

What Can We Learn About the Management
of Natural Resources from the Management of Aid?

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Abstract: A large body of literature has arisen in economics and political science analyzing the apparent “resource curse”—the tendency of countries with high levels of natural resources to exhibit worse economic and political outcomes. This paper examines the purported causal mechanisms underlying this curse and shows that they all center on the revenue that these resources generate for the government. As such it is not surprising that the most recent literature on the topic has demonstrated that—given a competent government—natural resources have no negative consequences and may actually have positive effects. The important question therefore is, What can be done in countries without effective governments? Policy proposals have centered on (a) taking the revenue out of the hands of the government, or (b) having the government commit to use the funds in certain ways. Neither of these has been particularly successful, which we might have predicted given the large amount of research on another important non-tax revenue source for developing countries: foreign aid. The parallels of the foreign aid literature with the resource curse literature are reviewed, as are the lessons from the foreign aid literature. It is argued that the best thing to do with natural resources in poorly governed countries is simply to leave them in the ground, a recommendation that has consequences for rich country actions.

I. Introduction

It is commonplace in the development community to hear laments about how international donors never live up to their promise of giving 0.7 percent of their GNP as foreign aid. If the international community surprised everyone tomorrow and suddenly delivered the annual foreign aid that has been promised since 1970—with all donors giving 0.7% of their GNP to poor countries—the massive windfall of perhaps \$100 billion to developing countries would likely be greeted with great fanfare.

What would happen instead if the \$100 billion did not come from aid, but some other source? What would be the difference? This is of course very similar to what is happening in today's world, with record high prices for oil and other natural commodities generating massive revenues for many developing countries. In Africa, as Table 1 highlights, a large group of countries stands to benefit from higher oil, gas, and mineral prices, and many of these countries have been targeted as having major financing gaps in meeting their Millennium Development Goals. And yet while there is some hope that this windfall of resources will have a beneficial development impact, there is far more emphasis in the international community about how countries can avoid the “curse” that comes along with natural resources (e.g. Overseas Development Institute, 2006). Countries rich in natural resources seem to do worse economically and politically than they otherwise should.

This paper will argue that in fact the differences between these two revenue sources are few. As I will detail, many of the problems that have caused natural resource wealth to be associated with poor political and economic outcomes center on how the revenue from this wealth is used. As such, in many cases there should be no particular difference between a country getting its revenue from aid or, for example, oil. There are specific policy implications arising from this approach, as I will outline, and they differ quite a bit from what tends to be recommended with regard to avoiding the resource “curse”.

The next section reviews the literature linking natural resources to poor economic and political outcomes, detailing how the major problems are caused the revenue these resources generate. It also discusses the policy recommendations made to deal with these problems, and their lack of success. This failure to alleviate the resource curse would not be surprising to those who have researched the effectiveness of foreign aid. As reviewed in the third section, the aid community for decades has experimented with various mechanisms to improve the effectiveness of aid in poorly governed countries—many mechanisms quite similar to those recommended now for natural resources—and found their success limited. As a result, the aid community has in recent years begun to turn to an approach of “selectivity”—attempting to give aid to countries that already have good economic policies and political institutions in place. In the fourth section, I discuss how this might be applied in the case of natural resources—a very different approach than is being implemented now. A fifth section concludes.

Table 1: African Oil, Gas, and Mineral Exporting Countries, with Millennium Development Goals Priority Level and Financing Gap

Category	Country	MDG Priority Level		MDG Financing Gap (2015)			
		Top: Failing/ reversing progress for multiple goals	High: Facing failed/reversing progress or progressing too slowly	None	<10%	10-20%	>20%
>10% of GDP from mineral exports	Botswana		X	X			
	Sierra Leone	X					X
	Zambia	X					X
	Liberia	X				X	
	Congo (Kinshasa)	X					X
	Niger	X					X
>30% of GDP from oil or gas exports	Angola	X			X		
	Congo (Brazzaville)		X		X		
	Equatorial Guinea		X	X			
	Nigeria	X			X		
	Gabon		X	X			
	Sudan		X			X	
Other current African mineral, oil, or gas exporters (<10% GDP)	Cameroon	X				X	
	Chad		X				X
	Côte d'Ivoire	X			X		
	Ghana					X	
	Togo	X					X
	South Africa		X	X			
	Tanzania	X					X
	Uganda						X
	Zimbabwe	X				X	
Countries either exploring for oil reserves or offering concessions	Benin	X				X	
	Central African Republic	X					X
	Ethiopia	X					X
	Guinea Bissau		X				X
	Kenya	X					X
	Madagascar	X					X
	Mali	X					X
	Malawi		X				X
	Mauritania	X					X
	Namibia		X	X			
	Senegal		X		X		
	Western Sahara			X			

Source: Overseas Development Institute, 2006.

II. The Revenue Curse

The presence of natural resources appears to have negative economic and political consequences. According to many scholars, these resources result in worse economic growth (e.g. Sachs and Warner, 1995) and more authoritarian political regimes (e.g. Ross, 2001). This section examines the causal mechanisms linking these resources to these effects. Most importantly, I demonstrate that each of the underlying causal mechanisms linking natural resources and these outcomes can be linked to (a) natural resource *revenue* and (b) how governments use that revenue. As I discuss at the end of the section, this indicates that we may be able to learn about how to manage *this* revenue from what we know about how to manage other kinds of revenue. There are three main causes I will review: “Dutch Disease”, revenue volatility, and a broad area I will refer to as “political deterioration”.

One of the most well known effects of the discovery of natural resources is the appreciation of the real exchange rate, leading to a condition often referred to as “Dutch Disease”. This is caused by a rise in the value of natural resource exports, and it generally makes exporting other (non-natural resource) commodities more difficult. With imports now cheaper, it also becomes difficult for domestic producers to compete in the local market. In addition, as local labor and assets are used by the natural resource sector, their prices increase, making them more expensive for producers in other sectors. The result is a privileging of the natural resource and nontradeable sectors, crowding out the traditional exports in an economy (manufacturing and/or agriculture).

However, Dutch Disease does not *have* to occur when natural resources are discovered—whether it does depends very much on how the government spends the resulting revenue. As Sachs (2007) has argued, “The real fear of the Dutch Disease, in short, is that the non-oil export sector will be squeezed, thereby squeezing a major source of technological progress in the economy. *But this fear is vastly overblown if the oil proceeds are being properly invested as part of a national development strategy.* If the proceeds from oil are used not for consumption but for public investment, the negative consequences of real exchange rate appreciation can be outweighed” (p. 184, emphasis in original). In other words, a competent government can avoid this aspect of the “resource curse” (also see Van Wijnbergen, 1984).

Indonesia’s experience with its oil boom in the late 1970s demonstrates how this might occur in practice. Instead of spending their increased revenue on current spending (as Mexico did by mainly promoting its state oil company), the Indonesian government put the oil revenues into spending on agriculture and industry, the tradeable sectors, in order to strengthen production. As Usui (1997) notes, perhaps the most striking aspect of Indonesian policy was its emphasis on agriculture. The Indonesian government used the oil revenues to encourage a boom in rice production, promoting research and extension, investment in irrigation, and subsidizing fertilizer use. The government’s procurement agency kept the producer price of rice high and subsidized the use of fertilizer necessary to take advantage of new Green Revolution crops. As a result of these incentives to

farmers, Indonesia was self-sufficient in rice production by the mid-1980s (also see Booth, 1988). In this way, Indonesia was generally able to avoid the Dutch Disease.

Malaysia provides a similar additional example. Revenues from crude petroleum discovered in the mid-1970s, and subsequently liquefied natural gas, were invested as opposed to consumed. This built on Malaysia's past strategy of trying to diversify its economy away from dependence on rubber and tin. As in Indonesia, much of this strategy revolved around modernizing the agricultural sector, as programs were developed to launch new commercial crops (like palm oil) and improve the performance of already existing crops (such as rubber). This was in addition to an overall strategy of investing resource proceeds into economic and social infrastructure—half of public investment went into energy, communications, and transport, while 10-17 percent went into education, housing, and health (Abidin, 2001).

In addition to Dutch Disease, natural resource exporters also face the problem of volatility in revenue. As Humphreys, et al. (2007) have discussed, this volatility has several sources, including resource extraction rates that vary over time, governments' back-loaded contracts with producing companies, world price fluctuations, and pro-cyclical lending that tends to accentuate booms and busts. This volatility creates a problem for fiscal policy: because there are diminishing marginal benefits to public spending, the social gain from spending more in some years does not make up for the social cost of spending less in others.

However, like Dutch Disease, this is a problem that can be overcome with a competent government in place—one that can “smooth” spending over a period of time. There are a variety of ways that this can be accomplished, though the most popular option recently has been to set up “natural resource funds”, which supposedly store revenues when natural resources are booming and then augment public spending when revenues diminish. For example, Chile established a Copper Stabilization Fund (CSF) in 1985 with the purpose of stabilizing the exchange rate and fiscal revenues in the context of rapidly changing copper revenues. A savings rule was determined that transferred resources into the fund at a rate based on the difference between copper's actual price and the government's estimated long-term copper price. The higher the actual price was in comparison to the long-run price, the more resources were transferred (and vice versa, if the price differential were to be negative). The fund has generally accomplished its purpose, and budget expenditures have not closely followed revenue variability, as was the case prior to the CSF (Fasano, 2000).

The final causal mechanism (or set of mechanisms) linking natural resources to a “curse” can broadly be called “political deterioration”. Natural resource rents have been linked to greater corruption and weaker accountability (Leite and Weidmann, 2002) and less democratization (Ross, 2001). Accountability arguments tend to center on the ability of governments with these revenues to avoid taxing their citizens, which has been argued to have played a key role in the development of western representative institutions (Ross, 2004; Tilly, 1990). Similarly, many explanations for the link between natural resources and authoritarian political regimes have focused on revenue (Anderson, 1995; Karl,

1997). These resources simply give political regimes more money with which to pursue their various strategies for staying in power. As Jensen and Wantchekon (2004: 821) state, “The key mechanism linking authoritarian rule and resource dependence, both in democratic transition and democratic consolidation, is an incumbent’s discretion over the distribution of natural resource rents.”

As with the first two “resource curse” mechanisms, the fact that these political mechanisms revolve around the use of revenue indicates that the effects are due to the institutions in place when these revenues arise. Building on this logic in recent work (Morrison, Forthcoming), I have shown that these revenues are not “anti-democratic”, or even “pro-democratic”, but simply stabilizing, in the sense that they solidify whatever regime they enter. If there are robust institutions in place, these revenues are likely to stabilize the regime.

One good example of this dynamic is Botswana, a country that has benefited a tremendous amount from its diamonds, economically and politically. Botswana’s growth rate is among the highest in the world over the past 40 years, and it has had freely contested democratic elections since independence. In their analysis of Botswana’s success, Acemoglu et al. (2003: 105-6) note the critical importance of the existing institutions when diamonds appeared on the scene: “By the time the diamonds came on stream, the country had already started to build a relatively democratic polity and efficient institutions. The surge of wealth likely reinforced this. Because of the breadth of the BDP coalition, diamond rents were widely distributed, and the extent of this wealth increased the opportunity cost of undermining the good institutional path.” By contrast—though through a similar dynamic—when oil prices surged in the 1970s and massive rents accrued to Mexico’s authoritarian party, it stabilized that party against strong democratization forces (Magaloni, 2006; Morrison, 2007b).

In sum, the various negative effects that have been attributed to natural resources are caused by the revenue that these resources generate, and how countries use that revenue. For this reason, it is not surprising that the most recent and important work on the “resource curse” is highlighting the fact that these resources have very different effects depending on the institutional environment in place in a given country. Several studies have now shown that in beneficial institutional environments, natural resources have no negative effect and can even have strong positive economic impacts (Boschini, et al., 2007; Hodler, 2006; Mehlum, et al., 2006; Robinson, et al., 2006). For example, Mehlum, et al. (2006) use an index that measures rule of law, bureaucratic quality, corruption, risk of expropriation, and government repudiation of contracts, and they demonstrate that when this index is high (i.e. the environment is “producer friendly”), there is no evidence of a resource curse. These studies indicate that it is only in poor institutional environments that natural resources have negative developmental effects. Similarly, on the political side, scholars have begun to demonstrate that these resources can actually work to stabilize democratic regimes, not just authoritarian ones (Dunning, Forthcoming; Morrison, Forthcoming).

While these arguments are encouraging, in that they dispel the notion that natural resources must be associated with a “curse”, they also raise a troubling problem: What can be done with these resources when they accrue to countries with poor institutional environments? Several options have been suggested and even implemented. Given that the major problem is how governments use natural resource revenues, one of the central thrusts of policy recommendations has been to lessen government control over how these revenues are used. This has taken one of two forms. The first is to take the resources away from the government or otherwise bypass the government in some way. This has included proposals to privatize state-owned oil companies (Weinthal and Luong, 2006) or distribute oil wealth directly to citizens (Birdsall and Subramanian, 2004). The second form is to keep the resources in the hands of the government but attempt to change the government’s actions in some way. This has included putting the money in natural resource funds (Varangis, et al., 1995), which include some sort of conditions over the way the funds are used and/or overseen.

Where they have been implemented, these policies have not been particularly successful (Davis, et al., 2001; Pegg, 2006). For example, countries where natural resource funds seem to have worked properly are countries that were managing their fiscal situation well to begin with. While disappointing, the lack of effectiveness of these mechanisms should not be surprising. The countries discussed above—examples that have avoided the “resource curse”—were not successful in managing their resources because they put in place some particular mechanism to insulate themselves. These were countries whose growth trajectories indicate they were doing many things right—managing their natural resources well was just part of their overall competence. In addition, while the mechanisms suggested by the policy community with regard to natural resources may be seen as innovative in that community, their lack of success would not seem strange to those who focus on another major revenue source for developing countries: foreign aid. The reasons why, and the implications of the experience with foreign aid, are explored in the next section.

III. The Lessons of Foreign Aid

In addition to highlighting the importance of the institutional environment for determining the effect of natural resources, the fact that the “curse” of these resources is caused by revenue raises an important question: If it is natural resource *revenue* doing the work, why is this revenue different from other kinds of revenue, particularly others that are not generated through taxation? Nevertheless, though one of the first influential analyses of states dependent on oil mentioned similarities between oil rents and other types of externally obtained revenues (Beblawi, 1987), it is only recently that scholars have begun to explore these similarities more in depth.

The principal external revenue with which natural resource revenue has been compared is foreign aid (Bräutigam, 2000; Collier, 2006; Moore, 2001; Morrison, 2007a; Smith, Forthcoming; Svensson, 2000; Therkildsen, 2002). As Collier (2006) notes, “both are ‘sovereign rents’” (p. 1483). And in fact, it is striking to note how similar the literatures on the effects of aid and natural resources are. Scholars have linked aid to

exactly the three causal mechanisms discussed above: Dutch Disease (e.g. Younger, 1992), variability of aid (Arellano, et al., Forthcoming), and political deterioration (e.g. Bräutigam and Knack, 2004; Knack, 2001; van de Walle, 2001). And as with recent research on natural resources, several scholars have argued that aid's effect is contingent on the institutional environment in place (Burnside and Dollar, 2000; Morrison, Forthcoming).

However, despite these apparent similarities, policy recommendations regarding these two revenue sources have moved in almost opposite directions in recent years. As discussed above, the general thrust of the natural resource literature has been to take the money out of the hands of the government, or at least attempt to change the way the government uses it. In the aid community, by contrast, the movement has been toward ensuring governments have “ownership” over the way they spend the resources, which has implied a move toward giving foreign aid to those countries that already have good institutions and policies in place, as opposed to trying to change the behavior of governments.

Why has the foreign aid community moved in this direction? The answer is essentially that for decades donors tried very similar tactics to those that are now being recommended for natural resources—attempting to change governments' behavior or bypass them completely—and found them to be largely unsuccessful. Donors' efforts in this regard took one of two forms: policy conditionality or projects. Given the parallels with natural resource policy recommendations, it is useful to review the experience with both of these.¹

Policy conditionality—attempting to change a government's policies in exchange for money—has been one of the more controversial aspects of foreign aid practice over the past few decades. Underlying the ideas of both the practitioners of it (most donors) and its critics (many non-governmental organizations) has been the assumption that these conditionalities actually work—that is, governments actually do implement the policies required by foreign donors. In fact, while there are certain instances in which these conditions have probably influenced a government to act in a specific way, studies have largely concluded that these conditions have no systematic influence on policy (Alesina and Dollar, 2000; Burnside and Dollar, 2000; Collier, 1997; Easterly, 2005; Mosley, et al., 1995; World Bank, 1992b).

There are two principal reasons why conditionality has not worked in general. The first is on the recipient side—simply put, there are strong political forces in place opposed to the policy conditions. If this were not true, conditionalities would of course be unnecessary: the policy would already be in place. These forces may be in the executive branch or outside it, but either way they are likely to continue to oppose the policy even if it is instituted at first. As such, policies adopted because of conditionalities are often reversed. This raises the problem on the donor side: donors have strong incentives to continue to disburse funds even if conditionalities are not met. These incentives can be political, such as the need to support a government for strategic

¹ Much of the following draws on Kanbur, et al. (1999).

reasons; or they can be economic, such as the need to keep domestic private sector actors happy because they receive aid-financed contracts. These incentives can even be bureaucratic, such as the need for aid agencies to disburse all their funds in order to get the same amount of funds the following year. Regardless of their origin, these incentives often mean that aid is disbursed regardless of whether or not conditions are met.

The other donor approach to making aid more effective—bypassing the government and implementing projects instead—has similarly led to disappointing results. Three problems have beset these projects. First, aid that goes to finance projects is largely fungible, in the sense that it simply enables a government to take money it would have spent on that item (for example, a school) and spend it on another item (Feyzioglu, et al., 1998). In this way, while donors may say they are funding a school, their money may simply free up the government to spend its money on other priorities (for example, arms). Second, taking the money out of the hands of the government hinders building up a capable state, which is a necessity for development if historical experience is any guide. Project proliferation has made it extremely difficult for governments to monitor what is going on in any given sector, and the transaction costs tend to undermine bureaucratic quality (Knack and Rahman, 2007).

Third, and perhaps most important for comparison to natural resource revenues, there is now a fair amount of evidence regarding the inability of projects to succeed in the context of a poor policy environment (Easterly, 2002; World Bank, 1992a). The reason is fairly intuitive. If a donor builds a road, for example, in a country where there is no funding for maintenance from the government, or where the economic policies do not encourage business, the road is likely to be ineffective in spurring economic development.

As Kanbur et al. (1999) have argued, the implication of these problems that have beset aid is that the recipient government needs to be supportive of whatever policy or project is in question. When that is the case, it is best just to give the government the money with no strings attached. And when that is not the case, it is generally better to give the aid to another country.

What are the implications of this literature for natural resources? Essentially the aid literature provides a framework by which to understand the pessimistic prospects for the various policy proposals put forward for avoiding the “resource curse”. For example, consider the proposals to take natural resources out of the hands of the government. Privatization of the resources—one of the ways to do this—has experienced the same type of problems that have plagued project-based aid. In the absence of a good institutional environment—such a developed legal system, a tax administration to collect revenues, and a corporate governance regulatory structure—privatizing the resources has led to a few people getting very rich and countries as a whole seeing little benefit (Stiglitz, 2007). While some may argue that in the longer term the newly rich will begin to demand better institutions, there is no particular historical or theoretical reason to expect this (Hoff and Stiglitz, 2005).

Transferring natural resource revenues in lump-sum form to citizens—another way of taking the resources out of the hands of the government—is similarly unlikely to succeed. As Sachs (2007) argues, what poor countries need to develop are infrastructure and primary health and education, services that must be provided by the government. Transferring resources to citizens in the absence of good governance is unlikely to result in any wide-scale development of the country. This requires a functioning government.

It should be noted that while much of the discussion here has focused on the economic impacts of these mechanisms for dealing with natural resources, there are also reasons to doubt their ability to improve the political situation in a country. For example, one might expect that taking the money out of the hands of an authoritarian regime—by distributing the money to citizens, for example—would help to destabilize the regime. I have shown, however, that even if one assumes that the arrangement works perfectly (i.e. there is no corruption), under a broad set of conditions this type of arrangement will not destabilize the dictatorship (Morrison, 2007a). The reason is that this spending will essentially diffuse demands for regime change from lower and middle income citizens who would benefit under a democracy.

The foreign aid literature also indicates that the other set of policy mechanisms—aiming to change the way governments use natural resource rents—is also unlikely to be successful. The message of the aid effectiveness literature has been that in the absence of “ownership” on the part of the government—that is, without the government supporting the policies of its own accord (which would make such efforts unnecessary in any case)—any policies put in place on the basis of “conditions” are likely to be reversed. Even if one sets up a natural resource fund to finance social spending, for example, the implication is that eventually this fund will be raided by the government for other purposes (Humphreys and Sandbu, 2007).

Because of the apparent importance of ownership for the effectiveness of aid, one of the principal initiatives of the past decade in the foreign aid community has been to foster this ownership in various ways. Most significantly, the World Bank and International Monetary Fund now require “Poverty Reduction Strategy Papers” (PRSPs), documents outlining the government’s policies to reduce poverty that are drawn up in consultation with NGOs, the private sector, and other important actors in society. The Bank and Fund apparently hoped that this “deliberative” approach would lead to sustainable, owned policies that donors could support. However, though there are some social science theories that support this assumption under certain conditions, these conditions are extremely rigorous (for example, complete equality among participants in the deliberation), and it is not surprising that the experience of the PRSP in generating this kind of ownership in practice has been disappointing (Morrison and Singer, 2007).

Perhaps the best (or worst) example of these problems in the case of natural resources has been the most elaborate attempt to shield natural resource revenues from bad governance: the Chad-Cameroon pipeline project overseen by the World Bank. Since the project began in 2000, there have been major problems of noncompliance with the various desires of the Bank (Pegg, 2006). Chad’s President Idriss Déby spent \$4.5

million of his country's \$25 million "signing bonus" on his military. The IMF (2003) found that the government was not allocating sufficient funds to health, education, and other priority sectors. And the group that monitors Chad's compliance with environmental and social safeguards found that the government was not following the country's PRSP (International Advisory Group, 2004). In 2005, Déby amended his country's revenue law to spend more on the military—in direct violation of Bank conditions. While the Bank protested initially, it eventually capitulated. Most recently, in March 2008, Déby has used a state of emergency decree to suspend Chad's compliance with the remaining Bank conditions with regard to poverty spending.

In sum, the most elaborate measures ever designed to insulate natural resource revenues have failed drastically in Chad. The 2005 standoff is particularly indicative of the similarities between this experience and donors' experience with aid conditionalities. Chad was in the midst of political turmoil and approaching an election. Despite its qualms about Déby, the World Bank and its major shareholders probably preferred him to the alternatives, or to an unstable country (Bank Information Center, 2006). The agreement to resume lending to Chad happened just after a U.S. State Department visit to the country, and just before the national elections. In sum, just as with foreign aid, a variety of conflicting interests have rendered ineffective the attempts to make these resources promote development in a clearly anti-development environment.

IV. Policy Implications

The message of the preceding sections is that the economic and political environment determines the effects of both natural resources and aid. The policy implications for natural resources therefore differ depending on what kind of an environment is present in a given country. For well governed countries, the message is that if one takes the proper precautions—which are now fairly well known (Sachs, 2007) and illustrated by the countries discussed above—one need not worry about a "resource curse". In fact, the evidence seems to indicate that well governed countries should expect to benefit from their natural resources.

The much larger problem is what to do when a country is not well governed. It makes little sense to make policy recommendations for such governments, for they will not heed them. The important policy recommendations are therefore for the international community, whose role in purchasing and helping to develop the resources in these countries is of course integral to these governments benefiting from them. The message of the literature on aid effectiveness is that the international community should be quite skeptical that policy instruments can prevent natural resources from having negative effects in these countries, both economically and politically. The prospects of changing a government's policies are dim, and the ability of projects to spur development without a beneficial policy environment are similarly poor. But then what can be done with natural resources in these environments? Again, it is useful to consider the aid community's response to this same question.

Following the implications of the research reviewed above, donors have begun to try to implement the principle of “selectivity”, by which they mean that recipient countries should receive more aid if they already have good policies in place. This idea took particular hold of the donor community after work by Craig Burnside and David Dollar at the World Bank showed the effectiveness of aid in certain policy environments (Burnside and Dollar, 2000; World Bank, 1998). This work has generated a large response, with some scholars confirming their results and others arguing that their results are not robust (Easterly, 2003 provides a good review). However, as writes one of their critics, William Easterly (2007: 645), “whether the Burnside and Dollar results hold (specifically whether aid has a positive effect on growth when policies/institutions are good) is something of a red herring regarding the issue of selectivity. The idea that aid money directed to governments would be more productive if those governments had pro-development policies and institutions is very intuitive.”

With this perspective, the answer to the natural resource problem in poorly governed countries seems straightforward, if somewhat difficult to imagine in practice: unless governments have pro-development policies in place, their natural resources should be left in the ground (Stiglitz, 2007). While the international community cannot (short of military intervention) prevent a government from mining its natural resources, it does have leverage in terms of purchasing. Without a market in which to sell the resources, poorly governed countries will not be able to benefit from those resources.

One of the first issues with this approach, of course, is deciding which policies and institutions are pro-development. While at one point there was some agreement in policy circles regarding the policies necessary for economic development, this consensus began to evaporate in late 1990s (Stiglitz, 1998), and now there are reasonable arguments that even looking for such a consensus is misguided (Rodrik, 2007, for example, argues that development strategies should vary quite a bit from country to country). In the foreign aid context, Kanbur et al. (1999) have argued that donors should be expected to decide for themselves what kind of policies they want to support. The United States, for example, has done this in the form of its Millennium Challenge Corporation, an agency that doles out part of the U.S. aid budget along criteria meant to reward good policy performance (Radelet, 2003).

The same principle can work for natural resources. In fact, this principle is already in place to a certain extent. Since 1997, for example, the U.S. has prohibited American energy companies from trading with the Sudanese government. The Executive Order instituting the sanctions cited Sudan’s “support for international terrorism, ongoing efforts to destabilize neighboring governments, and the prevalence of human rights violations, including slavery and the denial of religious freedom.” Secretary of State Madeleine Albright said the sanctions were intended to “deprive the regime in Khartoum of the financial and material benefits of U.S. trade and investment, including investment in Sudan's petroleum sector.”²

² See <http://www.eia.doe.gov/cabs/sanction.html>.

Of course, the problem with this type of approach—both with regard to aid and natural resources—is that a country that decides not to give aid to a government, or to put sanctions on their natural resources, cannot prevent another country from giving aid or buying those natural resources. For example, since 1999, the Sudanese government has received about \$500 million a year from petroleum sales despite the U.S. sanctions, much of it sold to China, which meets about seven percent of its energy needs with Sudanese oil (Baldauf, 2007). Similarly, western donors have begun to complain about China’s foreign aid policy in Africa, because China is giving aid to countries these donors would prefer not receive it (McGreal, 2007).

Short of international agreements to cut off certain countries, this problem will always exist. The question that governments have to ask themselves is whether it is worth it to forgo the benefits of these transactions in order to cut off resources to governments they find undesirable. So far, these decisions have been made almost exclusively for international security reasons, but they could also of course be made for development reasons. We know that the political incentives to take such actions are minimal in rich countries, but to the extent that advocacy can make a difference at the margin, it is useful to think about the best political and economic criteria for implementing such sanctions.

On the political side, one particularly innovative recent proposal is from Leif Wenar (2008), who bases his argument on his assertion that much of the oil in the world is in fact stolen. The reason is that natural resources are, by international law, the property of the citizens in a country. He cites both Article 1’s of the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights (the articles are identical in these covenants, one or both of which have been ratified by 151 countries including all of the G8): “All peoples may, for their own ends, freely dispose of their natural wealth and resources.” Similarly, Article 21 of the African Charter on Human and Peoples’ Rights says, “All peoples shall freely dispose of their wealth and natural resources. This right shall be exercised in the exclusive interest of the people. In no case shall a people be deprived of it.”

Since by international law natural resources are the property of a country’s citizens, the important question is who has the right to sell those resources. As Wenar notes, “Here we uncover the customary rule in the system of international trade that certainly gets the answer wrong. In current international practice all that is necessary for a group to acquire the legal right to sell off a territory’s resources is the power to inflict violence on the territory’s people.” That is, if a group can take control of a country’s resources, it by and large can sell them on the world market. Wenar argues that this “might makes right” rule clearly violates basic principles of the free market (there are laws against selling stolen property, for example), but the difficulty is in establishing the “minimal conditions that must obtain in a country for it to be possible for the people to authorize resource sales” (pp. 16-17).

Wenar puts forward three conditions that he thinks should be met, based on the assertion that a regime must be able to claim some sort of valid assent from its citizens

with regard to the sale of the natural resources. It is not necessary to review his conditions in detail here, but only to note that he concludes that—at a minimum—countries with the lowest ranking in the Freedom House evaluation of civil liberties or political rights do not qualify as meeting the conditions. These are countries characterized by “an overwhelming and justified fear of repression” (civil liberties) and/or an “extremely oppressive nature of the regime or severe oppression in combination with civil war” (political rights). The Freedom House coding scheme is politically useful because it is already endorsed by the U.S. government in its evaluations for the Millennium Challenge Corporation.

If one considers the resources sold by governments with the lowest Freedom House rating as stolen, Wenar calculates that international corporations bring over 600 million barrels of stolen oil into the United States each year—almost 13 percent of U.S. oil imports. In fact, he also implies that countries with the next-to-last ratings in these evaluations (on a seven point scale) also do not meet the conditions. Table 2 lists the African countries that received a 6 or a 7 on either scale in the 2008 report (note that in the Freedom House index, higher numbers represent more oppressive conditions).

Table 2: African Countries with Lowest Freedom House Ratings, 2008
(higher numbers represent worse conditions)

Country	Political Rights	Civil Liberties	Ores and Metal Exports, 2003, \$US thousands (% merchandise exports)	Fuel Exports, 2003, \$US thousands (% merchandise exports)	Official Development Assistance, 2003, \$US thousands
Angola	6	5			493,370
Cameroon	6	6	94,915 (4.2)	1,114,171 (48.8)	895,120
Chad	7	6			246,620
Congo (Brazzaville)	6	5			68,910
Congo (Kinshasa)	5	6			5,416,030
Côte d'Ivoire	7	5	8,842 (0.15)	743,050 (12.8)	254,090
Equatorial Guinea	7	6			20,990
Eritrea	7	6	116 (1.8)	1.2 (0.02)	316,080
Gabon	6	4	228,740 (8.1)	497,208 (17.6)	-11,030
Guinea	6	5			239,500
Rwanda	6	5	14,666 (23.3)	4,273 (6.8)	334,910
Somalia	7	7			173,690
Sudan	7	7	10,687 (0.42)	2,064,369 (81.2)	612,670
Swaziland	7	5	3,124 (0.19)	10,241 (0.63)	34,230
Zimbabwe	7	6			186,330

Blanks indicate missing data. Source for exports and aid data: World Bank's World Development Indicators.

What would the equivalent of these ratings be for economic development policies? As mentioned above, there is quite a bit of room for debate with regard to which policies are right for a given country. However, there are also some countries that almost no one would characterize as “pro-development”. There are a variety of economic ratings of countries, but like Wenar’s use of the Freedom House Ratings, it is useful to begin with indices already endorsed by rich governments. Perhaps the best place to start is the World Bank’s Resource Allocation Index (also called the Country Policy and Institutional Assessment, or CPIA). The Bank uses this index to allocate IDA funds, exactly with the belief that those funds will be better used in countries that have better policies and institutions. World Bank staff members rate countries in terms of their economic management, structural policies, social policies, and public sector management, and these ratings are combined into an index. There are many grounds for reasonable debate about not only the actual ratings but what is rated, but arguably the countries that fall at the bottom of these rankings would rank extremely low on just about any development policy evaluation. Table 3 lists the African countries that appeared in the bottom third of IDA countries in the rankings in 2007.

Table 3: African Countries in the Bottom Third of IDA’s Country Policy and Institutional Assessment, 2007 (Lower numbers represent worse policies and institutions)

Country	CPIA Index, 2007	Ores and Metal Exports, 2003, \$US thousands (% merchandise exports)	Fuel Exports, 2003, \$US thousands (% merchandise exports)	Official Development Assistance, 2003, \$US thousands
Sierra Leone	3.1			303,780
Djibouti	3.1			
Burundi	3.0	481 (1.3)	245 (0.65)	227,360
Guinea	3.0			239,500
Sao Tome and Principe	3.0	0.021 (0.0003)	0.348 (0.0005)	37,650
Congo (Kinshasa)	2.8			5,416,030
Angola	2.7			493,370
Congo (Brazzaville)	2.7			68,910
Guinea-Bissau	2.6			145,180
Chad	2.6			246,620
Côte d’Ivoire	2.6	8,842 (0.15)	743,050 (12.8)	254,090
Togo	2.5	55,263 (9.2)	2,071 (0.35)	49,990
Sudan	2.5	10,687 (0.42)	2,064,369 (81.2)	612,670
Central African Republic	2.5	46,802 (36.6)		51,220
Eritrea	2.4	116 (1.75)	1.2 (0.02)	316,080
Comoros	2.4			24,440
Zimbabwe	1.7			186,330

Blanks indicate missing data. Source for exports and aid data: World Bank’s World Development Indicators.

Even though many data are missing from these tables, the data that are present indicate that large quantities of money are being transferred to these states, both from the sale of natural resources and from aid. If the literature discussed above is correct (and if the Freedom House and CPIA measures are reasonable proxies for political and economic good governance), all of these transfers are detrimental from a development perspective. In fact, it is notable that Chad appears on both lists—in fact, since the Chad-Cameroon pipeline project was instituted, Chad’s Freedom House rating has actually declined. If rich countries were serious about encouraging development, they would take steps to prevent these transfers from taking place, so that the resources would be available for future generations, when (hopefully) the countries are better governed.

Of course, given domestic and world politics, it is unlikely that rich countries will take actions to cut off natural resource transactions simply because governments do not have good policies and institutions in place. Nevertheless, the selectivity approach with regard to natural resources can help focus attention on rich countries that are essentially encouraging the resource curse. Increasingly, the development community is focusing not just on aid policies, but also on trade, migration, and other policies that affect developing countries. Perhaps the best known example of this is the Center for Global Development’s Commitment to Development Index, which evaluates rich countries in terms of their contribution to development.³ Importantly, in the index’s evaluation of countries’ aid policies, it downgrades countries for giving aid to corrupt and undemocratic regimes. However, the analysis of rich countries’ trade policy includes no such devaluation. The numbers and theory presented here indicate that these policies may be just as important.

V. Conclusion

To be written.

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³ See http://www.cgdev.org/section/initiatives/_active/cdi/.

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