COMMENTARY

Natural resources and development: which histories matter?

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This volume is animated by a concern that history be taken properly into account in the design of development policy. Paul Warde's chapter on the history of energy and natural resource use in Europe reverses the lens. Scholars have only recently coined the term 'resource curse', and understood the extent to which, in poorer countries over the past few decades, large-scale exploitation of natural resources has had malign economic and political consequences. Warde tell us that this new understanding is already changing the ways in which economic historians interpret the past:

To an earlier generation of economic historians, it was self-evident that modern growth was predicated on favourable resource endowments and the technology to exploit them. The precocious English use of coal and development of associated technology such as the steam engine represented the exemplary case. Yet more recent developments have shaken that belief. It has been a striking characteristic of recent economic development and the international division of labour that economies heavily dependent on natural resource exploitation and export suffered from sluggish economic growth. One can speak now of a 'resource curse'. Hence relative natural resource abundance may now be viewed as detrimental to development ... while relative scarcity may actually prompt benefits through 'induced innovation' and substitution to less resource-dependent activities. (Warde, this volume, p. 221)

But how far does the experience of poorer countries in recent decades justify a general re-evaluation of – and scepticism about – the benefits of natural resource exploitation? The 'resource curse' is neither natural nor inevitable. It is rather the contingent outcome of a set of economic and political conditions that happen to have afflicted many poorer countries particularly intensely over recent decades, especially the period since around 1970. These conditions include in particular: (a) very high international income inequality between most (rich) resource importing nations and most (poor) resource exporting nations; (b) the

fact that certain types of natural resource exports ('point resources') have generated very high rents ('excess profits'), that have in turn generated political competition and largely have accrued to people who wield political power in the exporting nations; and (c) the fact that the polities of many of the exporting nations were already fragile for other reasons.

Explaining the resource curse¹

It is reasonable to be concerned that, when a country begins to export large quantities of phosphates (or coltan, copper, diamonds, oil, natural gas etc.), its national currency is likely to appreciate in value on the strength of dollar exports earnings, making life very difficult for other actual or potential export industries and thereby leaving other sectors of the economy vulnerable to competition from 'cheap' imports. Countries can become locked in economically to a dominant resource export activity. But these are not normally critical problems: export earnings can be managed to promote the growth of other sectors. This so-called 'Dutch disease' mechanism provides no general justification for leaving the resources unexploited underground – that would be a bit like arguing that any gift or social security transfer to poor families inevitably will worsen their poverty by reducing their incentive to work, when in reality it could help make them fit and healthy enough to work, enable them to pay the bus fare to travel to where the jobs are, ensure that they can set up the childcare arrangements needed for regular employment, etc.

The phrase 'Dutch disease' dates from the discovery of large natural gas fields in Dutch territorial waters in the 1970s. Despite concerns expressed at the time, the Dutch economy was not seriously afflicted in the long term. Yet other countries came to be so visibly damaged by natural resource exploitation that we now talk of a 'resource curse', and apply it as much to their polities as to their economies. What happened to convert potential blessings into curses? Let us begin with a distinction between 'natural resources' in general (including fertile soil and balmy climates) and what are now usually labelled 'point natural resources', i.e. resources like oil, gas, minerals and deep shaft diamonds.² Point natural resources are concentrated in one place, typically mined or pumped up in large quantities by a small number of organizations that have made major long-term investments. The extraction of point natural resources is ripe for more or less monopoly control. And in practice, this monopoly control is exercised either by parastatal companies or by private enterprises that work in close association with government. Why do governments have so many fingers deep in these pies? First because they can: the logistics of extraction, processing and transport and the major long-term character of extraction investments make it easy for governments to get in on the act in one way or another. More important, the motivations to do so are very powerful. Large concentrated operations that involve major flows of money and the extraction and export of the national

patrimony seem to cry out for the state to extend a grasping hand. And the material returns from bringing political and governmental power to bear on this sector can be enormous, because the levels of profitability – and therefore the scope to skim off super-profits (*rents*) – can be very high. The larger the natural resource extraction sector compared with the rest of the economy, the higher are the incentives for those in power to use it to extract such rents. So understood, there is no mystery about why Norway has not succumbed to the resource curse. It is not only that Norway's efficient, democratic political and administrative institutions were deeply 'grounded' long before the oil and gas was discovered. In addition, the rents that might be appropriated from its energy industry comprise only a small fraction of the national economy. Because of high extraction costs from deep under the North Sea, profitability per barrel is much lower than in, for example, Libya or Saudi Arabia. And other productive activities dominate the Norwegian economy.

To more fully understand the political dynamics of the contemporary 'resource curse', we need to bring in a little schematic economic history. Until the 1950s, industrialized ('developed') countries imported large quantities of (mainly tropical) agricultural commodities from poor countries (sugar, coffee, tea, cotton, rubber, cocoa, groundnuts, etc.), but collectively were largely self-sufficient in point natural resource commodities, especially in energy resources (mainly coal, with significant domestic oil production in the United States). The rapid reduction in international transport costs from the 1950s made possible a growing dependence on minerals extracted from many parts of the poor world and, in particular, oil from the Middle East (and Venezuela). It was only in this post-war period that 'the South' became a major source of point natural resource commodities. The business was mostly new, and mostly very profitable. Global demand has continued to expand, and grew especially fast since the turn of the century when the Chinese and other Asian economies became big importers. Time lags between identifying new reserves and bringing them on stream are long. Processes fuelled by oil, gas and their derivatives are so economically efficient that the incentive to use or develop substitute energy sources has been limited. The coordinated supply restrictions first introduced by OPEC in 1973 complete the big picture: a very large proportion of export receipts from oil and gas produced in poor countries – and, more variably, from other minerals – have represented *economic rents*, i.e. returns well in excess of actual production costs. Even today it costs only a few dollars to pump up a barrel of oil from under the Libyan or Saudi deserts and deliver it for export. Market prices are many multiples of that. The rents from oil, gas and mineral production have been variable over time, but in those regions of the world lacking highly developed agricultural, industrial or service sectors, they have in recent decades typically accounted for a large proportion of total national income.³ This proportion has tended to grow over time, especially in (West) Africa, which has become a major oil, gas and mineral-producing region relatively recently. And governments and

political elites have been busy helping themselves to these rents, sometimes employing armed force against one another, generally using some of the loot to buy off potential opposition leaders, and nearly always using a good part of it to arm themselves.

There is still more research to be done before we can talk confidently about the precise causal mechanisms underlying the resource curse. Researchers are still trying to fathom exactly why countries that began to exploit new point natural resources on a large scale since the 1970s are likely to have experienced even less economic growth than they could have expected without this 'gift', and to have regressed toward – or failed to move away from – exclusive, authoritarian government, arbitrary policy-making and excessive military spending. There are many potential pathways to these perverse outcomes; we have little detailed insight into which of them really matter, and how they interact. And we have to be very careful to point out that all these statistical patterns are not iron laws. We know what is likely to happen when countries become exporters of point natural resources, but, for individual countries, we cannot predict the outcomes with certainty.

Implications

From this perspective, we can be optimistic that Brazil – a big middle-income country with an institutionalized democracy – will make relatively 'good' use of its newly discovered oil and gas reserves.⁴ We cannot be as optimistic about countries like Ghana and Uganda. They are characterized by much the same conditions that have generated resource curses elsewhere over the last sixty years: poverty; fragile polities; and rents from point natural resource extraction potentially large enough to reshape the political and economic landscape. But that combination of circumstances is historically specific. It was not widely found, for example, in the European historical sequences that Warde discusses, where energy resources were not easily monopolizable, and did not generate very large rents. Neither is that combination guaranteed to persist in the contemporary world for more than a few years into the future. The current excitement over the potential for extracting natural gas from shale is likely much overblown. But it is possible that, within a decade, the major energy importing regions of the world – North America, Western Europe and China – might be producing enormous quantities of natural gas very cheaply at home.⁵ Were that to happen, the rents generated by oil and gas extraction elsewhere in the world might shrink, and that particular resource curse might shrivel.

In recognizing with Warde that the political salience of particular natural resource endowments is historically contingent, it is also important to apply the same logic to understand how institutions emerge (or not) to manage natural resource wealth. In his introductory paragraph cited above, Warde goes on to say:

Hence relative natural resource abundance may now be viewed as detrimental to development ... while relative scarcity may actually prompt benefits through ‘induced innovation’ and substitution to less resource-dependent activities. A belief in the fundamental substitutability of factors of production in the long-term has shifted attention away from resources as a major developmental issue for many economic historians. If factors are relatively easily substitutable, then relative backwardness must be explained by variant institutions or preferences. (Warde, this volume, p. 221)

Two rather large conclusions are embodied in this short quotation. We need to be wary of both. One is summarized in the final sentence quoted: since natural resource endowments per se allegedly explain less of the historical variation in economic growth rates than was previously believed, we should give more weight to an alternative perspective: the driving role of institutions. Like Warde, I am suspicious for several reasons. The first, as I have argued above, is that the prior conclusion reached by some researchers about downgrading the general historical significance of natural resource endowments is not well founded. The political economy of a given state’s primary source of revenue continues to matter, especially so if that revenue comes from a resource readily able to be controlled by unaccountable elites.

A second lies in the ambiguity of the notion of ‘institutions’ as drivers of economic growth, and the impossibility, to date, of testing that proposition such that it can be distinguished from some version of ‘politics matters’ (Toye 1995, Woodruff 2000). The most widespread operational definition of the proposition that ‘institutions drive economic growth’ is some variant of the proposition that it is property rights that do the work (Evans 2007). Yet this too is deeply problematic. The concept of ‘property rights’ is amorphous. Some property rights are always with us. It is not clear that they can unambiguously be added up such that we can generally aggregate them on a ‘more-less’ scale, or that any particular set of them are implicated in causing economic growth (Haggard et al. 2008). In short, if we need to understand the political salience of natural resource wealth historically, so too do we need to historicize the mechanisms by which a prevailing set of ‘institutions’ for managing it emerged (or failed to emerge).

This point takes us finally to Keith Breckenridge’s chapter on mining in Africa. I very much like the content, though I remain to be fully convinced that it entirely demonstrates its title claim: namely, that contemporary African economies are (excessively) dependent on mining because this is the only economic sector that has enjoyed ‘strong’ property rights. Breckenridge explains how the mining sector often has been very privileged in Africa, including through major government investment in physical infrastructure. However, he also talks of extensive nationalization, which is hardly a correlate of strong property rights (but which nonetheless has been deployed rhetorically and strategically by incumbent elites to attract foreign investors and ensure that elites retain sole control over the lucrative rents that the mines generate). The history

of mining in Africa is certainly driven by rents, including the political privileges that they can buy and the political competition and conflicts that they generate. It is not clear however, at least from the perspective of policy implications, that it is a story about property rights and institutions, alone; it is also a story in which such 'property rights' and 'institutions' are a product of privileges granted exclusively to those international firms able to wield sufficient domestic political influence. As such, historical scholarship can help illuminate the conditions under which such influence is, and is not, able to be exerted and resisted. Hence, there is no useful sense in which we can explain the expansion of mining in Africa since the turn of this century in terms of the weakness of property rights in other sectors of the economy. The drivers lie – as I suspect they always did, and as Breckenridge's analysis helps illuminate – more in the global political economy than in domestic institutions.

Concluding comments

Both Breckenridge and Warde frame their interpretations of economic history in terms of the institutionalism that has come to dominate the study of contemporary economic development, even as they seek to grapple with the historically and politically contingent ways in which particular forms of natural resource wealth have influenced, and been influenced by, the prevailing institutions for managing that wealth. Sometimes the institutionalist label represents more a change of packaging than of substance. Where it has substance, this often constitutes an unwarranted faith in the power of some ambiguous concept labelled 'property rights'. Economists should indeed learn from history. But history is not a pristine discipline unaffected by contemporary developments in economics and other social sciences. As in the real world of international trade, intellectual imports, exports and re-exports among disciplines need to be encouraged but also monitored for potential hazards.

References

- Atkinson, Giles and Kirk Hamilton (2003). 'Savings, growth and the resource curse hypothesis', *World Development* 31(11): 1793–808
- Bornhorst, Fabian, Sanjeev Gupta and John Thornton (2008). 'Natural resource endowments, governance, and the domestic effort: evidence from a panel of countries', Working Paper, No.WP/08/170, IMF
- Brunnschweiler, Christa N. (2008). 'Cursing the blessings? Natural resource abundance, institutions, and economic growth', *World Development* 36(3): 399–419
- Bulte, Erwin H., Richard Damania and Robert T. Deacon (2005). 'Resource intensity, institutions and development', *World Development* 33(7): 1029–44
- Collier, Paul (2006). 'Is aid oil? An analysis of whether Africa can absorb more aid', *World Development* 34(9): 482–97
- Collier, Paul (2010). *The Plundered Planet: Why We Must – and How We Can – Manage Nature for Global Prosperity*, Oxford: Oxford University Press

- Collier, Paul and Anke Hoeffler (2005). 'Democracy and natural resource rents', Department of Economics: Mimeo, University of Oxford. <http://ducis.jhfc.duke.edu/wp-content/uploads/archive/documents/CollierHoeffler.pdf>
- Evans, Peter (2007) 'Extending the "institutional" turn: property, politics, and development trajectories', in Ha-Joon Chang (ed.) *Institutional Change and Economic Development*, Tokyo, New York, Paris: United Nations University Press, pp. 35–52
- Gervasoni, Carlos (2010). 'A rentier theory of subnational regimes: fiscal federalism, democracy, and Authoritarianism in the Argentine provinces', *World Politics* 62(2): 302–40
- Haggard, Stephen, Andrew MacIntyre and Lydia Tiede (2008). 'The rule of law and economic development', *Annual Review of Political Science* 11: 205–34
- Humphreys, Macartan, Jeffrey Sachs and Joseph Stiglitz (eds) (2007). *Escaping the Resource Curse*, New York: Columbia University Press
- Isham, Jonathan, Michael Woolcock, Lant Pritchett and Gwen Busby (2005). 'The varieties of resource experience: how natural resource export structures affect the political economy of economic growth', *World Bank Economic Review* 19(2): 141–74
- Jensen, Nathan and Leonard Wantchekon (2004). 'Resource wealth and political regimes in Africa', *Comparative Political Studies* 37(7): 816–41
- Knack, Stephen (2009). 'Sovereign rents and the quality of tax policy and administration', *Journal of Comparative Economics*, 37(3): 359–71
- Lederman, Daniel and William F. Maloney (2008). 'In search of the missing resource curse', Policy Research Working Paper, No.4766, World Bank.
- Neumayer, Eric (2004). 'Does the "resource curse" hold for growth in genuine income as well?', *World Development* 32(10): 1627–40
- Omgba, Luc (2009). 'On the duration of political power in Africa: the role of oil rents', *Comparative Political Studies* 42(3): 416
- Ross, Michael L. (2008). 'Oil, Islam, and women', *American Political Science Review* 102(1): 107–24
- Sachs, Jeffrey D. and Andrew M. Warner (1995). Natural resource abundance and economic growth, Discussion Paper, No.517, Harvard Institute for International Development
- Snyder, Richard (2006). 'Does lootable wealth breed disorder? A political economy framework', *Comparative Political Studies* 39(8): 943–68
- Stijns, Jean-Phillipe (2006). 'Natural resource abundance and human capital accumulation', *World Development* 34(6): 1060–83
- Torvik, Ragnar (2009). 'Why do some resource-abundant countries succeed while others do not?', *Oxford Review of Economic Policy* 25(2): 241–56
- Toye, John (1995). 'The new institutional economics and its implications for development theory', in John Harriss, Janet Hunger and Colin M. Lewis (eds), *The New Institutional Economics and Third World Development*, London: Routledge, pp. 49–68
- Woodruff, David M. (2000). 'Rules for followers: institutional theory and the new politics of economic backwardness in Russia', *Politics and Society* 28(4): 437–82.

Notes

- 1 There is an enormous literature on this topic. See for example Atkinson and Hamilton (2003), Bornhorst et al. (2008), Bulte et al. (2005), Collier (2006), (2010), Collier and Hoeffler (2005), Gervasoni (2010), Humphreys et al. (2007), Jensen and Wantchekon (2004), Knack (2009), Neumayer (2004), Omgba (2009), Ross (2008), Sachs and Warner (1995), Snyder (2006), and Torvik (2009).

- 2 Stijns (2006) insists on the importance of this distinction, which was first formalized in Isham et al. (2005). Some scholars fail to do so (e.g., Brunnschweiler 2008, Lederman and Maloney 2008).
- 3 Data on estimated rents are now available from the World Bank.
- 4 Indeed, one could argue that the world community has staked a considerable short-term bet on this outcome, having had the confidence to stage both the 2014 World Cup competition and the 2016 Olympic Games in Brazil.
- 5 See, for example, *The Economist*, 13 March 2010.