To be successful, national oil companies (NOCs) should sell crude oil at the highest possible price, conduct the transaction at the lowest possible cost, and eliminate opportunities for corruption and abuses of authority. Our studies of how 11 oil-producing countries sell their share of production suggest that these aims can be met through different processes, including either of the dominant sales methods: spot sales or term contracts. The countries surveyed are Angola, Azerbaijan, Brazil, Congo-Brazzaville, Iraq, Kazakhstan, Mexico, Nigeria, Norway, Russia and Saudi Arabia.

Effective systems share success in the following ways. Through strong market expertise and techniques, their NOCs identify the optimal price at which to sell their oil. They prefer selling to end users—the companies that will refine the oil into petroleum products—rather than to trading companies. The NOCs themselves are well-governed, accountable and able to make most commercial decisions free from political interference. Finally, effective systems maintain control over their production through solid metering systems and the avoidance of theft.

**Good practices in NOC oil sales**

**Optimize price within available means**

Successful NOCs have developed a knowledgeable trading desk or division that can stay on top of instantaneous price movements when trading on the spot market, follow the spot markets in order to adjust price differentials when using term contracts, and identify the right buyers. Securing fair and full prices is an immense challenge because the physical oil market is opaque, competitive, volatile and astonishingly complex. The spot price of various oil grades reflects a multitude of overlapping and dynamic factors. These price dynamics are described further in the accompanying brief *When the Price Is Right*. Most NOCs have mastered the sophisticated skills for exporting their crude oil at fair and full value. Saudi Aramco offers a best-in-class example: Its small group of market experts aggressively price the kingdom’s oil while also managing its influence over regional and global prices. The trading arm of SOCAR, the NOC that markets around 70–80 percent of Azerbaijan’s production, has developed its reach and skill since its creation in 2007.

Linking the price of a country’s specific crude grade to a benchmark crude, such as Dated Brent in the North Sea, West Texas Intermediate in the United States, and Oman/Dubai in Asia, is a widely utilized good practice. Thorough market insights enable NOCs to set a competitive price differential—either a premium or discount depending on the crude’s quality—against the benchmark crude. This enables exporters to follow the volatile spot market and receive the highest possible
Briefing

The Governance of Oil Sales: Early Lessons on Good Practice

Revenue Watch Institute

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The studied NOCs use several special techniques for securing top value. Some enter into deals with refiners. To improve the market for its low-value, heavy “Maya” crude, the Mexican NOC Pemex worked with U.S. refiners to build expensive cokers that turn heavy crude into valuable products. This secured buyers and helped narrow the sour to sweet discount in the Gulf of Mexico. Saudi Aramco has joint ventures with refiners around the globe that are configured to optimize the output from Saudi crudes. In addition to predictable consumers, these joint ventures provide firsthand knowledge about local downstream markets, which helps the Saudi NOC to identify the optimal price to charge other buyers. Russia’s long-term contract to supply 300,000 barrels per day to the Chinese National Petroleum Corp. secured a buyer and also enabled the construction of the Asian ESPO pipeline between East Siberia and the Pacific Ocean.

In another special measure, Norway’s Statoil sometimes chooses to tighten the market for its crude by routing oil to its Asian storage facilities until price conditions shift. Countries also divert supplies to markets where demand appears strongest. For example, because Iraq oil sells at a higher average price in Asian markets than in European or U.S. markets, it increased the share of its oil sold to Asian markets from 30 percent in 2006 to 64 percent in 2010.

The case studies revealed other instances in which NOCs fail to secure an optimal price. By distributing a portion of their crude through Russian Transneft pipelines, Kazakhstan and Azerbaijan lose an estimated $3 and $7 per barrel, respectively, calculated by comparing 2010–2011 spot prices of the Azeri Light and Kazakh Tengiz with Ural spot cargoes. Both the Kazakh and Azeri crudes are of a higher quality than the Urals blend sold from the pipeline. Some sweeter Russian crudes face the same fate. For now, this is an unavoidable loss, given the lack of alternative transport options available to these NOCs.

Nigeria sells crude to its own NOC at a price below the market average. Moreover, the Nigerian NOC allocates cargoes to the trading companies that hold term contracts on an unpredictable and discretionary schedule. This lowers the value of the crude to the traders and likely affects the price they are willing to pay.

The fee charged by NOCs to market the state’s crude also affects the state’s realized price. In Angola, the NOC Sonangol is legally entitled to retain costs up to 10 percent of the sales price. Congo-Brazzaville’s SNPC reportedly charges a commission of 1.6 percent.

Use middlemen with care

Most major NOCs sell only to end users—companies that will process the oil into petroleum products. From our sample of countries, Angola, Russia, Nigeria and Congo-Brazzaville still use commodity traders—the middlemen of the industry. Traders, such as the industry-leading Swiss companies Glencore International, Vitol, Trafigura, Mercuria and Gunvor, can offer financing and flexibility that end users sometimes lack, and they are accustomed to managing the risks associated with operating in logistically or politically difficult environments. They often pay full market value for crude.

2  http://somooil.gov.iq/en/
However, using traders poses risks that require careful management. Traders capture a margin that theoretically could have been captured by the NOC if it marketed the crude itself. Moreover, traders are secretive companies that typically operate from jurisdictions with limited regulatory or taxation burdens, which exacerbates governance and tax avoidance risks. Their business model favors aggressive negotiation of sale terms, which can generate pressure on NOCs to grant favorable treatment. NOCs that sell to a mix of traders and end users can end up competing with the traders as both attempt to market the same crude to end users—a dynamic that could lower the eventual sale price.

Angola is deliberately moving away from using traders as it strengthens Sonangol’s trading arm. According to its statements, “Nowadays Sonangol has the ability to choose its own clients, and we choose people who are end users rather than traders.” However, through 2010 at least, Trafigura was still lifting crude. While the Russian NOC Rosneft sells most of its share of production through term contracts, it also executes spot sales with traders. The trader that receives the largest volumes is Gunvor, a company with rumored but officially denied links to top political leadership. What industry interviews do make clear is that oversight and transparency are limited around oil sales transactions involving Rosneft and Gunvor, such as those from the Port of Primorsk where Gunvor dominates. The rationale for using traders is unclear, given Rosneft’s ample expertise.

The Nigerian NOC, NNPC, sells nearly all its oil, around 1.1 million barrels per day in 2011, through term contracts with traders. According to numerous interviews, the contract recipients include companies that lack the requisite skills and financing to lift crude, suggesting that their allocations are “flipped” to more formidable companies for a profit. Term contracts in 2011 totaled 1.5 million barrels per day, considerably more than the actual production share controlled by NNPC. This factor and others contribute to the politicized and irregular allocation of cargoes and encourage influence peddling by those seeking to lift crude. The official selling prices are set in meetings between traders and the NOC, which represents a potential conflict of interest. The NOC in Congo-Brazzaville does not have a sophisticated trading desk and appears to sell at least some of its roughly 150,000 barrels per day to major oil traders. The structure of these arrangements is unknown. Illustrating the risks that accompany opaque and unaccountable crude sales, the proceeds from oil sold to Glencore by a front company for top Congolese government officials were seized by one of the country’s creditors in 2005, leading to court proceedings that involved the trading company.9

Some small oil exporters choose to hire a trading company to market their oil on their behalf. The traders have the experience to find customers for the specific crude produced, an expertise lacking in low-capacity environments or new producers. For example, Ghana has hired Vitol to serve this role, paying the company 8 cents per barrel of oil sold. Even though Ghana is a small oil producer, its crude sale revenue still represents a crucial revenue stream that requires careful governance. In 2011, Vitol sold oil worth approximately $450 million.

When traders are hired to market crude, such as in Ghana, their fees lower the price that producers will get for their crude. The much greater potential losses come if the contracts are poorly negotiated or monitored by the NOC. In exclusive marketing arrangements, the trader may have a limited incentive to maximize the value received by the NOC. Moreover, the selection of the

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6 http://www.sonangol.co.uk/dataTrading_en.shtml
8 http://www.ft.com/intl/cms/s/0/108aaace-ea10-11e0-b997-00144feab49a.html#axzz1ppyZBLB1
9 Global Witness (2005). The Riddle of the Sphinx: where has Congo’s oil money gone?
marketer should be open and competitive. Given the number of new oil producers, further research is needed on how NOCs with weak capacity and limited industry knowledge should sell their share of production.

**NOC autonomy and accountability**

To get the best price, NOCs need to operate at arm’s length from the government in an environment with clear rules and strong oversight. Unsurprisingly, across the cases, successful crude sales regimes with the fewest opportunities for abuse occur where the NOC is well governed and high-performing. NOCs typically execute a range of functions that can generate a mix of incentives vis-à-vis the public interest. For instance, in Azerbaijan and several other countries, the NOC manages the state’s participation in production sharing agreements (PSAs) in which it also participates as an equity shareholder. Transparency, oversight and corporate governance standards can help to ensure that NOCs fulfill their functions in ways that generate maximum long-term gains for their shareholders.

Countries should limit political interference in trading. Unclear roles and conflicts of interest make interference more likely. More so than a private company, NOCs will always be asked to pursue the national interest. For example, Petrobras states that “we continue to assist the Brazilian federal government to ensure that the supply and pricing of crude oil and oil products in Brazil meets Brazilian consumption requirements. Accordingly, we may make investments, incur costs and engage in sales on terms that may have an adverse effect on our results of operations and financial condition.” However, Petrobras’ roles and divisions are well defined and the company is provided autonomy over most commercial functions without undue political influence. Saudi Aramco is another example of a powerful NOC to which government grants autonomy in order to maximize its performance.

In Angola, lines between Sonangol’s business and state activities are more blurred, with Sonangol collecting revenue, borrowing and spending on behalf of the state. Moreover, reports suggest that politically connected persons and public officials have purchased shares in various Sonangol subsidiaries. Nigeria’s NNPC assumes multiple roles that generate conflicts of interest. As mentioned above, NNPC sells oil to itself at favorable prices through systems that lack transparency and oversight. Moreover, the country’s political leadership regularly intervenes in the company’s decision-making processes, including frequently changing top NOC personnel. Congo’s SNPC is required by law to consult with government regarding its activities, and political influence is high.

Strong corporate governance practices can help to safeguard NOC functions from abuse. These include internal and external reporting requirements such as the transparency practices recommended above. NOCs should account for all flows in their system and have a rigorous metering, accounting and auditing system for financial flows and volumes. External reporting requirements, such as the public disclosure of annual financial reports and auditor reports, provide added incentive for NOCs to strive for the highest price, reduce cost and avoid corruption. The governments and NOCs of Brazil and Norway publish reports on sales and income averages (though not individual sales), and Aramco has strong internal audit systems. Iraq’s SOMO publishes average sale prices and volumes every month in an effort to be more transparent, although these reports do not cover domestic sales.

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NOCs should transfer crude sale proceeds to the treasury through clear and efficient channels. Murky transactions are ripe for manipulation. According to a KPMG audit, Congo-Brazzaville's NOC, SNPC, is late in transferring funds to the treasury, uses exchange rates to its benefit, and fails to declare all income. Nigeria's NNPC buys 445,000 barrels per day of the state's oil but in the last few years has stopped paying for this sizable allocation, racking up debts to the treasury estimated at $6 billion. The transfer of sale income from NNPC’s four joint venture trading companies is opaque. Both Nigeria and Angola engage in crude-for-product swap deals that further obfuscate financial flows, particularly given the limited information available about these deals. And, as mentioned in The Case for Transparency in National Oil Company Crude Sales, the government of Angola could not account for $32 billion over 2007–2010, funds earned by Sonangol that never appeared on the Finance Ministry’s ledgers.

**Avoid production losses**

If oil is stolen from pipelines or during the export process, public revenue suffers. In Mexico, oil theft led to losses of $600 million in 2010, according to Pemex. Interviews suggest that, in Russia, oil goes missing in the Transneft pipeline system but volumes are not known, and that limited volumes in Azerbaijan and Kazakhstan go missing during transit as well, though more from smaller shipments and rail transfers than the big internationally run pipelines. The largest problem is in Nigeria, where an estimated 150,000 barrels per day are stolen by tapping pipelines, lifting illegally or manipulating export processes. Most theft occurs from the onshore or shallow water fields where the NOC controls 55–60 percent of the production, suggesting annual losses to the state of around $3 billion per year.

Effective metering systems and physical audit procedures can guard against lost production. Despite some improvements in Congo’s NOC transparency, recent audits could not align oil sale volumes with reports on the government’s production share, which indicates at least inadequate record keeping about physical flows. Iraq and Nigeria suffer weaknesses in their metering and other physical flow management systems, and programs to remedy those weaknesses face delays in both countries.

**Conclusions**

Oil sales and oil trading represent crucial parts of an industry that dominates the economies of many nations, including a growing number in the developing world. Abetted by their complexity, these transactions remain poorly understood and subject to limited scrutiny. This persists even though oil sale revenue constitutes the single largest source of government revenue for most producers.

As argued in the Revenue Watch brief The Case for Transparency in National Oil Company Crude Sales, transparency is a practical tool not only to generate accountability gains, but also to bring about the good governance practices identified above. Transparency encourages NOCs to seek out the best price, identify the optimal buyers, encourage healthier relationships with the rest of government, and maintain full control over production volumes.

To secure full transparency of NOC oil sale transactions would require a culture shift for most...
NOCs and buyers who have grown accustomed to operating in a certain way. The initial reaction to these recommendations may be opposition and assurances that such disclosures would undermine NOCs’ ability to enter into commercially competitive arrangements. Given the volatility of oil markets, the demonstrated correlation between oil wealth and unaccountable governance, and the importance of oil sales to funding public budgets, transparency of NOC oil sales may represent a concrete and practical tool to ensure that these transactions optimize the long-term interests of citizens.