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Rents to Riches?

Factoring in the Political Economy of Natural Resource-Led Development*

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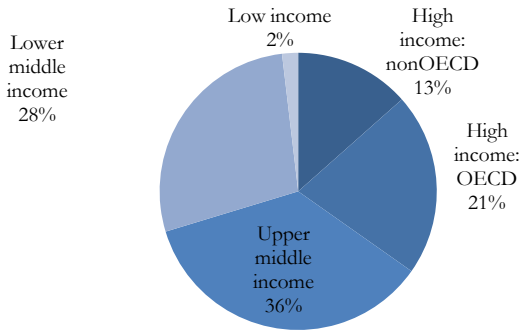
Subsoil natural resource endowments and associated rents—if well harnessed and managed—can serve as a boon to developing countries. Yet, too often, the extractive industries of oil, gas, and mining have been associated with the "resource curse" whereby nations that are more dependent on nonrenewable natural resources grow more slowly than resource-poor countries and often suffer from weaker governance and institutional quality.[i] In many developing countries, natural resources are the main game in town—and the extractive industries sector is both shaped by and, in turn, influences political, economic, societal, and institutional dynamics. Understanding the political economy of resource rents is therefore crucial to achieving sustainable development built on resource riches.

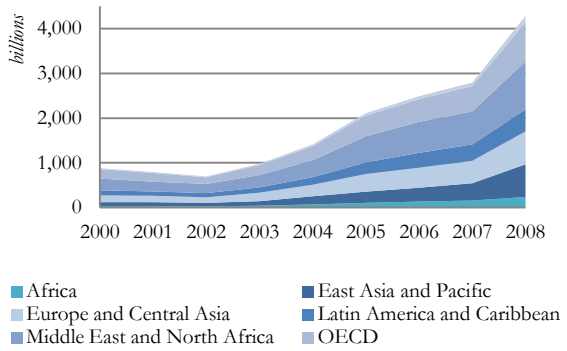
As global demand for natural resources grows—and in response to historically high commodity prices—the push for new discovery and intensified extraction has increasingly moved into "frontier areas" in the developing world. Although the bulk of resource rents are currently generated in higher income settings, almost a quarter of global extractive industries rents accrue to low-income and lower middle-income settings (Figure 1). A breakdown of rent flows by region (Figure 2) shows the increasing significance of the developing world's participation in the extractive industries. Although the Middle East has maintained its leading position in terms of rents derived from petroleum, its share of global extractive industry rents has decreased since 2000. Conversely, East Asia and the Pacific's share grew from 9 to 17 percent of total natural resource rents; and between 2000 and 2008, Sub-Saharan Africa's natural resource rents increased sixfold, with oil rents representing more than two-thirds of the total.[ii] In short, rents from natural resources are becoming more important in the developing world, where poor governance and weak institutional quality makes countries vulnerable to the resource curse.

Figure 1: Extractive industry rents by income level, 2008



Source: Wealth of Nations Database (World Bank2011).

Figure 2: Extractive Industry Rents by Region, 2000–08 (US$ billions)



Source: Wealth of Nations Database (World Bank 2011).

From the public interest perspective, many resource-dependent developing countries pursue short-sighted, suboptimal policies regarding the extraction and capture of resource rents and spending and savings from their resource endowments. This note attempts to make sense of these outcomes and suggest better policies at each step in the natural resource management (NRM) value chain by focusing on two central political economy dimensions: the degree to which governments can make credible intertemporal commitments to both resource developers and citizens and sustain durable pacts sector policies, and the degree to which governments are inclusive and inclined to turn resource rents into public goods and sustainable development outcomes.

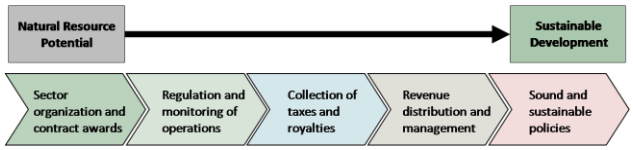
Much has been learned about the economics and associated policy options of natural resource-led growth. The commodity boom and bust cycle of the 1970s focused attention on these issues in the international development community.[iii] Today, historically high commodity prices and the growing importance of extraction in many developing countries underlie a renewed interest in policy issues pertaining to natural resource-led development and a number of measured policy options for natural resource-led growth have been advanced.[iv] Yet, for the most part, scholars and practitioners have fallen short of translating broad agreement on "good practice" policies into concrete steps to navigate and address the institutional and political obstacles associated with extracting and allocating resource rents for developmental purposes.

This analysis emphasizes instead the notion of "good fit"—taking the position that welfare-promoting policies, institutions, and governance must be tailored, at least in part, to a country's specific context. Adopting an approach to institutional arrangements that emphasizes local variation and innovation as much as best international practice, will be central to the ability of governments and development partners to achieve salutary developmental outcomes.[v] Thus, this note presents an analytical framework for assessing a country's political economy and institutional environment as they relate to natural resource management and, on that basis, it offers targeted recommendations across the natural resource value chain that are technically sound and compatible with the identified underlying incentives.

The Natural Resource Management Value Chain

Natural resource management spans many specific, interrelated decisions made by governments in interaction with resource developers (private and state-owned) and society. The World Bank has adopted a "value chain approach" to understanding NRM, with the primary objective of prescribing an integrated set of feasible policy interventions to transform natural resource potential into sustainable development outcomes. The value chain (Figure 3) encompasses the institutional arrangements across five key dimensions of NRM: (1) sector organization and the award of contracts and licenses; (2) regulation and monitoring of operations; (3) collection of taxes and royalties; (4) revenue distribution and public investment management; and (5) implementation of sustainable development policies.[vi]

Figure 3: The Natural Resource Management Value Chain



Source: Mayorga Alba 2009.

The NRM value chain spans the key sequence of steps that a resource-dependent country must undertake in transforming its natural resource rents into developmental riches. When embedded in a political economy context, the value chain also offers the potential for a comprehensive assessment of the governance and political economy parameters that

affect a resource-dependent country's ability to transform rents into riches.

Box 1. Typical Paradoxes in Natural Resource Management

Extracting Resource Wealth

The paradoxes involved in devising models of ownership and allocation of extraction rights in the natural resource sector include the following**:**

- The predictability of policy and the regulatory framework surrounding the natural resource sector is essential to salutary developmental outcomes, yet it is common for governments to seek to retain discretion to change the rules of the game.
- Contract negotiations in the hydrocarbon and mineral sectors are characterized by asymmetric capacity and information between the parties, but the relative bargaining power between governments and investors shifts over the lifecycle of extractive industry projects.
- Resource rents have the potential to allow governments expand the amount of public goods they provide without imposing additional taxes; but a tension exists around a private versus public calculus in decision-making around ownership of natural resources, one that is intensified because of the stakes involved.

Taxing Resource Wealth

The paradoxes involved in designing tax policy and the administrative instruments used for natural resource revenue collection include the following:

- Despite having weak revenue administration governance and capacity, many low-income resource-rich countries resort, in practice, to overly complex, multi-rate fiscal regimes.
- Developing countries use generous tax incentives to compensate investors for high levels of risk and to attract resources to develop extractive industries; nevertheless, their inability to sustain such commitments over time further deteriorates their credibility and discourages investment in the sector.
- Mineral resources provide countries with considerable rents and relative administrative ease—since taxing these resources requires less effort than taxing other economic activities—but many resource-dependent countries neglect basic investments in revenue administration capacity that could increase public revenue and allow for more a progressive and flexible fiscal regime, precisely as a result of the incentives generated by the sector.

Investing Resource Wealth

The paradoxes involved in deciding how natural resource revenues should be distributed to the citizenry and transformed into productive economic assets include the following:

- Resource rents offer the prospect of investing heavily in physical infrastructure that would generate high returns in capital-scarce countries, but such countries often fail to invest proactively in the processes and systems needed to yield the very best projects as a result of political incentives and the features of the sector.
- Investment in public infrastructure is one of the policy tools that resource-dependent countries can use as the basis for economic diversification and reduced cyclicality; nonetheless, public investment tends to be highly pro-cyclical, thus unsustainable. Failure to maintain projects generates repeated "build, neglect, rebuild" episodes.
- A benevolent national planner would ideally allocate resource rents to finance the highest return public investment projects, regardless of their geographic location; but political economy dynamics often militate toward earmarking investments to the location of resource extraction or fragmenting them across various narrower political constituencies.

Experiencing the Resource Paradox

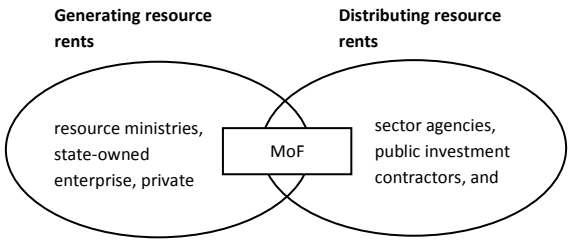
Practitioners in resource-dependent countries face many of the same challenges of poor policy making, limited capacity, and weak institutions as developing countries in general. Yet significant factors distinctive to resource-dependent settings shape the political economy context and can condition the overall development process in specific ways: in particular, the finite nature of hydrocarbons and minerals; the supernormal profits yielded by resource extraction and the state's sovereign right to some portion of those rents; the fact that commodity prices are extremely volatile and, from the perspective of most developing countries, are set exogenously; and the uniqueness and long timeframe of the extraction or production cycle and ownership structures in the resource sectors. Together, these distinctive qualities position resource rents as central to the political economy of resource-dependent settings and make the extractive industries particularly vulnerable to problems of intertemporal credibility.

Viewed through the lens of the empirical experiences of low-income, resource-dependent countries, it is more useful—in both analytical and practical terms—to speak of a set of "resource paradoxes" rather than a resource curse. From an operational perspective, the generation, taxation, and distribution of rents is conditioned by key government choices in terms of policies and institutions: What models of ownership are used in the sector and how are extraction rights allocated? How should tax policy be designed and what administrative instruments should be used to collect revenue? How should resource revenues be distributed to the citizenry and transformed into productive economic assets? The research for *Rents to Riches* identified typical NRM paradoxes that beset resource-dependent developing countries, as listed in box 1. Together, these paradoxes provide a picture of the formidable challenges low-income countries face as they attempt to transform resource rents into sustainable development riches. The analysis presented in the remainder of this note provides greater detail on the dynamics of these paradoxes and proposes potential interventions to resolve them.

Transforming Rents into Riches

Natural resources yield "rents"—or extraordinary profits from their production—that are crucial to the political economy of resource-led development. Viewing natural resource rents flows through the disaggregated lens of the NRM value chain, two key issues emerge in characterizing how a government manages its natural resources: (1) How effectively does a government generate and capture rents from the extractive industries? (2) How does the government spend resource wealth and to what extent is it invested in a sustainable, pro-development manner? In essence, outcomes across the NRM value chain can be reduced to two core rent arenas: *generating* rents through extraction and taxation and *distributing* rents through spending and investment (Figure 5). Many different domestic and international stakeholders are involved in natural resource policy making and extraction, and the relationships among these actors are constantly shifting across the value chain.

Figure 5. The Two Key 'Rent Arenas' in the Natural Resource Value Chain



Source: Barma et al. 2012, p. 11, based on Webb 2010.

Political economy scholarship often relies on regime typologies to distinguish why certain types of country settings yield certain outcomes.[vii] In order to help country counterparts and development practitioners diagnose the political economy trajectory a resource-dependent country is embarked upon, this volume advances a simple typology that is structured around two crucial dimensions:

- The *credibility of intertemporal commitment*—or the degree to which policy stability and bargains over time can be enforced and deviations from such agreements are subject to sanction; and

- The overall *political inclusiveness* of the prevailing state-society compact—or the extent to which diverse social, economic, and political viewpoints are incorporated into decision-making, and a sense of either collectivist or clientelist welfare is privileged over purely elite interests.

Table 1: Typology of Natural Resource-Dependent Settings

Political inclusiveness	Credibility of intertemporal commitment: Less credible/weaker enforcement	Credibility of intertemporal commitment: More credible/stronger enforcement
Less inclusive/ less collectively oriented	**Patrimonial rule** Individualized political authority, built on a hierarchy of cronyism; emphasis on private (elite) goods; exploitation of public resources for private gain.	**Hegemonic government** Institutionalized one-party regime; either predatory or benevolent; emphasis on private (elite) goods with some particularist and public goods.
More inclusive/ more collectively oriented	**Clientelist pluralism** Political competition based on extensive use of clientelism; provision of particularist goods; low horizontal accountability.	**Programmatic pluralism** Electoral competition based on programs geared toward collective welfare enhancement; provision of public goods; horizontal and vertical democratic accountability.

Source: Barma et al. 2012, p. 12, adapted from Barma and Viñuela 2010.

Although these dimensions are interdependent to some extent, positioning them against each other yields a typology of four distinct country settings, each with distinctive implications for natural resource rent generation and allocation.

- *Patrimonial rule:* political-economic settings characterized by individualized political authority, usually resting on a hierarchy of cronyism, where the exercise of power faces few constraints. These can be settings of persistent instability and a high degree of political contestation with frequent turnover among conflicting groups, or they can be characterized by dictators who avoid establishing organizational arrangements that constrain their actions (such as an institutionalized ruling party). These "roving bandits" are typically unlikely to make credible intertemporal commitments or protect property rights because they are unconstrained.[viii] In settings of patrimonial rule, extractive capacity is low, constant theft from society means economic production is low, time horizons are short, and the exploitation of public resources for private gain is common.

- *Hegemonic government:* an uncontested, institutionalized political force or one-party regime—or stationary bandit—that successfully monopolizes "theft" through regular taxation and provides, in turn, peaceful order and some degree of public goods for society. Hegemonic governments can appear either predatory or relatively benevolent.[ix] Time horizons are lengthened due to regime stability; combined with greater institutionalization, this enables credible intertemporal commitment.

- *Clientelist pluralism:* political-economic settings where some degree of political competition takes place (mainly through electoral contests), usually on the basis of extensive patron-client networks. The need to reward supporters results in some public goods provision; but the reliance on clientelist distribution of particularist goods to mobilize support undermines vertical and horizontal accountability and has self-enforcing characteristics that lead to the under-provision of public goods that enhance collective welfare. Time horizons are short because politics are relatively unpredictable, and the degree of institutionalization (and hence constraint on power) is low.

- *Programmatic pluralism:* electoral competition on the basis of programs that are geared toward collective welfare enhancement, with an emphasis on society-wide public goods provision. A higher degree of institutionalization brings with it built-in democratic mechanisms of horizontal and vertical accountability, facilitates the articulation and protection of property rights, and enables credible intertemporal commitment.

In summary, a country's positioning along the two key dimensions captured in the typology—the credibility of intertemporal commitment and degree of political inclusiveness—determines how stakeholder incentives and the institutional landscape interact with the structural characteristics of natural resources and hence how a country actually experiences the resource paradox. In noninclusive settings where the intertemporal credibility of commitment is low, rent generation will be weak because the state will find it difficult to make beneficial extractive bargains with resource developers, and rent allocation will be biased toward consumption by political-economic elites and away from saving and investment for society. Factors that make intertemporal commitments more credible—by lengthening time horizons and strengthening institutionalization and the enforcement of property rights—will tend to improve a country's performance in terms of rent generation by enabling governments to strike better deals, at a lower risk premium, with developers. Factors that increase political

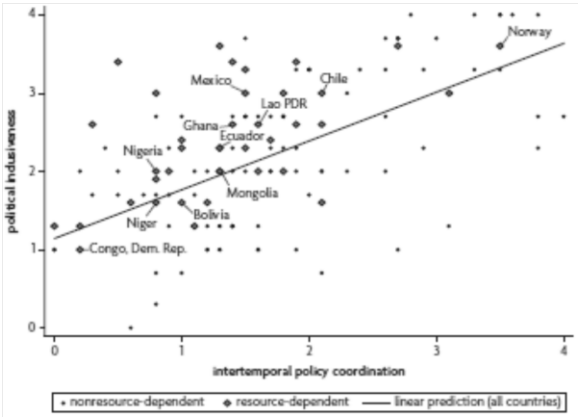
inclusiveness—incorporating more political, social, and economic groups into decision making—will make the state more accountable to society and will orient rent allocation toward collective welfare through the provision of public goods and investment for sustainable development.

Benchmarking Country Context

Cross-country governance indicators can provide an initial benchmarking of country context (https://www.agidata.org/). While all indicators are subject to potential measurement bias and error, a number of accessible indicators are publicly available to benchmark a country's ability to make credible intertemporal commitments and its degree of political inclusiveness. To illustrate how analysts and practitioners may characterize the institutional environment in their country of interest, Figure 6 plots a proxy for "intertemporal credibility" using the "policy coordination indicators from the Public Policy Attributes database; and a proxy for "political inclusiveness" using the "participation in political decisions" indicator from the French Development Cooperation Institutional Profiles Database.[x].

Political economic dimensions are inherently difficult to measure, and there is no substitute for careful country-by-country analysis. The more data sources that are examined and triangulated, the more robust and reliable any quantitative assessment will be; a more qualitative assessment is always useful in combination with quantitative indicators—especially if particular discrepancies across data sets remain, or if the quantitative characterization appears to be strikingly inaccurate.

Figure 6: Intertemporal Credibility and Political Inclusiveness



Source: Barma et al. 2012, p. 67, Institutional Profi le Database (2009) for "political inclusiveness" and Public Policy Attributes Database (2008) for "intertemporal policy coordination."

Emerging Intervention s for Addressing the Resource Paradox

The structural characteristics of resource dependence—especially the very rapid availability of large windfall rents, the concentration of ownership and decision making in the sector, and the often unrivaled access to rents for those with political and economic power—tend to push resource-dependent developing countries into a setting of patrimonial rule or else to entrench regimes in hegemonic government. This is suggested by the cumulative body of scholarship on the political economy dynamics associated with natural resource wealth.

Development interventions to mitigate the resource curse are aimed at assisting reform in countries such that their policy-making and institutional framework across the natural resource value chain approximate those to be found in countries squarely within the ideal of programmatic pluralism. In other words, natural resource rents are most reliably transformed into sustainable development riches when a government can make credible intertemporal commitments to both the extractive companies and its citizens, and when the political regime is inclusive such that the government has incentive to use resource rents to provide public goods that enhance collective welfare.

Using a political economy framework for understanding outcomes in natural resource management points to two interrelated principles for enhancing the developmental orientation of the sector:

i. Adopt a good-fit approach to natural resource management by tailoring interventions to context and;

ii. Emphasize the incentive compatibility of interventions such that they support and nudge stakeholders into making developmentally oriented decisions at each step of the value chain.

Orthodox approaches to natural resource management that seek to impose best practice arrangements in the sector often miss the distinct policy priorities and reform opportunities in particular countries. A good-fit approach is inherently contingent on context and hinges on the view that building functional institutional capability matters more than achieving specific institutional forms to do so. And it rests on a clear understanding of stakeholder motivations in designing incentive-

compatible interventions. In other words, a good-fit approach narrows the gaps between expectation and reality with regard to interventions, aiming to deliver improved outcomes through incentive-compatible entry points and institutional designs.

Table 3: Stakeholders in Extractives-led Development

Sector/ Motivation	Actor	Leverage
Extractive industry developers: seeking (sustainable) profits/resource rents	International major companies	Reputational concerns, international regulations
	Emerging internationals	Reputational concerns, level access
	National mining and oil companies	Domestic political economy, international aspirations
	Domestic producers	Continued access to contracts
Host governments: seeking investment, rents, development	Energy, oil and mining ministries	Technical reputation, bureaucratic power
	Executive	International reputation and linkages with country groupings (e.g., G-8, G-20)
	Central finance agencies	Technical reputation, bureaucratic power
	Subnational governments	(Predictable) access to rent streams; infrastructure development
	Sector ministries	Sectoral outcomes
	Legislatures	Political party interests and capacity
Civil society: "a many-splendored thing"	Non-Extractive industry private tradable sector	Competitiveness and linkages with extractive industry
	NGOs	Transparency, accountability
	Local communities	Voice, government responsiveness, accountability

Source: Barma et al. 2012, p. 233.

The technical chapters on sector organization, revenue mobilization, and public investment in *Rents to Riches* examine the specifics of NRM practices, highlighting how institutions, incentives, and stakeholders combine and interact with resource extraction, taxation, and spending, and presenting options for development interventions. Table 2 summarizes some of the emerging key principles for resource-dependent developing countries in these three areas, mapped against the political economy settings of patrimonial rule, hegemonic government, and clientelist pluralism—namely those characterized by significant weakness in terms of intertemporal credibility or political inclusiveness, or both.[xi] These good-fit interventions are layered against political economy contexts such that they ameliorate the adverse effects of weak intertemporal credibility and low political inclusiveness. In most cases, the interventions are elaborated as actions that resource-dependent governments could take to enhance resource extraction, taxation, and investment—any of these could be bolstered and enhanced by support from donors and partnerships with extractives investors and other stakeholders, including civil society groups.

Three basic types of incentive-compatible intervention are possible across the value chain. Some interventions are aimed primarily at extending time horizons, thereby enhancing intertemporal credibility. Other reforms emphasize mobilizing stakeholders in order to enable collective action in natural resource management, thereby broadening political inclusiveness. A third form of intervention is slightly different: it enclaves institutions and capacity in NRM so that some, albeit limited, functionality is possible even when the wider political economy dynamics are perverse. *Rents to Riches* provides a more in-depth treatment in the three chapters on extraction, taxation, and investment.

Ultimately, the best and surest trajectory of natural-resource-led development is to engage as many global, national, and community-level stakeholders as possible in defining the public interest and in holding decision makers accountable for achieving that goal. This volume's political economy framework demonstrates that where intertemporal credibility is weak and political inclusiveness low, political economic elites are able to siphon resource rents away from developmentally oriented outcomes. The implications for engagement are clear: lengthening time horizons enhances the ability of governments to increase potential rent generation, and improving political inclusiveness supports the orientation of rent distribution towards the collective good. The logic of the framework, along with the case material presented throughout this book, thus demonstrates the potential for mediating the resource paradox through intelligent and resilient institutional design. Successful development interventions must work within the constraints of, resonate with, and eventually shape, the underlying political and institutional dynamics associated with resource-dependence. Bearing that in mind, diverse stakeholders oriented by the normative compass of collective welfare enhancement can successfully transform resource rents into sustainable development riches.

Table 2: "Good Fit" Arrangements for the Extractives Sector

Political Economy Setting in Typology	Extraction	Taxation	Investment
Patrimonial rule (limited credibility/limited inclusiveness) 1. Enhance intertemporal credibility by lengthening time horizons and reducing the potential that contracts or fiscal regimes will be revised. 2. Support incentives to invest in institutional capacity across the value chain; facilitate the articulation of collective action and demands for good governance. 3. Limit rent-seeking behavior by minimizing points of discretion in decision-making processes.	• Enclave capacity-building initiatives in key agencies, emphasizing the strengthening of core technical skills in contracting. Such skills may be contracted-in or built into partnership with extractive investors. • Create simple, nondiscretionary legal and regulatory framework. • Ensure checks and balances in decision making over license allocation, minimizing discretion. • Ease information asymmetries through geological surveys, model contracts, and so on.	• Contract out audit capacity. • Combine production-based royalties and windfall royalties. • Design stability clauses with built-in regular revisions. • Use third-party monitoring.	• Enclave public investment capacity through resource-for-infrastructure deals, but promote transparency to enhance value for money. • Stress predictability over volume for key public investment creation envelopes/agencies. • Earmark investment resources on balance to public asset preservation over creation, for example, by capitalizing road funds. • Leverage narrow and organized constituencies for asset creation and preservation. • Tilt extractive industry infrastructure toward dual use and inclusivity, as feasible.
Hegemonic government (greater credibility/limited inclusiveness) 1. Take advantage of longer time horizons and the relatively more conducive environment for contracts and investment. 2. Facilitate greater inclusiveness in decision making and broader benefit sharing by supporting nascent civil society groups and empowering nonexecutive stakeholders with oversight functions.	• Enclave capacity in key agencies. • Automate license allocation, minimizing discretion. • Empower nonexecutive stakeholders, including legislature and civil society groups, with oversight powers. • Emphasize checks on executive power to rein in rent-seeking. Horizontal checks can be built in by ensuring interagency collaboration; vertical checks can be instituted, for example, through independent audit agencies and the legal system.	• Enclave tax administration capacity. • Combine production-based royalties with income tax and windfall royalties or sliding-scale royalties; use production sharing. • Use stability clauses with built-in regular revisions.	• Proactively encourage extractive industry infrastructure to be of dual use, notably through government's strategic planning of resource corridors. • Support technocratic investors to enhance quality of investment spending and aligning it with regime priorities for key types of infrastructure. • Motivate greater inclusiveness of investment by recourse to state legitimacy and crowding in demand side, including through international benchmarking.
Clientelistic pluralism (limited credibility/greater inclusiveness) 1. Enhance intertemporal credibility and policy stability by lengthening time horizons through contractual bargains. 2. Build stability through sectoral institutional technologies, emphasizing the importance of nondiscretionary process. 3. Enhance broader inclusiveness by easing information asymmetries and creating greater space for collective action for good governance.	• Gradually expand capacity by building coalitions for reform and investments in capacity. • Create simple, nondiscretionary legal and regulatory framework. • Ensure checks and balances in decision making over license allocation. • Create intertemporal flexibility on the terms of the deal, including built-in regular revisions. • Ease information asymmetries through contract disclosure.	• Contract out auditing in the short term and gradually build audit capacity through broader coalitions. • Combine production-based royalties with income tax and windfall royalties and sliding-scale royalties. • Use stability clauses with built-in regular revisions. • Ease information asymmetries and mobilize constituencies for transparency in revenue collection.	• Crowd in demand side for asset preservation and selected asset creation. • Enhance transparency with regard to asset creation and preservation; crowd in associated constituencies, anchored at a salient subnational constituency level. • Invest in most critical and visible links. •Illuminate key nodes of public investment management (for example, procurement) by emphasizing collective checks and balances.

Source: Barma et al. 2012, p. 222.

References

Ascher, William. 1999. *Why Do Governments Waste Natural Resources? Policy Failures in Developing Countries.* Washington, DC: Johns Hopkins University Press.

———. 2009. *Bringing in the Future: Strategies for Farsightedness and Sustainability in Developing Countries*. Chicago and London: University of Chicago Press.

Brahmbhatt, Milan, and Otaviano Canuto. 2010. "Natural Resources and Development Strategy after the Crisis." World Bank PREM Note 147 (Economic Policy) (January). World Bank, Washington, DC.

Barma, Naazneen, Kai Kaiser, Tuan Minh Le, and Lorena Viñuela. 2012. *Rents to Riches? Political Economy of Natural Resource-led Development.* Washington, DC: World Bank.

Collier, Paul. 2009. *Wars, Guns, and Votes: Democracy in Dangerous Places.* New York: HarperCollins.

———. 2010. *The Plundered Plant: Why We Must—and How We Can—Manage Nature for Global Prosperity*. Washington, DC: Oxford University Press.

Collier, Paul, Frederick van der Ploeg, and Anthony J. Venables. 2009 "Managing Resource Revenues in Developing Countries." OxCarre Research Paper 2009-14. University of Oxford, Oxford, UK.

Crombrugghe, Denis de, Kristine Farla, Nicolas Meisel, Chris de Neubourg, Jacques Ould Aoudia, and Adam Szirmai. 2009. "Institutional Profiles Database III: Presentation of the Institutional Profiles Database 2009 (IPD 2009)." Direction Générale du Trésor et la Politique Economique (DGTPE), Paris. http://www.cepii.fr/ProfilsInstitutionnelsDatabase.htm.

Dunning, Thad. 2008. "The Political Economy of the Resource Paradox: An Overview." Unpublished manuscript. World Bank, Washington DC.

Eifert, Benn, Alan Gelb, and Nils Borje Tallroth. 2002. "The Political Economy of Fiscal Policy and Economic Management in Oil Exporting Countries." In *Fiscal Policy and Implementation in Oil-Producing Countries*, ed. Jeffrey M. Davis, Rolando Ossowski, and Annalisa Fedelino, 80–122**.** Washington, DC: International Monetary Fund.

Evans, Peter B. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton, N.J.: Princeton University Press.

Frankel, Jeffrey A. 2010. "The Natural Resource Curse: A Survey." NBER Working Paper 15386. National Bureau of Economic Research, Cambridge, MA.

Gelb, Alan, and Associates. 1988. "Oil Windfalls: Blessing or Curse?" World Bank, Washington, DC.

Gelb, Alan, Kai Kaiser, and Lorena Viñuela. 2011. "How Much Does Natural Resource Extraction Really Diminish National Wealth? The Implications of Discovery." Unpublished manuscript. PREM Public Sector & Governance Group, Washington, DC.

Hamilton, Kirk, and Eduardo Ley. 2010. "Measuring National Income and Growth in Resource-Rich, Income-Poor Countries."PREMise Note No 28. World Bank, Washington, DC.

Hansen, Kjetl, and Ricardo Soares de Oliveira . 2009. "Political Economy of Petroleum Management in Angola." Unpublished manuscript. World Bank, Washington, DC.

Hartwick, John M. 1977. "Intergeneration Equity and the Investing of Rents for Exhaustible Resources." *American Economic Review* 67 (5): 972–74.

Humphreys, Macartan, Jeffrey D. Sachs, and Joseph Stiglitz. 2007. *Escaping the Resource Curse*. New York: Columbia University Press.

Humphreys, Marcartan, and Martin E. Sandbu. 2007. "The Political Economy of Natural Resource Funds." In *Escaping the Resource Curse*, ed. Macartan Humphreys, Jeffrey D. Sachs, and Joseph Stiglitz, 194–233. New York: Columbia University Press.

Kaiser, Kai, and Lorena Viñuela. 2011a. "Investing for Extractive Rents: Global Structure, Trends and Transparency." Unpublished manuscript. World Bank Public Sector Group. World Bank, Washington, DC.

———. 2011b. "Where the Extractive Rents Are?" Unpublished manuscript. World Bank Public Sector Group. World Bank, Washington, DC.

Kohli, Atul. 2004. *State-directed Development : Political Power and Industrialization in the Global Periphery.* Cambridge, UK, and New York: Cambridge University Press.

Lal, Deepak, and H. Myint. 1996. *The Political Economy of Poverty, Equity and Growth.* Oxford, UK: Clarendon Press.

Mayorga Alba, Eleodoro. 2009. "Extractive Industries Value Chain." Africa Region Working Paper 125. World Bank, Washington, DC. http://go.worldbank.org/KLQAH1H350.

McFerson, Hazel M.. 2010. "Extractive Industries and African Democracy: Can the 'Resource Curse' Be Exorcised?" *International Studies Perspectives* 11 (4): 335–53.

Mehlum, Halvor, Karl Moene, and Ragnar Torvik. 2006. "Institutions and the Resource Curse." *The Economic Journal* 116 (508): 1–20.

Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *American Political Science Review* 87 (3): 567–76.

Rajaram, Anand, Tuan Minh Le, James A. Brumby, and Nataliya Biletska. 2010. "Framework for Reviewing Public Investment Efficiency." World Bank Policy Working Paper 5397. World Bank, Washington, DC.

Rodrik, Dani. 2003. *In Search of Prosperity: Analytic Narratives on Economic Growth.* Princeton, NJ: Princeton University Press.

Sachs, Jeffrey D., and Andrew M. Warner. 1995. "Natural Resource Abundance and Economic Growth." NBER Working Paper 5398. National Bureau of Economic Research, Cambridge, MA.

———. 2001. "The Curse of Natural Resources." *European Economic Review* 45 (4–6): 827–38.

Sala–i–Martin, Xavier, and Arvind Subramanian. 2003. "Addressing the Natural Resource Curse: An Illustration from Nigeria." IMF Policy Working Paper, International Monetary Fund, Washington, DC.

Vatansever, Adnan, and Alexandra Gillies. 2009. "The Political Economy of Natural Resource Management for Development: A Framework for Operational Research." Unpublished manuscript. World Bank, Washington, DC.

World Bank. 2006. *Where Is the Wealth of Nations? Measuring Capital for the 21st Century*. Washington, DC: World Bank.

———. 2010. *Natural Resources in Latin America and the Caribbean: Beyond Booms and Busts?* Regional Flagship Study. Washington, DC.: World Bank.

———. 2011. *The Changing Wealth of Nations: Measuring Sustainable Development for the New Millennium*. Environment and Development Series. Washington, DC: World Bank.

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Notes

This note is based on Naazneen H. Barma, Kai Kaiser, Tuan Minh Le, and Lorena Viñuela, *Rents to Riches? The Political Economy of Natural Resource-Led Development* (Washington DC: The World Bank, 2012). This note summarizes the key messages of the volume, focusing on the political economy framework developed therein.

[i] Sachs and Warner (1995; 2001) are credited with a seminal empirical statement of the resource curse that demonstrates this paradoxical relationship between resource dependence (measured by the raw material export share of GDP) and growth. Subsequent cross-sectional empirical research indicates that the quality of existing institutions may be the key factor that mediates a resource-dependent country's economic outcomes. See, among others, Dunning (2008); Mehlum, Moene, and Torvik (2006); Sala-i-Martin and Subramanian (2003); Vatansever and Gillies (2009).

[ii] Background notes provide a more in-depth analysis of recent extractive rents, investment, and discovery, with a special emphasis on developing countries: Gelb, Kaiser, and Viñuela 2011; Kaiser and Viñuela 2011a; b.

[iii] See Gelb and Associates (1988) for a foundational statement.

[iv] See Brahmbhatt and Canuto (2010) for a recent summary of major issues. Collier, van der Ploeg, and Venables (2009) and Frankel (2010) survey some of the recent work in this area, positioning findings in the context of how the literature on the resource curse has evolved over time. The World Bank (2010) provides insights concerning commodity-led development more broadly with special reference to Latin America. "Good practice" approaches to better harnessing extractive resources for development include Asher (1999); Humphreys, Sachs, and Stiglitz (2007); Collier (2009; 2010); and the *Natural Resource Charter* (2009).

[v] Rodrik (2003; 2007) has advocated this perspective eloquently.

[vi] Mayorga Alba (2009) provides a complete description of the technical components embedded in the EI value chain.

[vii] The typology presented here is adapted from foundational work by Naazneen Barma and Lorena Viñuela (Barma and Viñuela 2010). Phil Keefer provided insights into refining the typology (Keefer and Vlaicu 2007; Gehlbach and Keefer 2009; 2010). The typology particularly builds on the typological and theoretical work of Eifert, Gelb, and Tallroth (2002); Evans (1989; 1995); Kohli (2004); Lal and Myint (1996); and Olson (1993).

[viii] Olson (1993) develops the concepts of roving and stationary bandits in articulating a theory of economic development under dictatorship and democracy. One of the key characteristics that distinguishes a political economy setting under a stationary bandit (or institutionalized regime) from that under roving bandits (leaders who are unconstrained by organizational arrangements) is that the time horizons are longer in the former (see Clague et al. 1996). The intertemporal dimension of our typology hinges on this elegant insight. The authors thank Phil Keefer for his observations on this concept.

[ix] The degree to which the regime needs to pay off other social groups (usually with a mix of particularistic and developmental goods) can vary and relates to the predictability of succession and the potential of revolt. In Angola, for example, the ruling elite was able to enrich itself with relative inattention to broader societal demands; whereas in Suharto era Indonesia, a certain degree of broad-based growth and development was necessary to underwrite the regime's grip on power.

[x] The Public Policy Attributes (PPA) dataset of the Inter-American Development Bank is available at http://www.iadb.org/res/pub_desc.cfm?pub_id=DBA-008 (see also Berkman et al. 2008).

The Institutional Profiles Database (IPD) developed under the auspices of the French Development Cooperation is available at http://www.cepii.fr/anglaisgraph/bdd/institutions.htm (see also Crombrugghe et al. 2009).

[xi] Programmatic pluralist settings face less constraining political economy dynamics.