March 16, 2016

Mary Jo White, Chair
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Re: Rulemaking for Section 1504 of the Dodd-Frank Wall Street Reform and Consumer Protection Act

Dear Chair White,

The ONE Campaign welcomes the opportunity to provide commentary on proposed rule 13q-1. The enclosed analysis raises important points that directly address issues raised by commenters during the initial comment period that we believe will prove useful to the Commission as it works to issue a final rule to implement 13q-1.

The ONE Campaign is an international campaigning and advocacy organization of more than 7 million people taking action to end extreme poverty and preventable disease, particularly in Africa. We believe that transparency of natural resource revenues is critical for enabling citizens in resource-rich countries to hold their governments accountable for using natural resource revenues effectively to combat poverty, improve citizen wellbeing, and promote peace and prosperity.

Evidence demonstrates that there are numerous benefits to revenue transparency, including Section 1504 of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Section 1504"). While some of these benefits may be challenging to quantify with precision, they certainly are not, as one commenter has suggested, "imperceptible, and potentially very slight."[1] In fact, other commenters have provided detailed submissions to the Commission that illustrate significant quantifiable benefits of Section 1504, including for investors, whose protection lies at the core of the Commission's mission.[2]

In the attached analysis, we provide the Commission with evidence that quantifies benefits of revenue transparency that may result from disrupting the links between corruption and conflict. Corruption-fueled conflict can destabilize a country, disrupt oil and gas production, and threaten the security of the US and other countries. In our analysis, we look at ongoing conflict events that have disrupted oil and gas production in Libya and Nigeria and quantify the impact that conflict rooted in decades of corruption has had on the realized revenues of US-listed oil and gas companies operating in those two countries. As

[1] Comment by API, February 16, 2016, p. 29, https://www.sec.gov/comments/s7-25-15/s72515-32.pdf
[2] Comment by Anthony Cannizzaro and Robert Weiner, February 11, 2016, https://www.sec.gov/comments/s7-25-15/s72515-22.pdf; Comment by Caitlin Corrigan, February 16, 2016, https://www.sec.gov/comments/s7-25-15/s72515-28.pdf; Comment by Sarah Peck and Sarah Chayes, February 16, 2016, https://www.sec.gov/comments/s7-25-15/s72515-31.pdf.

the analysis illustrates, the impact on companies has been substantial, with cumulative unrealized revenues of tens of billions of dollars over the assessed time periods, with the potential for similar or even greater unrealized revenues in the future.

As the Commission works to estimate the benefits that will result from the implementation of Section 1504, we ask that it consider in its analysis the quantifiable long-term benefits that increased revenue transparency could have in helping to mitigate corruption-fueled conflict in resource-rich countries.

Thank you for the opportunity to provide our views regarding this important rulemaking.

Sincerely,

Joseph Kraus, Ph.D.
Senior Policy Manager
The ONE Campaign

Quantifying the benefits of revenue transparency: Breaking the links between corruption and conflict

"As seen in recent years in Nigeria, North Africa and the Middle East, social and civil unrest, both within the countries in which we operate and elsewhere, can - and does - affect Shell."[3]

In its proposed rule the Commission has asked for analyses that quantify the benefits of resource revenue transparency.[4] There exist a wide range of potential benefits of revenue transparency, including for citizens and governments in both host and home countries, investors, and issuers, some of which have been cited in previous submissions to the Commission.[5] This analysis aims to contribute to this body of evidence by quantifying one potential benefit of revenue transparency: disrupting the link between corruption and conflict.

We believe that citizens empowered with information on how governments and other stakeholders are acting can assist in the fight against corruption and poor governance. Evidence supports this: ONE has gathered more than 50 case studies of citizens successfully using public information to challenge corruption and press for changes that improve government accountability and effectiveness, including in highly authoritarian states.[6] Given the established links between corruption and conflict, shining a light on the revenue payments to governments and making it more difficult for government officials and others to misappropriate or misuse resource revenues can play a role in mitigating future conflict, unrest, and political instability.

Building on a growing body of research that finds that corruption can breed instability and conflict,[7] particularly in resource-rich developing countries,[8] we seek to quantify some of the costs of conflict on

[3] Shell, "2013 Annual Report," p. 13, http://reports.shell.com/annual-report/2013/servicepages/downloads/files/entire_shell_ar13.pdf.
[4] Question 71 of the Commission's proposed rule: https://www.sec.gov/rules/proposed/2015/34-76620.pdf.
[5] Comment submitted by PWYP-US, March 14, 2014, p.5-13, http://www.sec.gov/comments/dftitle-xv/resource-extraction-issuers/resourceextractionissuers-28.pdf; Comment submitted by PWYP-US, February 16, 2016, p. 71-72, https://www.sec.gov/comments/s7-25-15/s72515-45.pdf; Comment submitted by Anthony Cannizzaro and Robert Weiner, February 11, 2016, https://www.sec.gov/comments/s7-25-15/s72515-22.pdf; Comment submitted by Caitlin Corrigan, February 16, 2016, https://www.sec.gov/comments/s7-25-15/s72515-28.pdf.
[6] Available at www.one.org/followthemoney. A sample of these case studies was previously submitted to the Commission. See comment submitted by Joseph Kraus, November 6, 2015, https://www.sec.gov/comments/df-title-xv/resource-extraction-issuers/resourceextractionissuers-98.pdf
[7] Sarah Chayes, 2015, *Thieves of State*, W.W. Norton & Company, Inc.; Oluwaseun Bamidele, 2013, "Corruption, Conflict and Sustainable Development in African States," https://www.ncsu.edu/aern/TAS13.1/TAS13.1_Bamidele.pdf; Robert I. Rotberg (ed.), 2009, *Corruption, Global Security, and World Order*, Brookings Institution Press; Raymond Fisman and Edward Miguel, 2008, *Economic Gangsters: Corruption, Violence, and the Poverty of Nations*, Princeton University Press; Louise Shelley, 2005, "The Unholy Trinity: Transnational Crime, Corruption, and Terrorism," Brown Journal of World Affairs, http://projects.iq.harvard.edu/gov2126/files/unholy_trinity_shelley.pdf.
[8] Comment submitted by Sarah Peck and Sarah Chayes, February 16, 2016, https://www.sec.gov/comments/s7-25-15/s72515-31.pdf; Philippe LeBillon, 2003, "The Political Ecology of War and Resource Exploitation," Studies in Political Economy, http://spe.library.utoronto.ca/index.php/spe/article/download/12076/8950; Macartan Humphreys, 2005, "Natural Resources, Conflict, and Conflict Resolution: Uncovering the Mechanisms," Journal of Conflict Resolution, http://www.columbia.edu/~mh2245/papers1/MH8JCR05_paper.pdf; Horatiu A. Rus, 2010, "Environmental Depletion, Governance and Conflict,"

various stakeholders. We do so by analyzing two case studies, Libya and Nigeria, in which countries, their citizens, and extractive companies have been negatively impacted by conflict and instability rooted in decades of endemic corruption. In both cases, opacity of oil revenues, lack of government accountability, and citizen frustration over the misuse of resource revenues played important roles in helping to ignite conflict events that disrupted oil and gas production.

The main contribution of this analysis is that it quantifies some of the impacts of these conflict events on oil and gas companies. Specifically, we estimate unrealized revenues incurred by US-listed oil and gas companies due to shut-in production.[9] We find that between 2011 and 2014, the unrealized revenues of five US-listed oil and gas companies operating in Libya as the result of conflict were more than $17 billion. In Nigeria, US-listed companies experienced unrealized revenues of at least $14.8 billion between 2003 and 2016 as the result of shut-in production stemming from conflict and unrest.[10]

We also seek to provide estimates of the money the US government spent on defense and emergency humanitarian funds as a result of the violence in these two countries.[11] In Nigeria and Libya, the US government has spent a minimum of roughly $2 billion to address ongoing conflict events that are linked to corruption.

The analysis that follows calculates the estimated losses, costs, and unrealized revenues incurred by various stakeholders in resource-rich countries as the result of specific events whose origins are intricately intertwined with corruption. If revenue transparency were to mitigate even a small portion of these costs, the benefits to firms, their investors, citizens of resource-rich countries, and others could be significant.

It is important to note, however, that revenue transparency alone cannot mitigate all of the underlying dynamics in these countries that contributed to this violence. The conflicts described in these two case studies involve a number of complex political and ethnic dynamics – and we do not claim these would all be addressed by increased revenue transparency.

Stronger government institutions, robust anti-corruption measures across all levels of government, a more transparent and equitable redistribution of wealth, respect for rule of law, and independent

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https://uwaterloo.ca/economics/sites/ca.economics/files/uploads/files/Environmental%20Depletion,%20Governance%20and%20Conflict.pdf; Augustine Ikelegbe, 2005, "The Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria," Nordic Journal of African Studies 14(2), http://www.njas.helsinki.fi/pdf-files/vol14num2/ikelegbe.pdf.

[9] Shut-in production refers to the industry practice of decreasing or suspending oil and gas production, typically for unanticipated reasons. In this analysis we look only at shut-in production that occurred as a result of violence or unrest linked to poor governance and corruption. We focus on US-listed companies given the relevance to the Commission's rulemaking to implement Section 1504.

[10] This directly impacted the revenues accruing to the Nigerian government. In addition to not being able to collect taxes and royalties on shut-in production, the state-owned oil company, Nigerian National Petroleum Corporation, had unrealized revenues of at least $15 billion during this same period as the result of shut-in production.

[11] Since US defense spending is not always made publicly available, our analysis of US spending in Libya and Nigeria is, by necessity, partial and therefore does not represent a complete picture of total US spending in these areas. We include it in this analysis to illustrate additional potential benefits of increased revenue transparency, namely reducing the need for US military and emergency humanitarian assistance abroad and bolstering US national and energy security.

judiciaries, among other things, are also necessary to help defuse the discontent that has contributed to conflict in these two countries.

Yet in both Libya and Nigeria, opacity over oil revenues - the very lifeline that has largely sustained these two countries over the past several decades - has contributed to the corrosion of governance institutions, government accountability, and state legitimacy. Citizens – forced to watch an unaccountable narrow ruling elite become inexplicably and ostentatiously wealthy while they themselves remained mired in extreme poverty with little chance for escape – increasingly lost trust in their governments. The corresponding frustration and cynicism exacerbated other sources of already existing tension, including ethnic and religious divisions.

As leading scholars of the resource curse emphasize, revenue transparency in resource-rich countries is a necessary and critical element for combating the resource curse, including through empowering reformers in resource-rich countries to press for improved accountability and governance,[12] and for helping to improve socioeconomic and development outcomes and curb corruption.[13]

The link between transparency and conflict

Some commenters have contended in submissions to the Commission that public disclosure of payment information could "put issuer assets at a heightened risk of attack and sabotage" or that it "might jeopardize the safety of an issuer's employees...or the national security of a host nation."[14] These speculative claims are proffered without reference to empirical evidence. Yet the negative impacts associated with opacity and secrecy in the extractives sector – including non-transparency of payment information – **do** have known and demonstrable negative impacts, including on the safety and security of issuers' employees, assets, and reputations (and by association, shareholders' portfolios), the wellbeing of citizens in resource-rich countries, and the national security of host nations, the US, and the international community.

Corruption siphons away public resources, undermines state authority, and weakens the state's ability to provide basic needs to its citizens, resulting in decreased public confidence and trust in governing

[12] Michael L. Ross, 2012, *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*, Princeton University Press; Paul Collier, 2007, *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*," Oxford University Press; Joseph Stiglitz, 2007, "What is the Role of the State? The Problem of Diversion of Resources," in Humphreys, Macartan, Jeffrey D. Sachs and Joseph E. Stiglitz (eds.), 2007. *Escaping the Resource Curse.* New York: Columbia University Press; Terry Lynn Karl, 2006, "Ensuring Fairness: The Case for a Transparent Fiscal Social Contract," Initiative for Policy Dialogue Working Paper Series, http://policydialogue.org/files/publications/Ch10.pdf;

[13] Leif Wenar, 2015, *Blood Oil: Tyrants, Violence, and the Rules that Run the World*, Oxford University Press; Jenik Radon, 2007, "How to Negotiate Your Oil Agreement," in Humphreys, Macartan, Jeffrey D. Sachs and Joseph E. Stiglitz (eds.), 2007. *Escaping the Resource Curse.* New York: Columbia University Press; Ana Bellver and Daniel Kaufmann, 2005, "Transparenting Transparency: Initial Empirics and Policy Applications," World Bank Policy Research Working Paper, http://siteresources.worldbank.org/INTWBIGOVANTCOR/Resources/Transparenting_Transparency171005.pdf.

[14] Comment submitted by Chevron, February 16, 2016: https://www.sec.gov/comments/s7-25-15/s72515-36.pdf, p. 2; Comment submitted by API, February 16, 2016: https://www.sec.gov/comments/s7-25-15/s72515-32.pdf, p. 36.

institutions, which can become drivers of conflict, including terrorism.[15] Evidence indicates that the recruitment efforts of terrorist organizations can be facilitated by extreme poverty and people's frustration with governments that fail to meet even their basic needs, as has occurred in Libya, Nigeria and other countries.[16]

In the supporting analysis, we detail specific examples in which conflict and instability linked to corruption in resource-rich countries has negatively impacted issuer assets. To highlight the potential scale of these negative impacts, we analyze issuers' public statements related to actual production shut-ins and disruptions in Libya and Nigeria, two countries beset by conflict and instability linked to corruption, and quantify the resulting negative impacts on those issuers' production.[17] We argue that had decades of opacity and corruption in the extractive sectors of those countries been disrupted sooner, the conflict events described in this analysis may have been mitigated. To the extent that transparency measures such as Section 1504 can help empower citizens to hold their governments more accountable – thereby helping to reduce the chances that corrupt governance engenders political instability, unrest, or outright conflict – they can help reduce the occurrence of the types of costs and losses outlined in this study. As such, they could be framed as potential benefits of mandatory disclosure requirements.

While this analysis focuses on two specific case studies, the dynamics of corruption, revenue opacity, extreme poverty, and simmering citizen frustration over the lack of realized benefits from natural resources exist in other countries, including Afghanistan, Angola, Cameroon, Egypt, Gabon, Equatorial Guinea, Iraq, Mali, Niger, Somalia, South Sudan, Syria, Yemen, and Zimbabwe. In several of these countries, conflict has already disrupted oil and mining activities.[18] This reality is highly significant for multinational oil, gas, and mining companies given that many of the world's new oil, gas, and mining reserves are being discovered in countries beset by governance challenges, including high levels of corruption and secrecy. Of the 50 countries at the bottom of the 2015 Corruption Perceptions Index,[19] 35 (70%) are considered resource-rich.[20]As such, the links between corruption, conflict and instability in resource-rich countries are likely to become even more relevant for extractive companies as they pursue

[15] OECD, February 2016, "Terrorism, Corruption and the Criminal Exploitation of Natural Resources," http://www.oecd.org/corruption/terrorism-corruption-criminal-exploitation-natural-resources-2016.pdf

[16] Congressional Research Service, June 10, 2014, "Nigeria's Boko Haram: Frequently Asked Questions," https://www.fas.org/sgp/crs/row/R43558.pdf; In her book, *Thieves of State*, Sarah Chayes documents how this same phenomenon has helped to undermine the US's war against the Taliban and Al Qaeda in Afghanistan. Sarah Chayes, 2015, *Thieves of State*, W.W. Norton & Company, Inc.;

[17] As is discussed in the methodology section, for a limited number of instances in which we were unable to find official company notices of production shut-ins, we also relied on media reports.

[18] This includes Afghanistan, Egypt, Iraq, Somalia, South Sudan, Sudan, Syria, and Yemen, while in other resource-rich countries, like Algeria, Angola, and Zimbabwe, simmering citizen frustration – while leading to the occasional political protest – has thus far been quelled through government repression.

[19] Transparency International, 2015, Corruption Perceptions Index 2015," http://www.transparency.org/cpi2015

[20] This list includes 30 countries considered resource-rich by the IMF and another 5 countries included in the Resource Governance Index. IMF, 2012, "Macroeconomic Policy Frameworks for Resource-Rich Developing Countries," https://www.imf.org/external/np/pp/eng/2012/082412.pdf; NRGI, 2013, "Resource Governance Index: Countries," http://www.resourcegovernance.org/resource-governance-index/countries.

new resource reserves in increasingly more challenging operating environments.[21] As a result, the benefits of revenue transparency will only increase for those firms and their shareholders, as well as for the citizens of resource-rich countries hoping that natural resource revenues can have a demonstrably positive impact on their lives.

Research limitations

Given the challenges associated with collecting the data, which companies typically do not publish, this study does not attempt to quantify other costs that companies incur when unrest, instability, or conflict occur, including expenses associated with increased security operations, the evacuation of employees, and purchasing political risk insurance. While it may be possible for issuers to purchase political risk insurance to help offset some of these and other costs associated with conflict events, the lack of publicly available information regarding the purchase of, or recovery from, such insurance vehicles precluded us from considering this in our analysis.

This study also does not attempt to quantify other related negative effects stemming from conflict events in resource-rich countries, such as the value of lost human lives and destroyed infrastructure, the economic, social, and psychological costs associated with massive refugee displacements, or the psychological or physical trauma of living in a conflict-torn country or under an unaccountable, authoritarian state. Those costs, although difficult if not impossible to estimate with any accuracy, likely dwarf the costs noted in this study. As such, the numbers contained in this study should not be treated as comprehensive estimates of the total costs of little-to-no transparency, but as estimates of one narrow aspect, that is, the costs incurred by companies operating in such countries as a direct result of production shut-ins.

Corruption and Conflict in Libya

With more than 48 billion barrels of known oil, Libya has the world's 8th largest proven oil reserves, making it more strategically important than even the United States in terms of potential future oil production.[22] Between 1965 and 2010, Libya produced 5% to 14% of OPEC's annual production. In 2010, the year before its production was disrupted by conflict, Libya pumped approximately 1.5 million barrels of oil per day, which accounted for about 40% of the country's total economic output and 95% of its export earnings.[23]

[21] The US-listed oil company, Total, for instance, acknowledges this: "We have significant production and reserves located in politically, economically and socially unstable areas, where the likelihood of material disruption of our operations is relatively high." Other US-listed companies have made similar statements. Total, 2012, "2012 Annual Report," p. 5, http://www.total.com/sites/default/files/atoms/files/total-form-20-f-2012.pdf

[22] Libya also has proven natural gas reserves of 1.5 trillion cubic meters. OPEC, 2015, "Annual Statistical Bulletin," p. 22, 94, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2015.pdf

[23] Issa Alli and Charles Harvie, 2013, "Oil and economic development: Libya in the post-Gaddafi era," Economic Modelling (32), https://www.researchgate.net/profile/Issa_Ali/publication/257099172_Oil_and_economic_development_Libya_in_the_post-Gaddafi_era/links/5448e9030cf2d62c3052d34c.pdf.

In 2011, long-simmering citizen frustration linked to misrule, including the corruption and mismanagement of oil revenues, was ignited by the Arab Spring uprisings that swept across North Africa, setting off an eight month civil war. The civil war, and subsequent ongoing violence and unrest, has significantly curtailed Libya's oil production, damaged Libya's economy, cost thousands their lives, and had a substantial negative financial impact on oil and gas companies operating there.

The Rise and Fall of Muammar Qadhafi

Over a reign spanning across six decades (1969-2011), Muammar al-Qadhafi carefully constructed a regime predicated on an entrenched system of personal rule and patrimonialism. Early in his tenure, Qadhafi banned political parties and opposition elements and centralized the country's economic and political systems.[24] Political power was wielded by Qadhafi, his family, and a network of supporters using expansive patronage networks to wield control over most facets of Libya's economic and political life.

While the Libyan state did use oil revenues to finance an impressive welfare system in the 1970s, in the subsequent decades that system eroded due to poor government planning, mismanagement, pervasive corruption, and international sanctions. Ordinary Libyans found it increasingly difficult to make ends meet, with many forced to work multiple jobs. Housing shortages grew acute. Complaints grew about the widening gap between the rich and poor. The public widely believed that economic opportunities were monopolized by a small politically connected elite – including Qadhafi and his family, who had acquired large fortunes across a range of businesses, including in the energy sector – whose children developed a "a reputation for acting recklessly and even violently with almost total impunity."[25] U.S. diplomatic cables released by WikiLeaks support this view, noting that it had "become common practice" for companies controlled by Qadhafi's offspring to benefit from "considerable government financing and political backing."

There is considerable evidence that the corruption pervasive in Libya during Qadhafi's rule impacted on the oil sector. An oil corruption scandal came to light in 2008 alleging that three multinational oil companies – Norsk Hydro (before its merger with StatOil), a subsidiary of Total, and Repsol YPF – had made questionable payments worth millions of dollars to a consultant with possible links to government officials.[26] The Qadhafi family involved itself in nearly every sector, and forced international companies to conduct its business through them: "American and international oil companies, telecommunications firms and contractors...discovered that Colonel Qaddafi or his loyalists often sought to extract millions of dollars in 'signing bonuses' and 'consultancy contracts' — or insisted that the strongman's sons get a

[24] International Crisis Group, June 6, 2011, "Popular Protest in North Africa and the Middle East: Making Sense of Libya, http://www.crisisgroup.org/~/media/Files/Middle%20East%20North%20Africa/North%20Africa/107%20-%20Popular%20Protest%20in%20North%20Africa%20and%20the%20Middle%20East%20V%20-%20Making%20Sense%20of%20Libya.pdf

[25] Ibid, p. 13-14.

[26] Global Witness, November 20, 2008, "StatoilHydro's Libyan "corruption" scandal shows need for oil industry disclosure laws," http://www.statoil.com/en/NewsAndMedia/News/2008/Downloads/Report%20of%20investigation.pdf and https://www.globalwitness.org/sites/default/files/import/libya_oil_scandal_points_to_need_for_new_laws.pdf

piece of the action through shotgun partnerships." Some international oil companies, including at least one US firm, agreed to pay the regime $1 billion signing bonuses.[27]

Over time, economic growth and efficiency became secondary to the maintenance of patronage networks. Corruption became institutionalized throughout the political system, undermining government accountability and contributing to the country's deteriorating development, including the use of its considerable oil revenues. As the International Crisis Group concluded in a June 2011 report written before Qadhafi was ousted from power:

> "Decades of authoritarianism and political repression combined with corruption and mismanagement had so alienated large swathes of the population that, once the spark had been ignited and people had lost their fear, they took to the streets en masse, united in the goal of bringing the regime to its knees…. Libya has been akin to a large pressure cooker waiting to explode."[28]

Explode it did. Frustration over decades of government repression, mismanagement, and corruption boiled over, sparking mass uprisings and demands for the end of Qadhafi's rule. An eight month civil war ended with the overthrow and execution of Qadhafi in October 2011. The revolutionary forces responsible for toppling Qadhafi moved quickly to replace his repressive regime with democratic elections and institutions, but were quickly stymied by a weak government bureaucracy that had atrophied under Qadhafi's unaccountable regime. That hindered efforts to quickly solidify state power, and attempts to create governing coalitions were hampered by political fractionalization that undermined the strength of the state and enabled factional groups to contest state authority.[29] In August 2014, Libya Dawn, a coalition of local militia forces that emerged during the 2011 civil war, seized the capital, forcing the elected and internationally recognized government to flee to the far eastern town of Tobruk, from where it now exerts control over the eastern half of the country.

The lack of a centralized national government created a power vacuum that enabled terrorists groups to gain a foothold in Libya and jeopardize the country's future as well as the future of neighboring

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[27] The New York Times, March 24, 2011, "Shady Dealings Helped Qaddafi Build Fortune and Regime," http://www.nytimes.com/2011/03/24/world/africa/24qaddafi.html?pagewanted=all&_r=1.

[28] International Crisis Group, June 6, 2011, "Popular Protest in North Africa and the Middle East: Making Sense of Libya, p. 1-2, http://www.crisisgroup.org/~/media/Files/Middle%20East%20North%20Africa/North%20Africa/107%20-%20Popular%20Protest%20in%20North%20Africa%20and%20the%20Middle%20East%20V%20-%20Making%20Sense%20of%20Libya.pdf; This conclusion is shared by Libyan scholars, who note that "[Libya's] lack of transparency, inefficient government institutions, widespread corruption and misuse of its oil revenue contributed to the under-performance of its economic growth and development. This recently resulted in traumatic political and economic upheaval arising from an eight-month long civil war that led to the ending of 42 years of dictatorship under Muammar Gaddafi in October 2011." Issa Alli and Charles Harvie, 2013, "Oil and economic development: Libya in the post-Gaddafi era," Economic Modelling (32), p. 274, https://www.researchgate.net/profile/Issa_Ali/publication/257099172_Oil_and_economic_development_Libya_in_the_post-Gaddafi_era/links/5448e9030cf2d62c3052d34c.pdf.

[29] Netherlands Institute of International Relations, September 2013, "Revolution and its discontents: state, factions and violence in the new Libya," http://www.clingendael.nl/sites/default/files/Libya%20-%20Revolution%20and%20its%20discontents.pdf

countries in the region. Most notable among these are the Islamic State (commonly referred to as "ISIS") and elements associated with Al Qaeda. Unclassified US intelligence reports state that "Extremists and terrorists from al Qa'ida (sic) affiliated and allied groups are using Libya's permissive security environment as a safe haven to plot attacks, including against Western interests in Libya and the region" and that ISIL (another commonly used name for ISIS) "also has declared the country part of its caliphate, and ISIL-aligned extremists are trying to institute sharia in parts of the country."[30] The US State Department describes Libya as "a permissive environment for terrorist groups," and noted in April 2015 that "terrorist training camps and facilitation networks exist throughout" the country.[31] Terrorist organizations have targeted Libya's oil infrastructure, doing considerable damage and causing the shut-in of substantial production.

Between 2011 and 2015, there were more than 4000 distinct politically violent events in Libya.[32] Conflict and weak governance have exacerbated the flood of migrants looking to leave Libya and neighboring countries to travel to Europe, and have turned Libya into a haven for criminal groups and trafficking networks that seek to exploit these migrants.[33]

The economic impact of conflict on Libya, 2011-

The cost of the war and ensuing violence has had an enormous impact on Libya. An estimated 30,000 lives were lost as a result of the 2011 civil war. Much of the country's oil production was disrupted and there has been significant damage to the country's infrastructure, including oil assets.[34] Libya's GDP fell by more than half (53.6%) in 2011 as the result of its civil war. Although it rebounded in 2012, subsequent violence further damaged the country's economy. In 2014, Libya's economic output was down 45% and the value of its petroleum exports was down 68% from 2010's pre-war levels.[35] Libya's oil production dropped by two-thirds between 2010 and 2014, from 1.5 million barrels per day (2010) to below 500,000 barrels per day (2014).[36]

The impact of Libya's unrest on US-listed oil and gas companies

Libya's conflict has significantly impacted the oil sector and the companies operating there. Oil production in Libya has declined considerably since the unrest began in 2011. The number of active oil

[30] Congressional Research Service, August 3, 2015, "Libya: Transition and U.S. Policy," p. 8, https://www.fas.org/sgp/crs/row/RL33142.pdf
[31] Ibid. p. 8.
[32] Armed Conflict Location & Event Data Project, 2016, "ACLED Version 6, 1997-2015, All Africa Files," http://www.acleddata.com/data/version-6-data-1997-2015/, accessed March 6, 2016.
[33] Congressional Research Service, August 3, 2015, "Libya: Transition and U.S. Policy," p. 10, https://www.fas.org/sgp/crs/row/RL33142.pdf
[34] Issa Alli and Charles Harvie, 2013, "Oil and economic development: Libya in the post-Gaddafi era," Economic Modelling (32), https://www.researchgate.net/profile/Issa_Ali/publication/257099172_Oil_and_economic_development_Libya_in_the_post-Gaddafi_era/links/5448e9030cf2d62c3052d34c.pdf.
[35] OPEC, 2015, "Annual Statistical Bulletin," p. 15-17, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2015.pdf
[36] OPEC, 2015, "Annual Statistical Bulletin," p. 28, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2015.pdf

rigs declined from 60 in 2010 to just 31 in 2014, and the number of producing wells declined from 2,060 in 2010 to 632 in 2014 due to violence that forced the closure of oil wells and shut-in substantial production.[37]

A number of US-listed oil and gas companies have exploration and production activities in Libya, including Eni, Hess, Marathon, Suncor, and Total. Since conflict erupted in Libya in 2011, all these companies have experienced production disruptions – often for extended periods – that have significantly curtailed their operations and negatively impacted their revenues. Below we detail these unrealized revenues using information obtained from publicly available company disclosures. While these figures do not necessarily represent lost revenues given the possibility that companies may be able to recover these revenues through future production, revenue impacts of such magnitude can have significant negative impacts on a company's annual financial performance, share price and shareholders.

Unrealized revenues for US-listed oil and gas companies due to unrest in Libya, 2011-2014 (% of company's total exploration and production revenues)

- Eni: $6.64 billion (4.3%)
- Marathon: $4.06 billion (9.1%)
- Suncor: $2.52 billion (15.01%)
- Total: $2.44 billion (2.12%)
- Hess: $1.78 billion (3.82%)

Between 2011 and 2014, these five US-listed oil and gas companies experienced cumulative unrealized revenues of $17.42 billion as the direct result of shut-in production caused by Libya's ongoing conflict. These unrealized revenues represented a sizeable portion of the companies' total revenues from exploration and production activities globally. As such, the impacts on their balance sheets – and investors – were significant.

See Appendix A for a detailed analysis

Potential for future impacts on oil companies operating in Libya

The potential for future disruptions to Libya's oil and gas production is high. The existence of various factions competing for control of state power and the country's oil – as well as the increased strength of terrorist groups – makes it likely that Libya will continue to experience the type of conflict and instability that has plagued the country since 2011. The violent activities of extremist groups like ISIS have increased in the past two years, increasingly disrupting oil production and impacting oil company assets, with no end in sight. Given this reality, it is possible that oil and gas company operations in Libya could be hindered indefinitely, resulting in significant future production shut-ins that impact company revenues.[38] Furthermore, extremist groups could seize oil company assets or take control of the national

[37] OPEC, 2015, "Annual Statistical Bulletin," p. 23, 26, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2015.pdf

[38] As a Congressional Research Service report on Libya notes, attacks by terrorist organizations on oil infrastructure in Libya has "Libyans and outsiders fearful that a major and more lasting disruption could occur if major sites are

government. Should either of those outcomes occur, US-listed oil and gas companies could face the permanent and total loss of all assets, including equipment, sunk costs, reserves and future production, resulting in losses in the tens of billions of dollars.[39, 40]

Libya's unrest has interrupted the business activities of other US-listed companies with operations in Libya. For instance, Schlumberger, the world's largest oil fields supply company, has had to scale back its operations in the country as a result of the unrest.[41] Other US firms have been forced to take losses and exit the country entirely as a result of the ongoing violence.[42]

Once Libya's violence subsides, it will take significant time for Libya's oil production to reach its pre-conflict levels due to damaged infrastructure, destroyed pipelines, and disrupted economic and political institutions.[43]

Corruption and Conflict in Nigeria

"Security issues and crude oil theft in the Niger Delta continued to be significant challenges in 2015."

- Shell, 2015 Annual Report[44]

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seized or damaged." Congressional Research Service, August 3, 2015, "Libya: Transition and U.S. Policy," p. 7, https://www.fas.org/sgp/crs/row/RL33142.pdf

[39] Even if terrorist organizations came to power but did not officially expropriate oil and gas companies assets, the US government could impose sanctions that made it illegal for US companies to conduct business there, similar to what has happened in Syria, where Total, a US-listed oil company, has been forced to shut-in production as the result of that country's ongoing conflict and subsequent sanctions imposed by the US and EU, and where ISIS groups have also taken over oil fields and are using oil sales to fuel their violent activities. Total, 2015, "2014 Registration Document and Annual Report," http://www.total.com/sites/default/files/atoms/files/registration-document-v3-2014.pdf; Financial Times, October 14, 2015, "Isis Inc: how oil fuels the jihadi terrorists," http://www.ft.com/intl/cms/s/2/b8234932-719b-11e5-ad6d-f4ed76f0900a.html#axzz42AGXltba

[40] For instance, Marathon notes that "[a]s of December 31, 2015, our net property, plant and equipment investment in Libya is approximately $777 million , and total proved reserves (unaudited) in Libya are 235 mmboe [million barrels of oil equivalent]." Based on the SEC pricing benchmark of $50.28 per barrel as of December 31, 2015, Marathon's reserves in Libya have a potential value of $11.8 billion (not including costs or discount rates). Hess's assets in Libya had a book value of $365 million as of December 31, 2014, and its 157 million barrels of Libyan reserves have a potential value of $7.9 billion (calculated using December 31, 2015 SEC pricing benchmark of $50.28, and not including costs or discount rates). Suncor reported an impairment charge of $297 million taken in 2014 as the result of production shut-ins. See Marathon, "2015 Form 10-K," p. 85, 106, http://ir.marathonoil.com/secfiling.cfm?filingID=101778-16-47&CIK=101778; Hess, "2014 Annual Report," http://www.annualreports.com/Click/6853; Suncor, "2014 Annual Report," p. 92, http://www.suncor.com/pdf/Annual_Report_2014.pdf.

[41] International Business Times, January 7, 2016, "ISIS Moving In On Libya's Oil Fields, Recruiting Engineers To Boost Revenue," http://www.ibtimes.com/isis-moving-libyas-oil-fields-recruiting-engineers-boost-revenue-2255879#sthash.Pj8AH8Qw.uxfs&st_refDomain=t.co&st_refQuery=/CW60G6k0Kr.

[42] Fortune, March 5, 2015, "Big Oil Companies in the Crossfire as Libyan Violence Erupts," http://fortune.com/2015/03/05/libya-oil-companies-isis-fighting/

[43] Issa Alli and Charles Harvie, 2013, "Oil and economic development: Libya in the post-Gaddafi era," Economic Modelling (32), https://www.researchgate.net/profile/Issa_Ali/publication/257099172_Oil_and_economic_development_Libya_in_the_post-Gaddafi_era/links/5448e9030cf2d62c3052d34c.pdf.

Nigeria possesses significant resource wealth, but its potential as Africa's largest economy and most populous country has been stymied by serious social, economic, and security challenges – including endemic corruption – that risk destabilizing both the state and the region, and impacting global oil prices. The country has been scarred by conflict along ethnic, geographic, and religious lines, and decades of corruption and misrule threaten to undermine the authority and legitimacy of the state. According to the US State Department, "massive, widespread, and pervasive corruption affected all levels of government" and Nigerian "officials frequently engaged in corrupt practices with impunity."[45]

Nigeria's economy heavily relies on its oil and natural gas resources, which account for 75% of government revenue and 95% of total export revenue.[46] Despite its extensive oil and gas wealth,[47] many of Nigeria's human development indicators rank among the world's lowest (152nd of 187 countries in 2014).[48] Poor governance and corruption have hindered infrastructure development and social service delivery, slowing economic growth and helping to keep a majority of the population (54%) mired in extreme poverty with an average life expectancy of less than 53 years.[49]

Resentment over government neglect and economic marginalization in the country's predominantly Muslim north has helped fuel the rise of the radical Islamic terrorist group Boko Haram.[50] As former US Ambassador to Nigeria John Campbell notes, "[t]he Boko Haram insurgency is a direct result of chronic poor governance by Nigeria's federal and state governments, the political marginalization of northeastern Nigeria, and the region's accelerating impoverishment."[51] Over the past five years, violence attributed to Boko Haram has taken the lives of more than 25,000 people.[52]

Decades of social unrest in the oil-producing Niger Delta and widespread corruption have hampered oil production, with deleterious effects on government revenues, social development, and oil and gas

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[44] Shell, "2015 Annual Report," p. 29, http://reports.shell.com/annual-report/2015/servicepages/downloads/files/download2.php?file=entire_shell_ar15.pdf.
[45] U.S. Department of State, 2013, "2013 Human Rights Reports: Nigeria," http://www.state.gov/j/drl/rls/hrrpt/2013/af/220146.htm
[46] US Energy Information Administration, February 27, 2015, "Nigeria: Overview," https://www.eia.gov/beta/international/analysis.cfm?iso=NGA
[47] The country produced nearly 31 billion barrels of oil 1960-2014. Nigeria has remaining proven oil reserves of 37 billion barrels and natural gas reserves of 5.1 trillion cubic meters. OPEC, 2015, "Annual Statistical Bulletin," p. 22-26, 94, http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2015.pdf
[48] UNDP, Human Development Reports, http://hdr.undp.org/en/countries/profiles/NGA.
[49] Congressional Research Service, April 24, 2013, "Nigeria: Current Issues and U.S. Policy," https://www.fas.org/sgp/crs/row/RL33964.pdf; World Bank Poverty data, http://povertydata.worldbank.org/poverty/country/NGA; UNDP, Human Development Reports, http://hdr.undp.org/en/countries/profiles/NGA
[50] Congressional Research Service, April 24, 2013, "Nigeria: Current Issues and U.S. Policy," https://www.fas.org/sgp/crs/row/RL33964.pdf
[51] Council on Foreign Relations, November 2014, "U.S. Policy to Counter Nigeria's Boko Haram," p. 5, http://i.cfr.org/content/publications/attachments/Nigeria_CSR70.pdf.
[52] Council on Foreign Relations, 2016, "Nigeria Security Tracker," http://www.cfr.org/nigeria/nigeria-security-tracker/p29483, accessed March 4, 2016.

company production, as well as giving rise to oil theft and piracy in the Gulf of Guinea.[53] Some estimates place the annual value of oil stolen from Nigeria at between $3 billion and $8 billion."[54] In 2012, former Nigerian government minister Obiageli Ezekwesili estimated that Nigeria had lost more than $400 billion to 'oil thieves' since the country gained independence in 1960.[55]

The regimes of several former presidents as well as the Nigerian state oil company, Nigerian National Petroleum Corporation (NNPC), have been plagued by corruption scandals in the oil sector. In 2014, the country's Central Bank Governor claimed that $20 billion in oil revenues had gone missing.[56] A subsequent PwC audit painted a picture of mismanagement and opacity in the way the Nigerian government handles oil revenues, with nearly half the proceeds from crude oil sales being spent non-transparently before reaching the treasury.[57] A report by the Natural Resources Governance Institute (NRGI) concluded that NNPC's system of domestic crude allocation is poorly managed, unaccountable, and rife with abuse.[58] Large-scale bribery is also believed to be commonplace in Nigeria's oil industry, and oil and gas production licenses and contracts, some of Nigeria's most valuable assets, have suffered from a deep abuse of secrecy as well.

International actors have come under attack for perceived or real participation in corruption. In 2011, subsidiaries of oil and gas firms Shell and Eni paid $1.1 billion to the Nigerian government, which was then transferred to an anonymous shell company (whose hidden owner was a former Nigerian petroleum minister),[59] which in turn passed the money to a network of anonymously owned companies that served as vehicles for secretly paying others involved in the deal. Evidence revealed in a UK court case suggests that Shell and Eni knowingly participated in the corruption scam.[60]

Oil and gas companies operating in Nigeria have frequently bore the brunt of citizen frustration over decades of corruption and poor governance. Unrest and militant movements dating back to the 1990s have routinely disrupted production at oil and gas facilities and sabotaged pipelines, forcing oil and gas

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[53] Congressional Research Service, March 8, 2015, "Nigeria's 2015 Elections and the Boko Haram Crisis," https://www.fas.org/sgp/crs/row/R43881.pdf

[54] Christina Katsouris and Aaron Sayne, September 2013, "Nigeria's Criminal Crude International Options to Combat the Export of Stolen Oil," Chatham House, https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Africa/0913pr_nigeriaoil.pdf

[55] Financial Times, August 17, 2015, "Nigeria audit: state oil company siphoning oil revenues," http://www.ft.com/cms/s/0/5ebb5f3c-edb2-11e4-987e-00144feab7de.html

[56] The New York Times, March 10, 2014, "Nigerians Ask Why Oil Funds are Missing," http://www.nytimes.com/2014/03/10/world/africa/nigerians-ask-why-oil-funds-are-missing.html.

[57] Financial Times, August 17, 2015, "Nigeria audit: state oil company siphoning oil revenues," http://www.ft.com/cms/s/0/5ebb5f3c-edb2-11e4-987e-00144feab7de.html

[58] Natural Resource Governance Institute, August 2015, "Inside NNPC Oil Sales: A Case for Reform in Nigeria," http://www.resourcegovernance.org/sites/default/files/NRGI_InsideNNPCOilSales_CompleteReport.pdf

[59] The ONE Campaign, September 2014, "The Trillion Dollar Scandal," https://s3.amazonaws.com/one.org/pdfs/Trillion_Dollar_Scandal_report_EN.pdf.

[60] Global Witness, December 18, 2015, "Leaked Emails Show How Shell And Eni Conspired To Hide Payment To Former Oil Minister's Company In Corrupt Opl 245 Deal," https://www.globalwitness.org/en/press-releases/leaked-emails-show-how-shell-and-eni-conspired-hide-payment-former-oil-ministers-company-corrupt-opl-245-deal/

companies to shut-in production and spend significant sums on heightened security.[61] As Shell acknowledged in 1999, "[t]he expectations of the seven million people of the [Niger] Delta are high, underlined by their sense of grievance that they have not received their fair share of economic and social rewards derived from oil income. As a result, community unrest and general crime is rife and there is violence between tribes and against industry."[62] That year alone, the Shell Petroleum Development Company of Nigeria (SPDC) – a joint venture between NNPC, Shell, Total, and Eni – reported shut-in production of 200,000 barrels of oil per day as the result of "[s]abotage and community disruption at SPDC facilities."[63] To improve relationships with local communities claiming real or perceived grievances as well as to fill social service gaps left by the government, multinational oil and gas companies (including several US-listed firms) have spent hundreds of millions of dollars on Corporate Social Responsibility projects in and around the Niger Delta, the epicenter of Nigeria's oil and gas production.[64]

Nigeria's crude oil production peaked at 2.44 million barrels per day in 2005, but then declined significantly as the result of escalating violence – particularly from militant groups like the Movement for the Emancipation of Nigeria (MEND) – that forced oil and gas companies to evacuate staff and shut-in production. Production levels began to recover after the declaration of a 2009 amnesty with militants resulted in a reduction in the number of attacks on oil facilities, but have declined in recent years as attacks have once again escalated due to citizen frustration over stagnant economic development and job creation.[65]

Production disruptions stemming from unrest and sabotage have, at times, had significant negative impacts on Nigeria's oil and gas output, with unplanned shut-ins as high as 500,000 barrels per day.[66] This has negatively impacted the revenues accruing to Nigeria's Federal and State governments, leaving them with fewer funds with which to meet budgetary outlays and provide social services.[67]

[61] It has been reported that insecurity in the Niger Delta has caused a significant increase in the cost of production, from $1.80 per barrel in 1986 to as much as $10 per barrel in 2009. International Association for Energy Economics, 1999, "The Niger Delta: Defusing The Time Bomb," IAEE Energy Forum, http://www.iaee.org/documents/2009WinterEnergyForum.pdf

[62] Shell, "1999 Annual Report," p. 25, http://reports.shell.com/sustainability-report/2012/servicepages/previous/files/shell_report_2000_99.pdf

[63] Ibid.

[64] In 2004 alone, a joint venture involving Shell contributed $68.9 million to the Nigerian government's Niger Delta Development Commission, and Shell directly spent an additional $25 million on community development projects in Nigeria. In preceding and subsequent years Shell's overall global CSR spending was above $100 million annually, with Nigeria one of its core CSR recipients (Shell annual reports, various years). Total reports having contributed more than €1 billion on to community development projects 2012-2014, including in Nigeria. Total, "2014 Annual Report," p. 190-191, http://www.total.com/sites/default/files/atoms/files/registration-document-v3-2014.pdf.

[65] US Energy Information Administration, February 27, 2015, "Nigeria: Overview," https://www.eia.gov/beta/international/analysis.cfm?iso=NGA

[66] Ibid.

[67] Shell's then-CEO Peter Voser noted in 2013 that oil theft and disruptions could cost the Nigerian government "$12 billion in lost revenues per year." Shell, 2013, "2nd Quarter and Half Year 2013 Unaudited Results," p. 2, http://www.shell.com/media/news-and-media-releases/2013/second-quarter-2013-results-

Oil and gas companies operating in Nigeria – including several large US-listed firms – have been hit hard by production disruptions. Companies have had to repeatedly declare force majeure and shut-in production over the past two decades, sometimes for extended periods of time. Such events have, as Shell has noted, "reduced onshore oil and gas production significantly,"[68] and can lead to oil spills that damage the environment and further enflame citizen anger, creating a downward spiral of community frustration and unrest that further exacerbates the risks to companies' assets.[69] In recent years, several oil companies – including Chevron, ConocoPhillips, Eni, Shell, and Total – have moved to sell oil fields and pipelines, at least in part to avoid the violence and vandalism that has placed a drag on their profits.[70]

Unrealized revenues for US-listed oil and gas firms due to unrest in Nigeria (time period)

- Shell: $8.32 billion (2006-2016)
- Total: $2.77 billion (2006-2016)
- Chevron: $2.16 billion (2003-2016)
- Eni: $1.39 billion (2006-2016)

See Appendix B for a detailed analysis.

The problems besetting Nigeria are complex, as are the solutions needed to address them. It would be simplistic to suggest that revenue transparency alone is sufficient to reverse decades of corruption or the citizen frustration, unrest and violence it has engendered in Nigeria. Yet granular revenue transparency is a necessary and critical part of the solution, for without granular-level (i.e. project-by-project) details about payments made to governments, citizens will remain largely in the dark about revenue flows, and unable to tackle corruption all the way down to the local level, where it often occurs.

Nigeria has been a member of the Extractive Industries Transparency Initiative (EITI) since 2007. While Nigeria's EITI has helped to identify significant missing revenues, some of which have since been recovered, its reporting has been inconsistent, slow, and beset with challenges. More importantly for the issues outlined in this study, however, is the fact that by the time Nigeria began implementing EITI, citizen frustration over poor governance and unrealized benefits from oil revenues had already boiled over, with more than a decade of violence and unrest preceding the implementation of EITI. Decades of unaccountable governments had helped to institutionalize corruption, which further disabled already weak governing institutions.

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announcement/_jcr_content/par/textimage_0.file/1441315648925/cf16ac059efb8b39a0b2b13c75f7a0d8/q2-2013-qra.pdf.

[68] Shell, "2013 Annual Report," http://reports.shell.com/annual-report/2013/servicepages/downloads/files/entire_shell_ar13.pdf, p. 28.

[69] In its 2004 annual report, Shell counted 157 oil spills caused by sabotage, noting that "Poverty is behind this practice." Shell, "2004 Annual Report," p. 16, http://reports.shell.com/sustainability-report/2013/servicepages/previous/files/shell_report_2004.pdf

[70] Reuters, August 27, 2014, "Shell Sells Some Nigeria Oil Fields," http://af.reuters.com/article/investingNews/idAFKBN0GR10X20140827; Wall Street Journal, October 30, 2013, "Shell Looks to Sell Nigerian Pipeline," http://www.wsj.com/articles/SB10001424052702304200804579165040226032758

In addition, to date EITI reporting in Nigeria and elsewhere has not contained the level of granularity necessary for fully tackling the issue of corruption. While the EITI approved a new standard in 2013 that mandates project-level reporting, its implementation is hindered by pending implementation of Section 1504, with which it is required to align. Should the Commission issue a final implementing rule that fails to mandate fully public, company-specific project-by-project reporting, citizens in Nigeria and other resource-rich countries will not have access to the information required to fully achieve the objectives of Section 1504's underlying statute. Furthermore, the EITI could then align with that inadequate approach, potentially derailing international progress in combatting corruption and creating dual-reporting standards for companies cross-listed in the US and EU, Norway or Canada, as well as for any company required to report in the EU, Canada, Norway and any of the 51 EITI implementing countries around the world.[71]

Even once the new EITI standard is fully implemented and includes project-level information, there are more than 30 resource-rich countries not currently implementing the EITI.[72] As such, a strong implementing rule for Section 1504 would play an important role in helping citizens in those countries hold their governments accountable, potentially helping to mitigate the dynamics that can lead to conflict.

Nigeria should serve as a cautionary tale for extractive companies operating in developing countries with high corruption levels and poor governance. Decades of no perceived benefits to ordinary citizens from Nigeria's oil largesse led many citizens to form the view that oil companies were complicit in government corruption.[73] That perception has helped fuel many of the attacks against oil company assets in the Niger Delta. Oil companies collectively have spent hundreds of millions of dollars on social projects in the region in an effort to polish their tarnished reputations, yet they have found it incredibly difficult to undo the negative views held by citizens weary of corruption and unaccountable governments. Full transparency of resource revenues – particularly in the first formative years after the discovery of natural resources – could have transformative effects and help to mitigate the types of conflict and production disruption witnessed in Nigeria over the past two decades.

Additional Impacts of Conflict in Resource-Rich Countries

Impact on the safety of issuers' employees and infrastructure

Conflict in resource-rich countries can pose significant risks to oil company staff. As Shell noted in 2002, "security incidents at our Niger Delta operations remain of concern due to attacks on company staff at

[71] Despite one commenter's suggestion that the EU's mandatory reporting regime could potentially be modified following a scheduled 2018 review (Comment submitted by ExxonMobil, February 16, 2016), there is no indication that any such change would occur, and there is no established review provision in the law already in effect in Canada.

[72] Author's calculations based on current EITI membership and countries deemed resource-rich by the IMF and NRGI. www.eiti.org; IMF, 2012, "Macroeconomic Policy Frameworks for Resource-Rich Developing Countries," https://www.imf.org/external/np/pp/eng/2012/082412.pdf; NRGI, 2013, "Resource Governance Index: Countries," http://www.resourcegovernance.org/resource-governance-index/countries.

[73] BBC, June 11, 2004, "Shell Admits Fuelling Corruption," http://news.bbc.co.uk/2/hi/business/3796375.stm

construction sites, hostage taking and willful damage to pipelines."[74] The company reported 176 community incidents in 2004, which resulted in the deaths of five company contractors and injuries to many others.[75] In 2006, Shell lost 17 employees to violence in Nigeria, and others were injured.[76] Companies operating in Libya have repeatedly been forced to evacuate staff and spend resources on increased security. In light of the fact that ongoing violence with links to corruption places oil company staff at risk, we contend that meaningful revenue transparency could contribute to the safety of issuers' employees.

While it can be difficult to quantify the costs that companies incur as a result of conflict that leads to the damage or theft of infrastructure, equipment and other assets, since companies do not typically publish this information, it is nonetheless a very real risk for companies operating in fragile environments.[77] In Libya, radical Islamist groups have increasingly targeted oil infrastructure and assets in their attacks, at times causing extensive damage. Troublingly, as ISIS moves to take over oil infrastructure, it relies heavily on oil revenues as a funding mechanism, earning up to $2.9 billion annually.[78]

Impact on US National Security

Recognizing the links between corruption and conflict, including terrorism, the US government has emphasized that combatting corruption is a national security priority. As Secretary of State John Kerry noted in January 2016, "today, corruption has grown at an alarming pace and threatens global growth, global stability, and indeed the global future….it is imperative that…we deepen the fight against corruption, making it a first-order, national security priority."[79]

The US government has made addressing conflict in resource-rich countries like Libya and Nigeria a national security priority in its global strategy to combat radical Islamic terrorism. As both countries increasingly become safe havens for such extremist groups, they pose an increasing risk to the stability of neighboring countries in the region and beyond. In March 2015, a US Africa Command commander testified to the US Senate that "Libya-based threats...have the highest potential among security

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[74] Shell, "2002 Annual Report," http://reports.shell.com/sustainability-report/2012/servicepages/previous/files/shell_report_2002.pdf, p. 33.
[75] Shell, "2004 Annual Report," p. 17, 25, http://reports.shell.com/sustainability-report/2013/servicepages/previous/files/shell_report_2004.pdf
[76] Shell, "2006 Annual Report," http://www.jaarverslag.com/assets/reports/JaarverslagCOM_Royal_Dutch_Shell_Jaarverslag_2006.pdf
[77] Wall Street Journal, February 6, 2015," Oil Companies in the Crosshairs of Libyan Violence," http://www.wsj.com/articles/oil-companies-in-the-cross-hairs-of-libyan-violence-1423207721' Issa Alli and Charles Harvie, 2013, "Oil and economic development: Libya in the post-Gaddafi era," Economic Modelling (32), p. 274, footnote 8, https://www.researchgate.net/profile/Issa_Ali/publication/257099172_Oil_and_economic_development_Libya_in_the_post-Gaddafi_era/links/5448e9030cf2d62c3052d34c.pdf, CNN Money, August 23, 2011, "Libyan Oil Could Take Years to Come Back," http://money.cnn.com/2011/08/23/markets/libya-oil-production/
[78] Reuters, October 28, 2015," Islamic State Risk for Libya's Troubled Oil Sector," http://www.reuters.com/article/us-libya-energy-idUSKCN0SM0HW20151028#KxJcGEruul9AuGdS.97
[79] US Department of State, January 22, 2016, "Remarks at the World Economic Forum," http://www.state.gov/secretary/remarks/2016/01/251663.htm.

challenges in Africa to increase risk to US strategic interests in the near future."[80] The rapid growth of ISIS – nearly doubling its fighting force in Libya in recent months to as many as 6,500 – has caused the US government to consider wide-scale military intervention.[81]

The US government has already spent significant sums to directly and indirectly address the conflict in Libya. The US Defense Department spent at least $1.1 billion on a military intervention in Libya between March and September 2011, while the NATO coalition spent several billions of dollars more.[82] Those figures do not account for US or NATO security assistance to the Libyan government since 2011, so the total amount spent to address the security situation in Libya post-Arab Spring are likely higher. The Obama administration has proposed investing hundreds of millions of dollars in foreign aid and counterterrorism efforts in Libya to combat the ongoing humanitarian and security crises.[83]

In Nigeria, the Obama administration has worked closely with the Nigerian government and other allies in the effort to combat Boko Haram. In 2014, the White House committed to a series of measures aimed at countering the terrorist organization, including the establishment of a $40 million Global Security Contingency Fund to provide technical expertise, training, and equipment, and a USAID commitment to spend $140 million to strengthen education systems.[84] This is in addition to the more than $600 million in US foreign aid programs in Nigeria, one of the largest US bilateral assistance packages in Africa.[85]

Impact on Global Energy Security

Conflict that disrupts oil and gas production also poses risks to global energy markets, potentially putting US energy security at risk. Supply shocks resulting from conflict-related production disruptions

[80] Cited in Congressional Research Service, August 3, 2015, "Libya: Transition and U.S. Policy," p. 7, https://www.fas.org/sgp/crs/row/RL33142.pdf

[81] The New York Times, February 4, 2016, "Obama Is Pressed to Open Military Front Against ISIS in Libya," http://www.nytimes.com/2016/02/05/world/africa/isis-libya-us-special-ops.html?_r=0; The New York Times, March 8, 2016, "Pentagon has Plan to Cripple ISIS in Libya with Air Barrage," http://www.nytimes.com/2016/03/09/world/middleeast/pentagon-considers-military-options-against-isis-in-libya.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=first-column-region&region=top-news&WT.nav=top-news

[82] Council on Foreign Relations, August 11, 2011, "What Does Libya Cost the United States?" http://blogs.cfr.org/zenko/2011/08/11/what-does-libya-cost-the-united-states/; Politifact, November 3, 2011, "Biden Calls Libya a Job Well Done," http://www.politifact.com/truth-o-meter/statements/2011/nov/03/joe-biden/biden-calls-libya-job-well-done/; Karl Mueller, 2015, "Victory Through (Not By) Airpower," in Karl Mueller (ed.), Precision and Purpose: Airpower in the Libyan Civil War," p. 380. The RAND Corporation, http://www.rand.org/content/dam/rand/pubs/research_reports/RR600/RR676/RAND_RR676.pdf

[83] Congressional Research Service, August 3, 2015, "Libya: Transition and U.S. Policy," p. 13, https://www.fas.org/sgp/crs/row/RL33142.pdf

[84] The White House, October 14, 2014, "FACT SHEET: U.S. Efforts to Assist the Nigerian Government in its Fight against Boko Haram," https://www.whitehouse.gov/the-press-office/2014/10/14/fact-sheet-us-efforts-assist-nigerian-government-its-fight-against-boko-

[85] Congressional Research Service, April 24, 2013, "Nigeria: Current Issues and U.S. Policy," https://www.fas.org/sgp/crs/row/RL33964.pdf

can create price volatility that damages producer countries, with the potential to destabilize resource-rich countries – like Libya and Nigeria – whose economies are highly reliant on resource revenues.[86]

Production disruptions can also cause global oil prices to rise, which can lead to slower global economic growth.[87] In its 2006 annual report, Shell noted that an increase in global oil prices that year was due in part to "supply disruptions" in countries including Nigeria."[88] Libya's violence and subsequent sharp decline in oil production in 2011 was widely cited as causing a spike in oil prices, and led some Western countries – including the US – to tap into their strategic petroleum reserves.[89] While the violence perpetrated by Boko Haram has not yet significantly impacted Nigeria's oil production, it poses risks to Nigeria's national security, as well as potentially to US national security. If Nigeria proves unable to defeat or contain Boko Haram, the group could eventually pose a threat to oil and gas production and transport, with consequences for oil and gas companies, the global energy supply, and global oil prices.

Conclusion

As this analysis illustrates, corruption can help to fuel conflict in resource-rich countries, with considerable negative financial and security impacts on extractive companies that operate in them. Citizens frustrated with poor governance – which is often facilitated by secrecy and a lack of accountability – and no perceived benefits from their country's natural resources may resort to violence in an attempt to change the status quo. Extractive companies may find themselves the direct or indirect victims of such events. While transparency over natural resource revenues is not in itself a guaranteed panacea for the many complex issues that can lead to conflict in such environments, it is certainly a necessary measure, and one that can empower citizens to hold governments accountable for the effective use of resource revenues. As such, helping to mitigate the types of conflict events detailed in this analysis should be considered among the many benefits of revenue transparency, including Section 1504.

[86] World Bank, 2013, "Oil Price Volatility, Economic Growth and the Hedging Role of Renewable Energies," Policy Research Working Paper, http://siteresources.worldbank.org/DEC/Resources/84797-1154354760266/2807421-1382041458393/9369443-1382041470701/Oil_Price_Volatility.pdf

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Methodology

To calculate unrealized revenues stemming from shut-in production of oil and natural gas, we relied exclusively on information provided in companies' annual reports and SEC filings (e.g. Forms 10-K and 20-F), with the exception of the Shell Petroleum Development Company of Nigeria Limited (SPDC). In the case of SPDC, we relied on company-issued information when possible, and supplemented that with media reports about specific events for which no SPDC-issued data was available.

It is important to note that, due to challenges associated with finding and compiling every known instance of shut-in production in Nigeria, our analysis is not a comprehensive accounting of every instance of shut-in production resulting from violence or sabotage. While some of the companies in our analysis publicly disclosed instances in which force majeure was declared, it is unclear whether they have done so for every such event. In addition, it is particularly challenging to account for instances in which a company's production was lessened – but not completely stopped – due to violence, since that information, including quantified impact, are often not provided. Furthermore, due to time, space, and information availability constraints, we have not included in our analysis every US-listed company with operations in Libya or Nigeria.

Given these factors, we emphasize that the estimates provided in our analysis are highly conservative, in that they underrepresent the total amounts of shut-in production for all US-listed companies operating in these two countries. The actual figures are invariably higher, possibly significantly so.

Methodology for calculating unrealized revenues in Libya

To calculate unrealized revenues for five US-listed companies operating in Libya, we treat 2010 production (pre-conflict) as a baseline against which to compare production for years 2011-2014 (conflict), and attribute to conflict any decrease in production between the former and latter. There are multiple reasons for using this approach. Prior to the onset of violence in 2011, oil and gas production in Libya had been relatively stable. The violence initiated in 2011 was a clear disruptive moment with a distinct "before" and "after" period. Furthermore, company reports and experts of the Libyan situation unanimously attribute the country's conflict for the disruption in, and precipitous decline of, oil and gas production.

After calculating the difference between production in 2010 and in each subsequent year for each company, we multiply that by the average realized price for a given year, as reported by the company, to calculate the daily unrealized revenues (i.e. the revenues the company would have otherwise been expected to collect if production had not been disrupted by conflict). We then multiply that by 365 to arrive at an annual figure. If a company produced both crude oil and natural gas, we did this analysis for both and aggregated the total, except in instances in which the company provided sufficient data on total hydrocarbons (i.e. crude oil plus natural gas). In the limited instances in which a company's annual output post-onset of violence exceeded the 2010 baseline figure, we compared subsequent years to the higher number, since the company had demonstrated that a higher level of production (than the baseline) was possible. However, we do not use that "new" baseline retroactively (i.e. we do not use it as the baseline for previous years).

Thus, in most cases, our methodology for the tables was:

*Unrealized Revenue = Production (Baseline Year) – Production (Year X) * realized price (Year X) * 365*

Methodology for calculating unrealized revenues in Nigeria

To calculate unrealized revenues for US-listed companies operating in Nigeria, we used information about reported shut-in production events – including dates and quantities – provided by the companies involved. We only included events in our analysis that were demonstrably the result of conflict. As noted above, in instances in which we were unable to source all relevant details from company statements, we also relied on information gathered from media reports.

To calculate the value of shut-in production, we multiplied the rate of shut-in production (e.g. barrels per day) by the number of days that the production shut-in lasted, and then multiplied that figure by the actual realized price reported by the company.[90]

*Unrealized revenue = Rate of production * Length of shut-in (# of days) * realized price (Year X)*

The figures for Total and Eni are limited to the companies' unrealized production resulting from their respective minority ownership positions in the SPDC, and do not include any additional shut-in production they may have experienced in Nigeria. The SPDC is a joint venture involving the government-controlled Nigerian National Petroleum Corporation (55% ownership), Shell (30%), Total (10%) and Eni (5%).

We excluded from our analysis production shut-in events for which we could not verify both a start and a termination date, or for which we were unable to determine the average daily shut-in production volume. This proved particularly challenging in the case of SPDC, especially for the years 2006-2010, which happened to be a period in which attacks on oil and gas facilities increased significantly, causing Nigeria's oil and gas production to decline by as much as one-third, or some 800,000 barrels of oil per day, according to some estimates. For instance, we were unable to sufficiently fill data gaps to account for most of SPDC's shut-in production in 2008 and 2009. We highlight this because it further illustrates that our estimates are highly conservative, as there are known shut-in production events that we were unable to quantify and include in our analysis. We also did not provide estimates of shut-in production for other US-listed companies, such as ExxonMobil, due to difficulties in compiling sufficient information. As such, our analysis should be treated as a partial snapshot of the financial burdens imposed by shut-in production, and not as precise estimates of total unrealized revenues resulting from shut-in production.

Some companies included in this analysis have used various names during the time periods relevant to this study (e.g. ChevronTexaco, Eni/Agip). We use their current names (e.g. Chevron, Eni) throughout.

[90] In the very limited number of instances in which a company did not provide its average realized price for a given year, we instead used the average world price for that year.

Appendix A: Unrealized revenues in Libya resulting from shut-in production

Marathon Oil

Liquid Hydrocarbons	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**		
Net liquid hydrocarbons sales, barrels per day	45,000	45,000	5,000	42,000	24,000	7,000		
Liquid hydrocarbon average realizations, per barrel	68.41	89.15	112.56	127.31	122.92	94.70		
Daily revenues from liquid hydrocarbons	3,078,450	4,011,750	562,800	5,347,020	2,950,080	662,900		
Yearly revenues from liquid hydrocarbons	1,123,634,250	1,464,288,750	205,422,000	1,951,662,300	1,076,779,200	241,958,500		
Daily unrealized revenues	-	-	4,502,400	381,930	2,581,320	3,598,600	**Total:**	
Estimated yearly unrealized revenues	**-**	**-**	**1,643,376,000**	**139,404,450**	**942,181,800**	**1,313,489,000**	**4,038,451,250**	
Total revenues	8,524,000,000	9,336,000,000	11,088,000,000	11,966,000,00	11,325,000,000	10,846,000,00		
Unrealized revenues in Libya as a % of company's total global revenues	**-**	**-**	**14.82%**	**1.17%**	**8.32%**	**12.11%**		**Yearly average: 9.1%**
Natural Gas	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**		
Net natural gas sales, cubic feet per day	4,000,000	4,000,000	0.00000	15,000,000	22,000,000	1,000,000		
Natural gas average realizations, per thousand cubic feet	0.70000	0.70000	0.70000	5.76000	5.44000	3.11000		
Natural gas average realizations, per cubic foot	0.00070	0.00070	0.00070	0.00576	0.00544	0.00311		
Daily revenues from natural gas	2,800	2,800		86,400	119,680	3,110		
Yearly revenues from natural gas	1,022,000	1,022,000		31,536,000	43,683,200	1,135,150		
Daily unrealized revenues	-	-	2,800	N/A	N/A	65,310	**Total:**	
Estimated yearly unrealized revenues	**-**	**-**	**1,022,000**	**N/A**	**N/A**	**23,838,150**	**24,860,150**	
							Total unrealized revenues from hydrocarbons + gas =	**4,063,311,400**

(Sources: Marathon annual reports, 2011-2014)[1]

ENI

Total Hydrocarbons	2009	2010	2011	2012	2013	2014	
Total hydrocarbons, barrels per day	244,000	273,000	112,000	258,000	228,000	239,000	
Total Hydrocarbons average realizations, per barrel	46.90	55.60	72.26	73.39	71.87	65.49	
Daily revenues, total hydrocarbons	11,443,600	15,178,800	8,093,120	18,934,620	16,386,360	15,652,110	
Yearly revenues, total hydrocarbons	4,176,914,000	5,540,262,000	2,953,988,800	6,911,136,300	5,981,021,400	5,713,020,150	
Daily unrealized revenues	-	-	11,633,860	1,100,850	3,234,150	2,226,660	**Total:**
Estimated yearly unrealized revenues	**-**	**-**	**4,246,358,900**	**401,810,250**	**1,180,464,750**	**812,730,900**	**6,641,364,800**
Total revenues, exploration & production			37,712,000,000	47,418,000,000	43,044,000,000	34,630,000,000	
Unrealized revenues in Libya as a % of company's total exploration & production revenues			**11.26%**	**0.85%**	**2.74%**	**2.35%**	**Yearly Average: 4.30%**

(Sources: Eni annual reports and SEC filings)[2]

Hess

Crude Oil	2009	2010	2011	2012	2013	2014	
Crude Oil, barrels per day	22,000	23,000	4,000	20,000	13,000	4,000	
Crude oil, average realizations, per barrel	48.91	65.02	88.46	89.02	108.17	97.31	
Daily revenues from crude oil	1,076,020	1,495,460	353,840	1,780,400	1,406,210	389,240	
Yearly revenues from liquid hydrocarbons	392,747,300	545,842,900	129,151,600	649,846,000	513,266,650	142,072,600	
Daily unrealized revenues	-	-	1,680,740	267,060	1,081,700	1,848,890	**Total:**
Estimated yearly unrealized revenues			**613,470,100**	**97,476,900**	**394,820,500**	**674,844,850**	**1,780,612,350**
Total revenues and non-operating income, exploration & production			10,511,000,000	12,928,000,000	14,019,000,000	11,508,000,000	
Unrealized revenues in Libya as a % of company's total exploration & production revenues	-	-	5.84%	0.75%	2.82%	5.86%	**Yearly Average: 3.82%**

(Sources: Hess annual reports, 2011-2014)[3]

Suncor

Crude Oil	2009	2010	2011	2012	2013	2014	
Crude oil, barrels per day	13,700	35,200	12,100	41,500	20,600	6,200	
Average price realized (before royalties & costs)	61.25	70.39	95.76	108.46	108.69	106.96	
Daily revenues from oil	839,125	2,477,728	1,158,696	4,501,090	2,239,014	663,152	
Yearly revenues from oil	306,280,625	904,370,720	422,924,040	1,642,897,850	817,240,110	242,050,480	
Daily unrealized revenues	-	-	2,212,056	N/A	1,586,874	3,101,840	**Total:**
Estimated yearly unrealized revenues			**807,400,440**	**N/A**	**579,209,010**	**1,132,171,600**	**2,518,781,050**
Gross revenues, exploration & production			6,784,000,000	6,476,000,000	6,363,000,000	4,715,000,000	
Unrealized revenues in Libya as a % of company's total exploration & production revenues	**-**	**-**	**11.90%**	**N/A**	**9.10%**	**24.01%**	**Yearly Average: 15.01%**

(Sources: Suncor annual reports, 2011-14)[4]

Total							
Liquid Hydrocarbons	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	
Hydrocarbon liquids, barrels per day	60,000	55,000	20,000	62,000	50,000	27,000	
Hydrocarbon liquids, average realizations, per barrel	58.10	76.30	105.00	107.70	103.30	89.40	
Daily revenues from liquid hydrocarbons	3,486,000	4,196,500	2,100,000	6,677,400	5,165,000	2,413,800	
Yearly revenues from liquid hydrocarbons	1,272,390,000	1,531,722,500	766,500,000	2,437,251,000	1,885,225,000	881,037,000	
Daily unrealized revenues	-	-	3,675,000	N/A	516,500	2,503,200	**Total:**
Estimated yearly unrealized revenues	**-**	**-**	**1,341,375,000**	**N/A**	**188,522,500**	**913,668,000**	**2,443,565,500**
Total global revenues from oil & gas producing activities			41,609,000,000	44,081,000,000	40,321,000,000	34,329,000,000	
Unrealized revenues in Libya as a % of company's total oil & gas revenues			**3.22%**	**N/A**	**0.47%**	**2.66%**	**Yearly Average: 2.12%**

(Sources: Total annual reports and forms 20-F, 2011-2014)[5]

Appendix B: Unrealized revenues in Nigeria resulting from shut-in production

Chevron

Crude Oil	2003[6]	2004[7]		2005[8]		2006[9]	2007[10]		2008[11]	2009[12]	2010[13]	2011-2015	Total
Crude oil, daily shut-in production, barrels per day	45,000	45,000	39,000	39,000	32,000	23,000	1,000	14,000		7,000		-	
Number of shut-in production days	270	150	215	270	95	365	365	210		60			
Total barrels shut-in per year	12,150,000	6,750,000	8,385,000	10,530,000	3,040,000	8,395,000	365,000	2,940,000		420,000			
Crude oil, average realizations, per barrel	26.79	34.17		47.59		57.65	65.01			55.97	72.68		
Total unrealized revenues from shut-in production	**325,498,500**	**180,832,500**	**286,515,450**	**501,122,700**	**144,673,600**	**483,971,750**	**23,728,650**	**191,129,400**		**23,507,400**			**2,160,979,950**
Natural Gas													
Natural gas, daily shut-in production, cubic feet per day							72,000,000		72,000,000	51,000,000	51,000,000	-	
Number of shut-in production days							365		58	210	58		
Total cubic feet shut-in per year							26,280,000,000		4,176,000,000	10,710,000,000	2,958,000,000		
Natural gas average realizations, per cubic foot							0.0039		0.00519	0.00401	0.00464		
Total unrealized revenues from shut-in production							**102,492,000**		**21,673,440**	**42,947,100**	**13,725,120**		**180,837,660**

2,341,817,610

Shell Petroleum Development Company of Nigeria Limited

Unrealized revenues as the result of shut-in production

						2011					
Crude Oil	**2006[14]**	**2007[15]**	**2008**	**2009[16]**	**2010[17]**	**June 12 – July 12[18]**	**Aug 23 – Oct 10[19]**	**Aug 28 - Nov 1[20]**	**Oct 10 – Nov 2[21]**	**Dec 24 - Jan 3[22]**	**2012[23]**
Crude oil, daily shut-in production, barrels per day	477,000	412,000	-	-	150,000	250,000	300,000	25,000	190,000	70,000	60,000
Number of shut-in production days	314	365			55	29	48	65	23	10	14
Total barrels shut-in per year	149,778,000	150,380,000			8,250,000	7,250,000	14,400,000	1,625,000	4,370,000	700,000	840,000
Crude oil, average realizations, per barrel	60.99	72.92			79.63	111.70					112.45
Total unrealized revenues from shut-in production	**9,134,960,220**	**9,171,676,200**			**656,947,500**	**809,825,000**	**1,608,480,000**	**181,512,500**	**488,129,000**	**78,190,000**	**94,458,000**
Natural Gas											
Natural Gas, daily shut-in production, cubic feet per day				500,000,000							
Number of shut-in production days				366							
Total cubic feet shut-in per year				183,000,000,00							
Natural gas, average realizations, per cubic foot				0.00171							
Total unrealized revenues from shut-in production				**312,930,000**							

	2013						2015		2016		
Crude Oil	**June 19 – July 5[24]**	**April 15- Aug 30[25]**	**Aug 31- Nov 27[26]**	**Sept 23 – Oct 3[27]**	**Oct 10-16[28]**	**2014[29]**	**Aug 27 – Sept 2[30]**	**Sept 30 – Oct 5[31]**	**Feb 22 – March 7[32]**	**Sub-totals**	**Total**
Crude oil, daily shut-in production, barrels per day	150,000	150,000	75,000	150,000	150,000	200,000	180,000	150,000	250,000		
Number of shut-in production days	16	137	88	10	7	72	7	5	14		
Total barrels shut-in per year	2,400,000	20,550,000	6,600,000	1,500,000	1,050,000	14,400,000	1,260,000	750,000	3,500,000		
Crude oil, average realizations, per barrel	110.14					100.55	48.67		34.04		
Total unrealized revenues from shut-in production	**191,112,000**	**2,310,847,500**	**737,220,000**	**165,210,000**	**115,647,000**	**1,447,920,000**	**61,324,200**	**36,502,500**	**119,140,000**	**27,409,101,620**	
Natural Gas											**27,736,231,620**
Natural gas, daily shut-in production, cubic feet per day				500,000,000							
Number of shut-in production days				10							
Total cubic feet shut-in per year				5,000,000,000							
Natural gas, average realizations, per cubic foot				0.00284							
Total unrealized revenues from shut-in production				**14,200,000**						**327,130,000**	

Shell Petroleum Development Company of Nigeria Limited	
Total unrealized revenues, 2006-2016	**$27,736,231,620**
Nigerian National Petroleum Corporation (NNPC) (55%)	$15,254,927,391
Shell (30%)	$8,320,869,486
Total (10%)	$2,773,623,162
Eni (5%)	$1,386,811,581

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