Recommendations on the Management of Natural Resources

[*from* Escaping the Resource Curse]

Macartan Humphreys

March 2009

Dear conference participants:

By way of a memo I give here a set of the recommendations provided in the final chapter of *Escaping the Resource Curse* a volume I coedited with Jeff Sachs and Joe Stiglitz published by Columbia University Press and RWI. The recommendations draw on contributions made by multiple authors to the volume. The full text of the concluding chapter is available here http://www.columbia.edu/~mh2245/papers1/erc12.pdf; the introduction is available here: http://www.columbia.edu/~mh2245/papers1/erc01.pdf.

I KEY RECOMMENDATIONS FOR INTERNATIONAL ACTION:

1. *Develop a mechanism for providing access to the services of skilled negotiators.* Better outcomes could arise for countries if they could draw on the skills of professional negotiators with extensive experience in the industry. Lack of access to such negotiators is in part due to a financing problem. This could be resolved through arrangements that bring together a pool of experts in negotiation that are remunerated according to fair standards from a fund that receives reimbursement only once earnings accrue.
2. *Develop a third-party natural resource fund management service.* International bodies could create and support a "global clearinghouse" for

natural resource revenue funds. This clearinghouse could deal with both the logistical and, more importantly, the difficult commitment issues associated with fund management in a way that respects and strengthens the sovereignty of producing nations. It could, for example, accept only accounts that come with strict rules on the magnitude of funds that could be withdrawn every year; disburse funds only when the required signatures of several branches of government are provided; and prevent the nonconstitutional raiding of revenues.

3. *Enforce stricter standards on multinationals.* Foreign resource companies working in developing countries should be subject to the same environmental and ethical standards they face at home. To ensure high standards there should be both individual and corporate accountability. The international community needs to make it easier for producer states to collect damages from multinationals—which often have few assets in the countries where they inflict the damage. This may mean piercing the corporate veil: allowing a parent company that owns more than a 20 percent share in a mining company that has damaged the environment to be sued for the damage inflicted will provide strong incentives for it to exercise oversight. Limited liability was introduced to increase economic efficiency, not to be a shield against bad behavior. Firms (and their agents) that violate environmental standards or engage in corrupt practices should be liable to criminal prosecution, with a full agreement on extradition for violations of such acts. In all cases, action in the home country of the multinational should be facilitated, which in many cases will entail legal reforms that enable pursuing firms across borders (such as through a more expansive version of the U.S. Alien Tort Claims Act).
4. *Create and maintain a global public information office on oil and gas revenue management.* A global information office can be established that collates and posts basic data on contracts and payments for oil and gas around the

world. Such a center could create a standardized system for filing contracts on-line and maintaining information on payments and public expenditures on a country-by-country basis. The generation and publication of comparable data on oil deals can facilitate negotiations, and improve oversight once deals are concluded.

II RECOMMENDATIONS FOR DOMESTIC ACTION:

1. *Condition the "deal" on future prices and other economic circumstances*. In the past, oil and gas contracts have not taken sufficient account of how the share of profits accruing to governments change as prices and output change. Oil companies often made sure that they were protected if oil prices fell, but they garnered the extra profits that resulted from soaring prices. No democratic government can accept a deal in which the corporation receives an unconscionably high return, and the country receives a pittance for its natural resource. Companies must be fairly compensated for their investments—but rates of return that are not commensurate with the risk will never be accepted. The mathematics is relatively simple. Ignoring costs of extraction, consider a deal with a fixed gross royalty of 50 percent. If the oil company was willing to undertake extraction when it expected prices of oil at $20 a barrel, then, if prices soar to $80 a barrel, the company receives four times the required return ($40 compared with $10). If such price increases are deemed unlikely, "progressive" deals that increase the country's share as prices rise may have only a minor impact on the ex ante value of a deal but can eliminate grossly inequitable situations ex post. But the deals made in the 1980s and 1990s were not sufficiently progressive—in many cases, the rising value of oil and gas holdings has not resulted in a rising share of benefits for the owners of these resources. Instead, oil and gas contracts should specify returns to governments under a wide range of price, cost, and production scenarios. Otherwise, once prices start rising without a

corresponding rise in the returns to resource nations, there will be a predictable rise in tensions between countries and corporations and a corresponding rise in resource nationalism.

2. *Require transparency of negotiated outcomes.* Although having domestic constituencies evaluate contracts during or after negotiations may seem like a constraint on government negotiators, it is a constraint that can in fact increase the bargaining power of domestic negotiators and help produce a better and more durable deal; it is essential if one is to avoid corruption. There is no reason that contracts should be secret.
3. *Use bonding to prevent environmental damage.* To mitigate the problem of corporations saddling countries with large environmental costs, governments should require that corporations post bonds in anticipation of future cleanup costs. This becomes more feasible as it becomes easier to ascertain in advance the size of possible cleanup costs. We now know more about the risks of some of the tailings than we knew a quarter century ago, and advances in technology have enabled better monitoring of pollution and possibly even lower costs in pollution abatement.
4. *Calculate national wealth correctly.* Rather than following standard approaches that treat oil and gas revenue as income, national accounting standards should be employed that accurately reflect the true economics of oil and gas production, taking account simultaneously of earnings and of the depletion of stocks, and the degradation of the environment. A clear understanding of the true wealth of a resource rich nation can help counter temptations to spend too much too quickly and to rely too narrowly on a depletable asset. Focusing on net national production (NNP) rather than gross national product (GDP) will focus attention on the benefits to the developing country—a mine that increased GDP, but in which most of the profits went to a foreign owner, would look far less attractive from the aspect of NNP.

5. *Stabilize expenditures.* Many resource-rich countries suffer greatly from the boom bust pattern. Resource prices are volatile; but when incomes are high, international lenders are willing to lend them more, so they even spend beyond their ample current flows, getting increasingly in debt. Money spent in this way is often poorly spent; and there are huge economic costs to such macroeconomic volatility. Some countries have found it desirable to create stabilization funds, credibly committing themselves to steadier patterns of expenditure. But if such funds are to be effective, incentives need to be built in so that political leaders are not tempted to raid them. In addition, at the international level, accounting frameworks have to be appropriately adapted, so that countries that spend out of their stabilization funds in a period of economic downturn are not penalized. Rainy day funds are designed to be spent when there is a rainy day.
6. *Use earnings for investment rather than consumption to avoid Dutch Disease problems.* Dutch disease effects arise largely from the rapid conversion of resource wealth (in the form of stocks of assets) into domestically produced consumption or investment goods. The effects of this are adverse impacts on non-oil exporting sectors, lower growth, and great readjustment costs once production stops. One solution is to rely on taxation for mobilizing domestic resources. More generally, to ensure sustained growth as natural resources get depleted, earnings have to be invested in financial, physical, and human capital. Investing in alternative export sectors, in agriculture, and in education can help sustain growth and diversify risk. It may be desirable, almost necessary to pace investment inside the country, holding some financial assets abroad in the meanwhile.
7. *Take steps to avoid inequities.* While there is in principle more scope for pursuing aggressive equalitarian policies in resource-dependent countries (without normal adverse effects on incentives), we have seen that resource-rich countries are often characterized by great inequality. The political crises

associated with oil wealth can likely be mitigated by ensuring a fair distribution of benefits within a country. The decentralization of revenue collection to subnational entities, however, can often result in an exacerbation of resource curse effects. The capacity of subnational entities to manage extreme volatility of income streams and to ensure oversight is often weaker than that of central governments. Thus it is better in most cases to centralize revenue collection and the intertemporal smoothing of expenditures, while allowing for the possibility of decentralizing expenditure to subnational bodies. There remain, of course, the highly contentious issues of how to divide proceeds. Producing regions in particular should not be faced with the environmental or other damages that may accompany production without seeing evidence of the benefits that derive from the production. In all cases, a first step to confronting the distributive repercussions of oil wealth is to collect and disseminate better information on the impact of oil and gas production on patterns of income distribution within producing countries.

8. *Strengthen state–society linkages.* As oil revenues flow in, multiple forces act to delink governing elites from their populations. They no longer, for instance, require revenues from taxes on their citizens. These dynamics can be countered politically by expanding the scope for broad-based participation in decision making. Broad based participation in oversight mechanisms can increase policy predictability and reduce the incentives and scope for misuse of revenues. This oversight can be strengthened by integrating the management of oil revenues with regular budgetary processes, and—contrary to the trends we observe in many countries—by continuing to rely on classic forms of taxation, such as income taxation, rather than relying exclusively on oil and gas revenues.