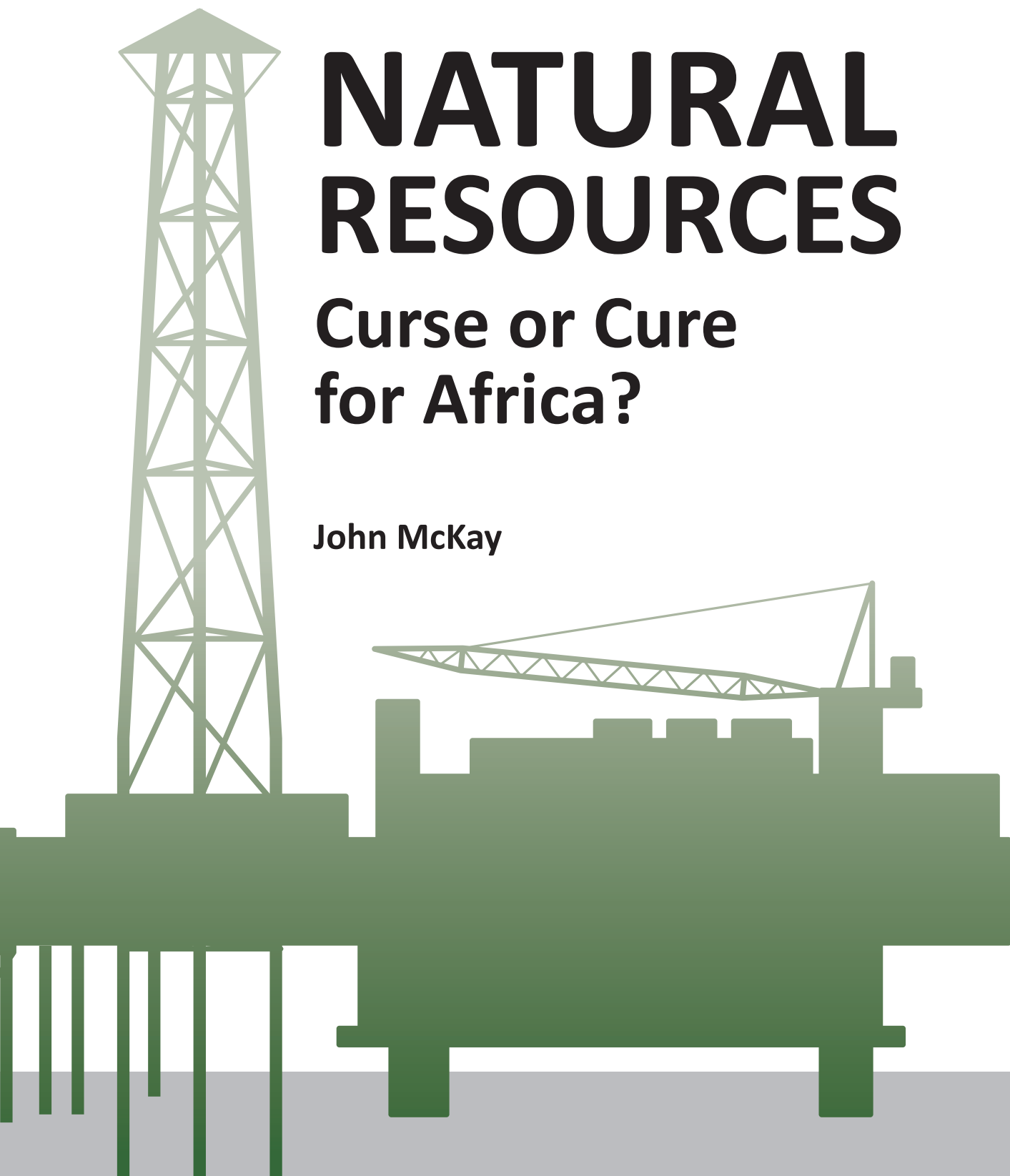


DISCUSSION PAPER 5/2012

NATURAL RESOURCES

Curse or Cure for Africa?

John McKay



Strengthening Africa's economic performance



NATURAL RESOURCES: Curse or Cure for Africa?



Contents

Abstract	3
Introduction.. .. .	4
Resource Endowments and Patterns of Development	4
Explanations of these Empirical Patterns: A Critique	5
The Rise of Asia and the Demand for Resources: A New Era for Africa?	11
Designing Policies to Avoid the Resource Curse	14
References	16

About the Author

Professor John McKay is a Partner in Analysis International in Melbourne, Australia and Honorary Professor in Development Studies at Deakin University and in International Studies at RMIT University.

Published in July 2012 by:

The Brenthurst Foundation

E Oppenheimer & Son (Pty) Ltd

PO Box 61631, Johannesburg 2000, South Africa

Tel +27-(0)11 274-2096 · Fax +27-(0)11 274-2097

www.thebrenthurstfoundation.org

All rights reserved. The material in this publication may not be reproduced, stored, or transmitted without the prior permission of the publisher. Short extracts may be quoted, provided the source is fully acknowledged.

Layout and design by Sheaf Publishing, Benoni.

Abstract

The rapid growth of Asia over the last few decades – and the more recent dramatic rise of China and India in particular – have resulted in significant increases in the demand for raw materials of various kinds. Commodity prices are now at historically high levels, and the terms of trade being enjoyed by resource-rich countries are extremely favourable. This has set off a frenzy of exploration and mining activity around the world, and Africa is very much part of this, in what has been termed the *New Scramble for Africa*. Yet, with the exception of a very small number of countries, this financial bounty has not been translated into increased rates of development. In the vast majority of cases, resource producers have almost always performed much worse than nations

without significant natural resources. This stark reality has given rise to much scholarship on what has often been termed ‘the resource curse’, seeking to explain this seeming paradox. Yet the existence of a small number of success stories, both in the developing and developed world, suggests that the relationships are not completely ironclad. With the right kinds of policies it is possible to avoid the curse and translate the increased income flows into lasting benefits. The aim of this paper, which takes a global perspective but gives special attention to the African case, is to understand just what kinds of policy interventions have proved successful and suggest how a range of African nations might still take advantage of their natural endowments.

Introduction

The rapid growth of Asia over the last few decades – and the more recent dramatic rise of China and India in particular – have resulted in significant increases in the demand for raw materials of various kinds. Commodity prices are now at historically high levels, and the terms of trade being enjoyed by resource-rich countries are extremely favourable. This has set off a frenzy of exploration and mining activity around the world, and Africa is very much part of this in what has been termed the *New Scramble for Africa* (Lee, 2006; Stephan & Power, 2012; Weinstein, 2008). Yet, with the exception of a very small number of countries, this financial bounty has not been translated into increased rates of development. In the vast majority of cases, resource producers have almost always performed much worse than nations without significant natural resources. This stark reality has given rise to much scholarship on what has often been termed the ‘resource curse’, seeking to explain this seeming paradox. Yet the existence of a small number of success stories, both in the developing and developed world, suggests that the relationships are not completely ironclad. With the right kinds of policies it is possible to avoid the curse and translate the increased income flows into lasting benefits. The aim of this paper, which takes a global perspective but gives special attention to the African case, is to understand just what kinds of policy interventions have proved successful and suggest how a range of African nations might still take advantage of their natural endowments.

But it is not just the policies of the resource exporting nations that are crucial: the approaches adopted by the resource importers are just as vital, or even more so. This insight has promoted some to argue that the policies now being adopted towards

regions such as Africa by China and India are much more benign than those of the Western nations – and their private companies – hence Africa now has a much greater chance of gaining lasting benefits from its minerals exports. This claim will also be evaluated here.

With the right kinds of policies it
is possible to avoid the curse and
translate the increased income
flows into lasting benefits

The paper is divided into four major sections. First, some of the empirical relations between resource endowments and development performance are summarised, looking in particular at those relationships measured in conventional statistics. Secondly, I try to move beyond what I argue are often spurious – or at the very least simplistic – statistical relationships and search for more sophisticated and meaningful theoretical frameworks and causal mechanisms. The mainstream econometric methods that have been used to explore the phenomenon of the resource curse, I suggest, are inadequate for the task at hand, and other methods and frameworks are needed. Thirdly, the policies and practices of Asian importers are examined critically in order to determine whether or not African resource-rich countries have really entered a new and more beneficial trade era. Finally, the conclusions from the earlier parts of the paper are drawn together in the form of suggestions for more appropriate policy approaches for African producers.

Resource Endowments and Patterns of Development

Evidence for the ‘resource curse’ hypothesis has been presented from both a global perspective and a series of case studies, mainly authored by economists. Seminal papers by Sachs and Warner (1995; 2001) brought the generally negative relationships between resource exports and economic growth

– as well as the small number of exceptions – to the attention of the academic community, and generated much follow-up research. Their studies provide a useful starting point for this discussion. These have been summarised in two extensive review articles by Andrew Rosser (2006) and Frederick van der Ploeg

(2011) that provide useful starting points for any discussion of the broad – but in my view often superficial – empirical evidence.

At the general global level, van der Ploeg (2011: 370–71) has illustrated a negative relationship between growth performance and the share of natural resources in merchandise exports, and he also

Out of 65 resource dependent developing countries, only four were able to generate long-term investments of more than 25 per cent of GDP

correlates resource dependence with higher levels of macro-economic instability. Similarly, Gylfason (2001) has shown that out of 65 resource dependent developing countries, only four were able to generate long-term investments of more than 25 per cent of GDP and an average GDP growth rate of more than 4 per cent. These were Botswana, Indonesia, Malaysia and Thailand. The three Asian nations managed to diversify their economies and build significant manufacturing sectors, but even their performance was less impressive than that of many of their resource-poor neighbours. These results echo the findings of earlier work by Gelb (1988) and studies using very large international data sets by Gylfason, Herbertsson & Zoega (1999) and Leite & Weidmann (1999). Many of these general studies

also hint at negative statistical relationships between resource dependence and a number of other variables that are also related to growth performance: these have included investment in education (Gylfason, 2001), savings rates (Atkinson & Hamilton, 2003), agricultural development and export diversification (Nankani, 1979), and the growth of manufacturing exports (Wood & Berge, 1997).

Similar general relationships have also been illustrated through selected case studies. In Africa a number of commentators have lamented the poor development performances of large resource-rich nations such as Nigeria and the Democratic Republic of Congo and contrasted them with other more successful resource-rich countries such as Botswana (for example, Bevan, Collier & Gunning, (1999); Fosu, (2011); Sala-I-Martin & Subramanian, (2003).

There are of course several shortcomings in such studies, and in particular those based on what is often statistical manipulation of large data sets. Correlation, as some of the authors themselves point out, is not the same as explanation, therefore one must dig much deeper to understand the processes at work. Also, the ways in which the various variables are specified are critical: for example, analyses involving different measures of resource dependence in an economy produce strikingly different results. Clearly, the real need is for more detailed work that has a much greater chance of arriving at plausible explanations that can be the basis of a more sophisticated set of theories, and it is to these kinds of studies that I now turn.

Explanations of these Empirical Patterns: A Critique

It is essential to dig deeper than is possible with large-scale econometric exercises in order to understand the processes at work and design effective policy interventions, and in this part of the paper the attempts to do this are summarised and evaluated. The many studies that have been produced are drawn together under a series of headings that capture the key processes involved. As will be seen, there have been some important differences of opinion regarding the essential nature of the mechanisms that have in most cases

resulted in a negative relationship between resource endowments and processes of development.

Resources, Foreign Exploitation and Price Volatility

In developing countries almost all large-scale resource projects are controlled by foreign companies, and the output is overwhelmingly exported, hence a number of studies have concentrated on the arrangements under which these external contracts have been

organised, and the impact that these terms have had on the host nation. There has also been much concern with the impact of the day-to-day operations of the companies, the social and political interactions between company workers and local communities and the environmental consequences.

Particular attention has been given to the activities of the multinational oil companies and their sub-contractors. African case studies mostly focus on the two major oil exporting countries: Nigeria and Angola. Special attention has been paid to the Niger Delta since the execution of Nigerian environmental activist Ken Saro-Wiwa. Over the years non-governmental organisations such as Human Rights Watch have painted a very alarming picture, pointing to a range of serious problems: the economic and environmental consequences of regular oil spills which have devastated local farming and fishing activities; the loss of property, inflation, and the breakdown of the region's social fabric and the like, have heightened community tensions. In addition, the strong alliances between the oil companies and the governments, regardless of successions, have led to the continued brutal repression of civilian protests.

A recent study commissioned by the European Union (EU) and undertaken by Chatham House (Baumüller *et al.*, 2011) has given even greater weight to these concerns. The authors stressed some key findings:

- The negative impacts of the oil industry are a major concern in various parts of Africa. Oil spills and the practice of gas flaring – both of which are very common in the Niger Delta – have had devastating impacts on local economies, societies and environments.
- Part of the problem lies with the oil companies, whose attempts to implement more socially responsible practices are seen as inadequate and short-sighted. Transparency and accountability are lacking, as is engagement with local communities.
- But governments also lack the political will to enforce local laws and regulations.
- Major importers of oil from sub-Saharan Africa such as the EU should do what they can to promote greater sustainability and equity in the industry.

- Current efforts to promote greater revenue transparency are important but there must also be better revenue management and a greater emphasis on preventing trade in oil sourced illegally or from conflict areas.
- There is a need for increased cooperation between governments, oil companies, civil society and local communities.

Other concerns relate to the ways in which oil revenues come to the host governments, and the impact of the highly volatile value of these receipts. Shaxson (2005) suggests that the unpredictability in the size of oil revenues flowing to African governments – with recurring periods of boom and bust – creates serious problems. Planning is extremely difficult when income streams are almost impossible to predict. Spending undertaken when oil prices are high and finance is plentiful is difficult to rein in, especially for governments whose public legitimacy rests on the dispersal of revenues from an oil bonanza.

**Volatility is a quintessential
feature of the resource curse**

Also, governments often take on international debt when prices are high and repayments are comfortable, but price-falls can give rise to serious difficulties. This is compounded by the tendency for lenders to charge high interest rates to cover them from the inherent risks associated with loans to governments with such volatile income streams. But the impact is greatly magnified by the ways in which contracts are generally written between governments and oil companies. In almost all cases contracts guarantee a steady, constant return to the companies involved while host governments are forced to bear almost all the brunt associated with price volatility, and in most cases these governments are poorly equipped to deal with these problem. Similarly, van der Ploeg & Poelhekke (2009) argue that volatility is a quintessential feature of the resource curse, suggesting that the negative effects of such revenue instability tend to drown out any possible gains from export receipts. Analysts such as Shaxson have suggested ways of avoiding this serious but largely neglected pitfall, and

I will return to some of these ideas towards the end of this paper.

Dutch Disease

The term ‘Dutch disease’ has sometimes been used in a generic sense to convey the overall tendency of resource-rich nations to perform badly on a whole range of development indicators, and in that sense it has become partly interchangeable with ‘resource curse’. But strictly speaking this is a much more restricted mechanism related to the tendency for large resource revenues to push up the value of national currencies, often with serious results. The term was coined by *The Economist* in 1977 to describe the economic, social and political problems flowing from the discovery of oil and natural gas in the Netherlands and in its coastal waters. Similarly, one result of Britain’s bonanza from its North Sea oil and natural gas resources was that its currency appreciated rapidly, making much of its manufacturing industry uncompetitive on the world market.

In the African context it seems that Dutch disease – narrowly defined – is less important than other factors in explaining the poor performance of most resource-rich nations

This mechanism has been cited by many researchers as the major cause of the resource curse and as such has generated a great deal of scholarship. Studies by van Wijnbergen (1984), Krugman (1987), Rowthorn & Wells (1987), Matsuyama (1992), Sachs and Warner (1995) and Gylfason, Herbertsson & Zoega (1999) have all supported the frequent occurrence of such a process as have a number of more theoretical and econometric analyses (van der Ploeg, 2011). However there is still debate about the precise mechanics involved.

Palma (2005; 2008) has suggested that de-industrialisation is a normal phenomenon for countries that have made some progress on the way to development, and he has identified three distinct relationships or mechanisms involved here, following an

initial rise in the relative importance of employment in manufacturing; a well-established ‘inverted-U’ relationship between manufacturing employment and income per capita; a declining relationship over time between income per capita and manufacturing employment; and, a similar decline over time in the income per capita at which the curve of the inverted-U turns down. Thus there is a general tendency as nations develop for their manufacturing sectors to increase in importance, for a time, before declining as incomes increase, and this de-industrialisation phase now seems to be occurring earlier and at lower levels of income. A number of countries, many of them in Asia, have not followed this trend, with countries such as Malaysia maintaining a manufacturing sector significantly higher than the global average. Dutch disease, as defined by Palma, is found in situations where the level of de-industrialisation is significantly greater than would be expected as the result of these ‘normal’ processes, and in most of these cases were resource-rich countries. Revenues from resources, Palma suggests, take the pressure off the national balance of trade, allowing a change of economic policy to emphasise this new source of national income and de-emphasise manufacturing – an option not available to most Asian countries, for example.

Similar arguments have been advanced by Auty & Gelb (2000), who suggest that whereas resource-poor nations – such as those in East Asia – have had no option but to become as efficient as possible and pursue competitive industrialisation strategies, resource-rich countries have less pressure on them, and contests for rents generate factionalised and predatory states with distorted economies.

In the African context it seems that Dutch disease – narrowly defined – is less important than other factors in explaining the poor performance of most resource-rich nations. Most of the resource-rich African countries have never been able to develop strong manufacturing industries, hence processes of de-industrialisation are not really relevant, although Dutch disease may make it even more difficult to establish such industries. It is to these wider processes that I now turn.

Resource Endowment and Internal Conflicts

The availability of natural resources, especially those of high value, has frequently been linked to an

upsurge in instability, violence or even civil war in a number of countries, a link brought to the attention of the wider public through the film *Blood Diamonds*. In the academic literature, important earlier contributions by Jean & Rufin (1996) and by Collier & Hoeffler (2002a; 2002b; 2004) have been supplemented by a number of more recent studies all pointing to the same phenomenon.

The tendency for the availability of resources to lead to violent conflict is crucial in two ways: such conflicts have a disastrous impact on development, and once violence has been initiated there is a tendency for such civil wars to recur.

Understanding these strong but complex relationships between security and development is now one of the important tasks within the field of international development

Understanding these strong but complex relationships between security and development is now one of the important tasks within the field of international development (McKay, 2012). As has been noted in an important recent study from the International Peace Institute (Tschirgi, Lund & Mancini, 2010) all the statistics point to some obvious connections: since the 1980s some 80 per cent of the poorest nations have been wracked by violent conflict of some kind. Similar relationships have been highlighted by Brainard & Chollet (2007) and in the *World Development Report 2011* (World Bank, 2011). About 1.5 billion people – some 25 per cent of the global population – live in situations of conflict and violence, and the gap in poverty is increasing between stable nations and those affected by violence. As Fukuda-Parr (2010) has stressed, civil war hampers development, reducing GDP and government revenues. Administrative capacity is reduced along with expenditures for productive and social sectors. Social institutions, social networks and trust are all seriously eroded, incomes fall, nutrition declines and diseases increase along with child and infant mortality, just to mention a few consequences.

Thus, if conflicts or civil war break out over resources this may often lead to a long period of renewed instability with disastrous consequences for development.

Several studies have attempted to identify what kinds of resources are most likely to give rise to conflict and the circumstances under which such conflicts seem most common and are likely to be protracted. Herbst (2000) has stressed that each conflict situation in Africa has complex antecedents and needs to be examined in detail to discover its unique dynamics. In particular we need to understand how rebel leaders motivate their followers to join their cause and remain loyal. In various situations political indoctrination, ethnic mobilisation and coercion may be used, while the importance of economic incentives varies widely. However, in virtually all such conflicts the availability of lootable resources plays some role. Michael Ross (2004) has also explored some of these issues and after evaluating the available literature arrives at four major conclusions:

- Countries with large oil industries are prone to protracted internal conflicts, but the presence of oil does not seem to be related to the duration of such struggles.
- By contrast, the presence of gemstones and drugs of various kinds – such as opium, coca, and cannabis – does not seem to necessarily initiate conflict, but it does lengthen pre-existing wars. The role of timber resources is not at all clear.
- Agricultural commodities do not seem to be related to either the initiation or duration of civil war.
- The frequent claim that primary commodities in general are associated with the onset of civil war appears shaky.

A number of other authors have also suggested that it is not just the presence of a particular commodity that is important but the precise nature of the deposits, their value, their ease of extraction, and their location. Le Billon (2001a; 2005), for example, has suggested that different types of resources are conducive to the development of distinct types of civil wars. Resources clustered around a particular location can be more easily captured than more diffuse sources spread over a wide geographical area, while resources distant from the capital are more

vulnerable to rebel attack. Hence, point source resources close to the capital will tend to be associated with conflicts over state control; point source resources distant from the capital will tend to generate separatist movements; diffuse resources closer to the capital may encourage rebellions and rioting; and diffuse resources distant from the capital will tend to be associated with warlordism.

However, it is also instructive to place these specific issues within the broader debate about the causes of civil war. In a number of influential contributions, Paul Collier and his co-workers have argued

Empirical studies have found a positive relationship between the availability of lootable resources and the prospects of civil war or secessionist movements

that participants in civil wars are motivated by either *greed* – a desire to become rich – or *grievance* – a strong dissatisfaction with an existing state of affairs (Collier *et al.*, 2003; Collier & Hoeffler, 2002a; 2002b; 2004). Others have brought these together in the concept of *motivation*, but have also argued that there must also be *opportunity* – a reasonable chance that the rebels will be able to be successful – and *identity* – a common cause essential for group formation (Gurr, 1970; Berdal & Malone, 2000; Elbadawi & Sambanis, 2002). The funding available from looted resources is clearly relevant here. Income from the sale of resources props up existing governments – which in many cases are incompetent, repressive and corrupt and hence give rise to widespread resentment. These rents flowing from control of lucrative resources increase the attractiveness of taking power from existing regimes, while the expectation of such riches may well increase the attractiveness of joining and identifying with the rebel forces. It is hardly surprising then that a number of empirical studies have found a positive relationship between the availability of lootable resources and the prospects of civil war or secessionist movements, all of which have serious

consequences for national progress (see, for example, Addison, Le Billon & Murshed, 2002; Fearon, 2005; Gilmore, Gleditsch & Lujala, 2005).

Are Resource-Rich Nations More Likely to Have Authoritarian Governments?

A number of researchers have argued that resource-rich nations are more likely to produce authoritarian governments, and that this inhibits development in a variety of ways. This line of argument obviously discounts the evidence from a number of studies suggesting that authoritarian regimes can in certain circumstances generate unusually high levels of economic growth at least in the early phases – take, for example, the transformations achieved in South Korea and Taiwan. Most dramatically, Friedman (2006) has propounded ‘the First Law of Petropolitics’ which postulates that:

The higher the average global crude oil price rises, the more free speech, free press, free and fair elections, an independent judiciary, the rule of law, and independent political parties are eroded. And these negative trends are reinforced by the fact that the higher the price goes, the less petroliar leaders are sensitive to what the world thinks or says about them (p. 31).

Michael Ross (2001) has suggested three possible explanations for this phenomenon: first, there may be a ‘rentier effect’ with resource-rich regimes using patronage and low taxes to avoid the need for greater accountability; secondly, a ‘repression effect’ with resource revenues allowing internal security measures to be enhanced; and thirdly, a ‘modernisation effect’ with growth based on oil revenues failing to bring about the social and cultural transformations that are essential for the development of democracy.

The relevance of these ideas to Africa have been explored by Jensen & Wantchekon (2004) who argue that political elites accrue most of the resource revenues and thereby consolidate their hold on power, hence further marginalising poorer elements in society. The lack of transparency in the allocation of revenues works against both the transition to democracy and democratic consolidation.

Resources and Rent Seeking

Very similar ideas – at least in terms of outcomes – have been advanced in a number of studies examining the rent seeking behaviour of elites and governments in resource-rich nations. Lam & Wantchekon (2003) have labelled this phenomenon ‘political Dutch disease’ in that these forces produce a whole range of negative effects, but they are social and political in nature rather than being in the realm of economics, although the economic impacts are decisive. Building on a number of studies of what has become known as the ‘rentier state’ (for example, Baland & Patrick, 2000), they argue that revenue flows generated by the sale of resources increase the power of existing elites and, importantly, have the capacity to widen income inequalities. The elites generally take a large share of these revenues, but the precise level of these rents is within the remit of this elite: more enlightened regimes will distribute resource revenues for the benefit of the general society, but in many cases elites will take most of the benefits for their immediate circle and will distribute only enough to maintain a degree of social and political stability. As has been frequently noted in Africa such states are predominantly authoritarian, with much of the revenue being used for the personal aggrandisement of the ruler himself rather than being invested or used to upgrade infrastructure (Yates, 1996). A related but slightly different argument has been put forward by Torvik (2002): as the possibilities for rent seeking increase, entrepreneurs will seek out these opportunities rather than try to establish productive enterprises.

The Quality of Institutions

The arguments presented in a number of the preceding sections of this paper – dealing with the relationships between resource abundance and internal conflicts, corruption, rent seeking and authoritarianism – can be brought together, as they have been by a number of authors, into the essential role of good governance and high quality institutions (Ako & Uddin, 2011). Mehlum, Moene & Torvik (2006) see the primary determinant of growth performance in countries rich in resources as resting with the institutional arrangements governing the distributions of rents from these resources. In nations with ‘producer friendly

institutions’ rent seeking and production are complementary activities, and entrepreneurs are encouraged to engage in production that leads to better growth performance. On the other hand, in countries with ‘grabber friendly institutions’ rent seeking and production are competing activities, with unproductive activities often dominant. Education and skills are also crucial here, with strong evidence that countries with higher levels of human resource are much more likely to gain benefits from the exploitation of natural resources (Kurtz & Brooks, 2011).

One major factor in the resource
curse phenomenon is that
most host governments treat
the state as a quasi ‘firm’

Similar ideas have been examined in a very provocative study by Heller (2006) who has suggested that one major factor in the resource curse phenomenon is that most host governments preside over very limited forms of ‘hybrid democracy’, treating the state as a quasi ‘firm’. Such states are intent on exacting tribute, controlling market opportunities, extracting natural resource rents and collecting the international transfers that accompany the exercise of sovereignty. Because of their control of legal processes, such states are also able to relax the constraints of legality on many activities or simply choose not to enforce regulations or laws, blurring the border between the legal and illegal. Such a privatised state, acting in the interests of a ruling elite rather than the community as a whole, will also forge alliances with a range of business groups both at home and abroad, all for the purpose of capturing concentrated resource rents. Thus, the rule of law and the elimination of corruption and maladministration become essential for progress. These findings, they suggest, contradict those in the seminal paper by Sachs & Warner (1997), where it was argued that institutional quality does not seem to be a major influence on development outcomes in resource-rich nations.

The crucial role of institutional quality has also been supported in a series of papers by Isham *et al.*

(2003), Leite & Weidmann (2003), Sala-I-Martin & Subramanian (2003) and Bulte, Damania & Deacon (2005), all of whom find that the presence of large resource revenues tends to undermine the quality of institutions, and this in turn has a strong negative impact on growth performance. But there is also evidence that the type of resource base is crucial: more spatially concentrated or 'point' resources, an issue already discussed, seem to have a much greater undermining influence on institutional quality than do more dispersed types of resources. These point resources can be controlled relatively easily and cheaply by a ruling elite and the negative impact of such predatory rent seeking on good governance shows up very quickly, with flow-on effects to the whole economy and society.

These broad findings, which now seem to be part of the accepted wisdom in this field, are in keeping with much current research in development studies, and a range of policy agendas and recommendations that have been put forward to assist developing nations. In a recent book Acemoglu & Robinson (2012) have stressed that national prosperity depends on the creation of inclusive institutions that provide incentives for all citizens to invest in their

own education and innovative technologies. Once in place these institutions create a virtuous cycle of development, whereas alternative extractive institutions continue the old cycle of poverty.

If China's policies and strategies
represent a new start, can the
partnership between Africa and China
be used to break the resource curse?

But, what this review so far has indicated, is that it is even more difficult for resource-rich nations to follow such prescriptions, since the very dependence on resources tends to undermine such inclusive institutions and make their establishment very problematic. There are however a small number of success stories among resource-rich nations and lessons from these will be used later in this paper to develop ideas for ways in which resource-rich countries in Africa might manage their natural wealth more effectively for the benefit of the wider population.

The Rise of Asia and the Demand for Resources: A New Era for Africa?

Since the often exploitative behaviour of multinational resource companies has been at least partly responsible for the poor performance of resource-rich countries, there has been much recent speculation about the role that resource companies from Asia – now major investors in many of Africa's resource economies – are likely to play, and whether their impact will be similar or rather different from their earlier Western counterparts (see, for example, Alden, 2007; Alden, Large & Soares de Oliveira, 2008). If China's policies and strategies represent a new start, can the partnership between Africa and China be used to break the resource curse?

China's involvement in Africa has increased dramatically. Following the massacre of dissidents in Beijing's Tiananmen Square, Western sanctions against China encouraged the emerging power to develop stronger ties with other parts of the world that were less critical of Chinese policies. Increased

American dominance in the global system, particularly after the end of the Cold War, encouraged China to push for a move towards a more multi-polar international power structure, while the dramatic growth of the Chinese economy has increased demand for energy and a whole range of raw materials, including from Africa (Ampiah & Naidu, 2008; Lagerkvist, 2009; Tull, 2006). The results have been dramatic. Between 1989 and 1997 trade expanded by more than 400 per cent, and in 2011 China became Africa's largest trading partner. In all of this, China has sought to portray itself as being very different from the former colonial powers and much more in tune with the needs and aspirations of African nations. President Jiang Zemin called China the world's largest developing country and lauded its relations with Africa, the continent with the largest number of developing countries. But how do we evaluate China's impact in Africa so far?

The optimists suggest that the rise of India and China – and the increased prices being offered for the minerals and other resources with which Africa is well endowed – may offer a way forward. Asia offers both large markets and growing industries that can absorb not just traditional exports like cotton, but also food and consumer goods. Tourism from Asia can also be a key earner of foreign exchange. Thus, while Africa may have been marginalised by the West, Asia can be the new Silk Road (Broadman 2007). It has also been suggested that China's model of development – itself a modified version of the successful Asian development model – can also provide a new kind of strategy for African development. The Beijing Consensus can usefully displace the Washington Consensus, now discredited in the eyes of many since the convulsions caused by the Global Financial Crisis (GFC).

A key consequence of this renewed attraction of Asian approaches to development policy and planning is that the role of the state – and indeed the very nature of the state – has returned as a central issue in development studies. The fact that China's economy is still under very direct control of the state, that a significant proportion of the economy is still state-owned, that the nature of China's links with the global economy are tightly constrained and that the country was able to weather the GFC so well, has not gone unnoticed in the rest of the developing world (Subramanian, 2011). The need to strengthen state capacity and regulatory reach has emerged as one of the key lessons of the GFC: the state should now not be seen as a key problem but as an indispensable

While Africa may have been marginalized by the West, Asia can be the new Silk Road

part of any viable solution. Markets unaided cannot be relied on to deliver the benefits of development since market failures are endemic, even in developed countries. This lesson is certainly being heeded in a wide range of countries where various kinds of 'state capitalism' have been established. Aware of the economic power of capitalist systems but unwilling to trust the operations of uncontrolled markets, several

countries are using carefully regulated markets to create wealth, but are ensuring that the funds are used as the government sees most appropriate (Bremmer, 2010). For many African governments a key attraction of China's approach to its foreign investments and aid has been a 'hands off' or conditionality-free approach to aid, with no demands being made regarding democracy, human rights or labour rights. This, some argue, is a desirable trend which encourages local decision making and the setting of local priorities.

Critics have questioned whether China's exploitation of Africa's resources will be any more benign than was the earlier colonial pillage of Africa

Critics, on the other hand, have questioned whether China's exploitation of Africa's resources will be any more benign than was the earlier colonial pillage of Africa, pointing out that almost all Chinese investment has been in resources, and oil in particular, often in countries like Sudan that have questionable development credentials. Halper (2010), for example, fears that, with the rise of China, authoritarian forms of government will again become more attractive. Keenan (2009) has also suggested that the unconditional nature of Chinese aid and investment may in fact be counterproductive in that this wealth creates strong incentives for elites to govern and allocate resources for their own benefit rather than that of the wider society. Tull (2006) emphasises that it is the impact of China on the political culture and processes in a number of African countries that is most worrying.

However, others have suggested that if handled carefully, China and India can help the continent reach higher levels of growth: it is for Africa to make decisions and plan for its own future (Winters and Yusuf, 2007). An optimistic view has been presented by Friedman (2009) and Gonzalez-Vicente (2011) who argue that China is already in the process of transforming parts of Africa, not just by increasing

demands for resources but by exporting entrepreneurial methods and more general Asian dynamism, and incorporating Africa into Asian industrialisation (Power, 2008). China's method of operation, it is argued, is fundamentally different from earlier Western investors and the results can be much more positive and less exploitative. It has also been suggested that, as China's own economy matures and moves away from a reliance on cheap, labour-intensive manufactures, this enmeshment of Africa in an Asian-led global division of labour may become much more benign through the kind of 'flying geese' model initiated first by Japan, then South Korea and Taiwan and now China.

But what do we know in detail about the actual impact of Chinese and other Asian companies' involvement in resource projects in Africa? In fact there are few useful studies here. Perhaps the most exhaustive research yet undertaken is a report by Chatham House on the operations of Asian oil companies in Nigeria and Angola (Vines *et al.*, 2009). Chinese companies offered, in both countries, investment in infrastructure and other projects in return for access to oil, but this was much more successful in Angola than in Nigeria. This was not

China is already in the process of transforming parts of Africa, by exporting entrepreneurial methods and more general Asian dynamism

a case, the authors stress, of weak African governments being exploited by unscrupulous foreigners, rather the failure in Nigeria was the result of a complete misunderstanding by the Chinese of local politics, and a similar failure by the Nigerian government to manage the schemes. The political and business relationships with Angola have been much better managed on both sides, with the local version of the oil-for-infrastructure attracting much attention, and being dubbed the 'Angola mode' by the World Bank. In part this was the result of a long process of learning how to work together with

a well-established regime – President José Eduardo dos Santos celebrated his 30th year as President of Angola in 2009, while Nigeria has had many changes of leadership in this period. But the key, the authors argue, is for the foreign companies to learn the intricacies of doing business in different countries, while governments need to understand the issues involved in managing their relationships with the companies and in dealing effectively with the large revenue streams. Japanese and Indian companies have been

Chinese foreign policy and business operations in Africa are very much a reflection of Chinese domestic politics

much more risk averse than their Chinese counterparts, while the Korean companies have become so frustrated with their experience in Nigeria that they have become bogged down in legal actions. But, since each case is demonstrably so different, we need many more case studies of this kind.

What case studies of this kind also demonstrate is the different behaviour of different national companies from Asia, and again there have been too few studies of these behavioural differences. Partial exceptions here are a small number of studies examining the ways in which Chinese foreign policy and business operations in Africa are very much a reflection of Chinese domestic politics and of China's own processes of development (Alden & Alves, 2008; Kopinski, Polus & Taylor, 2011; Stephan & Bridgman, 2012). Wenran Jiang (2009) reaches a number of interesting conclusions in this respect:

- While most authors on Africa–China relations come to definite conclusions about whether the relationship is good or bad for Africa, the reality is in fact much more complex and nuanced. Quite different results are possible depending on the time, sector, country and a host of other variables.
- Chinese domestic politics and past development experience are very important in understanding Chinese approaches to Africa. Thus, in order to understand Chinese policies toward Sudan or

Zimbabwe, for example, one needs to be versed in this domestic context.

- China's strategic goals in Africa reflect, in part, the desire to gain access to natural resources for its own economic growth, but this is moderated by the historical role that China has played as a champion of developing countries and by its desire to construct a very different kind of international order.
- China's desire to control energy resources is a reflection of its own feelings of vulnerability rather than some desire for dominance of the African continent.
- In the cut-throat competitive environment that now characterises the Chinese economy, there are temptations for Chinese companies to have inadequate regard for problems of corruption and environmental degradation.
- African governments also need a thorough understanding of Chinese domestic politics and priorities in order to understand how to deal with Chinese resource companies. The demand

boom will not last forever, and it will change in nature – facts that need to be grasped in all their complexity.

All of this newer research on Asian companies in Africa emphasise the point that local contexts, political processes, institutional arrangements and policies do matter, and there has been far too little detailed

The resource curse need not
strike in all situations

work in this area. Asian resource companies can produce outcomes that are beneficial or detrimental depending on the complex inter-relations involved, and the policy setting on both sides (Mohan & Power, 2008). The resource curse need not strike in all situations, and ways of avoiding such outcomes are the subject of the final part of this paper.

Designing Policies to Avoid the Resource Curse

There are two ways of avoiding the resource curse: to learn some lessons from the few success stories that exist, and to suggest the ways in which the myriad of horror stories might have been avoided. Both approaches are adopted here, but as we will see the conclusions seem to be the same.

In the developed world one example of success that has attracted much attention is Norway. Larsen (2006) has suggested that focussed and effective public policy is the key here, and in particular a number of resource allocation measures enacted by the Norwegian government:

- *Factor Movement Policy.* A centralised wage fixing system was used to limit general wage increases to the level of productivity increases in the manufacturing sector.
- *Spending Effect Policy.* Strong macro-economic management ensured that fiscal discipline was maintained. Foreign debts were repaid quickly and a Petroleum Fund was established to invest oil revenues overseas. This shielded the economy from excessive demand and real

appreciation when at full capacity, thus reducing loss of competitiveness.

- *Spillover-Loss Policy.* The accumulation of expertise in offshore oil extraction was encouraged rather than the use of foreign specialists.
- *Education, Research, and Development Policy.* Significant resources were channelled into education, research, and development. Scholarships for overseas study were set up.
- *Active Countercyclical Policy.* Strong measures were taken to counteract recessions.
- *Labour Market Policies.* A centralised wage negotiation system was maintained and negotiating parties were urged to keep in mind the effects of any wage increases on the overall economy.
- *Industrial Policy.* Efforts were made to maintain and accumulate know-how in industrial activities and keep a diversified export base.

In Africa the success story that has attracted attention is that of Botswana, and there seems to be general agreement on what factors account for its

success (see, for example, Beaulier & Subrick, 2006; Robinson & Parsons, 2003; Acemoglu & Robinson, 2012). Learning from history is important, and in order to do this, strong national institutions and good governance are critical. Botswana's political leadership pursued sound resource management policies to enhance the legitimacy of the government. The government invested in education and building infrastructure, while spending on the military was kept to a minimum. In so doing, Botswana was able to establish strong institutions that allowed it to escape the resource curse.

For other countries, it is of course impossible to turn back the clock and make better use of missed opportunities. But the analysis and case studies presented in this paper do offer some powerful clues as to what needs to be done to make the best use of natural resources. The dangers that come from rent seeking elites and rebel movements keen to gain access to resource revenues are abundantly clear. The economic pressures that result from rapid increases in revenues from resources have very real negative implications for the rest of the economy in the absence of strong action. Above all, strong, legitimate and effective institutions are crucial in the provision of good and effective governance. National governments need the willingness and capacity to

The dangers that come from rent-seeking elites and rebel movements keen to gain access to resource revenues are abundantly clear

stand up to multinational companies to gain the best deals possible for their people. It may also be in the national interest to question the economic orthodoxies peddled by international organisations (Bonnie Campbell, 2004; 2010), for example has shown that pressures to deregulate mining regulations in the name of encouraging foreign investment may have some very bad consequences for local economies, societies and natural environments.

Such conclusions – and they leap out of the evidence I have presented in this paper – are easy to say but, as in all aspects of development policy,

they are extremely difficult to implement. To add an additional complication we have seen in many countries evidence that natural resource revenues in fact undermine the establishment and consolidation of effective institutions. We come to the unavoidable conclusion that there are no easy answers and

It may also be in the national interest to question the economic orthodoxies peddled by international organisations

that effective development can only be achieved after many years of effort and sacrifice. This is also surely one of the lessons of the GFC, which has demonstrated that relatively easy formulas based around the establishment of markets are, in the absence of much more fundamental change, worthless. But the evidence also suggests that with the right policies and the necessary amount of political will, success is possible: there is nothing inevitable about the resource curse. The definition of the best policies will depend upon local circumstance, history and institutions – a point made strongly in a recent World Bank Study (Barma *et al.*, 2012).

Thus, to end on a positive note, there may be a few things that can be done in the short term that might then become part of an effective longer term program. The first involves the establishment of great transparency regarding resource revenues (Karl, 2007). Initiatives such as Publish What You Pay which attempt to persuade governments and companies to make clear declarations about the size of these revenues are a helpful start, allowing a range of community groups to monitor what financial flows are in place, who received them and how they were used. This is unlikely to influence the activities of hard-line authoritarian regimes, but in some circumstances it can bring constructive pressure to bear. Secondly, it can be effective to establish sovereign wealth funds, which as we have seen in the Norwegian case, can mitigate the impacts of Dutch disease. Since the 1950s some 30 countries have established such funds, and in most cases fiscal performance has improved. More importantly in the context of countries in Africa these can also – if appropriate firewalls are put

in place – make it more difficult for regimes to siphon off funds and use them for corrupt or frivolous purposes. The mode of governance of these funds then becomes crucial (Bagattini, 2011). Such a scheme is being explored at the moment in Papua New Guinea, which is experiencing a boom in oil and natural gas development. Thirdly, Shaxson (2005) has suggested that ways need to be explored to even out the cycles of boom and bust that characterise receipts of resource revenues. He suggests that the World Bank

should explore ways producer nations can borrow at times of high prices rather than the reverse. The presence of national oil companies, predominantly from Asia, provides opportunities, he suggests, for negotiating innovative deals of this kind to reduce volatility of returns. These three mechanisms are not a panacea and would not work everywhere, but they can be a first step, and given the difficulty and complexity of the resource curse problem it is essential that an early start be made, if possible.

References

- Acemoglu, Daron & Robinson, James (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*, New York: Crown Business.
- Addison, Tony, Le Billon, Philippe and Murshed, Mansoob (2002). 'Conflict in Africa: The Cost of Peaceful Behaviour', *Journal of African Economies* 11(3), 365–86.
- Ako, Rhuks & Uddin, Nilpar (2011). 'Good Governance and Resource Management in Africa' in Botchway, Francis (ed.) *Natural Resource Investment and Africa's Development*, Cheltenham: Edward Elgar, 21–48.
- Alden, Chris (2007). *China in Africa*, London: Zed Books.
- Alden, Chris & Alves, Ana (2008). 'History & Identity in the Construction of China's Africa Policy', *Review of African Political Economy*, 115, 43–58.
- Alden, Chris, Large, Daniel & Soares de Oliveira, Richard (eds), (2008). *China Returns to Africa: A Rising Power and a Continent Embrace* (London: Hurst & Co., 2008).
- Ampiah, Kweku & Naidu, Sanusha (eds) (2008). *Crouching Tiger, Hidden Dragon? Africa and China*, Scottsville: University of Kwa-Zulu-Natal Press.
- Atkinson, G. and Hamilton, K. (2003). 'Savings, Growth and the Resource Curse Hypothesis', *World Development*, 31 (11), 1793–1807.
- Auty, Richard & Gelb, Alan (2000). 'Political Economy of Resource Abundant States', Paper prepared for the annual World Bank Conference on Development Economics, Paris.
- Bagattini, Gustavo Yudi (2011). 'The Political Economy of Stabilisation Funds: Measuring their Success in Resource-Dependent Countries', *IDS Working Paper 356*, Institute of Development Studies, University of Sussex.
- Baland, Jean-Marie Francois Patrick (2000). 'Rent Seeking and Resource Booms', *Journal of Development Economics*, 61, 527–42.
- Barma, Naazneen, Kaiser, Kai, Le, Tuan Minh & Vinuela, Lorena (2012). *Rents to Riches: The Political Economy of Natural Resource-Led Development*, Washington: World Bank.
- Baumüller, Heike, Donnelly, Elizabeth, Vines, Alex and Weimer, Markus (2011). *The Effects of Oil Companies' Activities on the Environment, Health and Development in Sub-Saharan Africa*, Brussels: Policy Department, Directorate-General For External Policies of the European Union.
- Berdal, Mats & Malone, David (eds) (2000). *Greed and Grievance: Economic Agendas in Civil Wars*. Boulder, CO: Lynne Rienner.
- Beulier, S. & Subrick, J. (2006). 'The Political Foundations of Development: the Case of Botswana', *Constitutional Political Economy*, 17 (2), 103–15.
- Bevan, David, Collier, Paul & Gunning, Jan Willem (1999). *The Political Economy of Poverty, Equity, and Growth: Nigeria and Indonesia*. Oxford and New York: Oxford University Press.

- Botchway, Francis (2011). 'Regime Theory and China–Africa Economic Relations: New Ideas on Old Paradigms, in Botchway, Francis (ed.) *Natural Resource Investment and Africa's Development*, Cheltenham: Edward Elgar, 368–94.
- Brainard, Lael, & Chollet, Derek (eds) (2007). *Too Poor for Peace? Global Poverty, Conflict, and Security in the 21st Century*, Washington DC: Brookings Institution Press.
- Bremmer, I. (2010). *The End of the Free Market*. New York: Portfolio.
- Broadman, H. (2007). *Africa's Silk Road: China and India's New Economic Frontier*, Washington DC: World Bank.
- Bulte, Erwin, Damania, Richard & Deacon, Robert (2005). 'Resource Intensity, Institutions, and Development', *World Development*, 33 (7), 1029–44.
- Campbell, Bonnie (ed.) (2004). *Regulating Mining In Africa: For Whose Benefit?* Uppsala: Nordiska Afrikainstitutet, Discussion Paper 26.
- . (2010). 'Revisiting the Reform Process of African Mining Regimes' *Canadian Journal of Development Studies*, 30 (1–2), 197–217.
- Cincotta, R. (2010). 'Demographic Challenges to the State', in Tschiri, N., Lund, M. & Mancini, F. (eds) (2010) *Security and Development: Searching for Critical Connections*. Boulder: Lynne Rienner, 77–98.
- Collier, Paul, Elliot, Lani, Hegre, Håvard, Hoeffler, Anke, Reynal-Querol, Marta, & Sambanis, Nicholas (2003). *Breaking the Conflict Trap. Civil War and Development Policy*. Oxford: Oxford University Press.
- Collier, Paul, & Hoeffler, Anke (2002a). 'On the Incidence of Civil War in Africa. *Journal of Conflict Resolution*, 46(1), 13–28.
- . (2002b). *The Political Economy of Secession*. Washington, DC: Development Research Group, World Bank.
- . (2004). 'Greed and Grievance in Civil War' *Oxford Economic Papers*, 56 (4), 563–95.
- Elbadawi, Ibrahim & Sambanis, Nicholas (2002). 'How Much War Will We See? Explaining the Prevalence of Civil War', *Journal of Conflict Resolution* 46(3), 307–34.
- Fearon, James D. (2005). 'Primary Commodity Exports and Civil War', *Journal of Conflict Resolution* 49(5).
- Fosu, Augustin Kwasi (2011). 'Terms of Trade and the Growth of Resource Economies: A tale of Two Countries', Centre for the Study of African Economies, University of Oxford, Working Paper 2011/09.
- Friedman, E. (2009). 'How Economic Superpower China Could Transform Africa', *Journal of Chinese Political Science*, 14: 1–20.
- Friedman, Thomas (2006). 'The First Law of Petropolitics', *Foreign Policy*, 154, 28–37.
- Fukuda-Parr, Sakiko (2010). 'Poverty and Violent Conflict: Rethinking Development' in Tschiri, N., Lund, M. & Mancini, F. (eds) (2010). *Security and Development: Searching for Critical Connections*. Boulder: Lynne Rienner, 17–46.
- Gelb, Alan (ed.) (1988). *Oil Windfalls: Blessing or Curse?* Oxford and New York: Oxford University Press.
- Gilmore, Elisabeth, Gleditsch, Nils Petter & Lujala, Päivi (2005). 'A Diamond Curse? Civil War and a Lootable Resource', *Journal of Conflict Resolution*, 49(4), 538–62.
- Gonzalez-Vicente, R. (2011). 'China's Engagement in South America and Africa's Extractive Sectors: New Perspectives for Resource Curse Theories', *The Pacific Review*, 24: 65–87.
- Gurr, Ted Robert, (1970). *Why Men Rebel*, Princeton, NJ: Princeton University Press.
- Gylfason, Thorvaldur (2001). 'Natural Resources, Education, and Economic Development.' *European Economic Review*, 45, 847–59.
- Gylfason, T., Herbertsson, T. and Zoega, G. (1999). 'A Mixed Blessing: Natural Resources and Economic Growth', *Macroeconomic Dynamics*, 3: 204–25.
- Halper, S. (2010). *The Beijing Consensus: How China's Authoritarian Model Will Dominate the Twenty-First Century*. New York: Basic Books.
- Heller, Thomas (200). 'African Transitions and the Resource Curse: An Alternative Perspective', *IEA Economic Affairs*, (December), 24–33.
- Herbst, Jeffrey (2000). 'Economic Incentives, Natural Resources and Conflict in Africa', *Journal of African Economies*, 9 (3), 270–94.

- Isham, J., Woodcock, M., Pritchett, L., & Busby, G. (2003). 'The varieties of resource experience: How natural resource export structures affect the political economy of economic growth', *Middlebury College Economics Discussion Paper 03-08*, Middlebury College, Vermont.
- Jean, François, and Rufin, Jean-Christophe (eds) (1996). *Économie des Guerres Civiles* Paris: Hachette.
- Jensen, N. and Wantchekon, L. (2004). 'Resource Wealth and Political Regimes in Africa', *Comparative Political Studies*, 37 (7), 816–41.
- Jiang Wenran (2009). 'Fuelling the Dragon: China's Rise and Its Energy and Resources Extraction in Africa', *The China Quarterly*, 199, 585–609.
- Karl, Terry (2007). 'Ensuring Fairness: The Case for a Transparent Fiscal Social Contract', in Humphreys, Macartan, Sachs, Jeffrey & Stiglitz, Joseph (eds) *Escaping the Resource Curse*, New York: Columbia University Press.
- Keenan, Patrick (2009). 'Curse or Cure? China, Africa, and the Effects of Unconditioned Wealth', *Berkeley Journal of International Law*, 27 (1), 83–125.
- Kopinski, Dominik, Polus, Andrzej & Taylor, Ian (2011). 'Contextualising Chinese Engagement in Africa', *Journal of Contemporary African Studies*, 29 (2), 129–36.
- Krugman, P. (1987). 'The Narrow Moving Band, the Dutch Disease, and the Competitive Consequences of Mrs. Thatcher: Notes on Trade in the Presence of Dynamic Scale Economies', *Journal of Development Economics*, 37, 41–55.
- Kurtz, Marcus & Brooks, Sarah (2011). 'Conditioning the "Resource Curse": Globalization, Human Capital, and Growth in Oil-Rich Nations', *Comparative Political Studies*, 44(6), 747–70.
- Lagerkvist, Johan (2009). 'Chinese Eyes on Africa: Authoritarian Flexibility Versus Democratic Governance', *Journal of Contemporary African Studies*, 27 (2), 119–34.
- Lam R. and Wantchekon L. (2003). Political Dutch Disease, NYU Working Paper, web document, available at URL: www.nyu.edu/gsas/dept/politics/faculty/wantcheko/research/lr-04-10.pdf.
- Larsen, Erling Røed (2006). 'Escaping the Resource Curse and the Dutch Disease? When and Why Norway Caught Up with and Forged Ahead of Its Neighbors', *American Journal of Economics and Sociology*, 65, (3), 605–40.
- Le Billon, P. (2001a). 'The Political Ecology of War: Natural Resources and Armed Conflicts', *Political Geography*, 20, 561–84.
- . (2001b). 'Angola's Political Economy of War: The Role of Oil and Diamonds 1975–2000', *African Affairs*, 100, 55–80.
- . (2005). *Fuelling War: Natural Resources and Armed Conflicts*, London: International Institute for Strategic Studies & Routledge, Adelphi Papers 45 (375).
- . (2007). 'Fatal Transactions, Conflict Diamonds and the (Anti) Terrorist Consumer', in Gregory, Derek & Pred, Allan (eds), *Violent Geographies: Fear, Terror, and Political Violence*, New York: Routledge.
- Lee, M. (2006). 'The 21st Century Scramble for Africa', *Journal of Contemporary African Studies*, 24 (3), 303–30.
- Leite, C. and Weidmann, J. (1999). 'Does Mother Nature Corrupt? Natural Resources, Corruption and Economic Growth', Washington, DC: International Monetary Fund, IMF Working Paper WP/99/85.
- Lujala, Päivi (2009). 'Deadly Combat over Natural Resources', *Journal of Conflict Resolution*, 53(1), 50–71.
- . (2010). 'The Spoils of Nature: Armed Civil Conflict and Rebel Access to Natural Resources', *Journal of Peace Research*, 47(1), 15–28.
- . (2011). 'Cursed by Resources? High-Value Natural Resource and Armed Civil Conflict', in Jakobsen, Tor Georg (ed.) *War: An Introduction to Theories and Research on Collective Violence*. New York: Nova Science.
- Lujala, Päivi; Rustad, Siri Aas & Le Billon, Philippe (2010). 'Valuable Natural Resources in Conflict-Affected States', in Berdal, Mats & Wennmann, Achim (eds) *Ending Wars, Consolidating Peace: Economic Perspectives*. London: International Institute for Strategic Studies/ Routledge, 121–36.
- McKay, John (2012). 'Security and Development' in Kingsbury, Damien, McKay, John, Hunt, Janet, McGillivray, Mark & Clarke, Matthew, *International Development: Issues & Challenges*, Houndmills: Palgrave Macmillan, 2nd edition, 297–319.
- Matsuyama, K. (1992). 'Agricultural Productivity, Comparative Advantage and Economic Growth', *Journal of Economic Theory*, 58, 317–34.

- Mehlum, Halvor, Moene, Karl and Torvik, Ragnar (2006). 'Institutions and the Resource Curse', *The Economic Journal*, 116, 1–20.
- Mohan, Giles & Power, Marcus (2008). 'New African Choices? The Politics of Chinese Engagement', *Review of African Political Economy*, 115, 23–42.
- Nankani, G. (1979). 'Development Problems of Mineral Exporting Countries', Washington, DC: World Bank Staff Working Paper 354.
- Palma, José Gabriel (2005). 'Four Sources of De-industrialization and a New Concept of the Dutch Disease', in Ocampo, José Antonio (ed.) *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*, Washington DC: World Bank.
- . (2008). 'De-industrialization, 'Premature' De-industrialization and the Dutch Disease' in Durlap, Steven N. & Blume, Lawrence E. (eds) *The New Palgrave Dictionary of Economics*, Houndmills: Palgrave Macmillan, 2nd edition.
- Power, Raphael (2008). 'What Does the Rise of China Do for Industrialisation in Sub-Saharan Africa?' *Review of African Political Economy*, 115, 7–22.
- Robinson, James & Parson, Neil (2003). 'State Formation and Governance in Botswana', *Journal of African Economies*, 15, 100–40.
- Ross, Michael (2002). 'Does Oil Hinder Democracy?' *World Politics*, 53 (3), 325–61.
- . (2003). 'Oil, Drugs and Diamonds: The Varying Role of Natural Resources in Civil War', in K. Ballentine and J. Sherman (eds), *The Political Economy of Armed Conflict: Beyond Greed and Grievance*, Boulder: Lynne Rienner, 47–70.
- . (2004). 'What Do We Know About Natural Resources and Civil War?' *Journal of Peace Research*, 41 (3), 337–56.
- Rosser, Andrew (2006). 'The Political Economy of the Resource curse: A Literature Review', *IDS Working Paper 268*, Institute of Development Studies, University of Sussex.
- Rowthorn, Robert and Wells, J. (1987). *De-industrialization and Foreign Trade*, Cambridge: Cambridge University Press.
- Sachs, Jeffrey and Warner, Andrew (1995). 'Natural Resource Abundance and Economic Growth', Washington DC: National Bureau of Economic Research Working Paper 5398.
- . (1997). 'Sources of Slow Growth in African Economies' *Journal of African Economies*, 6(3), 335–76.
- . (2001). 'The Curse of Natural Resources' *European Economic Review*, 45(4–6), 827–38.
- Sala-I-Martin, Xavier & Subramanian, Arvind (2003). 'Addressing the Natural Resource Curse: An Illustration from Nigeria', Washington DC: National Bureau of Economic Research, Working Paper 9804.
- Shaxson, Nicholas (2005). 'New Approaches To Volatility: Dealing With The "Resource Curse" In Sub-Saharan Africa', *International Affairs* 81 (2), 311–24.
- Stephan, Harry & Bridgman, Michael (2012). 'Globalisation and Regime Theory: China Brings Change to Africa', in Stephan, Harry & Power, Michael (eds) *The New Scramble for Africa in the 21st Century*, Cape Town: Renaissance Press, 261–98.
- Stephan, Harry & Power, Michael (eds) (2012). *The New Scramble for Africa in the 21st Century*, Cape Town: Renaissance Press.
- Subramanian, A. (2011). 'The Crisis and the Two Globalization Fetishes', in Birdsall, N. & Fukuyama, F. (eds), *New Ideas on Development After the Financial Crisis*. Baltimore: Johns Hopkins University Press, 68–82.
- Torvik, Ragnar (2002). 'Natural Resources, Rent Seeking and Welfare', *Journal of Development Economics*, 67, 455–70.
- Tschiri, N., Lund, M. & Mancini, F. (eds) (2010). *Security and Development: Searching for Critical Connections*. Boulder: Lynne Rienner.
- Tull, Denis (2006). 'China's Engagement in Africa: Scope, Significance and Consequences', *Journal of Modern African Studies*, 44 (3), 459–479.
- van der Ploeg, Frederick (2011). 'Natural Resources: Curse or Blessing?' *Journal of Economic Literature*, 49(2), 366–420.
- van der Ploeg, Frederick & Poelhekke, Steven (2009). 'Volatility and the Natural Resource Curse', *Oxford Economic Papers*, 61, 727–60.
- van Wijnbergen, S. (1984). 'The "Dutch Disease": A Disease After All?' *Economic Journal*, 94, 41–55.
- Vines, Alex, Wong, Lilian, Weimer, Markus & Campos, Indira (2009). *Thirst for African Oil: Asian National Oil Companies in Nigeria and Angola*, London: Chatham House (Royal Institute of International Affairs).

- Weinstein, L. (2008). 'The New Scramble for Africa', *International Socialist Review*, 60, 1–19.
- Winters, A. & Yusuf, S. (2007). *Dancing with Giants: China, India and the Global Economy*, Washington DC: World Bank.
- Wood, A. and Berge, K. (1997). 'Exporting Manufactures: Human Resources, Natural Resources, and Trade Policy', *Journal of Development Studies*, 34: 35–59.
- World Bank (2011) *World Development Report 2011: Conflict Security and Development*. Washington DC: World Bank.
- Yates, Douglas (1996). *The Rentier State in Africa*, Trenton NJ: Africa World Press.