Natural Resource Exploitation: Challenges and Opportunities for LDCs

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Background

The least developed countries (LDCs) have long been heavily dependent upon natural resource exports. This is both a problem and an opportunity. It is a problem because natural resource extraction does not directly employ many people and so has only limited direct transmission on to the incomes and well-being or ordinary citizens. Further, revenues are volatile, making macroeconomic management difficult and increasing the need for social protection.

It is, however, increasingly an opportunity. After decades of low prices for commodities, the growth of emerging market economies has driven up demand. For the foreseeable future commodity prices are likely to be high. This will raise the resource revenues of LDCs twice over. Directly, high prices have the potential to raise revenues more than proportionately. This is because the taxable component of commodity export earnings is the rent — the excess of their value over the full costs of extraction. When commodity prices increase, costs do not rise proportionately, so the rent component increases more rapidly than the price. For example, when global commodity prices double, rents, and hence tax revenues, might triple.

In addition to this direct effect of high commodity prices on revenues, and probably more important, are the consequences for new discoveries. Until recently there has been much less prospecting in LDCs than in the richer countries. Beneath the typical square mile of the LDCs only one quarter of the sub-soil assets had been found as in the typical square mile of the Organisation for Economic Co-operation and Development (OECD). This is not because less is there, but because there has been less investment in search in the LDCs.

Both the problems and the opportunities are distinctive to LDCs. Resource-rich OECD countries, such as Australia, Norway and Canada, have more diversified economies and are well-placed to cope with the problems posed by natural resources. Their opportunities for enhanced revenues are also more limited because they have less potential for new discoveries. Primarily, the problems and opportunities call for distinctive domestic policies by LDC governments. However, some actions of the international community can also be helpful: these international actions are the focus of this issue of *Commonwealth Trade Hot Topics*.

Discovering and taxing natural resources

The discovery of natural resources is often an expensive, technically difficult, and risky process. However, there are strong reasons for the

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government to commission the generation of good geological information which it then makes publicly available prior to selling the rights to prospecting. Without good prior public geological information, two problems are likely: high private risks that heavily discount what prospectors are willing to pay; and 'asymmetric information' — the prospectors having much better information than the government as to what is likely to be found.

The costs of generating good public geological information are falling because of the development of aerial surveying techniques. However, because for any one LDC government investment in geological information is risky, a better approach is to finance it through multilateral aid. If a multilateral donor used aid for prospecting across many LDCs the likelihood of finding valuable resources would be very high. This would probably be a high-return use of aid. Donors have been reluctant to use aid for this purpose because it is not 'photogenic' (i.e. does not yield direct social benefits), and perhaps because it would weaken the bargaining power of international resource extraction companies. It is therefore an appropriate priority redeployment of aid for LDC governments to insist upon.

Once geological information has been generated, the challenge is to use this to maximise the amount of resource rents captured by the government. This depends upon the tax regime and initial payments in cash or kind. The best way for a government to maximise its bargaining power is to require competition between rival resource extraction companies or consortiums. Companies prefer to deal with governments through secret, one-on-one negotiations, or by offering packages which are incommensurable with other offers. This maximises their information advantage over governments. Companies can also use the structure of bilateral secret negotiations to play off one government against another. LDC governments can strengthen their joint bargaining power by insisting upon a common format for selling the rights to extraction, namely, auctions conducted to common international standards in which all bidders are competing in the same dimensions with the weights to be placed on each dimension made explicit. Typically, a government gets a better deal if there are around four or five serious bidders. Much fewer than this can result in collusion among bidders, while if there are too many bidders no company is prepared to invest sufficiently in information to warrant a high bid — all companies bid low, knowing that one of them will be lucky. *Companies will be more willing to participate in such auctions if all LDCs require this approach than if only a few insist on it.* Hence, this is an area for common action. A good way of ensuring adherence by all LDCs to the auction approach is by setting it down as a voluntary international standard. That way, OECD governments can pressure their companies to engage on these terms.

While auctions are useful for maximising rent capture, the main instrument used is the tax regime. The more confidence that resource extraction firms have in the tax regime, the more will they be willing to invest. This is because firms face an obvious 'time-consistency' problem. If the firm makes an irreversible investment based on a promise of low taxation, the government then has an incentive to break its commitment. As a sovereign power, the government has the authority to do this, but since the company recognises the risk, this power is a curse for the government rather than a blessing. For example, for decades the giant aluminium company, ALCOA, shipped bauxite out of Guinea rather than invest US$1 billion to build a smelter that would have reduced overall costs substantially. Its refusal to invest was explicitly because the Government of Guinea lacked the power to make a *credible* commitment not to expropriate the investment through raising taxation. The inability to make credible commitments is not unique to LDC governments. (For example, after years of broken promises, most OECD governments have lost the power to make credible commitments on aid!) However, many LDC governments undoubtedly currently have this problem in respect of natural resource taxation. There two complementary ways around the problem. First, a tax regime is more credible the more it builds in obvious contingencies such as changes in world prices. Often tax regimes are changed because they have become highly disadvantageous to one party or another as a result of changes in circumstances that could have been anticipated. Designing such tax systems is complex because there is no single 'best-practice'. The same commodity, such as copper, should be taxed differently depending upon whether the country has high or low costs of extraction, and depending upon the expected lifetime of the deposits. Further, whether profits or gross revenues are the main object of taxation depends upon the capacity of the tax authorities to scrutinise what companies are reporting. Where the capacity to scrutinise is limited, it may be better to tax outcomes that are readily observable and difficult for companies to distort. Because the governments of LDCs do not have the capacity to design and run such tax systems and cannot afford to build it, they have a collective interest in the availability of free and independent international public expertise, or equivalently, in aid that can be used to purchase such expertise on the market. *The record of poorly designed tax regimes suggests that such assistance is not currently sufficiently available and so it is an appropriate demand on the international system from LDC governments*.

The other way around the problem is for governments to use the international system to build ways of making their commitments credible. Some LDCs use the international Dispute Settlement Boards mechanism: indeed China currently usually insists on such a clause in its contracts. Perhaps a better approach would be to use the procedures of the World Trade Organization (WTO) as an enforcement mechanism. A core part of the purpose of the WTO is to enforce government commitments, but to date this facility has seldom been used to help LDCs. This is paradoxical, since LDC governments have the greatest need of international commitment technologies. Of course, if resources are sufficiently valuable, some companies will be prepared to take the risks of investment, but even here companies implicitly recoup a hefty risk premium through the terms of the deal. *LDC governments can collectively help themselves by recognising that many of them have a credibility problem which is very costly to their own interests, and then using the international system to do something about it*.

Sometimes the difficulties of the efficient taxation and spending of revenues will be so daunting that governments may find it more advantageous to receive payment in kind. This is the approach commonly taken in deals with China: natural resources are sold in exchange for infrastructure. There are advantages to this approach but it need not contravene the important principle that competition between bidders on clear and explicit dimensions will generate maximum benefits. Thus, if the government wants infrastructure, it can conduct an auction between bidders in terms of how much infrastructure each is willing to provide. Although China is frequently criticised for the deals that it offers, the concern for LDCs should be not that it offers a package approach of resources-for-infrastructure but that other countries do not, so that China is often a monopolist. Hence, *LDC governments that favour such deals have a common interest in encouraging other countries to participate in auctions in which resources are sold in return for infrastructure*.

Over time countries can reasonably hope to build local expertise in the business of resource extraction, and also sometimes develop upstream and downstream industries. These objectives can therefore be legitimate requirements placed on resource extraction companies, although any such requirements are no stronger than the ability of government to monitor compliance. There is a danger that WTO rules might restrict the ability of governments to insist on local content procurement rules as an extension of general provisions to this effect. LDC governments should collectively resist such rules on the grounds that resource-rich, low-income countries face a distinctive need to diversify their economies. Local content procurement rules are not, therefore, simply a bias against international competition, but a possible strategy for an objective of diversification which is distinctive and appropriate.

Guarding against local violence and environmental damage

Both the Niger Delta and the Gulf of Mexico demonstrate the potential social and environmental risks involved in resource extraction. These risks are greatest in LDCs. It is important to recognise that while resource extraction companies have an interest in managing these risks, their interest is not coincident with that of the government. Two sets of principles are likely to be important.

One is that the full costs of environmental damage should be borne by the company. This principle is important because only then has the company a proper incentive to keep damage to a realistic minimum. Clearly, resource extraction companies do not have an interest in this principle. In the USA the judicial system provides this incentive, which is why the BP oil spill has been such a disaster for the company. But where judicial systems function less well, companies are not credibly faced by the full costs. Remedying deficiencies in local legal systems can only be a long-term prospect. *In the meantime, there may be scope for establishing international and independent adjudication. The BP oil spill provides an ideal context for LDC governments to get this issue on the global agenda.*

The other principle is that to the extent politically possible, the public revenues from resource extraction should accrue centrally to the government rather than to the locality of resource extraction. The centralisation of revenues permits their more equitable national distribution than if resource-rich localities are privileged. Again, resource extraction companies do not have an interest in this principle: generally, they would prefer public revenues to accrue to the locality in which they operate so as to minimise local opposition. However, the centralisation of revenues has historically often been associated with a heightened suspicion that they are being misappropriated, and as a consequence LDC governments face a credibility problem with the inhabitants of resource-rich localities. *LDC governments, therefore, have an interest in developing international mechanisms of transparency which build confidence in local populations that revenues are being well-used.*

Guarding against corporate corruption

Governments are dependent upon individual officials and ministers to negotiate deals. Companies can gain immensely by bribing these individuals. This gives rise to an 'agency problem' for LDCs. While widely recognised, to date it has been addressed by a variety of *ad hoc* international initiatives. One such is the Extractive Industries Transparency Initiative, started in 2003 and now with over thirty signatories among the governments of resource-rich countries, indicating recognition of concern for the problem. It aims to counter corruption in contracts by requiring companies engaged in resource extraction to report all their payments, country-by-country, forcing illicit payments into the open. Another initiative has been the pan-OECD anti-bribery legislation which has made it a criminal offence for an OECD-based company to bribe government officials anywhere in the world in order to win a contract. One consequence of this OECD legislation has been the rapid emergence of a two-stage system of negotiations for the rights to resource extraction. In the first stage a company which is either too small to face scrutiny, or not OECD-based, negotiates with government. In the second stage, this company on-sells the rights to a major OECD company that has the technology and finance to undertake exploitation. A third and related international initiative has been to co-ordinate the laws relating to money laundering. A fourth initiative has been the Kimberley Process which has curtailed illegal international transactions in diamonds through certification of the source of origin. The Government of Nigeria has recently proposed that an equivalent system of certification be put into place to curtail the large-scale theft of crude oil from the Niger Delta. The latest initiative is the Lugar-Cardin Amendment, now enacted into US law, whereby all companies listed on the New York stock market engaged in resource extraction must report all payments made associated with contracts in considerable detail. Potentially, such legislation could so discourage the major companies from entering into prospecting contracts with the governments of LDCs that the only companies left as partners for governments would be cowboy operations.

Given the impediments to *ad hoc* international co-operative initiatives, this plethora of international responses is evidence of the need for a more systematic international approach. These initiatives could potentially be subsumed and made more effective by bringing corruption in resource extraction contracts under the clear remit of the WTO. For example, the anti-bribery legislation that the OECD now requires of its membership could be a requirement of WTO membership, as could compliance with the equivalent of the Lugar-Cardin amendment to the recent US financial reform act. The emergence of major resource extraction companies based outside the OECD has made the WTO the more appropriate institution for international co-operation on this matter. Countering corruption in international contracts faces an acute weakest link problem. While ever some companies are in jurisdictions where bribery is permitted these companies will tend to win the contracts. Knowing this, individual governments that are the homes of resource extraction companies will be reluctant to act in isolation.

In principle, there is no reason why compliance by resource extraction companies with payments integrity could not be built into WTO rules of membership. After all, the only conduct which is being discouraged is recognised as criminal in virtually all jurisdictions. Hence, it is not a matter of adopting new standards, but simply of enforcing standards which are already incorporated into legal systems globally. One major advantage is that this would throw the burden of enforcement back on to the governments that were the homes of resource extraction companies, rather than on the countries — often LDCs — in which they operate. A further advantage of using the WTO is that it is an organisation in which LDCs are represented, unlike the organisations which to date have been responsible for these initiatives, such as the OECD, and the US Congress. *LDC governments have a much stronger interest in countering corruption in resource contracts than OECD governments. International approaches, while potentially effective, therefore depend upon LDC leadership.*

Saving and investing

Revenues from the extraction of natural resources are generated by depleting natural assets. This depletion should therefore be offset by the accumulation of other assets. While models of international best-practice are often helpful, they must be appropriate. Currently, several LDC governments are following the practice of Norway and Kuwait, which have established funds for future generations. While this is sensible for Norway and Kuwait it is inappropriate for LDCs. Both Norway and Kuwait have abundant invested capital per worker. In contrast, one of the defining features of LDCs is that they are short of capital. Hence, whereas it is appropriate for Norway and Kuwait to save their oil revenues in foreign financial assets, it is more sensible for LDCs to save by investing in their own country. Yet the inappropriate international 'best-practice' has sometimes been foisted on LDCs. For example, the Chad—Cameroon pipeline project led to the creation of a Future Generations Fund which invested a proportion of the revenues from Chad's oil into foreign financial assets. Given the lack of public capital in Chad, this was unlikely to be the most appropriate use of these revenues.

Not only is the Norwegian-Kuwaiti model inappropriate for LDCs in terms of what assets are acquired, it is also inappropriate in terms of how much should be saved. A rich country that is depleting its natural assets should aim to save all the revenues and merely consume the income from these savings. That way it uses resource depletion to increase its 'permanent income'. This approach is implicit in the standard International Monetary Fund recommendation for how much to save out of resource revenues. However, for an LDC the right objective is not to raise 'permanent income' but to speed up the process of convergence to global standards of consumption. In part this is achieved by using the revenues for investment, but resource revenues can also directly boost consumption towards global standards and this is a sensible use for an LDC. That these two uses of resource revenues are both legitimate in an LDC creates an inevitable tension between investment and consumption. Typically, the sensible range of saving out of resource revenues for an LDC will be 30 to 70 per cent: much higher than saving out of other forms of tax revenue but substantially less than the 100 per cent implied by overly simple models of 'permanent income'. International models of 'best-practice' such as that adopted by Norway are, however, highly influential. *The governments of LDCs have an interest in getting international recognition that the savings rates and asset choices appropriate for them are distinctive.*

Implications for managing 'Dutch disease'

The onset of resource exports can easily lead to 'Dutch disease', whereby the production of other internationally tradeable goods becomes uncompetitive. As a result, people employed in these activities can lose out, and the economy is undiversified and so dangerously exposed to commodity shocks. One conventional approach to avoiding Dutch disease has been to use much of the revenues to accumulate foreign financial assets. However, as discussed above, as a continuous strategy this is largely inappropriate for an LDC: the country should be accumulating assets domestically rather than abroad. The accumulation of foreign assets can nevertheless be important during commodity price booms to prevent spikes in the exchange rate which could bankrupt non-resource exporters. Whether this spending on domestic investment gives rise to Dutch disease depends upon how, specifically, it is used. Typically, the non-resource export sector of LDCs faces high costs due to inadequate infrastructure for transport and power. By investing in these sectors the government can fully avoid Dutch disease. More ambitiously, domestic investment can pump-prime new export activities. That Dutch disease is not inevitable is illustrated by the contrast between Nigeria and Indonesia following their oil discoveries. The Nigerian cocoa industry went into severe decline, but over the same period Indonesia developed a cocoa industry and rapidly became a major exporter.

Conclusion

Over the next decade the extraction of natural resources from LDCs is likely to expand both in value and in volume. It is a unique opportunity for LDCs, but the history of resource extraction is not encouraging: harnessing the opportunity requires a capacity to resist pressures of both corruption and populism. Neither the interests of the OECD countries, nor those of the emerging market economies, are the same as the interests of the LDCs. Nor are the available models of OECD 'best-practice' particularly appropriate for LDCs.

There is thus a strong case for LDC governments to adopt voluntary norms that are pertinent for developing countries and are independent of interest groups. Until recently no such norms were available. Now, however, there are two complementary voluntary international standards, the Extractive Industries Transparency Initiative (EITI), and the Natural Resource Charter. The EITI is a multi-stakeholder international organisation that focuses exclusively on the transparency of revenues. Currently, around 30 governments are using it as a commitment technology, and as a mutual commitment device for governments and companies LDCs should find it useful. The Natural Resource Charter is an information guide on the decisions involved in harnessing natural resources for development. It is managed by an independent Oversight Board with members from Africa, Asia, Latin America and the Middle East, and is chaired by Ernesto Zedillo (former President of Mexico). The Board is supported by a Technical Group headed by Michael Spence (Nobel Laureate in economics). It sets out the entire decision chain involved in harnessing natural resources for development on a website (www.naturalresourcecharter.org) intended for governments, citizens and companies. Its 12 Precepts propose standards for resource extraction companies, the governments which are the home of such companies, and the governments of the countries in which resources are extracted. The Charter has been endorsed by the African Development Bank. While not designed for commitments, it is appropriate for LDCs and their governments may find endorsement of it useful to indicate in general terms the policies and standards they expect to follow.

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Selected Recent Meetings/Workshops supported by ITRC

9 March 2011: Consultative Meeting on Trade Effects of Rules on Procurement for Commonwealth ACP members held in London, UK.

8 March 2011: Consultative Meeting on Making Trade in Services Supportive of Development in Commonwealth Small and Low-Income countries, held in London, UK.

16-18 February 2011: Conference on Regional Integration titled 'Caribbean Community and the Commonwealth: Collective Responsibility in the Twenty First-Century', held in Kingston, Jamaica.

17-19 December 2010: 3rd South Asian Economic Summit titled, Regional Economic Integration, Climate Change and Food Security Agenda for the Decade 2011-2020, held in Kathmandu, Nepal.

25-26 November 2010: Regional Seminar on Trade Policy for Commonwealth Caribbean Parliamentarians, held in St. Kitts & Nevis.

24-26 November 2010: International Dialogue titled, Exploring a New Global Partnership for the LDCs in the Context of the UN LDC IV, held in Dhaka, Bangladesh.

15-17 November 2010: Workshop on Competitiveness Strategies with Special Reference to African and Indian Ocean Small States, held in Port Louis, Mauritius.

3 November 2010: Pre-LDC IV African Civil Society Forum, held in Arusha, Tanzania.

16 September 2010: WTO Public Forum Session on Africa in international trade: impediments and opportunities, in Geneva, Switzerland.

28 June 2010: Consultation Meeting on WTO Accession, held in Brussels, Belgium

26 June 2010: Workshop on Policy Barriers in Intraregional Trade in South Asia, held in Dhaka, Bangladesh

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