2023/24.[63] As a result, the government has only allocated limited public funds to the mineral sector in recent years, despite it becoming an increasing priority. The budget allocation for 2024/25, for example, is $8.3 million.[64] Therefore, the government will need to carefully weigh the opportunity costs of UNMC investments. In some cases, the financial and opportunity costs will likely be prohibitive.

Returns from these investments will also be highly uncertain, with particularly large risks associated with mineral exploration. The success rate for prospecting and exploration projects is extremely low. Fewer than 1 in 100 mineral showings discovered actually become a mine, and it takes, on average, 18 years to reach production.[65] However, exploration work fulfills UNMC's legal mandate under the MMA and helps address one of Uganda's most pressing needs in the mineral sector: discovering new mining prospects. Alongside continued investment in geological surveys, mineral exploration is perhaps the best use of scarce UNMC funds.

That said, we recommend that UNMC takes a particularly cautious approach to any investment in the first few years to allow the company to build experience in the mining industry and avoid diverting scarce public funds to overly risky projects. This is particularly the case with UNMC exploring minerals on its own.

Given the particularly high costs and risks involved, it would be advisable for UNMC to only consider going it alone in the longer term.

If UNMC develops the capacity to explore on its own, it would not be advisable for it to receive preferential treatment in the issuance of licenses. Providing UNMC with preferential access to licenses or permits would "crowd out" private investment in the sector, raise the costs of exploration and weaken the mining sector's long-run potential. If the private sector is willing to invest in exploration without the use of public funds, it should be allowed to do so unimpeded. This is more cost-effective than spending scarce public resources on investments that would otherwise be made by the private sector. UNMC should step in only where the private sector is unwilling or unable to do so.

Recommendation 2. Reconsider paying for non-controlling equity in a mine's development and operational phases

In net present value terms, the opportunity cost of investing as a non-controlling shareholder in a mine is almost always greater than investing state funds in education, healthcare, productive infrastructure or other sectors of the economy that generate more jobs and long-run growth. This is because of the risk of relatively small returns (even when dividends are guaranteed far into the future), liabilities, a limited increase in influence on decision-making or access to information, and state-corporate alignment that undermines regulatory enforcement. The only clear justification for state investments as a minority shareholder in a mining project would be to lower risk for investors in cases where the project would not proceed without state co-financing. These types of projects are rare and could possibly be incentivized in other ways. To avoid losses and allow the government to invest more in other priority areas, we recommend prohibiting UNMC from purchasing equity at a mine's development or operational phases unless each of the following conditions are met: it receives a controlling interest; the private sector is unwilling to invest due to country risk; and the financial and opportunity costs are deemed worthwhile.

If the government continues to plan for UNMC to pay for non-controlling equity in mines, it could develop a model shareholder agreement that, among other things, clearly outlines UNMC's role in decision-making processes and access to information. However, as part of this process, the government will need to consider the implications for the interest of other investors in projects, as stricter conditions could potentially reduce this interest.[66]

We also recommend that the government consider replacing the planned free equity in projects with other fiscal tools given the risk of dividend avoidance and limited other benefits. Similarly, accepting physical mineral products as payment on state equity carries more risk than collecting royalties, for instance, or withholding taxes on international transfers. If the government continues to seek free equity, it should negotiate guaranteed dividends.

Recommendation 3. Carefully consider production sharing, including Uganda National Mining Company's capacity to do so

While some countries have employed production sharing in the mineral sector, this kind of policy does not guarantee improved benefits for Uganda. It can function similarly to a royalty or a profit tax, and therefore the main difference arises if the country decides to take a share of the physical minerals.[67] This can help mitigate transfer pricing risks, especially for hard-to-price minerals (for example, gemstones, rare earth elements). However, it requires transportation and warehousing of minerals as well as negotiation of sales contracts, each of which poses risks. Unless UNMC develops sufficient capacity in these areas, introducing production sharing may simply replace one set of challenges with another. If the government continues to pursue production sharing, we recommend it follows the example of Gabon and develops UNMC's capacity before it takes any share of physical minerals.

Recommendation 4. Invest in value-addition activities only where they align with a clear, evidence-based strategy

While UNMC could consider investing further along the value chain, it should be cautious and ensure these projects are aligned with clearly defined strategic objectives. These objectives should be specific to individual minerals and stages of the value chain, and based on national development plans, economic feasibility, market outlook and rigorous cost-benefit analysis. Even value addition that is viable might not be beneficial for Uganda in cases where, for example, the mine must sell at a lower price to sustain the processing facility, or the processing facility diverts from other productive or social needs. Identifying the gaps and opportunities for Uganda along mineral value chains will require in-depth study, for which the government could engage external expertise to support. We recommend that the government requires independent and publicly disclosed feasibility studies prior to any investment in value addition activities. We also recommend prohibiting UNMC from making loss-making investments unless accompanied by a rigorous plan for how this will enable further value chain development and large payoffs in the longer term.[68]

Recommendation 5. Limit non-commercial and non-core roles

The government appears to intend a primarily commercial mandate for UNMC. We recommend that it continues with this approach. Retaining regulatory responsibilities within the Directorate of Geological Survey and Mines avoids the possibility of UNMC having to face conflicts of interest as well as reducing corruption risks. The government may also wish to prohibit investments in non-core activities to prevent the types of losses or inefficiencies associated with, for example, the DRC's Gécamines or Mongolia's Erdenes Mongol. NMCs are generally not well placed to invest in non-core sectors, such as electricity, transport (where unconnected to mines), banking or hospitality. There are already public institutions in Uganda that invest in these sectors and UNMC's involvement would risk crowding out the private sector. If the government intends for UNMC to have any non-commercial or non-core roles, these should be limited and clearly defined.[69]

Financing the Uganda National Mining Company

In order to encourage UNMC to achieve its objectives and operate efficiently, an appropriate funding model will be essential. This model must be aligned with UNMC's mandate and avoid the pitfalls of other NMCs. Below, we have outlined two key recommendations for how to do so.

Recommendation 6. Allocate start-up capital based on a realistic plan, budget and assessment of opportunity costs

There is a significant risk that UNMC might become another SOE driven by a "drill, borrow, collect, retain, repeat" philosophy, without any tangible benefits for the country other than providing a few NMC jobs. From day one, UNMC must have a clear path to profitability and to generating dividends for the government, while meeting its mandate of participating in the industry and benefiting Uganda's citizens.

We suggest that the government provides a multi-year budget for UNMC, rather than the typical single-year budget. This will allow the government to provide UNMC with greater certainty, allowing it to plan and make multi-year investments that benefit Uganda. Section 23 of the PFMA permits multi-year expenditure commitments provided they are approved by parliament. However, it would be prudent for the government to initially limit the size of this allocation, imposing a strict cap on UNMC's access to capital until it demonstrates the ability to compete with the private sector at international standards. To this end, UNMC should publish financial, economic, environmental and social feasibility studies, provide a clear explanation to parliament on how the opportunity costs of using public funds have been accounted for prior to making any large-scale investment, and allow time for public discussion.

Recommendation 7. Allow only the retention of revenue from own investments and set a high payout ratio to the government

While UNMC should be able to cover its legitimate costs, it should not become a "state within a state," nor starve the treasury of much-needed income from the mining sector.

The MMA and the PFMA leave it unclear whether UNMC will retain dividends earned on free equity. Although Section 30 of the PFMA requires dividends due to the government to be paid into the Consolidated Fund, it does not define "dividends due" or whether this includes any profits made by an SOE. To incentivize UNMC performance, the government could clarify that the Uganda Tax Authority will collect all passive income, or that UNMC will transfer it directly to the Consolidated Fund. UNMC should only retain a portion of the income it earns from any investments in geological research, exploration and paid equity in mining projects.

To prevent over-investment, the government could provide clear guidance to the Board of Directors on the maximum amount of earned income that UNMC can retain in any given year. Given commodity price volatility, the company's retained revenue should be smoothed to prevent year-to-year budgetary fluctuations and allow the company to plan in advance. We recommend a high minimum payout ratio for at least the medium term, with occasional capital allocations based on extraordinary need.[70] Many new NMCs have lower payout ratios, but they generally do not generate significant benefits with their retained revenues. If the government and parliament deem that the company has demonstrated the ability to manage a large project to international standards, regulations could allow parliament to make one-off allocations to UNMC to finance these projects. This should be based on independent analysis or feasibility studies and clear accounting for opportunity cost. This approach strikes a balance between government control, predictability and performance incentives.

Management and oversight of the Uganda National Mining Company

Establishing UNMC will be costly, and financial returns are uncertain, as noted above. As the experience of NMCs from around the world highlights, the structure, management and oversight of the company are all key to ensuring it fulfills its mandate and benefits Ugandans.

The performance of the 41 public corporations or SOEs that already have a commercial mandate in Uganda also highlight the importance of effective management and oversight.[71] Based on Auditor General reports, these SOEs have a mixed performance. As set out in Table 4, the majority of SOEs audited in the past five years have been profitable. However, the Auditor General has found most of them to have an "inadequate" return on assets—less than 5 percent—suggesting that they are using their assets inefficiently. Moreover, very few SOEs have paid dividends to the government despite making a profit during this period. While most SOEs have indicated that they have retained profits to fund planned investments, the Auditor General has flagged the lack of operationalization of dividend policies that also ensure shareholders are paid.[72]

Table 4: Performance of audited Ugandan state-owned enterprises in 2019/20–2023/24[73]

	2019/20	2020/21	2021/22	2022/23	2023/24
Profitable	8/13	13/26	10/18	14/23	13/20
Return on assets of at least 5%	2/13	11/27	6/16	3/22	5/20
Made dividend payments	2/26	2/27	1/16	1/22	1/20

To improve UNMC's probability and success, we offer three recommendations, outlined below.

Recommendation 8. Engage experienced consultants to support the setting up of Uganda National Mining Company to align with its mandate

The structure of UNMC should be a function of its mandate. If the company were to focus on exploration and enhancement of Uganda's geological knowledge base, it would need the following:

1. Senior management (including corporate secretary, internal audit, legal counsel, external relations and sales and marketing)
2. A mineral-exploration department (covering, for example, surveys, geological and geophysical exploration, drilling, testing and resource and reserve calculations)
3. A licensing and permitting department
4. A finance department (including investor relations, accounting and tax, and treasury and risk management)
5. Human resources and IT

If the company were to focus on managing and operating mines, it would need to add:

6. A mine-engineering division
7. A health, safety and security division
8. A project-management division and a project manager for each mine
9. An environmental management and corporate social responsibility division

A clear organigram, remunerations policy and job descriptions for each position are also essential. UNMC could engage experienced consultants to draw on international experiences with mining companies and NMCs to guarantee the most appropriate setup.

Experienced consultants could also advise on the approach to selection and oversight of senior managers. Given the political nature of UNMC's Board of Directors, there is a risk that the company might become part of the government's patronage network. To ensure that only the most qualified and experienced individuals are selected for senior management positions, it would be useful for the UNMC Board to establish clear criteria for hiring, promotions and dismissals. Ma'aden, Saudi Arabia's highly profitable and successful NMC, is managed by a board and senior managers drawn roughly half from Saudi Arabia and half from other countries. Brazil's Vale similarly draws on board and managerial expertise from around the world, while Sweden's LKAB has an all-Swedish board but managers of different nationalities.

While remuneration of senior managers should be performance-based, we would recommend not basing compensation on company profitability, since UNMC's main goal, at least initially, is to unlock Uganda's mineral potential. Rather, we recommend remuneration be based on quantifiable targets, such as area covered by geological surveys, new reserves discovered, cost-control measures and timely public disclosure of reports. UNMC's middle management and staff should also demonstrate high levels of competence, expertise and professionalism.

Recommendation 9. Ensure parliament reviews operations and finances and approves large investments, and external auditors conduct annual audits

Well-managed NMCs require high-quality, independent oversight to ensure they are following their own rules or principles and meeting their own objectives. Oversight bodies identify potential mismanagement and corruption, and suggest or enforce corrections. As a result, they are also crucial for building trust with market participants and the public.

The Ugandan parliament will have a crucial role providing oversight of UNMC's operations and budget. In particular, parliament could review and approve large investments based on guidelines provided by the UNMC Board for assessing investment projects. However, this reliance on parliamentary approval is not without risk, and inefficiencies in the

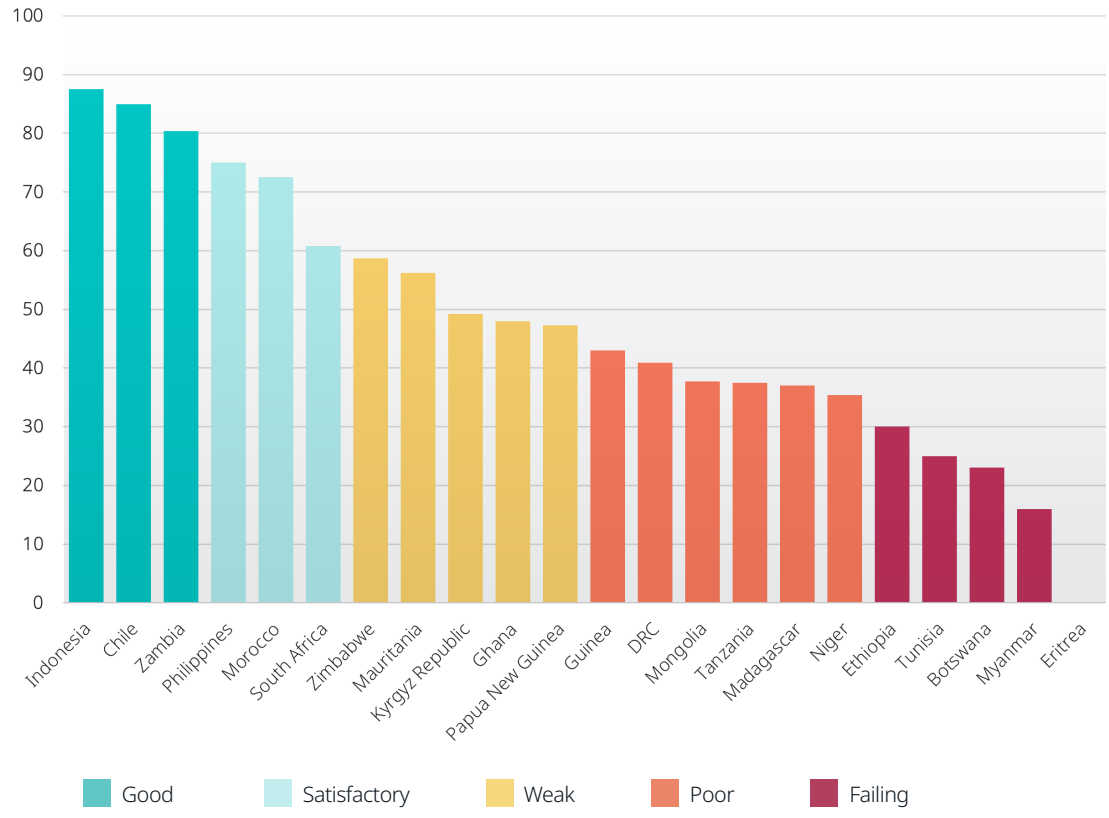
parliamentary process can delay time-sensitive financing. The government could follow the same approach it is taking with the Uganda National Oil Company and its retention of sales revenues for cash calls, deeming that parliament has approved an investment if it has not made a decision within a specified period of time.

The Ugandan Auditor General will also play a crucial oversight role similar to the one it has with Uganda's other SOEs. However, in addition to their periodic reports, a credible, independent external auditor should annually audit UNMC, as is the case with Botswana's Debswana, Chile's Codelco, China's Zijin Mining, Indonesia's three NMCs, Sweden's LKAB and Zambia's ZCCM-IH. UNMC should publish these reports on its website to build the trust of counterparties and the public.

Recommendation 10. Require the highest standards of transparency

The public's access to information on NMC finances and activities differs widely from country to country. At the upper extreme, companies such as Brazil's Vale, Chile's Codelco, Indonesia's Antam and Zambia's ZCCM-IH publish detailed audited annual reports covering mining and non-mining operations, activities and detailed finances. At the opposite extreme, companies such as Eritrea's ENMC, Myanmar's ME1 and ME2 and Tunisia's Compagnie des phosphates de Gafsa publish very little. (See Figure 3 for a ranking of NMC transparency scores from 2017, the most recent available comprehensive Resource Governance Index.) Extractive Industries Transparency Initiative (EITI) reports are often the only source of information on NMC activities in these countries.

Figure 3. National mining company transparency scores (Resource Governance Index, 2017)[74]



Transparency is essential for guaranteeing that UNMC successfully implements its mandate and contributes to Uganda's sustainable development. It promotes alignment between public expectations and government objectives, building trust with citizens, encouraging long-run policy consistency and smoothing political pressure over time. Transparency also allows policymakers to respond to changing economic conditions and ineffective or corrupt management of the NMC earlier and more easily if they have free access to credible information about the company's operations and performance. By improving investor confidence, transparency also increases access to capital: investors are more likely to put their money in a jurisdiction where policymaking is predictable and the risks are clear.[75] Finally, a well-informed public can engage in a constructive discussion around policy formulation and NMC performance. Public scrutiny can complement the role of oversight bodies by deterring officials from acting unethically and holding them accountable for abuses of power for private gain.

Among the more than 14 international transparency guidelines for SOEs, some specifically designed for NMCs, the most common elements include publication of the NMCs':[76]

- Legal framework and mandate
- Shareholdings
- Corporate structure
- Partnerships
- Corporate governance
- Commercial and non-commercial activities
- Audited annual reports and quarterly financial statements
- Performance and returns
- Risk factors
- Transfers to/from the treasury
- Contracts and shareholder agreements
- Social and environmental disclosures

It may be reasonable to conclude that these commonalities represent a global consensus on what elements constitute good reporting practice by SOEs. Yet, to date, a definitive, internationally accepted extractive SOE disclosure standard has not been developed. To the list above, we would also add: capital and operational expenditures on a mine-by-mine basis; major procurements; commodity sales (if relevant); the beneficial ownership information of business partners; internal policies and standards (such as internal audit standards, human resources policies and job descriptions); as well as independent feasibility studies prior to any final investment decision.

UNMC should publish independently audited annual and quarterly financial statements and annual reports covering, at a minimum: legal framework and mandate; shareholdings; corporate structure; partnerships; corporate governance; commercial and non-commercial activities; performance including costs, revenues and profits; volume and price of any commodity sales; transfers to and from the government; and risk factors. The UNMC website should also publish all contracts and shareholder agreements, feasibility studies, environmental and social impact assessments as well as internal policies and standards. To achieve the highest degree of transparency, UNMC could publish all transactions greater than $1,000 on a monthly basis, as is the case in Mongolia, where SOEs are legally required to do so under the Glass Accounts Law.[77]

Conclusion

Uganda's new NMC has been established with a legal mandate under the Mining and Minerals Act, 2022 and a Board of Directors. However, it remains unclear whether or how the company will contribute to Uganda's future prosperity and wellbeing. There is much work to be done to transform the idea of the company into a functioning entity that will "optimize value to its shareholders," that is, the state and the people of Uganda.

The board's first step, even before hiring managers and staff, might be to clarify the company's business plan and its exact list of eligible or prohibited investments. This document would inform all future decisions, from human-resources policies, to IT systems, to financing requirements. In this report, we have advised the board to consider a limited mandate for the next few years to allow the company to build experience in the mining industry and avoid diverting scarce public funds to high-risk mineral projects. We see a focus on unlocking Uganda's mineral potential through investment in geological surveys and co-financing exploration as UNMC's best opportunities to contribute to Uganda's sustainable development. Indeed, Uganda may wish to draw on global and regional experiences that suggest that minority state equity may not generate the returns that governments or SOEs might expect, and that there are potentially better uses of public and NMC resources, as well as better ways to raise government revenue from mining projects.

UNMC should be operated professionally and draw on Ugandan and global expertise in the mining sector. To these ends, the board should establish clear and objective hiring, promotion and dismissal criteria and procedures, and the company's management structure should reflect its ultimate mandates. UNMC should be subject to the highest standards of oversight and transparency, including reviews by parliament and publication of independently audited financial statements and annual reports.

Mineral exploration is usually unsuccessful, and when a commercial discovery is made, projects have large lead times and require enormous start-up capital, and profitability is subject to the whims of commodity markets and uncertain geology. At the same time, the sector can generate significant revenues for the state as well as supplier contracts and jobs (though automation is reducing the need for local labor and many of the jobs are short term). While UNMC can generate added benefits for Ugandans, the government may wish to manage expectations as to what it can accomplish and the timeline for success.



Photo by Dean Petrovici for iStock

Appendix

Table 5 outlines the NMCs identified by NRGI for the purposes of this report. This list includes SOEs that are involved in both the mining and petroleum sectors and excludes subsidiaries and affiliates.

Table 5: National mining companies identified by the Natural Resource Governance Institute

Country	National mining company	Country	National mining company
Afghanistan	Northern Coal Enterprise	Kyrgyz Republic	Khaidarkan Mercury
Angola	Empresa Nacional de Diamantes (ENDIAMA)	Kyrgyz Republic	Kyrgyzaltyn
Bolivia	Corporación Minera de Bolivia	Kyrgyz Republic	Kyrgyzkomur
Botswana	Debswana (50:50 joint venture with DeBeers)	Madagascar	Kraomita Malagasy (Kraoma)
Brazil	Vale	Mauritania	Société Nationale Industrielle et Minière (SNIM)
Burkina Faso	Société de Participation Minière du Burkina (SOPAMIB)	Mexico	Litio para México (LitioMx)
Cameroon	Société National des Mines (SONAMINES)	Mongolia	Erdenes Mongol
Chile	Corporación Nacional del Cobre de Chile (Codelco)	Morocco	Office Chérifien des Phosphates (OCP)
Chile	La Empresa Nacional de Minería (ENAMI)	Myanmar	Mining Enterprise 1 (ME1)
China	China Energy Corporation	Myanmar	Mining Enterprise 2 (ME2)
China	Shenhua Energy	Myanmar	Myanma Gems Enterprise (MGE)
China	Zijin Mining	Namibia	Namdeb (50:50 joint venture with DeBeers)
Democratic Republic of Congo	Gécamines	Niger	Société du patrimoine des mines du Niger (SOPAMIN)
Democratic Republic of Congo	Société de Développement Industriel et Minier du Congo DRC (SODIMICO)	Papua New Guinea	Ok Tedi Mining

Democratic Republic of Congo	Societé Minière de Bakwanga (MIBA)	Papua New Guinea	Petromin
Eritrea	Eritrean National Mining Corporation (ENAMCO)	Philippines	Philippine Mining Development Corporation
Ethiopia	Ethiopian Mineral Corporation	Poland	Jastrzębska Spółka Węglowa (JSW)
Finland	Finnish Mineral Group	Poland	Kompania Weglowa
Gabon	Société Équatoriale des Mines (SEM)	Russia	Rostec
Ghana	Ghana Integrated Aluminum Development Corporation	Saudi Arabia	Ma'aden
Ghana	Ghana Integrated Iron and Steel Development Corporation	Senegal	Société des Mines de Fer du Sénégal Oriental (MIFERSO)
Ghana	Prestea Sankofa (subsidiary of Ghana National Petroleum Corporation)	Senegal	Société des Mines du Sénégal (SOMISEN)
Guinea	Société Guinéenne du Patrimoine Minier (SOGUIPAMI)	South Africa	African Exploration Mining and Finance Corporation
India	Coal India	Sweden	LKAB Minerals
Indonesia	Antam/PT Aneka Tambang	Tajikistan	Vostokredmet
Indonesia	PT Bukit Asam	Tanzania	State Mining Corporation (STAMICO)
Indonesia	PT Timah	Trinidad and Tobago	National Quarries Company Limited
Jordan	Jordan Phosphate Mines Company (JPMC)	Tunisia	Compagnie des phosphates de Gafsa
Kazkahstan	Kazatomprom	Vietnam	Vinacomin
Kazakhstan	Tau-Ken Samruk National Mining Company	Zambia	ZCCM Investments Holdings (ZCCM-IH)
Kenya	National Mining Corporation Kenya	Zimbabwe	Zimbabwe Mining Development Corporation (ZMDC)

Endnotes

1 Uganda National Planning Authority, "Vision 2040," accessed 19 March 2025, www.npa.go.ug/vision2040/; Uganda National Planning Authority, *Fourth National Development Plan (NDPIV) 2025/26 - 2029/30* (2024), parliamentwatch.ug/wp-content/uploads/2025/01/PDF-FINAL-NDPIV-for-Parliament-Approval-13122024-1.pdf.

2 Jason Mitchell, "Uganda formalises its mining sector to drive future economic growth," *IntelliNews*, 10 October 2024, www.intellinews.com/uganda-formalises-its-mining-sector-to-drive-future-economic-growth-347600/; Uganda Chamber of Mines and Petroleum, "General Media Statement," 5 September 2024, ucmp.ug/general-media-statement/.

3 Uganda Ministry of Energy and Mineral Development, *Minerals and Mining Policy 2018* (2018), www.ugeiti.org/wp-content/uploads/2023/03/Minerals-and-Mining-Policy-2018.pdf.

4 The most recent survey was completed in January 2025. See: David Rupiny, "Investment in minerals: High-value mineral deposits found in northeastern Uganda," Uganda Investment Authority, 5 February 2025, www.ugandainvest.go.ug/investment-in-minerals-high-value-mineral-deposits-found-in-northeastern-uganda/.

5 Cecilia Jamasmie, "Uganda grants Ionic licence to mine rare earths," Mining.com, 18 January 2024, www.mining.com/uganda-grants-ionic-licence-to-mine-rare-earths/.

6 Exploration spend is from the S&P Global database: www.spglobal.com/market-intelligence/en/solutions/products/resources/capital-iq-pro-metals; land area is from World Bank Group, "Land area (sq. km)," 2022, data.worldbank.org/indicator/AG.LND.TOTL.K2.

7 Exploration spend is from S&P Global; land area is from World Bank, "Land area (sq. km)."

8 Uganda government, *The Mining and Minerals Act, 2022* (2022), bills.parliament.ug/attachments/Mining%20and%20Minerals%20Act,%202022.pdf.

9 Hakim Kanyere, "Museveni reiterates ban on export of unprocessed minerals," *Nile Post*, 25 January 2025, nilepost.co.ug/steel/239111/museveni-reiterates-ban-on-export-of-unprocessed-minerals.

10 Franklin Draku, "Uganda National Mining Company gets new board," *The Monitor*, 5 November 2024, www.monitor.co.ug/uganda/news/national/uganda-national-mining-company-gets-new-board-4812220.

11 Franklin Draku, "Uganda National Mining Company gets new board."

12 Section 179 of the MMA provides for this equity. Section 29 of the Public Financial Management Act (PFMA) states that all revenues must accrue to the Consolidated Fund unless specified by an Act of Parliament.

13 Section 30 of the PFMA requires dividends due to the government to be paid into the Consolidated Fund. However, it does not define "dividends due" or whether this includes any profits made by an SOE.

14 Mining.com, "The top 50 biggest mining companies in the world," 5 October 2024, www.mining.com/top-50-biggest-mining-companies/.

15 An "operational" NMC may not necessarily be the mine "operator," meaning the lead partner on a particular project.

16 Collecting dividends on paid equity would fall under a NMC's commercial mandate.

17 Patrick Heller, *Doubling Down: National Oil Companies as Instruments of Risk and Reward* (NRGI, 2018), resourcegovernance.org/publications/doubling-down-national-oil-companies-instruments-risk-and-reward.

18 High-grading is the practice of selectively mining the richest parts of a deposit to maximize short-term profits.

19 Eva Liedholm Johnson and Magnus Ericsson, "State ownership and control of minerals and mines in Sweden and Finland," *Mineral Economics* 28 (2015): 23–36, link.springer.com/article/10.1007/s13563-015-0063-2.

20 We were unable to find data for Kumtor's payments to government in 2021. See: EITI, "Kyrgyz Republic," 2024, eiti.org/countries/kyrgyz-republic; Kumtor, "Video – President of KGC Almazbek Baryktabasov speaks at the forum 'MINEX Central Asia 2024,'" 19 June 2024, www.kumtor.kg/en/kgknyn-prezidenti-almazbek-baryktabasov-el-aralyk-minex-central-asia-2024-forumunda-s%D3%A9z-s%D2%AFjl%D3%A9d%D2%AF/.

21 Alex Donaldson, "Chile to nationalise lithium industry; Codelco to organise," *Mining Technology*, 21 April 2023, www.mining-technology.com/news/chile-lithium-mining-nationalisation-boric/.

22 Nguyet Thi Minh Phi, Farhad Taghizadeh-Hesary, Chuc Anh Tu, Naoyuki Yoshino and Chul Ju Kim, *Performance Differential between Private and State-Owned Enterprises: An Analysis of Profitability and Leverage* (Asian Development Bank Institute, 2019), www.adb.org/sites/default/files/publication/503476/adbi-wp950.pdf; Michael Trebilcock, "Trends in the Role of State-Owned Enterprises in Developed and Developing Country Economies," in A. Marciano, G.B. Ramello (eds.), *Encyclopedia of Law and Economics* (Springer, 2021), doi.org/10.1007/978-1-4614-7883-6_457-2; Thai-Ha Le, Donghyun Park and Cynthia Castillejos-Petalcorin, "Performance comparison of state-owned enterprises versus private firms in selected emerging Asian countries," *Journal of Asian Business and Economic Studies* 30, no. 1 (2021), www.emerald.com/insight/content/doi/10.1108/jabes-08-2021-0116/full/html.

23 See for example: Meenakshi Parida and S. Madheswaran, "Does ownership matter? Empirical evidence from the performance of Indian state and private coal mining companies," *Resources Policy* 74 (2021), www.sciencedirect.com/science/article/abs/pii/S0301420721003974.

24 See for example: David Manley and Webby Wake, *Copper Giants: Lessons from State-Owned Mining Companies in the DRC and Zambia* (NRGI, 2015), resourcegovernance.org/publications/copper-giants-lessons-state-owned-mining-companies-drc-and-zambia.

25 Nelson Banya and Chris Mfula, "Abu Dhabi's IRH to invest $1.1 bln in Zambia's Mopani Copper Mines," *Reuters*, 22 December 2023, www.reuters.com/markets/commodities/abu-dhabis-irh-invest-11-bln-zambias-mopani-copper-mines-2023-12-22/; Zambia EITI, *Zambia Extractive Industries Transparency Initiative (ZEITI) Final Report 2022* (2023), https://zambiaeiti.org/wp-content/uploads/2024/04/2022-ZEITI-Report.pdf.

26 Given the costs incurred in closing a mine, it may also be rational for an NMC to keep a loss-making mine open if it is still covering its operating costs.

27 Tau-Ken Samruk, *Annual Report of «JSC Tau-Ken Samruk» NMC for 2023* (2024), www.tks.kz/en/reports-and-results/.

28 Andrew Bauer and Dorjdari Namkhaijanstan, *Wild Growth: An Assessment of Erdenes Mongol* (NRGI, 2019), resourcegovernance.org/publications/wild-growth-assessment-erdenes-mongol; Orano, "Orano signs investment agreement with Mongolian government to develop world-class uranium deposit," 17 January 2025, www.orano.group/en/news/news-group/2025/january/orano-signs-investment-agreement-with-mongolian-government-to-develop-world-class-uranium-deposit.

29 M. Montastudio, "USD 2.3 billion debt obligation in Oyu Tolgoi project waived," Montsame, 25 January 2022, montsame.mn/en/read/288029.

30 Aaron Ross, "Congo's state miner seeks to dissolve Glencore venture over debts," *Reuters*, 24 April 2018, www.reuters.com/article/business/congos-state-miner-seeks-to-dissolve-glencore-venture-over-debts-idUSKBN1HV1OO/.

31 Charles McPherson, *State Participation in the Natural Resources Sectors: Evolution, Issues and Outlook* (International Monetary Fund, 2008), www.imf.org/external/np/seminars/eng/2008/taxnatural/pdf/mcpherson.pdf.

32 EITI, "EITI country reports," updated 7 March 2025, eiti.org/eiti-country-reports; CRU International (2021); World Bank, *Study on the Economics of Optimally Developing Mongolia's Mineral Resource Wealth* (2022), documents.worldbank.org/en/publication/documents-reports/documentdetail/099440003302234098/p173631057d1660790a63002faf47ea7000; interview with Mongolian official, 2022.

33 For a discussion of some of these losses, see: *Le Monde*, "In the DRC, the calamitous management of Gécamines revealed, hundreds of millions evaporated," 6 June 2022, www.lemonde.fr/afrique/article/2022/06/06/en-rdc-la-gestion-calamiteuse-de-la-gecamines-revelee-des-centaines-de-millions-de-dollars-evapores_6129084_3212.html; DRC General Inspectorate of Finances, *Sunthese du rapport de controle de l'inspection generale des finances sur la gestion de la Gecamines* (2022), congomines.org/system/attachments/assets/000/002/263/original/Synthèse_du_rapport_de_contrôle_Gécamines.pdf?1654686181.

34 ZCCM-IH, "Annual Reports," updated 10 June 2024, zccm-ih.financifi.com/financials/annual-reports/.

35 R. Renchindulam, "Mongolia and France Launch Joint Uranium Project at World-Class 'Zuuvch-Ovoo' Deposit," *Mongolian Mining Journal*, 20 February 2025, www.mongolianminingjournal.com/a/74000.

36 Barrick Gold Corporation, *Extractive Sector Transparency Measures Act – Annual Report 2022* (2023), q4live.s25.clientfiles.s3-website-us-east-1.amazonaws.com/322814910/files/doc_downloads/estma/Barrick_2022_ESTMA_Report.pdf; Barrick Gold Corporation, *Extractive Sector Transparency Measures Act – Annual Report 2023* (2024), q4live.s25.clientfiles.s3-website-us-east-1.amazonaws.com/322814910/files/doc_downloads/estma/Barrick_2023_ESTMA_Report.pdf.

37 Agreement between the Government of the Republic of Mali and Société des Mines de Gounkoto SA and Gounkoto SA, *Mali, Gounkoto SA - Gounkoto - Concession, 2012*, Article 7.2 (2012), https://resourcecontracts.org/contract/ocds-591adf-6710616438/view#/pdf/page/6/tagged/12354.

38 Ghana Web, "'Ghana's 10% carried interest In mining companies Is virtually useless' –Bawumia," 8 May 2018, www.ghanaweb.com/GhanaHomePage/business/Ghana-s-10-carried-interest-in-mining-companies-is-virtually-useless-Bawumia-650065.

39 Ghana EITI (GHEITI)'s aggregation reports 2019–2022: GHEITI, "Publications – Aggregation Reports," updated 2023, www.gheiti.gov.gh/site/index.php?option=com_phocadownload&view=sections&Itemid=54.

40 For more discussion of the state shareholders' involvement in company decision-making, see: World Bank, *African Mining Legislation Atlas (AMLA) Toolkit for State Equity Participation in Mining Companies* (2022), www.a-mla.org/images/articles/State-Equity-Toolkit-World-Bank-2022.pdf.

41 Vale, "Check out our company," accessed 12 February 2025, vale.com/check-out-our-company.

42 In most countries, these provisions are only enforced on new mining projects; older contracts and licenses are protected by stabilization clauses.

43 The Zambian government is planning to initially buy copper from mining companies in the country on commercial terms to trade before negotiating production-sharing arrangements. See: Felix Njini and Clara Denina, "Africa's big copper countries set their sights on the profits of trade," *Reuters*, 31 January 2025, www.reuters.com/world/africa/africas-big-copper-countries-set-their-sights-profits-trade-2025-01-31/.

44 Reuters, "Uganda signs maiden production sharing deal to revive copper mine," 4 March 2025, www.miningweekly.com/article/uganda-signs-maiden-production-sharing-deal-to-revive-copper-mine-2025-03-04.

45 How a production-sharing arrangement operates as a fiscal tool generally depends on whether the mine operator can retain a portion of production each year to cover costs; whether there is a cost-recovery ceiling; as well as the variables used to determine the sharing ratio (for example, production level, profit level, R-factor or rate-of-return calculations, etc.). If there is no cost recovery or it is limited to a percentage of production, the production share would be similar to a royalty by assuring that some share will always flow to the government regardless of profits. Without a cost recovery limit, it would operate like a profit tax. Nevertheless, there are differences in implementation that can affect the amount of government revenue that each of these instruments generates. The optimal design of the production-sharing arrangement will depend on the wider fiscal regime. For more discussion, see Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) and African Tax Administration Forum (ATAF), *The Future of Resource Taxation: 10 policy ideas to mobilize mining revenues* (2023), www.igfmining.org/resource/future-resource-taxation-10-policy-ideas-to-mobilize-mining-revenues/.

46 IGF and ATAF, *The Future of Resource Taxation: 10 policy ideas to mobilize mining revenues*.

47 IGF and ATAF, *The Future of Resource Taxation: 10 policy ideas to mobilize mining revenues*.

48 Gaëlle Arenson, "Gécamines: Traders finally selected to sell Tenke copper," *Africa Business Plus*, 22 July 2024, www.africabusinessplus.com/fr/820131/gecamines-les-traders-finalement-retenus-pour-vendre-le-cuivre-de-tenke/.

49 For a discussion of the various factors that determine a country's competitiveness at different stages of mineral value chains, see: Thomas Scurfield, Matthieu Salomon and Silas Olan'g, *Six Keys to Unlocking Equitable Value Addition in Mining* (NRGI, 2024), resourcegovernance.org/publications/six-keys-unlocking-equitable-value-addition-mining.

50 Andrew Bauer and Dorjdari Namkhaijanstan, *Wild Growth*.

51 ZCCM-IH, "Annual Reports."

52 Corporate Finance Institute, "Conglomerate Discount," accessed 19 March 2025, www.corporatefinanceinstitute.com/resources/valuation/conglomerate-discount/.

53 DRC General Inspectorate of Finances, *Summary of the Control Report of the General Inspectorate of Finances*.

54 This section draws heavily on the following resource: Organisation for Economic Co-operation and Development, *Financing State-Owned Enterprises: An Overview of National Practices* (2014), www.oecd.org/en/publications/financing-state-owned-enterprises_9789264209091-en.html.

55 This table has been put together from company annual reports. The payout ratio is the percentage of a company's earnings that is paid out to shareholders as dividends.

56 See, for example: Zijin Mining, *Annual Report 2023* (2024), www.zijinmining.com/upload/file/2024/04/30/74fe00e4dbe140fab01574193d4aae65.pdf.

57 Chris Mfula, "Zambia seeks to restructure Glencore debt with new Mopani investor," *Reuters*, 2 February 2024, www.reuters.com/markets/commodities/zambia-restructure-15-bln-glencore-debt-with-new-mopani-investor-2024-02-02/.

58 Hamish Rutherford, "Solid Energy brought down by debt and ambition," *Stuff*, 13 August 2015, www.stuff.co.nz/business/industries/71088037/solid-energy-brought-down-by-debt-and-ambition.

59 S&P Global rates Uganda as having a "high" overall risk. It rates the risk of tax increases and inconsistency as well as operational risks (including the impact of corruption, regulatory burden, infrastructure disruption and labor strikes on the operating environment), as "very high." S&P Global, "Uganda Risk Summary," accessed 11 February 2025, www.spglobal.com/market-intelligence/en/solutions/products/resources/capital-iq-pro-metals.

60 If there is a commercial discovery, UNMC would earn a higher share of the profits or resale value of the license as a proportion of their ownership stake, provided that its investment is equity and not debt.

61 Uganda National Planning Authority, *NDPIV 2025/26 – 2029/30*.

62 This figure is lower than that reported by the Auditor General. The Auditor General reports public debt to have reached 52.7 percent of GDP at the end of 2022/23. Ministry of Finance figures are also lower than the 50.7 percent reported by the International Monetary Fund (IMF). The reason for this could be that the Auditor General and the IMF include debts that the Ministry of Finance does not. For example, unlike the Ministry of Finance, the IMF includes debt from the Ugandan central bank. See: Uganda Ministry of Finance, Planning and Economic Development, *Debt Sustainability Analysis Report FY2022/23* (2023), mepd.finance.go.ug/documents/DSA/DSA-FY202223.pdf; Uganda Office of the Auditor General, *Annual Report of the Auditor General to Parliament for the Financial Year Ended 30th June 2023: Consolidated Audit Findings* (2023), www.oag.go.ug/viewmegareport/33; IMF, *Uganda: 2024 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Uganda* (2024), www.imf.org/en/Publications/CR/Issues/2024/09/11/Uganda-2024-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-554753.

63 IMF, *Uganda: 2024 Article IV Consultation*.

64 Jeff Mbanga, "What awaits Uganda's mining sector in 2024," *The Observer*, 10 January 2024, observer.ug/news/what-awaits-uganda-s-mining-sector-in-2024/.

65 Manuel Regueiro González-Barros and José Antonio Espí, "The returns on mining exploration investments," *Boletín Geológico Y Minero* 130, no. 1 (2019), bgm.revistas.csic.es/index.php/bgm/article/view/218; Paul Manalo, "Average lead time almost 18 years for mines started in 2020–23," S&P Global, 10 April 2024, www.spglobal.com/market-intelligence/en/news-insights/research/average-lead-time-almost-18-years-for-mines-started-in-2020-23.

66 World Bank, *African Mining Legislation Atlas Toolkit for State Equity Participation in Mining Companies*.

67 Another difference is the reduction of base erosion and profit-shifting risks because of the cost-recovery limit and elimination of interest expenses. However, such a provision could be included in the mining code or mining agreements without a production-sharing contract.

68 Thomas Scurfield, Matthieu Salomon and Silas Olan'g, *Six Keys to Unlocking Equitable Value Addition in Mining*.

69 Patrick R. P. Heller, Paasha Mahdavi and Johannes Schreuder, *Reforming National Oil Companies: Nine Recommendations* (NRGI, 2014), resourcegovernance.org/sites/default/files/documents/nrgi_9recs_eng_v3.pdf.

70 The government could require, for example, a payout ratio of around 80 percent, smoothed over a five-year period, for the first ten years of operations.

71 Uganda Office of the Auditor General, *Annual Report of the Auditor General to Parliament for the Audit Year Ended 31st December2024: Consolidated Audit Findings* (2024), www.oag.go.ug/viewmegareport/40.

72 Ugandan Auditor General reports for 2019/20-2023/24: Uganda Office of the Auditor General, "Annual Audit Reports Consolidated," accessed 19 March 2025, www.oag.go.ug/consolidatedreports.

73 Uganda Office of the Auditor General, "Annual Audit Reports consolidated."

74 NRGI, "2017 Resource Governance Index," 2017, resourcegovernance.org/publications/2017-resource-governance-index.

75 Julio Mejía and Elmira Aliakbari, *Fraser Institute Annual Survey of Mining Companies 2023* (Fraser Institute, 2024), www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2023; United Nations Development Programme, *Mineral Investment Conditions in Selected Countries of the Asia-Pacific Region* (1992), repository.unescap.org/bitstream/handle/20.500.12870/3900/ESCAP-1992-RP-Mineral-investment-conditions.pdf.

76 See for example: EITI, *Upstream Oil, Gas and Mining SOE Governance Challenges* (2018), eiti.org/documents/upstream-oil-gas-and-mining-soe-governance-challenges. NRGI compiled the various standards and guidelines, along with examples of good practices from SOEs all over the world,into a single guide in 2018: NRGI, *Guide to Extractive Sector State-Owned Enterprise Disclosures* (2018), resourcegovernance.org/publications/guide-extractive-sector-state-owned-enterprise-disclosures.

77 Dorjdari Namkhaijantsan, *Mongolia's State-Owned Mining Enterprises: A Deeper Look Into Glass Accounts Data* (NRGI, 2022), resourcegovernance.org/publications/mongolias-state-owned-mining-enterprises-deeper-look-glass-accounts-data.

About the authors

Andrew Bauer is a consultant at the Natural Resource Governance Institute (NRGI). Paul Bagabo is a senior officer at NRGI and leads its Uganda program. Thomas Scurfield is an Africa senior economic analyst at NRGI.

Acknowledgments

The authors are grateful to Alexandra Readhead and Viola Tarus of the International Institute of Sustainable Development; Professor Magnus Ericsson of the Luleå University of Technology and RMG Consulting; and Dr Valérie Marcel of the New Producers for Sustainable Energy and the School of Oriental and African Studies for their helpful advice. They also thank the Ugandan government officials, industry representatives and civil society members who attended the validation workshop for this report in Kampala on 26 February 2025 for their invaluable insights and feedback. Finally, they thank colleagues across NRGI, in particular Amir Shafaie, Damilare Ogunmowo, Daouda Papa Amad Diene, David Manley, David Sefa Adjei, Denis Gyeyir, Dorjdari Namkhaijantsan, Fernanda Ballesteros, Moise Liboto Makuta and Rob Pitman for providing valuable support, as well as the Fundraising and Operations teams for making this report possible.

This material has been funded by United Kingdom (U.K.) International Development from the U.K. government; however, the views expressed do not necessarily reflect the U.K. government's official policies.

About NRGI

The Natural Resource Governance Institute is an independent, non-profit organization that supports informed, inclusive decision-making about natural resources and the energy transition. We partner with reformers in government and civil society to design and implement just policies based on evidence and the priorities of citizens in resource-rich developing countries. Learn more at **www.resourcegovernance.org**

Natural Resource Governance Institute