

MODEL EKONOMI POLITIK KUTUKAN SUMBERDAYA ALAM KASUS INDONESIA

Pendahuluan

Sepanjang sejarah, sumberdaya alam mempunyai peran yang penting bagi kesejahteraan pada sejumlah negara maju. Namun demikian selama 50 tahun terakhir ini hanya sedikit sekali contoh dari negara yang kaya sumberdaya alam yang tumbuh menjadi negara kaya. Norwegia dan Botswana merupakan contoh Negara yang mampu mengeksploitasi sumberdaya mereka secara efisien. Pada sebagian besar negara kaya sumberdaya alam menghadapi pertumbuhan negatif atau relative rendah. Pola pertumbuhan yang negatif atau rendah serta pola social ekonomi yang buruk (*underperformance*) dari Negara yang kaya sumberdaya disebut kutukan sumberdaya alam (*the resource curse*).

Banyak literatur memasukkan aspek penting ketidaksetujuan atau meragukan apakah kutukan sumberdaya itu ada. Rekomendasi kebijakan (*policy recommendation*) tak dapat dibuat tanpa basis teori dan penelitian empiris.

Model Ekonomi Politik Kutukan Sumberdaya Alam

Sejumlah saran dibuat mengenai bagaiman suatu Negara yang kaya sumberdaya alam menunjukkan kinerja ekonomi yang buruk. Terdapat 4 mekanisme yang menjelaskan kutukan sumberdaya (lihat gambar). Faktor itu adalah: *Dutch Disease*, model Ekonomi Politik yang Tersentralisasi (PE) models, model desentralisasi ekonomi politik (*rent-seeking or mechanisms*), dan keterbukaan perdagangan.

Model Dutch Disease menjelaskan dampak negatif dari sumberdaya alami natural sebagai berikut: ekstraksi sumberdaya alami meningkatkan upah riil dan menimbulkan apresiasi pada nilai tukar sehingga menyebabkan turunnya daya saing produk sector non-sumberdaya dalam negeri bagi kepentingan ekspor. Jika perubahan produktivitas dan pembelajaran terjadi pada sector tersebut, atau terjadi eksternalitas pada aktivitas itu, pertumbuhan ekonomi jangka panjang akan terganggu (Van Wijnbergen, 1984; Sachs and Warner, 1995, 1999, 2001; Torvik, 2001, Matsuyama, 1992). Asumsi dampak pembelajaran yang superior pada sector manufaktur tak terbukti (Sala-i-Martin and

Subramanian, 2003). Terlebih lagi Dutch Disease tidak muncul untuk menjelaskan pertumbuhan negatif jika mekanisme lain mengendalikan hal itu.

Akhir-akhir ini bukti empiris menyatakan bahwa kutukan sumberdaya (*resource curse*) berkaitan dengan keterbukaan perdagangan (*trade openness*). Dengan kata lain Negara yang kurang membuka diri bagi perdagangan, menderita dampak lebih dalam pada pertumbuhan sumberdaya alami. (Arezki and van der Ploeg, 2008). Mechanism yang pasti melalui keterbukaan pasar mempengaruhi pembangunan di Negara kaya sumberdaya alam contohnya teori yang menggarisbawahi hipotesa tertentu tampak kurang berkembang.

Model ekonomi terpusat focus pada keputusan elit politik dan bagaimana hal itu dipengaruhi oleh sumber daya alami (Caselli and Collingham, 2007). Model desentralisasi (*Decentralized models*), or rent-seeking models, menganalisa insentif agen swasta dan pengaruh sumberdaya dalam hal alokasi dan aktivitas usaha. by contrast,

Model ekonomi terpusat dari kutukan sumberdaya

Model ekonomi terpusat dari kutukan sumberdaya berpusat pada keputusan politisi dalam menata perekonomian yang kaya sumberdaya. Analisa keputusan adalah alokasi sumberdaya antara aktifitas memperkaya diri, dan aktivitas yang meningkatkan produktivitas potensial dari suatu perekonomian. Menurut Caselli dan Cunningham (2007), peningkatan penerimaan dari sumberdaya alami mempunyai 2 tipe pengaruh pada model ini: i) hal itu meningkatkan kekuatan terpendam (*staying in power*) yang berarti mengendalikan penerimaan yang lebih besar ii) meningkatkan (*likelihood*) di mana yang lain akan menantang kekuasaan pemerintah.

Peningkatan nilai kekuatan terpendam diberikan oleh lebih bernilainya sumberdaya dapat memproduksi 2 tipe tanggapan pemerintah. Salah satunya dengan menggunakan sumberdaya pada kegiatan yang menjamin posisi pemerintah contohnya meningkatkan dukungan politik atau kesempatan untuk dipilih kembali. Hal ini dapat dilakukan dengan (*patronage*), di mana pekerjaan pemerintahan diserahkan pada pendukung politik yang berkuasa. Selama hal itu menciptakan inefisiensi penempatan tenaga kerja, dapat mempunyai dampak merusak perekonomian. Tetapi popularitas pemerintah dapat ditingkatkan melalui alat produksi yang potensial, seperti mengurangi tarif pajak. Sebagai tambahan pengaruh lain dari membuat perkantoran politik lebih bernilai In

addition, another effect of making adalah dengan membuat horizon perencanaan lebih panjang, sehingga dapat membuat path (Jalur) ekstraksi sumberdaya lebih optimal (cf. Robinson et al, 2006), atau investasi lebih ditekankan pada aktivitas produktif. Pengaruh sumberdaya yang lebih bernilai pada aktivitas ekonomi amatlah ambisius. I Demikian pula peningkatan kesempatan mempunyai kekuatan dapat menyebabkan sejumlah reaksi dari pemerintah. Salah satunya dengan membelanjakan lebih banyak sumberdaya dalam fighting or dissuading penantang potensial yang dapat dilakukan dengan cara yang tidak produktif (represi atau membeli penentang potensial / buying off potential opponents), atau cara yang produktif (memperbaiki profitabilitas sector swasta untuk memberi pada lawan pilihan luar yang berharga). Sebagai tambahan kemungkinan lebih tinggi untuk ditentang juga berarti bahwa pemerintah mengharapkan tenure dikurangi, yang mengurangi planning horizon, bekerja dengan masyarakat pada arah yang berlawanan.

Secara umum model ini memprediksi bahwa Negara dapat melihat pengaruh positif dan negatif dari sumberdaya alam; kutukan sumberdaya alam dengan kata lain tak dapat dihindarkan. Palaing tidak dari sudut anjang kebijakan, lebih menarik bahwa hasil umum adalah apa yang dihasilkan bersifat mendua (ambiguity) rejeki instant sumberdaya . Apa yang membuat pengalaman suatu Negara berpengaruh positif dari (windfall resources) ? Apa yang dinyatakan model ini adalah perbedaan antara cara kekuasaan tersembunyi yang dapat bersifat khusus maupun distortif, dan cara yang bersifat umum dan produktif. Pemerintah dapat secara prinsip memuat kepentingan khusus dari kelompok kuat atau bagian dari populasi, atau dapat pula bertindak untuk kepentingan seluruh populasi dalam rangka untuk meningkatkan popularitas saat pemilu. Pada kasus favoritisme pada kelompok tertentu, eksternalitas negatif pada masyarakat secara keseluruhan dapat dimainkan are likely played down, menghasilkan alokasi sumberdaya (for instance in terms of public employment) yang suboptimal, bertentangan dengan cara umum dimana eksternalitas dapat diinternalisasikan.

Implikasi argument ini bahwa Negara dapat secara adil meningkatkan kelembagaan, contoh kelembagaan yang mengurangi kemungkinan atau menarik favoritisme versus membawa kepentingan public secara umum. Satu contoh peningkatan keadilan kelembagaan adalah memfungsikan akuntabilitas kelembagaan yang demokratis. (cf.

Robinson et al 2006). Pembuat kebijakan harus mengadakan reformasi yang mengurangi keberpihakan dan meningkatkan keadilan (impartial).

2.2 Model Ekonomi Politik Kutukan Sumberdaya yang Terdecentralisasi

Model Desentralisasi berfokus pada keputusan dan tindakan individu di luar elit kekuasaan (Caselli and Cunningham, 2007). Model ini esensinya adalah mencari keuntungan (rent seeking), di mana individu memilih antara menggunakan usaha, waktu dan bakat pada kegiatan ekstraksi rent dan menggunakan pada aktivitas produktif. Secara umum rent sumberdaya mempunyai dua pengaruh berlawanan. Peningkatan rent sumberdaya akan meningkatkan pendapatan tetapi di sisi lain, terjadi *displacement effect* pada sector produktif selama lebih banyak entrepreneurs memilih menjadi rent-seekers. Pengaruh negatif sumberdaya akan lebih jauh bergabung apabila ada pengaruh eksternal dari kegiatan rent seeking atau peningkatan skala penerimaan dari sector produktif (increasing returns to scale in productive sectors).

Terdapat banyak literatur yang membahas model rent-seeking berkaitan dengan sumberdaya. Perbedaan mendasar dari sejumlah studi itu adalah bagaimana mekanisme menyebabkan lebih dari penyebaran rent secara penuh (full rent dissipation atau external effects). Pada model Mehlum et al (2006) sebagai titik tolak, entrepreneur dapat bertindak sebagai produser atau rent-seekers. Pada sector produktif entrepreneurs memasuki sector modern di mana terdapat externalities demand positive antara produser. Ketika seorang produser bergeser untuk mengambilnya (to grabbing), hal ini mengurangi profitabilitas produser sisanya selama permintaan produknya berkurang. Biaya oportunitas (opportunity cost) untuk mengambil rent karena itu menurun saat entrepreneurs bergeser dari produksi ke grabbing. Penurunan opportunity cost memperluas displacement effect, contohnya. Ketika sejumlah entrepreneurs menjadi grabbers lebih mengikuti kepuasan. Keseimbangan alokasi entrepreneurs antara produksi dan grabbing, ditentukan oleh kemampuan menghasilkan untung (profitabilitas) relative dari kedua aktivitas itu. Profitabilitas relative itu dipengaruhi oleh kualitas kelembagaan yang melindungi hak atau property rights (atau secara umum adalah hukum/ the rule of law). Hal ini mengarah pada dua model keseimbangan. Ketika kualitas kelembagaan tinggi keseimbangan berada di sektor produksi di mana semua entrepreneur adalah producers.

Ketika kualitas institutional rendah, kesetimbangan adalah kesetimbangan grabber (pengambil rent), di mana sejumlah entrepreneur adalah produser and sejumlah lain grabbers. Lebih banyak sumberdaya alam yang berada pada kesetimbangan produksi di sisi lain banyak sumberdaya alam pada kesetimbangan grabber.

Bukti empiris lintas Negara dengan regressi pertumbuhan GDP keberlimpahan sumberdaya berinteraksi dengan indeks kelembagaan. They apply an institutional quality index based on an un-weighted average of five indices based on data from Political Risk Services: a rule of law index, a bureaucratic quality index, a corruption in government index, a risk of expropriation index, and a government repudiation of contracts index. Ditemukan dampak negative dari sumberdaya terhadap pertumbuhan GDP seperti studi Sachs and Warner (1995), tetapi juga ada interaksi positif antara kelembagaan dan sumberdaya. When the quality of institutions is high enough, this interaction effect is higher than the immediate resource effect. Resources are accordingly a blessing only in countries with good institutions, or to phrase it another way, they find empirical support that the curse occurs conditionally on the quality of institutions. On the other hand, Collier and Goderis (2007) present empirical evidence that these decentralized mechanisms are less important in creating a resource curse than centralized mechanisms. Caselli and Cunningham (2007) present a theoretical argument against decentralized models. They argue that since these models depend on externalities for their results, they must explain why the state cannot internalize or contract around these externalities. Hence, decentralized explanations require making some assumptions about the inability or unwillingness of the state to do so, which brings us back to centralized models. They thus argue that there is no such thing as a fully decentralized model. It is unclear whether this is in fact a good argument against decentralized models, as it seems that the opposite case can also be made. Centralized models require some modeling of for instance why or when individuals choose to accept government offers of public employment over private sector employment (cf. section 2). So one could equally well argue that the centralized models depend on decentralized ones.

2.3 Trade and impartiality enhancing institutions

As noted earlier, a few empirical studies have found that rather than being conditional on the institutions discussed in the political economy models, the resource curse depends on

trade policy. By applying newer time series and instrument variables techniques controlling for the endogenous characters of the explanatory variables, Arezki and van der Ploeg (2008) find that institutions of the type discussed above do not explain the variable experiences of resource rich countries. They instead find that the interaction term of trade openness and resources has a significant impact on the curse. They therefore claim that resource rich countries like Australia, Bolivia, Barbados, Canada, Chile, Ecuador, Indonesia, Mauritius, Malaysia, and the United States have escaped a resource curse partly to a less restrictive trade policy than other countries. It is, however, noticeable that none of these countries can be characterized as significant oil exporting countries.

That trade policy may have a direct impact on economic growth is well known in the literature (see for instance Dollar and Kraay, 2004), although the exact theoretical mechanism for this is unclear and disputed (see Rodrik et al. 2004). The general mechanisms pointed to in the literature are increased competition and the improvement of firms' productivity partly due to technology transfers, access to cheaper imports or externalities/ increasing returns to scale in exports. Similar lines of argument may also be used to suggest that open countries are able to exploit their natural resources more efficiently. However, there is so far little explicit theorizing on the link between trade policies and the impact of resources on economic development.

There is, however, a possibility that the openness to trade is not a competing explanation of variable resource experiences, but closely linked to the political economy mechanisms explored above. In a sense, general openness to trade is a kind of impartiality enhancing institution. Firstly, a more open trade regime may mean that the profitability of private sector activities is relatively higher, making rent-seeking a less profitable alternative for entrepreneurs. And secondly, openness to trade may have an effect on democratic accountability, by creating a powerful middle class or since mobility increases the costs of inefficient redistribution. It is possible, therefore, that the results on trade do not present new mechanisms behind a resource curse, but merely an additional policy measure to address the political economy mechanisms.

3. Does current donor policy reflect available evidence?

The dismal performance of many resource rich developing countries, has led to a number

of donor initiatives aimed at improving the situation. Among these are initiatives to increase transparency in resource rich countries, and initiatives that focus on capacity building. This section critically examines two particular initiatives supported and implemented by the donor community, the Extractive Industry Transparency Initiative (EITI), and the Norwegian Oil for Development programme. A main conclusion is that these initiatives only to a limited extent capture the implications of the scientific literature on the resource curse. Though some critical work on these initiatives has emerged (Kolstad and Wiig, forthcoming; Kolstad et al, forthcoming), they have not been systematically evaluated nor adequately scrutinized by scientists. One risks, therefore, that they remain political window dressing initiatives rather than initiatives that address the key problems resource rich countries actually face.

3.1 The Extractive Industries Transparency Initiative (EITI)

The Extractive Industries Transparency Initiative (EITI) is an initiative that supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining. Accession to the EITI is voluntary, and 23 candidate countries have so far committed to the EITI process. To progress from being an EITI candidate to being EITI compliant, countries have to complete steps of preparation (establishing a multi-stakeholder committee and reporting procedures), disclosure (verifying company and government disclosure) and dissemination (agreeing on quality of dissemination), and finally undertake external independent validation to assess whether the country has met 20 implementation indicators. The full validation process was agreed on in March 2008, and no country has yet has time to complete an EITI validation, but only one country (Azerbaijan) is in the process of being validated. The reach of the initiative is somewhat limited; candidate countries only comprise 6.4 per cent of global oil production and 7.6 per cent of proven global oil reserves.

While transparency is potentially important in many areas, the EITI focuses on transparency in revenue collection only. It does not address transparency in other important activities, such as procurement, nor does it cover the distribution of income and public expenditure stemming from the extractive industry revenues. The EITI provides a partial basis for accountability in the management of revenue flows from oil and other

extractive industries. By comparing the payments made to governments by companies, with the payments received by governments, the revenues to governments are subjected to closer verification than would otherwise be the case. Since substantial amounts are otherwise believed to disappear in the process of collection, this is no doubt important. The EITI also underscores the importance transparency plays in governance, and represents an international standard on transparency and good governance in the area in question.

Based on the arguments presented in section 2, however, it is not immediately apparent that the EITI addresses the key challenges in resource rich countries. The EITI is an initiative that focuses on revenues from extractive industries in resource rich countries. This implies a narrow take on transparency, as only a small section of the public sector is covered. Importantly, the initiative does not address transparency in the use of public resource, i.e. the expenditure side. The expenditure side is clearly central to many of the political economy perspectives on the resource curse. Patronage politics, whereby funds or positions are transferred to supporters, is clearly about the expenditure side. The study by Robinson et al (2006) suggests that accountability in the use of public resources, is the key to avoiding the resource curse. There is, therefore, a possibility that the EITI initiative is not only narrow, but that it also gives priority to the wrong set of issues in resource rich countries.

Moreover, the EITI includes the construction of a multi-stakeholder group to participate in the validation process. While this has the potential of improving accountability and participation in revenue management, there is also a risk that the group can become another arena for rent-seeking and patronage. Though civil society is to be represented in the multi-stakeholder group, civil society is not one thing nor necessarily representative of the population. Civil society in many resource rich developing countries is also weak. Since the multi-stakeholder group is to be appointed by the government, there is a chance that it will be peopled with government supporters. Or along the lines of rentier state arguments, a government may use its power of appointment to undermine the existence of social groups independent of the government. Moreover, fractionalistic stakeholder groups may use their potential leverage in the EITI, to acquire a greater proportion of resource rents. This suggests the need for a critical analysis of the composition and

behaviour of the multi-stakeholder system of the EITI, to assess the commitment of the government to real reform in the area of transparency.

There are also challenges in terms of implementation of EITI principles, which provide a bridge to the discussion in section 4 on policy challenges. EITI membership is voluntary for states and companies. This means that countries and companies may choose whether or not to accede to the initiative, and whether to wholeheartedly follow up on it if they do join. For instance, a country such as Angola has opted not to join the EITI. Whether or not a government chooses to accede to an initiative of this kind most likely depends on what it has to gain and its compliance costs by doing so. As corrupt government officials may have vested interests in not promoting transparency in their country, expanding EITI membership and implementation is likely to remain a problem. Unless membership status is linked to effective sanctioning mechanisms there is a low cost of non-accession or non-compliance with the validation criteria.

Furthermore, transparency is, in and of itself, insufficient in improving government behaviour. In the absence of accountability, whereby other groups can hold a government to account and sanction misbehaviour, it is unclear that the EITI will have much of an effect. It is, for instance, unclear that failing to meet EITI criteria will necessarily have any repercussions on a government, in countries where accountability mechanisms are weak. Moreover, in addition to accountability, the effect of the initiative will depend on the degree to which other groups are able to process the information made available, i.e. their level of education. There are also potential free-rider problems in providing highly aggregate data that affect everyone in general but no one in particular. The EITI likely needs to be coupled with other types of reform to have an effect resource rich countries. The EITI+ initiative of the World Bank may represent a step in the right direction by extending the issue of transparency to the expenditure side of the public sector.

3.2 The Norwegian Oil for Development programme

Norway launched the Oil for Development programme in 2005 in an effort to coordinate and extend its petroleum-related aid. While other donors also have petroleum related aid activities, the Norwegian programme is the only one which integrates different petroleum related aid activities into one programme. It is one of the Norwegian government's areas of priority in development cooperation, with a projected budget of about USD 45.6

million in 2008, the largest recipients of which will be Sudan, East Timor and Angola. While the points raised below relate to the Norwegian programme, it should be noted that they are also relevant to petroleum-related aid from other countries (see Kolstad et al, forthcoming).

The Oil for Development programme emphasizes three “main integrated themes”: resource management, revenue management, and environmental management and control. These three main themes account for almost 90% of country allocations, with resource management being dominant and comprising more than two-thirds of this percentage. The majority of the programme’s activities are directed at enhancing the capacity of government and civil service staff. This probably reflects the programme’s emphasis on being demand-driven, where demand largely means government demand. Previous evaluations of Norwegian petroleum-related aid have pointed to a lack of governance activities (Ekern, 2005), which has led to more activity in this area, but these activities are still limited. Though governance is claimed to be a cross-cutting issue in the three main themes, specific activities in main cooperating countries do little to suggest that this is in fact the case.

The priorities of the programme thus do not really reflect the policy prescriptions of the scientific literature on resources and development. The existing focus on revenue, resource, and environmental management prevalent in petroleum-related aid is too narrow and sector-specific to address overarching problems of accountability and unfavourable incentives that are at the core of the resource curse. Nor does capacity building and technical assistance per se induce positive institutional change. While such change may be difficult to induce where key players benefit from below-par arrangements, the lack of emphasis on vertical and societal modes of accountability (democratisation, support to civil society, the free press) will do little to produce the necessary reform. Unfortunately, no systematic of the political economy of recipient countries is performed - this is done only sporadically in some cases. A recent evaluation of Norwegian petroleum-related aid to four countries concludes that “the strict petro-technical capacity building in the programmes to a high extent has been successful, in particular in the ‘new’ petroleum producing countries. Institutional capacity development has been less successful” (Norad, 2007:5). There is also little emphasis on improving

institutions for the private sector that act as an inducement to productive activities as opposed to rent-seeking.

In addition to a lack of reflection of the literature on natural resources, the programme has received criticism for promoting Norwegian strategic or interests and extrapolating Norwegian experience to developing country contexts. Allegations can easily be made that petroleum-related aid is provided or designed to further commercial ends of donor countries with strong domestic oil industries. Limiting the influence of donor country interests in petroleum-related aid has implications for organization of these types of programmes. Moreover, policies that work well in Norway, or in another developed country, do not necessarily work well in another social and political context. Experiences from other countries at a similar development stage might be more valuable for a developing country than the experience from donors like Norway. There might be alternative institutions that fit better to local institutions and are more efficient.

4. Research and policy implications

The literature on natural resources and economic development has advanced considerable in recent years, yet is still in the making. This means that there are a number of research challenges that should be addressed, it also means that it can be difficult to draw precise policy implications. In this section we discuss a selection of research issues that need to be addressed, and the policy implications that can be drawn from currently available political economy models of the resource curse. We also address some important issues in terms of tying research to policy.

4.1 Resources, rents and measurement

The seminal paper by Sachs and Warner, entitled “Natural Resource Abundance and Economic Growth”, was the first to present empirical evidence that resources reduce growth (Sachs and Warner, 1995). Sachs and Warner used the share of exports of primary products in GNP as their proxy for natural resource abundance, and found it to be negatively related to economic growth. Following this result, a number of studies have argued that this proxy does not really capture resource abundance, and that other measures such as reserves or production should be used instead. Indeed, Stijns (2005) shows that using reserve and production data on resources, rather than export shares, yields no effect of natural resources on growth. Brunnschweiler (2008) employs an index

of natural wealth per capita, and finds a positive relationship between resource abundance and growth. A number of different proxies have been employed to date with different results, making some refer to the resource curse as “missing” or “elusive” (Lederman and Maloney, 2008) or “a red herring” (Brunnschweiler and Bulte, 2008).

But are these studies that focus on measurement asking the right question? Is the question whether natural resource *abundance* leads to reduced growth or not? There appears to be an eerie disconnect between theories of the resource curse and the measures used to test empirically for a curse. The key theories of the resource curse outlined above, basically state that it is the revenues or *rents* natural resources give rise to that may cause problems rather than natural resources in themselves. Even in the Dutch Disease framework, the focus is on how rents from the natural resource sector make other sectors contract. And in the political economy models, it is appropriable rents that cause problems in terms of patronage or rent-seeking. Measures of resource abundance, say how much resources there are in the ground, need not be a good proxy for the rents those resources actually give rise to. Even abundance measures based on net present value of resources need not be good proxies, if agents are more preoccupied with current rents, due for instance to credit constraints and short horizons. It appears that the resource abundance term in title of the Sachs and Warner paper may have put the subsequent literature on the wrong track. Empirical studies should instead focus testing the mechanisms proposed by the theoretical literature on resources and development. One way to proceed is to pretend the empirical literature does not exist, start from theory, and ask which is the proxy that best reflects the hypothesis in question. This depends on the particular mechanism in question. As argued above, proxies used to test Dutch Disease or political economy hypotheses should reflect rents rather than physical abundance. Given the fact that (appropriable) rents may also stem from other sources than natural resources, consideration may be given to including other types of rents as well. Another important point emphasized by Nilsson (2008), is that measures of rents reflect not only revenues but also costs of production, which can differ substantially.

4.3 Institutions and implications for policy and research

Institutions are a key variable in mediating the effect of natural resource rents on development. Institutions constitute rules of the game which influence the positive and

negative effects of resource rents and their relative dominance, in both centralised and decentralised political economy models of the resource curse. As argued earlier, impartiality enhancing institutions are important in this respect, since they curb possibilities for private, costly appropriation of rents, and increase the attractiveness of alternative productive actions. In centralized and decentralized models, respectively, institutions of public accountability restrict the possibilities of capture by government officials while institutions facilitating private sector efficiency reduce the rewards of private capture.

Institutions are however a very broad concept, and need to be further unbundled for precise policy analyses. The argument that institutions of democratic accountability are important to curb patronage; the form of democracy may be more important than democracy in itself. Specifically, they find that presidential regimes suffer from the resource curse but parliamentary regimes do not, which they relate to a tendency of presidential regimes to target powerful minorities in their spending. Similarly, Mehlum et al (2006) present empirical evidence for the importance of institutions promoting private sector profitability. The institutional index used in their analysis is, however, a composite one, consisting of a rule of law index, a bureaucratic quality index, a corruption in government index, a risk of expropriation index, and a government repudiation of contracts index. The composite or aggregate approach of empirical studies does not permit us to distinguish between different categories of institutions, and thus draw more precise policy conclusion.

More research is therefore needed to look into the details of the institutional design, to find the institutions most critical for alleviating a resource curse. We need to know more about what precisely needs to be done, and where to start.

In unbundling institutions, Acemoglu and Johnson (2005) distinguish between property rights institutions (which protect citizens against expropriation by the government and powerful elites) and contracting institutions (which enable private contracts between citizens, reducing transaction costs in enforcing contracts). Contracting institutions regulate contracts between private agents, while property rights institutions regulate the relationship between the state or the politicians and the private citizens. As we have argued elsewhere, there is an overlap between these types of institutions (Kolstad et al.,

forthcoming), which does not make it all that useful in addressing the issues raised here. Hence, although we know at an aggregate level that the focus of domestic and international policy towards resource-rich countries should be on improving institutions, and in other ways reducing opportunities and incentives for rent-seeking and patronage, we need to know more about which specific institutions at a detailed level to support. This should be an important priority of research into natural resources and development in the near future. This included analyzing the question of whether policies that are important in one context and one country, also apply in other contexts and countries.