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Proving the old spell wrong: New African hydrocarbon producers and the 'resource curse'

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Proving the old spell wrong: New African hydrocarbon producers and the ‘resource curse’

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Abstract

Avoiding the ‘resource curse’ will be key to turning oil and gas discoveries into sustainable development for new African producers. The article focuses on international and national policy innovations that can cut the economic, institutional and cultural Gordian knot behind the curse. ‘Oil funds’ have a disappointing record; best practices on why and how to use them are ambiguous. By contrast, the Extractive Industry Transparency Initiative has triggered learning processes of strengthening momentum. Leveraging transparency toward accountability through informed national policy debates is now the central policy challenge for new African producers. Meanwhile, Corporate Social Responsibility has evolved beyond health and safety to cover a firm’s environmental and social impact and can be mobilized in the form of development-supportive partnerships with investing companies. Much of past policy innovation has been *defensive* in nature, however. The post-2015 Sustainable Development Goals proposed by the UN High Level Panel present governments, companies and stakeholders with a shared *positive* agenda to eradicate poverty and turn natural resources into sustainable development.

Keywords: Resource curse, economic and institutional channels, Dutch disease, corruption, civil wars, conflicts, Hartwick rule, investors, innovation, Sovereign Wealth Funds, Santiago Principles, transparency, Publish What You Pay, EITI, Natural Resources Charter, Equator Principles, Corporate Social Responsibility, Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), High Level Panel (HLP), Sustainable Development Solutions Network (SDSN), UN General Assembly, post-2015, tripartite partnerships.

Introduction and outline

A ‘resource curse’ has cast an unwelcome shadow on past experiences of large-scale hydrocarbon developments in countries lacking a diversified enough economy including a majority of the twenty African countries considered as ‘resources-rich’ by the IMF (IMF 2012). The discovery of major oil and gas resources in a new group of African countries notably in East Africa and the Gulf of Guinea region has the potential to support accelerated development yet an essential question is whether the new producers can avoid the curse and, indeed, turn it into the blessing it should be. In the words of former UN Secretary General Kofi Annan: “*Africa is standing on the edge of enormous opportunity. Will we invest our natural resource revenue in people, generating jobs and opportunities for millions in present and future generations? Or will*

we squander this opportunity, allowing jobless growth and inequality to take root?” (Africa Progress Panel, 2013).

How being ‘resource rich’ often ends up making countries poorer rather than richer has been discussed widely by academics and practitioners in the wake of pioneering work by Sachs, Warner, Humphreys, Salai-i-Martin, Subramanian and many other. Yet, from the beginning, and even leaving aside Norway, a country in a category of its own, noteworthy exceptions have existed—such as Botswana and the United Arab Emirates. A rich experience has accumulated on how monetization of natural resource should be managed to ‘do it right’ on the public policy side as well as on the corporate side (UNDP, 2011). As we shall see, institutional and strategic innovations of the 2000s provide a far more supportive context for policy-makers intent on proving the old spell wrong. Corrupt behaviors and institutional shortcomings once seen as an inevitable part of the way of doing business are now scrutinized by empowered local stakeholders. Tax avoidance and evasion is now high on G8 and G20 meetings’ agendas. Far from being confronted with an unavoidable trap, the new producers can make productive use of this transformed environment in support of their own innovative approaches to turning energy resources into broad-based development.

As background for its policy-oriented, forward-looking analysis, the article begins with a brief survey of existing research on the ‘resource curse’, highlighting its multi-layered nature first in terms of the interplay of macroeconomic variables behind the so called ‘Dutch disease’ (section 1) and continuing with the role of corruption and rent seeking as well as the risk of civil war and conflicts (section 2). The first set of policies calling for attention is the creation of ‘stabilization funds’, ‘next generation funds’ and other Sovereign Wealth Funds (section 3). While high hopes were pinned as such funds as economic buffers against the Dutch disease, as protective tools against greed and corruption and as inter-generational transfer tools achievements so far have been disappointing, not to say muddled by conflicting objectives and uncertain guiding doctrine. By contrast the Extractive Industry Transparency Initiative (EITI) is proving to be game-changing: its disciplined, well vetted approach to transparency creates higher expectations of accountability and innovative processes to pursue such opportunities through multiple layers of interactions and partnerships (section 4). Key to the EITI policy and behavioral momentum is the nurturing of strong linkages between, on the one hand, the *international* reporting and verification process and, on the other hand, *national* policies, *corporate* strategies and pro-active *participation* by local communities and stakeholders. Turning to the essential role of investing companies, the article then discusses how company-centric ‘health and safety’ policies have evolved into far more comprehensive Corporate Social Responsibility (CSR) policies (section 5). Altogether, new producers can develop their resources in a profoundly transformed policy context that can tilt the playing field against forces of corruption and short-sightedness. Yet, important as they are, the institutional and policy innovations of the 2000’s remain largely *defensive* in nature, focused on ‘avoiding the resource curse’ and preventing corrupt behaviors. The last part of the article highlights therefore how the Millennium Development Goals and their post-2015 successors could catalyze a stronger alignment of natural resources development with *positive* goals of poverty elimination and sustainable development. Proposals put forward by the 26-member High Level Panel (HLP) co-chaired by the Presidents of Indonesia, Sierra Leone and the British Prime Minister and by the Sustainable Development Solutions Network (SDSN) of academic institutions provide signposts for a deeper, better prioritized integration of resources

exploitation and development policies. New producers need not be passive participants in this debate; how responsibly they develop their oil and gas resources and their own diversified energy mix will have implications well beyond their borders.

The article concludes by stressing the critical importance of partnerships in making use of this changed policy context and delivering responsible hydrocarbon development. New producers may seek inspiration both from the ground-level ‘trilateral partnerships’ with investors and communities/stakeholders emphasized in the 2009 UNDP South-South Nairobi conference (UNDP, 2011) and from the ‘new global partnership’ called for by the High Level Panel on post-2015 development goals (UN HLP, 2013).

1. The economic dimension of the resource curse: the ‘Dutch disease’ and its roots

In the footsteps of seminal work by Jeffrey Sachs and Andrew Warner (Sachs and Warner, 1995), and with the example of Nigeria seemingly a dramatic confirmation (Salai-i-Martin and Subramanian, 2003; Watts and Kashi, 2008), it has become customary to observe that countries that are ‘resource-rich’ tend to be, so to speak, development-poor. Looking back to past decades, many authors have contrasted the successful development of countries that were not well resources-endowed, such as Singapore and South Korea, with the less impressive results of well endowed countries that started from similar levels of development. In Nigeria for instance, nearly US\$350 billion in oil revenues over the period 1965-2000 and oil revenues per capita “increased from US\$33 in 1965 to US\$325 in 2000, but income per capita has stagnated at around US\$1100 in PPP terms since its independence in 1960 putting Nigeria among the 15 poorest countries in the world” (Van der Poel, 2010). In its June 2013 report the Africa Progress Panel deplors that “Angola and Equatorial Guinea have some of the largest gaps between income and human development as reported in the United Nations Development Programme’s Human Development Index (HDI).” Indeed, Angola, Africa’s second-largest exporter of oil, has a higher income per capita than Indonesia but its child death rate is comparable with Haiti’s (Africa Progress Report 2013). Meanwhile Equatorial Guinea has been the fastest country in the world in the recent period (17% p.a.) yet survival of children under the age of 5, a critical indicator of overall human development, did not improve.

By themselves, however, resources are not a good predictor of economic and social development (Brunnschweiler, 2008). First, one should distinguish between ‘resource dependency’ and ‘resource abundance’ (Ding and Field, 2005). In this respect, oil and gas tend to lead to higher levels of ‘fiscal dependency’ as higher taxes are more easily levied on producing companies. More importantly, as observed by Jean-Philippe Stijns, “*what matters is what countries do with their natural resources,*” and notably the “*type of learning process involved in exploiting and developing them*” (Stijns 2005). The literature on this matter consists of three separate main subsets that overlap, centered respectively on *economic performance, institutions and regime dynamics* and *conflict or civil war*. Let us discuss first the economic dimension, the one most easily amenable to policy intervention.

From a purely economic perspective, the resource curse manifest itself in the form of a failure to develop economic activities other than those centered on the energy and/or natural resources sector. The most obvious channel for this crowding out is the *exchange rate*, giving rise to the ‘Dutch disease’ whereby an appreciated national currency crowds out domestic manufacturing and also makes domestic non-traded goods non competitive. The ensuing de-industrialization or failed industrialization (Harding and Venables, 2010) and what Pertusier suggests to call the ‘de-agriculturization’ of traditional economies (Pertusier, 2011) can be especially hard on

developing countries in an early stage of their development

Paradoxically, ‘Dutch disease’ effects are fully in line with standard trade-specialization theory, reinforcing the use of a country’s comparative advantages in the way Ricardo would have found natural. Unfortunately, the comparative advantages in question come with specific disadvantages, notably the relatively small number of workers needed in modern oil and gas development. Hence the second type of economic channels contributing to the curse, namely insufficient *linkages* between the natural resources sector and the rest of the economy. In a dynamic perspective, this leads to insufficient ‘learning by doing’ for the economy at large. Turning the resources production and processing sector into a platform from which to launch an import-substitution strategy, as attempted under the *dependencia* theory by countries of the Andean Pact (Prebisch 1949), has turned out to be a strategic dead-end. Only a few countries have the skills and technology foundations needed to leverage the energy sector into the spearhead for a fully fledged industrial and services economy, a difficulty compounded by the highly specialized skills and capital equipment now called for in frontier hydrocarbon developments such as deep and ultra deep water fields, ‘unconventionals’ and even conventional Enhanced Oil Recovery (EOR). Incidentally, most developed countries would face a similar challenge if they could develop shale gas or tight oil resources: only the U.S. has the capacity to deploy thousands of rigs with support from around six hundred thousand specialized industrial and services workers (US EIA June 2013). For most developing countries, what tends to happen therefore is the development of an ‘off-shore sector’ (figuratively when not literally) with precious few linkages to the rest of the economy. Sometimes the domestic sector that *does* develop is not the one the government and investing companies would have encouraged, as is the case in Benin where a significant fraction of the population in the border region lives from selling gasoline smuggled from Nigeria. Such is the case also in the Niger Delta itself where more than one thousand small and primitive illegal refineries (‘cooking spots’) produce gasoline from Bony light crude ‘acquired’ in the depth of night through illegal ‘bunkering’ at the cost of major leakages (France televisions 2011/2013).

‘Local content’ policies endeavor to remedy this lack of linkages by imposing the purchase of a certain proportion of locally produced goods and services across the energy value chain. Significant results have been achieved in countries like Nigeria (Obembe, 2011; Oyejide and Adewuyi, 2011). Brazil, a country where the military regime had invested for several decades in off-shore technology, has become a leader in deep water drilling and Petrobras, its national energy company, is perfectly at ease in the highly competitive US part of the Gulf of Mexico. In some cases however, local-content obligations amount to putting the cart before the horse, triggering the development of a protected sector in which a few privileged local partners serve as gate keepers and rent collectors more than as genuine economic developers and innovators. The development of national champions is another avenue but here also results take time. The technology race is pretty unforgiving and even seasoned international companies such as ENI may see their skills stretched to the limits as could be seen in the early stages of the development of the Kashagan field in off-shore Kazakh waters (Bressand, 2009). The world of National Oil Companies (NOCs) is a very diverse one and it is no surprise that ENH, the Mozambican NOC, is giving itself two to three decades to transform from a state-participation management agency into a fully fledged operator (Ocuane, 2013). Natural gas is especially demanding: as stressed by Statoil’s Fareed Mohamedi “*the development of gas assets, especially in complicated environments requires large scale investments, advanced technical expertise, complicated pricing and contractual arrangements and marketing prowess [...] The impact ... on the political*

economy is more complicated than oil development because it is an ‘economic’ fuel, supporting in most cases more productive economic development, and its revenue impact is more gradual and also more stable over the long term” The recommended strategy is to use part of the gas resources to accelerate the electrification of the country (presently at 15% only in Tanzania) and, if possible, liquefy the rest for exports that will generate funding for development by the central government (Mohamedi, 2013).

Altogether, the proper solution to the linkages issue that would seem to be on scale with development needs in most of the new producer cases is an indirect one, in which financial resources generated by the natural resources sector are used for general economic development purposes through investment in human capital, infrastructures and other catalysts of a successful integration into the global economy.

Adopting a financial approach as we recommend brings into light however the third type of economic challenge within the resource curse, namely *volatility* of commodity prices and revenues. Not only do commodity prices tend to fluctuate widely—with the recent stable price for crude oil an interesting exception—but so does a typical producing country’s tendency to consume and import, and so does also the value of the underground collateral on which the country can rely when borrowing (Frankel, 2010). As a result, commodity cycles tend to be exacerbated by the policies that countries engage into during the commodity cycles. The creation of oil funds, as discussed in section 3, is one of the tools available to address this challenge, although a very imperfect one.

2 Corruption and rent seeking: institutional and political roots of the resource curse

Altogether, the challenge of building a diversified economy remains a daunting one but none of the three economic dimensions we briefly reviewed (i.e. ‘Dutch disease, linkages and volatility’) is insurmountable. A more comprehensive analysis is in order to capture the unforgiving logic of the resource-curse. Two qualitatively different dimensions—the political-institutional one and the one related to open conflicts and civil wars—interact with the economic challenges just reviewed and may compound them into a curse. Rafael Pertusier, a Petrobras executive with strong academic inclinations, can be credited for offering possibly the most enlightening synthesis of the literature in the form of a nine-channel framework (which nevertheless leaves aside conflict and civil wars) as described in Table 1.

1. Dutch Disease 2. Linkages and Learning-by-Doing 3. Volatility	Economic Channels
4. Rent-Seeking 5. Human Capital 6. Social Capital 7. State Accountability (or Social Contract)	Institutional Channels
8. Savings (including the Hartwick Rule) 9. Non-Maximization of Resource Rents	Depletion Channels

Table 1: Channels of Transmission of the Resource Curse. Source: Pertusier, 2011, p. 37.

Institutional channels are the ones that loom more prominently in the present debate. It would be beyond the scope of this article to analyze in full how capturing state-managed rent may hamper development of human capital and of social capital (i.e. a buoyant civic society) in the detailed manner Pertusier and other analyze. Let us take corruption as a proxy for, and common root behind the four institutional channels in this typology. Corrupt behaviors are pervasive in all parts of the world. “*Looking at the Corruption Perceptions Index 2012*,” observes Transparency International in introducing its 2013 report, “*it's clear that corruption is a major threat facing humanity. [...] . While no country has a perfect score, two-thirds of countries score below 50, indicating a serious corruption problem*”. The development impact of corruption falls most heavily on the poorest: “*Corruption translates into human suffering, with poor families being extorted for bribes to see doctors or to get access to clean drinking water. It leads to failure in the delivery of basic services like education or healthcare. It derails the building of essential infrastructure, as corrupt leaders skim funds. Corruption amounts to a dirty tax, and the poor and most vulnerable are its primary victims*” (Transparency International, 2013). Corrupt practices contribute to massive losses for developing countries. Using a broader measure of illicit capital outflows stemming from crime, corruption, tax evasion, and other illicit activity, and with China accounting for almost half of the total, the Global Financial Integrity coalition finds that “*The developing world lost US\$859 billion in illicit outflows in 2010, an increase of 11% over 2009. From 2001 to 2010, developing countries lost US\$5.86 trillion to illicit outflows*” (Global Financial Integrity, 2012).

Many reasons account for the dismal performance of extractive industries regarding corruption and other un-transparent practices. The large monetary volume associated with a relatively small number of transactions makes corruption more tempting. In addition, diverted flows are difficult to detect as rent is extracted from concentrated revenue flows resulting from a relatively small number of mostly foreign taxpayers (corporations) as opposed to local tax payers. Also energy is a highly capital intensive sector, which tends to encourage monopolistic or oligopolistic market structures thereby facilitating discretionary control of access. As a result, rent seeking becomes a major hindrance to proper development of human capital and of a lively civic society.

Interestingly, to the economic and institutional/political dimensions of the curse, Pertusier adds “depletion channels” by which he refers to “*the impossibility of observing optimal depletion rules [of a country's natural resources] if the constraints of the institutional channels and the effects of the economic channels are not addressed*” (Pertusier, 2011). Ideally, under the Hartwick rule, a country with a exhaustible resources should build a stock of capital equivalent to the amount of depleted resources so as to prepare themselves for the post-commodity period (Hartwick, 1977). Rent seeking and weak institutions tend however to hamper the development of the fully competitive financial organizations that would be needed to support such a long term financial intermediation. As a result, the pace and manner in which reservoirs are developed differs widely from the optimal strategy one can observe for instance in countries such as Saudi Arabia where deposits like Ghawar are carefully harnessed with a long term perspective. A well known counter example is the opportunistic manner in which some of the Russian reservoirs have been exploited after the dismantling of the USSR when property rights were so insecure and political discretion so high that accelerated monetization was the strategy of choice (Gustafson, 2012).

Last but not least, conflict and civil war are the most extreme forms of the curse. “*Secessionist rebellions are considerably more likely if the country has valuable resources, with oil being*

particularly potent” (Collier *et al.* 2003). How rebel groups may fund themselves through the sales of natural resources and whether the latter tend to keep conflicts longer lasting than would otherwise be the case is a theme abundantly studied (Ross, 2004; Humphrey, 2005). Armed conflict can be exacerbated by third-party governments seeking to profit from resource-rich neighbors as seems to be happening in Central Africa around the DRC. Conflicts and civil war may well extend beyond the borders of the resources-rich state as unaccountable governments may use part of the large revenues under their control to illegally supply arms to rebels in neighboring countries as was the case when Charles Taylor’s government in Liberia used off-record revenues from ‘blood diamonds’ to promote rebellion in Sierra Leone.

More than 1.5 billion people live in fragile and conflict-affected countries. A major step forward in development assistance and policies has been a far sharper recognition of the specific challenges faced by ‘fragile states’. Nineteen of the fragile and conflict-affected countries came together, forming the ‘G7+’ group with a secretariat in Timor Leste to seek progress and assistance in common. At the Fourth High-Level Forum on Aid Effectiveness held in Busan, South Korea, in December 2011, a *New Deal for Engagement in Fragile States* was endorsed by about forty countries and by major development agencies. The ‘new deal’ sets out five goals: legitimate politics, justice, security, economic foundations and revenues and services. Achieving the peace-building and state-building objectives supported by the ‘G7+’ group and the New Deal agreement is a precondition for sound management of natural resources (a major subject in its own right which the present article can only allude to).

3 Oil funds and ‘next generation funds’: much ado about nothing?

Setting aside some of the revenues from the sales of natural resources appears to many as an essential foundation for responsible management of oil and gas resources and the IMF tends to recommend that resource rich countries set up Natural Resource Funds (NRFs or in short oil funds) to generate ‘genuine savings’ in line with their long term investment needs¹. The high hopes once pinned on have proven however more difficult to translate into effective success if not part of a much broader tool set (Heuty, 2011).

A first problem is that “oil funds” are part of a broader group of institutions, the Sovereign Wealth Funds (SWFs) responding to heterogeneous objectives through diverse or even contradictory avenues. Many SWFs, such as Temasek in Singapore or the three major SWFs set up by China, not to mention the one set up by France to protect some key industrial holdings, have no relationship with the world of natural resources although they also partake in an effort to provide for ‘future generations’. Even pure ‘oil funds’ can be designed with very different objectives in mind, ranging from protection from volatility and corruption to development funding. Such heterogeneity of both ends and means deprives NRFs of the compelling logic associated with EITI and its overarching objective of promoting accountability through transparency as we review in the next section. Not surprisingly, a number of countries have closed their NRF while others have let it evolve into just another discretionary tool in the hands of the well connected. “*In Venezuela, Iran and Nigeria,*” observes Heuty, “*the lack of rules-based fiscal policy has undermined revenue management and often led to spending that is both inefficient and opaque*” (Heuty 2011). “*The effectiveness of [natural resource] funds in*

¹ Genuine saving is the traditional concept of net saving, namely public and private saving minus depreciation of public and private investment, *plus* current spending on education to capture the change in intangible (human) wealth *minus* the value of net depletion of exhaustible natural resources and renewable resources (forests) *minus* damages of stock pollutants of CO2 and particulate matter (van der Poel, 2010).

restraining expenditure seems to be limited” observes the IMF in line with its previous finding that “*saving oil revenues requires making fiscal decisions for which a fund is no substitute*” (IMF, 2007 and 2001). A fiscal framework based on a long term development strategy and, as emphasized by Paul Collier, the creation of a national capacity to invest efficiently (“*investing in investment*”) matter more than the creation of a fund (Heuty, 2011; Collier, 2012).

SWFs being major investors in developed economies, Western countries grew worried of such opaque practices, which led to the creation of an *International Working Group on Sovereign Wealth Funds* with 26 resource-rich and non-commodity exporters as members and with the OECD and the World Bank as observers. In 2008 the group approved the *Santiago Principles*, a set of 24 voluntary principles to foster transparency and accountability. These objectives however are articulated from the perspective of the developed countries recipient of SWF and NRF investment rather than from that of the fund’s home country’s development needs.

In many cases the reason to create an ‘oil fund’ is to deal with volatility of resources earnings, which, as we saw, is only one of the three economic channels behind the resource curse. Stabilization efforts were pursued through multi-country mechanisms such as the Stabex and Sysmin funds created by the European Union and its African, Caribbean and Pacific (ACP) partners in the Lome and Yaounde conventions. Few would associate these efforts with resounding success. The actual impact of such funds depends on the overall fiscal policy and there have been cases, such as Venezuela in 1999-2000, when the stabilization fund ended having to borrow at times it was supposed to be lending. Other oil funds endeavor to promote inter-generational transfer, which calls for riskier, higher-return investments than the low-risk, high-liquidity investment typical of stabilization funds. In fact, the most efficient way to promote inter-generational transfer in low-capital stock countries may well be to forego NRF and invest instead, upfront, in education and infrastructures (Takizawa *et al*, 2004; van der Ploeg and Venables, 2010). Part of the conflict between the World Bank and Chad over the fund set up to save revenues from the Chad-Cameroon pipeline was the Bank’s demand that assets be kept offshore, which does protect investment against undue political influence but also guarantees that the country’s revenues are *not* used in support of its own immediate development needs. This led Paul Collier and a group of experts at the Oxford Centre for the Analysis of Resource Rich Economies (OxCarre) to launch the *Natural Resource Charter*, a set of principles on optimal resources management that includes a call for stronger public and private domestic investment (Precepts 7 and 8) as part of a full value-chain view of resources discovery, exploitation and use. Meanwhile the IMF is defending itself against the criticism that it uses the Permanent Income Hypothesis (PIH) to advise excessive levels of savings from resources exporters, to the detriment of their present development needs and of investment in human capital (IMF, May 2012).

Altogether, NRFs or ‘oil funds’ appear as means towards heterogeneous policies that raise a number of country-specific dilemmas and that requires a broader set of institutions to be effective. When such a framework exists—as is the case in Norway from which other countries sought inspiration or even managerial help—then the oil fund can be a useful additional policy tool. It can even be further leveraged, as Norway has just decided to do, to act as responsible investor in the companies in which it invests, closing the loop with the transparency and governance agenda. But absent such framework, an oil fund is either an isolated measure putting symbol before substance or, at worst, a honey pot waiting to be raided.

4 Transparency as the trump card against corruption: the EITI shock wave

At the beginning of the century, when disillusionment about inequitable or failed development reached its apex, transparency emerged as the trump card to foster an across the board re-alignment of incentives in support of genuine development. Ana Bellver and Daniel Kaufmann define transparency as “*an increased flow of timely, good quality and reliable economic, social and political information, which is accessible to all relevant stakeholders*” (Bellver and Kaufman, 2005). This however misses that corruption can develop within the investing companies and even, in some cases, in civil society if NGOs are created merely to serve as fronts for gate-keeping, turning into what is sometimes derided as GRINGOs (Government Run and Influenced NGOs). Transparency International, an organization dedicated to combating corruption through increased transparency measures, provides a definition that relates more straightforwardly to the objective of responsible resources development, namely as: “*a principle that allows those affected by administrative decisions, business transactions or charitable work to know not only the basic facts and figures, but also the mechanisms and processes.*” (www.transparency.org). A new culture has developed in which it is no longer taboo to lift the veil of opacity that protected what Paul Collier called ‘the plundering of the planet’ (Collier, 2011). Who could have imagined only one decade ago that a panel of eminent thought leaders including a former President of Nigeria would name the president of Angola and his daughter, billionaire Isabel dos Santos, among those responsible for preventing Angola’s massive oil and gas wealth to benefiting the poor and disenfranchised? Or that the French judiciary could raid property belonging to the ruling family of Equatorial Guinea, a country which rose to 45th rank in terms of income per capita while moving *down* 2 slots to rank 136 in terms of Human development Index between 2006 and 2011? The genie of transparency is out of the bottle, for the better.

The present momentum to tackle the ‘resource curse’ through greater transparency and accountability in the energy and mining industries can be traced back to the creation of the Publish What You Pay (PWYP) coalition by London-based NGOs in 2002. The PWYP coalition has grown to become a global network comprised of community organizations, international NGOs and faith-based groups in more than 70 countries. The rallying cry for the global coalition’s campaign was that citizens have the right to see how much their governments receive from their natural resources. In addition to the spirit of its campaign, reminiscent of the ‘Let’s make poverty history!’ campaign, the PWYP focused on a strategic and yet easily identifiable and communicable aspect of the overall institutional aspects of the resource curse. As observed by Mabel van Oranje and Henry Parham, “[o]ne of the main factors allowing for the PWYP coalition’s expansion is that it has a powerful core objective that has complemented existing local priorities of civil society activists promoting good governance and corporate responsibility. [...] International NGOs and donor agencies have increasingly mobilised resources to support local civil society groups with capacity building and with technical assistance programmes. Various information-sharing mechanisms have been used to enable local groups to engage with other activists to learn from their experiences and coordinate advocacy efforts” (Van Oranje and Parham, 2009).

The PWYP campaign was instrumental in promoting the creation, also in 2002, of the Extractive Industries Transparency Initiative (EITI). The objective was to bring governments and investing companies together, on a voluntary basis, to set a global standard for transparency in oil, gas and mining. By so doing, they would enhance transparency in revenue streams, strengthen governance and accountability in resource-rich countries, and significantly improve hydrocarbon

management. The EITI works through the publication and the verification of two streams of data: all payments investing companies make to governments in connection with extractive activities and all government revenues from the same activities. The two sets of data are then compared, quite often exposing discrepancies that suggest that some of the revenues were appropriated by third parties along the way. A recent example was the finding, made public by the Africa Centre for Energy Policy at the August 2013 International Transparency conference in Accra, that “*Ghana lost a whopping \$4.9 billion through illicit financial flows from 1970 to 2008 in the extractive sector*” (Global Financial Integrity Report, 2013). The good news and a powerful illustration of how the transparency momentum may lead to actual results, was that, in light of such losses, President John Mahama directed the Ministers of Energy and Petroleum and Land and Natural Resources, to map out potential areas of resource accumulation and that Ghana would adopt a public auction process for licensing concessions which would remove one major source of opacity. Similarly, recent EITI audit of Nigeria EITI audits covering the period 2006-2011 revealed that the Nigerian National Petroleum Corporation owed the government around USD 8 billion, of which 2 billion have already been paid up after Nigerian lawmakers seized on the revelations.

One decade after its creation, EITI has become a central feature of international efforts and of the national efforts of forty countries at least to impose higher levels of integrity to relations around oil, gas and mining. Almost one billion people in 37 countries now have information about the \$1 trillion dollars’ worth of revenues that accrue to their countries from extraction of natural resources—in practice mining and oil and gas. More than 160 EITI Reports document flows of money from natural resources with increasing precision. In Africa, as observed by the IMF, 14 resource exporters of 20 are currently participating in the EITI of which “*all but one has completed at least one reconciliation report, and five have been declared fully compliant*” (IMF, April 2012). In February 2012, Denmark’s DONG became the 63rd oil, gas and mining companies to support the EITI on the international level. When presenting this decision to the public, Charlotte Strand, Vice President and Head of Finance in DONG E&P, observed that “*It is part of DONG Energy’s policy to refrain from corruption and other unethical business conduct. For the same reason we joined the UN Global Compact’s ten principles covering the areas of human rights, labour, the environment and anti-corruption in 2006. Now as a next natural step we also support the EITI*”. Tanzania is a member of EITI, one of only 21 countries that the EITI Board has declared in full compliance with EITI Standards, meaning that the country has an effective process for annual disclosure and reconciliation of all revenues from its extractive sector. This allows citizens to see how much their country receives from oil, gas and mining companies (TEITI, 2013).

Beyond the mining sector, the EITI has also convinced over 80 global investment institutions that collectively manage over USD 16 trillion (2010 figure) to subscribe to a pledge based on EITI principles, the Investors’ Statement on Transparency in the Extractives Sector. One paragraph of that Pledge is worth quoting as it refers to business risks companies and money managers need to bear in mind to protect their long-term ‘license to operate’:

“We are concerned that extractive companies are particularly exposed to the risks posed by operating in these environments. Companies that make legitimate, but undisclosed, payments to governments may be accused of contributing to the conditions under which corruption can thrive. This is a significant business risk, making companies vulnerable to accusations of complicity in corrupt behaviour, impairing their local and global ‘licence to operate’, rendering them vulnerable to local conflict and insecurity, and possibly compromising their long-term

commercial prospects in these markets” (EITI, 2013). More generally, according to Kolstad and Wiig, increased transparency increases the probability of getting caught and [...] the likelihood that evidence will be properly gathered; makes it easier to induce non-corrupt behavior through incentives and to select honest bureaucrats or partners; increases the likelihood of symmetrical information which would lead to less rent-seeking behavior, greater accountability, and encouragement for the voting public.

As stressed by the Africa Progress Panel however *“The real force for change is the exposure of policymakers to the force of public opinion”* (Africa Progress Panel, 2013 p.70). The EITI process could boil down to a box-ticking, formulistic process telling little about the true state of revenue management and use. Clare Short, EITI chair, acknowledges that transparency is only a tool toward a broader end in her foreword to the 2013 EITI report *“We must not however be under the illusion that the EITI can answer all natural resource governance challenges [...] We are only at the beginning of the journey towards good natural resource management across the world. In too many countries, the EITI is not yet generating informed public debate, and the public debate is not yet driving the reform that is needed to bring lasting benefits to the people.”* Or, in the blunter words of Jonas Moberg, head of EITI International Secretariat, *“[t]he EITI exists on the premise that transparency leads to improved accountability. Well, transparency is starting to become a reality. Accountability however will not follow automatically”* (EITI, 2013a).

One limit in the global impact of EITI is that companies and governments adhere to the EITI on a voluntary basis only. Even this is changing. In 2007, Nigeria became the first country to make participation in EITI compulsory for all oil and gas producing companies. In 2010, the US made it compulsory for US mining and energy companies to join (US, Dodd-Frank Act 2010). The EU followed suite with the 2013 Accounting Directive mandating disclosure of payments to governments by listed and large non-listed companies with activities in the extractive industry and the logging of primary forests (EU 2013).

Another major debate now raging is about the need to provide a payment by payment picture of revenues. Disaggregate payments are known to the auditors compiling national EITI reports but the host country is the one deciding whether such information gets published. Currently, there is about an even split between both types of reporting being used by EITI countries, with the EITI board maintaining a neutral stance on the issue.

Yet another limitation of the EITI approach concerns its focus on the revenue part of the value chain. In Charles McPherson and Stephen MacSearraigh’s words, *“The narrow focus on revenue transparency ignores phases further up in the value chain such as contract and operations monitoring--two stages that are particularly sensitive to nontransparent/corrupt practices, as well as operations, distribution of revenues, and expenditures* (McPherson and MacSearraigh, 2007). Things are moving however, and the contracts themselves are increasingly made public. When submitting the Candidature of Senegal to EITI, President Macky Sall said that as part of the EITI process, Senegal will publish all mining contracts as well as revenue to be derived from these contracts". Candidacy, he stressed, is a key instrument in Senegal’s reform process to reduce poverty at a time when prospective oil reserve of roughly 3.5 billion barrels and at least 13 billion cubic feet of natural gas stand a good chance of being added to gold, iron ore and phosphates reserves among the country’s top export earners (EITI, 2013 b).

A broader criticism although not one quite as daunting is that external prodding is still needed for producing countries still need to take transparency and accountability as seriously as their development interest commands. This is beginning to change however. While deploring that *“[f]or too long, African governments have been responding to externally driven transparency*

agendas. They have been following, not leading”, the Africa Progress Panel also takes note of the recent adoption by the African Union of the African Peer Review Mechanism as the main framework for monitoring natural resource. Hence their recommendation that African governments should build on the Africa Mining Vision and “*institute transparent systems of auctions and competitive bidding for concessions and licences, as well as tax regimes that reflect both the real value of their countries’ natural resource assets and the need to attract high quality investment*”. They urge them also to “*adopt legislation that requires companies bidding for concessions and licences to fully disclose their beneficial ownership*” (Africa Progress Report 2013).

5 Corporate Social Responsibility: how investors can pro-actively contribute

The role of the investing companies is essential in achieving responsible development of hydrocarbons. Publication of payments to government is only one aspect of a broader agenda that includes ‘don’t do’ as well as ‘do’ prescriptions. On the ‘don’t’ side, the Africa Progress Panel stressed in its 2013 report that “*When foreign investors make extensive use of offshore companies, shell companies and tax havens, they weaken disclosure standards and undermine the efforts of reformers in Africa to promote transparency. Such practices also facilitate tax evasion and, in some countries, corruption, draining Africa of revenues that should be deployed against poverty and vulnerability.*” But the Panel is not alone in taking a closer look at tax optimization and tax avoidance behaviors, now a regular item of international summits. They can therefore “*call on the G8 and the G20 to step up to the mark, to show leadership in the development of a credible and effective multilateral response to tax evasion and avoidance*” (Africa Progress Report 2013). But the ‘do’ side is just as important since investors are needed as active partners together with local communities and stakeholders. What companies do beyond their legal obligations in support of causes that are not strictly limited to profit maximization is referred to as Corporate Social Responsibility (CSR). Companies also see a benefit in creating ‘social capital’ that will facilitate on-the-ground operations through easier grievance resolution, more transparent distribution of project tax and royalty, and community empowerment. In many large and not so large companies, the former approach based on strict legal compliance is complemented with a pro-active affirmation of a given company’s values. In 1997 Shell adopted its Statement of General Business Principles and one year later BP followed with its “We stand for” statement. Then companies began working in closer and closer relationship with stakeholders. Shell for instance went from the “community assistance” of the early 1990s, akin to charity work, to “community development” (1997) and from there to “sustainable community development programs” (2004). Previous practices akin to a charity approach, such as cash payments to communities, are giving way to work with NGOs and development agencies. In addition to affirming their values in their own mission statements, companies are also coming together to identify and affirm common principles of integrity, as is the case in the framework of the World Business Council for Sustainable development (WBCSD). Most strikingly, a group of financial institutions active in project finance came together to create the Equator Principles in 2003 and to revise them in 2006. They constitute a common baseline and framework the implementation of each institution’s internal social and environmental policies, procedures and standards related to its project financing activities. This common framework encourages information sharing and the identification of best practices. Currently, 78 financial institutions apply the Equator Principles to projects of US\$10 million or more across all industry sectors. Altogether, the culture change that we detected in producer countries in the wake of the EITI

endeavor has some equivalent—even if less than an overwhelming one—in the world of investors. Making the two cultural changes cross-fertilize will call for partnerships in which objectives are not merely those captured in project balance sheets but pertain to the development process broadly defined. Hence the importance of changes at work regarding how the international community approaches universal development objectives.

Embracing development objectives is an open-ended undertaking however, and companies are better at accomplishing relatively well identified tasks. “*While the management of environmental issues is well understood by the oil, gas and mining industries,*” observe Warner and Sullivan, “*social issues are a relatively new area of management focus.*” Progress on the CSR front notwithstanding, there are limits to what companies can contribute; they should focus on contributions in line with their core competencies (Bressand, 2011). But the move from being mere ‘environment takers’ to acting as ‘environment shapers’ in partnership with other is underway and can be mobilized. “*Today, the demand from many quarters is for companies to be part of a ‘smarter’ type of social investment, one that reflects the complex relationship between mitigating negative social impact and promoting community development*”. The reward for companies in accepting this more complex set of objectives is that its ‘social license to operate’ can only be strengthened if “*affected communities and households feel that the company is responsive to their concerns*” (Warner & Sullivan, 2004).

6 Hydrocarbons, poverty alleviation and the coming Sustainable Development Goals

The 21st century opened indeed on a new wave of reasoned optimism regarding the fate of the poorest countries. By adopting the Millennium Development Goals (MDGs) and by focusing on eight compelling targets to be reached by 2015, the Millennium Summit of heads of States in the year 2000 unleashed a dynamics that has proven more impressive and more resilient than most imagined. True, this happened after the embrace of free market policies in China, from 1979 onward, and then in India in 1989, had removed major self-inflicted obstacles to development leading to fairly dramatic economic growth well above the infamous ‘Hindu growth rate’ and its Maoist equivalent. In the view of Jagdish Bhagwati, such acceleration of economic growth achieved far more in poverty alleviation than programs and policies focused on helping the poor had in previous decades (Bhagwati 2010). Nevertheless, it did matter that the international community placed performance in meeting basic human needs above increasingly sterile disputes over the ‘Washington consensus’ or the New International Economic Order (NIEO). International and national institutions could now be held accountable for progress in ways the man and woman in the street could understand. Donor-recipient relations have also changed significantly. Aid is a less prominent part of development financing thanks to globalization, to expanding trade and to favorable changes in terms of trade and/or in market shares for resource-rich and emerging economies. In addition, the debate on aid effectiveness (Paris agreement, 2005 and Accra convention 2008) has led to a more balanced relationship in which finger pointing—by donors to recipients and by the latter to conditionality or to capitalism—has given way to what begins to look like mutual accountability and shared responsibility. Aid is neither indispensable nor a god-given right, it can now be discussed, even if old rhetorical habits die hard, as part of a broader process of development funding in which developing countries—notably resource-rich countries—have greater means for self-reliance—this at a time when South-South trade has taken off and calls for ‘collective self-reliance’ lose much of their ideological tones in a faster moving, more pragmatic, pluri-centric world.

Results in pursuit of the MDGs have been encouraging even if fragile countries and countries in

conflict have largely stayed aside. As summarized by the High Level Panel (HLP) set up by the UN Secretary General to advise on post-2015 development strategy, the number of people living with less than \$1.25 per day is on its way to falling below 15% of developing countries' population in 2015 against 46% in 1990. Enrolment in primary education has increased by 18 points in sub-Saharan Africa to 76% and by 12 points to 91% in South Asia. The mortality rate for children under five has declined by a third. True, other goals have proven more difficult to achieve. The proportion of people exposed to hunger has leveled out at 16% in developing countries. The number of workers in informal 'vulnerable jobs' stopped decreasing in 2008. One in eight children in sub-Saharan Africa still dies before the age of five, twice the developing countries' average and 18 times the developed regions' average (UN HLP, 2013). Yet, by and large, unlike the situation that faced Nigeria and Angola in previous decades, the new producers will be developing their hydrocarbon resources at a time when their own progress towards the MDGs are, or can become very significant. As highlighted by the Africa Progress Panel, Tanzania already reduced extreme poverty from 84% to 67 % between 2000 and 2007. Mozambique also recorded a major advance: poverty fell from 74 % in 2002 to 59 % in 2007. Ghana reduced extreme poverty by one-third between the end of the 1990s and 2005. In Cameroon and Mali, however, increased growth had no discernible effect on poverty – and Nigeria and Zambia registered small increases in poverty despite increased growth (Africa Progress Panel, 2013).

Major resources are going to be available in countries fully engaged in the global war against extreme poverty and already familiar with the imperatives of transparency, accountability and broad-based democratic debate on the use of natural resources fostered by the EITI which we have described above. To quote from the Africa Progress Panel again "*In many resource-rich countries anticipated revenue flows are very large in relation to the estimated costs of closing the national poverty gap, as indicated by the financing requirements for bringing each poor person up to a poverty line income. In Guinea, Liberia and Mozambique, the average annual revenues projected by the IMF from current natural resource projects could eradicate extreme poverty*" (Africa Progress Panel, 2013).

Conclusion: the responsible resources development agenda

Many of the mechanisms behind the 'resource curse' are embedded in challenging relationships between macroeconomic variables (growth, savings, resources exhaustion...) and complex learning processes of an economic, social and strategic nature—not forgetting the needed 'investment in investing' to master efficient deployment of resources over time (Collier, 2012). These challenges will *not* disappear yet the progress we have reviewed on several key fronts mean that they can be addressed in a much more supportive context. After all, the survey of the resource curse literature brings to light that, in the end, so many factors come into play, from resource endowment to types of political regime and leadership style (van de Ploeg, 2011), that curse or blessing must be considered a wide open outcome in a given country. The transformation in the international and African policy context we have described can therefore make a very significant difference if it becomes embedded in a culture of accountability—the same culture that the Paris, Accra and Busan conventions of 2005, 2008 and 2011 have promoted within the global development community.

A powerful combination could take shape whereby the progress towards transparency and accountability of the previous decade provides a high quality policy context in which to mobilize resources in support of the MDGs and their successor goals. Much of the discussion in the past

has been about developing countries investing to develop capital and labor skills commensurate with what can take them along the path of development as captured in standard economic models that devoted limited attention to the poverty trap and to what the MDG agenda has revealed. Inefficient use of resources, outside of rent capture, was attributed by many to ‘white elephants’ projects and other efforts by politicians in resource-rich countries to stay in power van der Ploeg). In a more transparent policy environment, success in the fight against extreme poverty and some of the compelling SDGs presently being articulated could replace ‘white elephants’ as a more productive transmission belt between policy discretion regarding use of economic resources and political gains.

An interesting paradox for the new energy producers will be that part of the SDGs will tend to be predicated on negative views of the role of hydrocarbons in connection with detrimental climate change. Attracted to the purest approaches rather than to the most effective ones, the activist community tends to over-emphasize alternative energy sources when all quantitative modeling points to a persistent role for hydrocarbons and therefore to the need for responsible hydrocarbon development including through carbon capture and sequestration (CCS) in conjunction with, rather than as alternative, to the exuberantly pursued ‘transition’. This however will only make the international debate more stimulating and interesting to follow. The opportunity for new producers to lead will rise in consequence: a common culture is one to which all contribute and in which all learn for each other experiences. Progress on the several fronts we have reviewed mean that, more than ever, the resource curse will not be predicated from backward-looking econometric regressions but from forward looking policy and corporate strategic decisions.

References

- Africa Progress Panel**, Equity in Extractives: Stewarding Africa’s natural resources for all, Africa Progress Report 2013, Foreword by Kofi Annan, June 2013.
- African Union**, Africa Mining Vision, Addis Ababa, 2009.
- Amin, A.** Africa Centre for Energy Policy, Pro. Conference on International Transparency Initiatives, opening statement, Accra, July 31, 2013, accessed August 13, 2013 at http://www.etvghana.com/index.php?option=com_content&view=article&id=4104%3Aghana-loses-49-billion-in-extractive-industry&catid=120%3Aheadlines&Itemid=530
- Bellver, A. and Kaufmann, D.** World Bank, ‘Transparenting Transparency’: Initial Empirics and Policy Applications, Pro. IMF conference Transparency & Integrity, July 2005.
- Bhagwati, J.** Millennium development Goals: Time for a Rethink, Finance & Development 47:3, Washington DC, September 2010.
- Brunnschweiler, C.N.** Cursing the Blessings? Natural Resource Abundance, Institutions, and Economic Growth, World Development 36:3 (2008): 399–419.
- Brunnschweiler, C.N. and Bulte, E.** The resource curse revisited and revised: A tale of paradoxes and red herrings, Environmental Economics and Management, 55, pp.248–264, 2008.
- Collier, P. et al** Breaking the Conflict Trap: Civil War and Development Policy, World Bank/OUP, Washington DC., 2003.
- Collier, P. and Venables, A. J.** International Rules for Trade in Natural Resources, World Trade Organization, Staff Working Paper ERSD-2010-06, Geneva, 2010.

Collier, P. *The Plundered Planet: Why We Must —And How We Can — Manage Nature for Global Prosperity*, Oxford University Press, New York, 2011.

Collier, P. “Managing Natural Resources to Ensure Prosperity in Africa”, speech to UONGOZI Institute, 28 February 2012, Dar es Salaam, Tanzania, 2012, accessed August 12, 2013 at www.youfly.co.tz/uongozi/Collier%20Speech%20Transcript%2028%20Feb%2012.pdf

Ding, N. and Field, B.C. Natural Resource Abundance and Economic Growth, *J. Land Economics*, 81:4; pp. 496–502, 2005.

European Commission New disclosure requirements for the extractive industry and loggers of primary forests in the Accounting (and Transparency) Directives (Country by Country Reporting) MEMO/13/541 Event Date: 12/06/201

Extractive Industries transparency Initiative (EITI) Message from the EITI chair and “Statement of the Head of EITI International Secretariat in: EITI Progress Report 2013 Beyond Transparency, Oslo, 2013.

Extractive Industries transparency Initiative (EITI) Senegal EITI Candidacy, accessed August 12, 2013 at <http://eiti.org/news/eiti-be-key-instrument-senegal-extractive-reforms>

Extractive Industries transparency Initiative (EITI) Nigeria EITI: Making transparency count, uncovering billions, Case study 20.01.12, accessed on August 12, 2013 at <http://eiti.org/files/Case%20Study%20-%20EITI%20in%20Nigeria.pdf> , 2012.

Fotinos, E. The Extractive Industry Transparency Initiative: Moving Beyond Oil Revenue Transparency, in: UNDP, Bressand Albert (lead ed.), *Getting It Right*, New York, 2011.

France Televisions and Tony Comiti Productions Nigeria : les esclaves de l’or noir, In: *Les routes de l’impossible*, 2011, broadcasted August 3, 2011, accessed August 15, 2013 at http://www.tv-express.com/programme-television-france5-les_routes_de_l_impossible-1618679-3-0.php

Frankel, J. A. *The Natural Resource Curse: A Survey*, Cambridge, MA: National Bureau of Economic Research Working Papers Series, March 2010.

Gelb, A. and Majerowicz, S. Oil for Uganda – or Ugandans? Can Cash Transfers Prevent the Resource Curse? Center for Global Development, Washington DC, working-paper-261, 2011.

Global Financial Integrity Illicit Financial Flows from Developing Countries: 2001-2010, Washington, DC, 2012.

Global Financial Integrity, Kar, D. and Cartwright-Smith, D. *Illicit Financial Flows from Africa: Hidden Resource for Development*, 2010.

Gustafson, T. *Wheel of Fortune: The battle for oil and power in Russia*, Harvard University Press, Cambridge Mass., 2012.

Harding, T. and Venables A.J. Exports, imports and foreign exchange windfalls, OxCarre Research Paper, University of Oxford, 2010.

Hartwick, J.M. Intergenerational equity and investing rents from exhaustible resources, *American Economic Review*, 66, pp. 972-974, 1977.

Heuty, A. Can Creating Natural Resource Funds Address the Fiscal Challenges of Resource-Rich Developing Countries? in: UNDP, Bressand A. (lead ed.), *Getting it Right*, New York, 2011.

Heuty, A, and Humphreys, M. Natural Resources, Conflict, and Conflict Resolution: Uncovering the Mechanisms, *J. of Conflict Resolution*, 49:4, Paradigm in Distress? Primary Commodities and Civil War pp. 508-537, August 2005.

Humphreys, M.; Sachs, J. D.; and Stiglitz, J. E. *Escaping the Resource Curse*, Columbia

University Press, 2007.

International Monetary Fund Fiscal Frameworks for Resource Rich Developing Countries, Staff Discussion Note SDN 12/04, Thomas Baunsgaard *et al*, Washington DC, May 2012.

International Monetary Fund Regional Economic Outlook for Africa: Sustaining Growth amid Global Uncertainty, World Economic and Financial Surveys, Washington DC, April 2012.

International Monetary Fund The Role of Fiscal Institutions in Managing the Oil Revenue Boom, Washington DC, March, 2007.

International Monetary Fund Stabilization and Savings Funds for Nonrenewable Resources, Davis, Jeffrey *et al.*, Finance and Development, Washington DC, December 2001.

Kaufmann, D. and Penciakova V. SEC Passes Natural Resource Transparency and Conflict Minerals Rules: The Glass is Fuller than Expected, Brookings Institution, Washington DC, 2012.

Kolstad and Wiig, Is Transparency the Key to Reducing Corruption in Resource-Rich Countries? *J. World Development*, 37: 3, pp. 521–532, 2009.

McNeish, J.A. Rethinking Resource Conflict, CMI Norway, Background paper for World Development Report, World Bank, Washington DC, 2010.

McPherson, C. and MacSearraigh, S. Corruption in the Petroleum Sector, in: Campos Edgardo J. and Pradhan, S. (eds), *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level*, The World Bank, Washington, D.C., 2007.

Mitchell, J. V. and Stevens, P. Ending Dependence Hard Choices for Oil-Exporting States, Chatham House Report, London, 2008.

Mohamedi, F. The Geo-Economics of Resources and Conflict in Africa, Pro. IISS Conference 7 –9 April, London, 2013.

Moss, T. and Young L. Saving Ghana from Its Oil: The Case for Direct Cash Distribution, Center for Global Development, Washington DC, Working Paper 186, 2009.

Nigeria EITI: Making transparency count, uncovering billions. Accessed on August 12, 2013 at <http://eiti.org/files/Case%20Study%20-%20EITI%20in%20Nigeria.pdf> , 2012.

North, D.C. *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, New York, 1990.

Obembe, O. Challenges and Opportunities in Developing Local Content in the Oil and Gas Sector: A Case Study of Nigeria, in: UNDP, Bressand A. (lead ed.), *Getting it Right*, New York, 2011..

Oyejide, A. and Adewuyi, A. Enhancing Linkages of Oil and Gas Industry in the Nigerian Economy, MMCP Discussion Paper No. 8, University of Cape Town, Cape Town, 2011.

Pertusier, Rafael, R. Addressing the Resource Curse: Widening the Political Economy Debate on the Challenges Facing New Oil- and Gas- Exporting Economies, in: UNDP, Bressand Albert (lead ed.) ,*Getting it Right*, New York, 2011.

Rainbow Insight Evaluating the EITI's Impact on the Transparency of Natural Resource Revenues, accessed on August 12, 2013 at

<http://eitransparency.org/files/Rainbow%20Insight%20Report.pdf> February 2, 2009

Ocuane, N. ENH chairman, speaking to the daily Notícias, accessed on August 12, 2013 at <http://cpi.transparency.org/cpi2012/results/> , Agence Ecofin, June 26, 2013.

Rodrick, D., Subramanian A. and Trebbi, F. Institutions rule: the primacy of institutions over geography and integration in economic development, *J. of Economic Growth*, 9, pp. 131-165, 2004.

Ross, M. L., *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*, Princeton University Press, Princeton, NJ, 2012.

- Ross, M.I L.** A Closer Look at Oil, Diamonds, and Civil War, *J. Annual Review of Political Science* 9, 2006, Palo Alto, Cal., 2006.
- Ross, M. L.** How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases, *J. International Organization*, 58:1, pp. 35-67, Cambridge, 2004.
- Salai-i-Martin, X. and Subramanian, A.** Addressing the Natural Resource Curse: An Illustration from Nigeria, IMF Working Paper, Washington DC, July 2003.
- Sachs, J. and Wagner, A.** Natural Resource Abundance and Economic Growth, National Bureau of Economic Research, Working Paper 5398, 1995.
- Sauvant K. P. and Strauss, J.** State-controlled entities control nearly US\$ 2 trillion in foreign assets, Columbia FDI Perspective, New York, 2012.
- Shaxson, N.** New approaches to volatility: dealing with the 'resource curse' in sub-Saharan Africa, *International Affairs*, 81:2, pp. 311–324, London, 2005.
- Segal, P.** Resource Rents, Redistribution, and Halving Global Poverty: The Resource Dividend, *World Development*, 39:4, 2011.
- Stevens, P. and Dietsche, E.** Resource curse: An analysis of causes, experiences and possible ways forward, *J. Energy Policy*, 36, pp. 56–65, 2008.
- Stijns, J. P.** Natural resource abundance and economic growth revisited, *J. Resources Policy*, 30, pp.107–130, 2005.
- Sustainable Development Solutions Network (SDSN), Leadership Council,** An Action Agenda for Sustainable Development, Report by the submitted to the UN Secretary-General, New York, June 2013.
- Tanzania Extractive Industries Transparency Initiative (TEITI)** Third Reconciliation Report for the year ended 30 June 2011, Prepared by BDO East Africa in association with Paulsam Geo-Engineering Ltd., Dar Es Salaam, June 2013.
- Torvik, R.** Learning by doing and the Dutch disease, *European Economic Review*, 45, pp. 285–306, Brussels, 2001.
- Transparency International and Revenue Watch,** Promoting revenue transparency 2011: report on oil and gas companies, Washington DC, 2011.
- U.S. Energy Information Agency (EIA),** Analysis & Projections, June 13, 2013.
- U.S. Government,** Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010.
- United Nations,** A NEW GLOBAL PARTNERSHIP: ERADICATE POVERTY AND TRANSFORM ECONOMIES THROUGH SUSTAINABLE DEVELOPMENT, Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, May 2013.
- United Nations Development Program (UNDP), Special Unit for South-South Cooperation,** Getting It Right: Lessons from the South in Managing New Hydrocarbon Economies, Bressand A. lead ed., Preface by John A. Kufuor, former President of the Republic of Ghana, New York, 2011.
- Van Oranje, M. and Parham, H.** Publishing What We Learned: An Assessment of the Publish What You Pay Coalition, p. 17, London, 2009.
- Van der Ploeg, F.** Natural Resources: Curse or Blessing? Oxford Centre for the Analysis of Resource Rich Economies, OxCarre Research Paper 5, 2010.
- Warner, M. and Sullivan, R.** Putting Partnerships to Work: Strategic Alliances for Development between Government, the Private Sector and Civil Society, Greenleaf Publishing Ltd., Sheffield, 2004.
- Watts, M. (editor) and Kashi, E. (photographer),** Curse of the Black Gold: 50 Years of Oil in The Niger Delta, PowerHouse Books, Brooklyn, 2008.

Wei, K. The Resource Curse: Current schools of thought and policy responses, in: UNDP, Bressand A. (lead ed.), Getting it Right, New York, 2011.

World Bank World Development Report 2011: Rethinking Resource Conflict, 2011.

Sites of interest:

Equator Principles at <http://equator-principles.com/>

Extractive Industry Transparency Initiative at www.eiti.org and national EITI sites (e.g. teti.org for Tanzania)

Natural Resource Charter at <http://www.naturalresourcecharter.org>

Publish What You Pay coalition at <http://www.publishwhatyoupay.org>

Transparency International at www.transparency.org



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