

WORKING PAPER **268**

The Political Economy of the Resource Curse: A Literature Survey

Andrew Rosser
April 2006



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Andrew Rosser

Abstract

This paper presents a critical survey of the literature on the 'resource curse', focusing on three main questions: (i) are natural resources bad for development?; (ii) what causes the resource curse?; and, (iii) how can the resource curse be overcome? In respect of these questions, three observations are made. First, while the literature provides considerable evidence that natural resource abundance is associated with various negative development outcomes, this evidence is by no means conclusive. Second, existing explanations for the resource curse do not adequately account for the role of social forces or external political and economic environments in shaping development outcomes in resource abundant countries, nor for the fact that, while most resource abundant countries have performed poorly in developmental terms, a few have done quite well. Finally, recommendations for overcoming the resource curse have not generally taken into account the issue of political feasibility. More generally, it is argued that the basic problem with the literature is that researchers have been too reductionist – they have tended to explain development performance solely in terms of the size and nature of countries' natural resource endowments. A consensus is emerging that various political and social variables mediate the relationship between natural resource wealth and development outcomes. But rather than acknowledge that these variables are shaped by a range of historical and other factors in each case, scholars have tended to see them as determined by the natural resource base. Put differently, scholars have been asking the wrong question: rather than asking why natural resource wealth has fostered various political pathologies and in turn promoted poor development performance, they should have been asking what political and social factors enable some resource abundant countries to utilise their natural resources to promote development and prevent other resource abundant countries from doing the same.

Keywords: natural resources; civil war; democracy; economic growth

Andrew Rosser is a Fellow in the Governance Team. This paper was written for the Development Research Centre on the Future State and was conceived in conjunction with the Centre's Director, Mick Moore.

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1 Introduction

Prior to the late 1980s, the conventional wisdom concerning the relationship between natural resource abundance and development was that the former was advantageous for the latter. In the 1950s, for instance, geographer Norton Ginsburg argued that: 'The possession of a sizable and diversified natural resource endowment is a major advantage to any country embarking upon a period of rapid economic growth' (as cited in Higgins 1968: 222). Similar views were also expressed by mainstream economists during this period (see, for instance, Viner 1952 and Lewis 1955). In the 1960s, the prominent development theorist Walter Rostow (1961) went further, arguing that natural resource endowments would enable developing countries to make the transition from underdevelopment to industrial 'take-off', just as they had done for countries such as Australia, the United States, and Britain. In the 1970s and 1980s, neoliberal economists such as Bela Balassa (1980), Anne Krueger (1980) and P.J. Drake (1972) put forward similar arguments, with the former, for instance, arguing that natural resources could facilitate a country's 'industrial development by providing domestic markets and investible funds' (1980: 2). A number of radical economists challenged these views prior to the late 1980s, arguing that the structure of the global economy and the nature of international commodity markets put developing countries that were reliant on natural resource exports at a serious disadvantage (Singer 1950; Prebisch 1950). But theirs was a minority view – in general natural resources were seen as a blessing for developing countries.

Since the late 1980s, there has emerged a sizeable scholarly literature that has challenged this conventional wisdom. Rather than a blessing, this literature has suggested that natural resource abundance (or at least an abundance of particular types of natural resources) increases the likelihood that countries will experience negative economic, political and social outcomes including poor economic performance, low levels of democracy, and civil war. This literature has been extremely influential: the idea that natural resources are bad for development is now widely accepted by researchers and officials at the major international financial institutions, the World Bank and the International Monetary Fund (Bannon and Collier 2003; Sala-i-Martin and Subramanian 2003; Davis *et al.* 2003; Leite and Weidmann 1999; Sarraf and Jiwanji 2001; Isham *et al.* 2002; Eifert *et al.* 2003; Gelb and Associates 1988), as well as by many NGOs (see, for instance, Save the Children 2003; Oxfam 2002). So influential has this literature been that the conventional wisdom now is arguably the exact opposite of what it was prior to the late 1980s.

This paper presents a critical survey of this literature on the 'resource curse', focusing in particular on the three main questions that this literature addresses: (i) are natural resources bad for development? (ii) what causes the resource curse? and (iii) how can the resource curse be overcome? In respect of these questions, I make three specific observations. First, while the literature provides considerable evidence that natural resource abundance is associated with various negative development outcomes, this evidence is by no means conclusive. Second, existing explanations for the resource curse do not adequately account for the role of social forces or external political and economic environments in shaping development outcomes in resource abundant countries, nor for the fact that, while most resource abundant countries have performed poorly in developmental terms, some – such as Botswana, Indonesia, Chile, Norway, Australia, Canada, and Malaysia (Stevens 2003: 8) – have done quite well. Finally, recommendations for overcoming the resource curse have not generally taken into account the issue of political feasibility.

More generally, I suggest that the basic problem with the literature as it stands is that most researchers who have worked on the resource curse have been reductionist in their approach – that is, they have explained development performance solely in terms of the size and nature of countries' natural resource endowments. A consensus is emerging that various political and social variables mediate the relationship between natural resource wealth and development outcomes but rather than acknowledge that these variables are shaped by a range of historical and other factors in each case, scholars have tended to see them as determined by the natural resource base. Put differently, scholars have been asking

the wrong question: rather than asking why natural resource wealth has fostered various political pathologies and in turn promoted poor development performance, they should have been asking what political and social factors enable some resource abundant countries to utilise their natural resources to promote development and prevent other resource abundant countries from doing the same (Schrank 2004; Snyder and Bhavnani 2005). I conclude therefore that researchers should give greater attention to the latter question in their forthcoming work, not just because doing so will enhance our understanding of when natural resource abundance is associated with poor development outcomes but because it will also generate useful policy recommendations for addressing the resource curse.

Before beginning the survey, it is worth making two preliminary points. The first is that the literature on the resource curse in fact consists of three separate sub-literatures: on the relationship between natural resource abundance and economic performance; on the relationship between natural resource abundance and civil war; and on the relationship between natural resource abundance and political regimes. The notion of a resource curse was initially associated with the first of these sub-literatures because this sub-literature emerged well before the others (see Ross 1999 for a review). But as the other two sub-literatures have emerged and developed, the second in response to Collier and Hoeffler's seminal study (1998) and the third in response to studies such as Wantchekon (1999) and Ross (2001a), the resource curse has become seen as a multi-dimensional phenomenon, involving not simply poor economic performance but also civil war and authoritarianism. For this reason, the paper endeavours to survey all three of these sub-literatures.

The second point is that the term 'natural resources' is defined variably throughout the literature. Some scholars have defined the term in terms of particular commodities – e.g. oil, minerals, forest resources, and agricultural crops. Others have defined it in terms of the abundance of land or the size of the primary sector. At the same time, there is some difference among scholars in the first group about which commodities can be considered natural resources – some, for instance, include agricultural crops while others do not. It would be impractical in a short survey like this to explain how all authors have defined this term. Hence, I distinguish simply between those studies that examine the developmental effects of natural resources in general (however specifically defined) and those that examine the developmental effects of a particular resource – e.g. oil or minerals.

2 Are natural resources bad for development?

As noted above, the literature on the resource curse has presented considerable evidence to suggest that natural resources are bad for development. This section reviews this evidence. It is organised according to sub-literature for the sake of clarity.

- **Economic performance:** A large number of studies have presented evidence to suggest that natural resource abundance, or at least an abundance of particular natural resources, reduces economic growth. Wheeler (1984), for instance, found that within sub-Saharan Africa, countries that were rich in minerals grew more slowly than those that were not rich in minerals during the 1970s. Similarly, Gelb and Associates (1988) found that mineral economies experienced a more serious deterioration in the efficiency of domestic capital formation during the boom period of 1971–1983 than non-mineral economies, leading to negative growth in hard mineral economies and dramatically reduced in oil exporting economies (see also Auty 1993). Sachs and Warner (1995) examined the experiences of a large and diverse set of natural resource economies between 1970 and 1989 and found that natural resource abundance was negatively correlated with economic growth. Leite and Weidmann (1999) and Gylfason et al. (1999) produced similar results, also using large datasets. Auty (2001a) found that

the per capita incomes of resource-poor countries grew at rates two to three times higher than resource abundant countries between 1960 and 1990. Neumayer (2004) examined whether natural resource abundance had a negative effect on economic growth if one measured growth in terms of 'genuine income' – that is, GDP minus the depreciation of produced and natural capital – rather than GDP. He found that it did.

Other scholars have presented evidence to suggest that the economic problems of resource abundant countries have gone beyond poor levels of economic growth. Nankani (1979), for instance, found that mineral economies performed relatively poorly in terms of agricultural growth, export diversification, and inflation compared to non-mineral economies and were more likely to be characterised by poor savings performance, greater technological and wage dualism, high unemployment, high external indebtedness, and high export earnings instability. Wood and Berge (1997) found that resource abundant countries were less likely to export manufactured goods than resource poor countries. Leite and Weidmann (1999) found that natural resource abundance tends to worsen corruption. Atkinson and Hamilton (2003) found that savings rates are on average lower in resource abundant countries than in resource poor countries. Finally, Ross (2003a) found that oil wealth and non-fuel mineral wealth are associated with bad outcomes for the poor in terms of poverty and human development levels.

- **Civil war:** The literature also contains numerous studies that suggest that natural resource abundance is associated with the onset of civil war and influences the duration and intensity of civil war – that is the number of battle-related deaths. After examining the experiences of 98 countries and 27 civil wars, Collier and Hoeffler (1998), for instance, found that natural resource abundance, defined in terms of the ratio of primary exports to GDP, is a strong and significant determinant of the onset of civil war, although they also found that the relationship between these variables was curvilinear: initially, natural resource wealth increased the risk of civil war but after a certain level of exports, it reduced this risk. In a subsequent study, they confirmed this finding using a better data set (Collier and Hoeffler 2000). In a third study, they examined the effect of natural resource abundance on different types of civil wars. They found that natural resources increased the risk of both secessionist and non-secessionist civil wars, but that the former were three times more likely to be associated with natural resources than the latter (Collier and Hoeffler 2002). Reynal-Querol (2002) conducted a similar study, focused on examining the association between natural resources and the onset of ethnic and non-ethnic civil wars. Using data from a sample of 138 countries between 1960 and 1995, she found that natural resource abundance was an important variable in explaining the incidence of non-ethnic civil wars and other forms of political violence but not the incidence of ethnic civil wars. In their most recent paper, Collier and Hoeffler (2005) report on work showing that natural resource wealth continues to exhibit a curvilinear relationship with the onset of civil war even if a rent-based measure of natural resource abundance is substituted for their original export-based measure. However, they note that this result is less significant than their earlier finding and that the rent-based measure of natural resource abundance becomes insignificant, when the original measure of natural resource wealth is included in the regression analysis as well.

Some researchers have also suggested that natural resource abundance may lengthen the duration of civil wars. Collier and Hoeffler (1998), for instance, found that natural resource abundance and the duration of civil wars also had a curvilinear relationship. Similarly, Doyle and Sambanis (2000) found that natural resource wealth was significantly and negatively correlated with the success of peace-building initiatives. As Ross (2004a: 341) has noted, in so far as there is a link between the failure of such initiatives and the duration of civil wars, this finding suggests that natural resource wealth is associated with longer wars. Fearon (2004) found that countries that are rich in contraband resources such as opium, diamonds, or coca tend to experience

longer civil wars and Ballantine (2003) found that natural resources served to prolong civil wars in a selection of resource rich developing countries.

Finally, as Ross (2004b: 45) has noted, several observers of Africa's civil wars, have suggested that natural resources worsen the intensity of civil wars 'by causing combatants to fight for territory that would otherwise have little value'. Ross (2004b) himself found only very modest support for this idea: of the thirteen cases of civil war he examined, natural resources only clearly increased the intensity of conflict in two cases; in the eleven others, natural resources either had no effect or a mixed effect on civil war intensity.

- **Regime type:** The resource curse literature also contains a number of studies that suggest that natural resource abundance is associated with low levels of democracy. Wantchekon (1999), for instance, examined data related to 141 countries between 1950 and 1990 and found that a one per cent increase in natural resource dependence, as measured by the ratio of primary exports to GDP, increased the probability of authoritarian government by nearly 8 per cent. He also found that countries that were rich in natural resources were more likely to experience failed or slow transitions to democracy. Jensen and Wantchekon (2004) presented similar findings in relation to Africa, concluding that resource abundant countries in this region were more likely to be authoritarian and experience breakdowns in democracy after the democratic transition. Ross (2001a) investigated whether there was any variation in regime outcomes across different types of resource economy and different regions. After examining data from 113 states between 1971 and 1997, he concluded that 'a state's reliance on oil or mineral exports tends to make it less democratic; that this effect is not caused by other types of primary exports; that it is not limited to the Arabian peninsula, to the Middle East, or to sub-Saharan Africa; and that it is not limited to small states'.

While there is thus considerable evidence to support the notion of a resource curse, there are several reasons to treat this evidence with caution. First, some scholars have suggested that the findings of studies such as those cited above may not be robust to differences in the measurement of natural resource abundance. In general, researchers have measured natural resource abundance in terms of either the ratio of countries' natural resource exports to GDP or the ratio of countries' natural resource exports to total exports. When they have used different measures of natural resource abundance, their results have been less clearly supportive of the notion of a resource curse. Stijns (2001), for instance found that when natural resource abundance was measured in terms of levels of production and reserves rather than exports, it did not have a significant influence on economic growth. Similarly, Herb (2003) found that when natural resource abundance was measured in terms of the percentage of rents in government revenues rather than levels of natural resource exports, there is little support for the idea that there is a negative relationship between natural resource abundance and the occurrence of democracy. De Soysa (2000) found that when natural resource abundance was measured in terms of the level of natural resource stock per capita, there was no relationship between the incidence of civil war and the overall level of natural resource abundance. Auty (2001a: 5) has pointed out that a number of studies have used non-export based measures of natural resource abundance including Gylfason *et al.* (1999) (who used labour force in the primary sector) and Auty (2001a) (who used crop land per head), suggesting that the findings of these studies may be more robust than critics of the resource curse hypothesis have suggested. But the question of whether these findings are robust to broader changes in the measure of natural resource abundance remains unresolved.

Second, it is not clear that the ratio of natural resource exports to GDP or the ratio of natural resource exports to total exports are appropriate measures of natural resource wealth. As we will see below, most studies that attempt to explain the resource curse suggest that the main problem with natural resource abundance is not that it leads to economic dependence on natural resources or a skewed export structure *per se* but that it

creates rents – that is, excess earnings above normal profits. The existence of these rents is in turn variously seen as contributing to negative development outcomes by encouraging myopia and over-exuberance on the part of political elites, promoting damaging rent-seeking behaviour by political elites and/or social actors, weakening state capacity to regulate and supervise the economy, empowering social elements that are opposed to growth-promoting policies, or encouraging foreign intervention. As such, it could be argued that rent-based measures of natural resource abundance provide a more useful basis for making judgements about the existence or non-existence of a resource curse. Yet studies that have used such measures – such as Herb (2003) and Collier and Hoeffler (2005) – have so far provided only mixed support for the notion of a resource curse.

Third, the finding that there is a strong relationship between natural resource abundance and the onset and duration of civil war seems to be contingent on the use of a particular civil war database. As Ross (2004a: 347–8) has pointed out, the studies that have presented this finding have all used Collier and Hoeffler's list of civil wars, yet scholars who have used alternative lists of civil wars have generally come to different conclusions. He suggests several reasons for this related to the way in which civil wars are coded and civil war duration is measured. In short, however, he suggests that Collier and Hoeffler's database 'may be biased in a way that overstates the impact of primary commodities' (2004a: 342).

Fourth, a number of scholars have presented evidence that suggests that the main problem *vis-à-vis* development outcomes in resource abundant countries is not natural resource abundance *per se* – as many of the aforementioned studies suggest – but an abundance of particular types of natural resources. At the same time, there is some disagreement, at least in relation to civil war, about which natural resources are the main problem. Many researchers have pointed to 'point source' natural resources – for instance, oil, minerals, and plantation crops – as being particularly problematic. Isham *et al.* (2002), for instance, found that countries that are rich in point source natural resources grew much more slowly during the 1980s and 1990s than countries that are rich in 'diffuse' natural resources – for instance, wheat and rice – and countries that are rich in cocoa and coffee. Similarly, Sala-i-Martin and Subramanian (2003) found that an abundance of point source natural resources was significantly correlated with poor economic growth but that an abundance of diffuse natural resources was not. Leite and Weidmann (1999) found that fuel and ores had a more negative effect on growth than agriculture (although a less significant negative effect than food production). Ross (2003a) found that oil wealth and non-fuel mineral wealth are associated with bad outcomes for the poor but not agricultural resources. De Soysa (2000) found that, while the incidence of civil wars was not related to total natural resource wealth, it was strongly related to the level of mineral wealth, suggesting that point source resources (specifically mineral resources) rather than natural resources in general are the main problem as far as the onset of civil war is concerned. In a subsequent study, he found that, among mineral-rich countries, oil exporters were particularly prone to civil war (De Soysa 2002). Fearon and Laitin (2003) have presented similar evidence on this point, showing that the size of countries' primary commodity exports is not a significant determinant of the onset of civil wars but that their level of oil wealth is. Fearon (2005) has provided further evidence to this effect. Finally, Ross' (2001a) findings on the relationship between oil wealth and democracy are also consistent with the emphasis on the negative effects of point source resources.

His findings in relation to civil war, however, are not. In Ross (2003b), he presents evidence to suggest that it is 'lootable' resources such as diamonds (particularly alluvial diamonds) and drugs (particularly opium and coca) rather than point source resources that are the most likely to produce civil war. After analysing 12 civil wars and three minor conflicts that occurred between 1990 and 2000, he found that, once income per capita was accounted for, there was little difference in civil war rates between resource abundant countries in the four main categories of natural resources – oil and gas, minerals, food crops, and non-food crops. By contrast, he found that diamonds and drugs were strongly associated with the incidence of civil war. Humphreys (2005) has also presented evidence to suggest that point source resources are not the main problem *vis-à-vis* the onset of civil war, although his

findings also challenge Ross's findings concerning lootable resources. According to his evidence, the main problem *vis-a-vis* the onset of civil war is the extent to which countries are dependent on agricultural production. This effect, he notes, is independent of a country's endowment of oil and diamonds, suggesting that the problem of resource dependence is not simply one of the availability of point source or lootable resources but also economic structure and how this shapes social relations (2005: 524–5). These findings stand in marked contrast to those of Fearon, Fearon and Laitin, and De Soysa and suggest that the issue of which types of natural resources are most likely to lead to the onset of civil war has not yet been resolved.

Fifth, there is some evidence, albeit very limited, that natural resource wealth may in fact have a beneficial, or at least neutral, effect on development performance. Davis (1995), for instance, has shown that, by certain economic and social measures, mineral economies outperformed non-mineral economies between 1970 and 1991. These measures include average GNP per capita and improvement in various social indicators such as infant mortality, life expectancy, calorie supply per capita, and the UN's human development index. None of this evidence is necessarily inconsistent with the findings of the aforementioned studies because it focuses on social indicators rather than economic indicators such as growth. But it does raise the question of whether economic growth in particular is the only measure that we should examine in judging the economic performance of resource abundant countries. In addition, some scholars have produced evidence to suggest that natural resource abundance may not have a negative effect on the onset, duration or intensity of civil war. In a study of the effects of oil dependence on regime failure and conflict in 107 developing countries between 1960 and 1999, Smith (2004), for instance, found that oil wealth is associated with lower levels of civil war and anti-state protest. Similarly, Sørli *et al.* (2005) found that oil dependence has not exercised a significant influence on the onset of civil war in the Middle East in recent decades. In respect of the duration of civil war, Humphreys (2005) has presented evidence to suggest that natural resource conflicts are more likely to end quickly while Ross (2003b) has presented evidence to suggest that while lootable resources may serve to prolong non-separatist conflicts, non-lootable resources serve to reduce non-separatist conflicts (see also Collier *et al.* 2004). In respect of the intensity of civil war, Ballantine (2003) has suggested that natural resource abundance has, in some cases, reduced the number of battle-related deaths during civil war.

Finally, while the studies above provide evidence that natural resource abundance – or at least an abundance of particular types of natural resources – and various development outcomes are *correlated* with one another, they do not prove that the former *causes* the latter. Those arguing in favour of the notion of a resource curse have merely inferred causality from the evidence of correlation. However, the direction of causation may in fact run the other way. That is, it may be that civil war, for instance, causes economic dependence on the natural resources sector by making it difficult for countries to attract manufacturing investment. As Schrank (2004) puts it, natural resource dependence may be a symptom of underdevelopment rather than the cause. Alternatively, the relationship between natural resource dependence and various development outcomes may be entirely spurious – that is, their correlation with one another may simply reflect the influence of an unidentified third variable. Just as ice cream sales and the number of sunburn cases are highly correlated because of changes in the seasons, rather than because ice cream consumption causes sunburn or vice versa, so it may be that natural resource abundance and civil war, for instance, are correlated because a third variable (say, the weak rule of law) both increases the risk of civil war and the difficulties countries face in attracting manufacturing investment (Ross 2004a: 338). It will only be by examining more closely the causal mechanisms surrounding the resource curse that scholars will adequately resolve these issues.

2.1 Conclusion

In sum, then, while there is strong evidence to support the notion of a resource curse, it is by no means conclusive. First, there are a variety of factors related to the measurement of key variables – especially, natural resource abundance and civil war outcomes – that raise doubts about the findings of studies that are supportive of the resource curse hypothesis. Second, it is unclear whether the resource curse (and its various dimensions) applies to all natural resource economies or just certain ones. Different studies point in different directions on this issue. Also there is ongoing debate among those who argue that particular natural resources are the main problem about which natural resources are most pernicious, especially in relation to civil war. Third, some studies report findings contrary to the resource curse hypothesis, even when they use the same measure of natural resource abundance as those that support this hypothesis (as is the case, for instance, with some studies on the link between natural resource abundance and the duration of civil war). Finally, these studies do not illustrate conclusively that the direction of causation runs from natural resource wealth to poor development outcomes rather than the other way around and that the relationship between the two does not reflect the influence of an independent third variable.

3 What causes the resource curse?

Notwithstanding the inconclusive nature of the evidence in support of the notion of a resource curse, many researchers have taken it as read that natural resource wealth leads to bad development outcomes and have focused on trying to explain why this is the case, either in general or in respect of particular regions or countries. The perspectives they have offered vary considerably in terms of the causal mechanisms that they emphasise but can be broadly grouped into seven categories: (i) *economistic* perspectives that emphasise economic mechanisms; (ii) *behaviouralist* perspectives that emphasise emotional or irrational behaviour on the part of political actors; (iii) *rational actor* perspectives that emphasise self-interested behaviour on the part of political actors; (iv) *state-centred* perspectives that emphasise the nature of the state; (v) *social capital* perspectives that emphasise the degree of social cohesion in countries; (vi) *structuralist* perspectives that emphasise the role of social groups or socio-economic structure; and (vii) *radical* perspectives that emphasise the role of foreign actors and structures of power at the global level. Explanations from all of these categories feature in the sub-literature on natural resources and economic performance, with more limited sets of explanations featuring in the sub-literatures on natural resources and civil war and natural resources and regime type, reflecting greater academic engagement with issues in the first sub-literature.

3.1 Economic performance

Much early work on the economic performance of resource abundant countries suggested that the causal mechanisms linking natural resource abundance and economic performance were essentially economic in nature.¹ Singer (1950) and Prebisch (1950), for instance, argued that resource abundant countries had suffered from declining terms of trade over time, in turn constraining their prospects for economic growth and development. Other scholars such as Nurske (1958) and Levin (1960) argued that the problem for resource abundant countries was that international commodity markets were inherently unstable and that any instability within them could easily be transferred to domestic economies, in turn affecting the reliability of government revenues and foreign exchange supplies and dramatically increasing risks for private investors. Hirschman (1958) suggested that the problem was the

¹ This and the following paragraph draw heavily on Ross (1999: 301–9).

'enclave' nature of natural resource activities and the fact that multinational enterprises in these sectors tended to repatriate profits rather than reinvest them in the local economy. This, he said, made development difficult by restricting opportunities for the development of backward and forward linkages between these activities and the rest of the economy. Finally, in the early 1980s, several commentators argued that resource abundant countries were susceptible to the so-called 'Dutch disease' – a condition whereby a resource boom leads to appreciation of the real exchange rate and in turn damages manufacturing and other tradable sectors (Corden and Neary 1982; Bruno and Sachs 1982).

Most of these explanations are now regarded with some scepticism. Subsequent studies of trends in international commodity prices have suggested that while in overall terms international commodity prices have declined during the twentieth century, this has been due largely to declines in the prices of commodities that are exported exclusively by developed countries or more or less exclusively by relatively successful developing countries – the prices of commodities exported primarily by other developing countries have not declined severely during this period. Similarly, several studies have suggested that export price instability may be beneficial to exporters in so far as it can encourage higher levels of private investment as exporters seek to protect themselves against future price shocks. Other studies have suggested that export price instability does harm exporters but have not clearly demonstrated that it harms exporters of primary commodities. There has been more support in subsequent studies for Hirschman's argument regarding economic linkages and for the Dutch disease hypothesis. But these studies also suggest that governments can take action to address these problems, in turn suggesting that these negative effects may operate more through political than economic mechanisms.²

For this reason, most recent work on the relationship between natural resource abundance and economic performance has given much greater attention to the role of political variables in mediating this relationship. On the one hand, economists have increasingly incorporated ideas from political science into their work on the resource curse, particularly, although not exclusively, ideas from neoclassical political economy and the new institutionalism (Eifert *et al.* 2003; Rodrik 2003; Isham *et al.* 2002; Auty 2001c, 2001d; Torvik 2002). On the other hand, political scientists have entered debates on the resource curse, bringing with them analytical frameworks such as behaviouralism, public choice theory, Marxism, institutionalism/statism, dependency and world systems theories, and fiscal sociology, all of which give central attention to the role of political factors in shaping economic outcomes. For the most part, both economists and political scientists have agreed that the immediate cause of poor economic performance in resource abundant countries has been poor economic management. In particular, they have pointed to fiscal profligacy, overvalued exchange rates, excessive protection, and inefficient use of resource windfalls as being the main problems in this respect (Usui 1997; Anderson 1998; Mitra 1994; Karl 1997; Ascher 1999). However, the broad consensus that poor economic management has been the immediate cause of poor economic performance has not reflected consensus about the underlying causes of this poor performance. Generally speaking, five main sets of perspectives have emerged on this issue:

- **Behaviouralist perspectives:** These perspectives have suggested that natural resource abundance leads to various types of emotional or irrational behaviour on the part of political elites, in turn contributing to poor economic policy-making and institutional deterioration. In particular, it is argued, resource booms induce myopia, sloth, and/or over-exuberance in political elites. Such arguments featured in the work of great political and economic theorists such as Machiavelli, Montesquieu, Smith and Mill and in the work of economists such as Wallich (1960), Levin (1960), Nurske (1958) and Watkins (1963). More recently, they have appeared in the work of economists such as

² See Ross (1999: 301–7) references to these studies.

Mitra (1994) and political scientists such as Krause (1995) (Ross 1999: 309). Mitra (1994: 295) has argued that resource booms produce a ‘tendency to optimism’ in countries that benefit from such booms, in turn leading to excessive government spending. Similarly, Krause (1995: 322) has suggested that natural resources lead to ‘wishful thinking’ among policy-makers in resource-rich countries. Behaviouralist ideas have also featured in commentary on the resource curse in the popular media (e.g. Useem 2003).

- **Rational actor perspectives:** In contrast to behaviouralist perspectives, these perspectives portray political actors as rational utility-maximising individuals. Accordingly, they have suggested that the problem with natural resource abundance is not that it leads to irrational behaviour on the part of political actors but that it provides them with an opportunity to line their own pockets by engaging in rent-seeking. Most scholars have suggested that members of the political elite are the main problem in this respect. Ross (2001b), for instance, argues that when governments receive windfalls from a resource boom, rational political elites will take the opportunity to either directly seize the rents created by resource booms or gain control over the right to allocate them – a process he calls ‘rent-seizing’ (Ross 2001b). In a similar vein, Ascher (1999) has suggested that resource abundant countries have generally wasted their natural resources because political elites have tended to use them to pursue various programmatic and political objectives including financing controversial development programs, providing economic benefits to particular groups, capturing rents for the government treasury, creating rent-seeking opportunities in order to secure private sector cooperation in relation to other objectives, gaining control over rent allocation, and evading accountability. Robinson *et al.* (2002) have suggested that such rent-seeking behaviour is most likely to lead to negative economic outcomes when resource booms are perceived to be temporary because political elites will focus on maximising the rents that they can extract in the short-term. Where resource booms are perceived to be permanent, they argue, political elites will be less interested in short term rent-maximisation because permanent booms increase the likelihood that they will stay in power and hence the gains that they can make by promoting long-term economic development. Even where booms are perceived to be permanent, however, Robinson *et al.* (2002) suggest that economic outcomes are likely to be negative because political elites will still have an incentive to engage in inefficient redistribution of economic resources in order to influence elections.³ Other scholars, however, have suggested that social actors are more to blame for the increased rent-seeking. Torvik (2002), for instance, has argued that natural resource abundance increases the rewards that social actors can gain from rent-seeking, and in turn provides them with greater incentive to engage in such behaviour.

- **State-centred perspectives:** These perspectives suggest that natural resource abundance leads to poor economic performance not by influencing the behaviour of political elites or social actors but by influencing the state’s capacity to promote economic development. Numerous scholars, for instance, have pointed to the problems associated with so-called ‘rentier’ states – that is, states that receive regular and substantial amounts of ‘unearned’ income in the form of, for instance, taxes on natural resource exports or royalties on natural resource production (Mahdavy 1970; First 1974; Skocpol 1982; Beblawi 1987; Luciani 1987; Tanter 1990; Chaudhry 1994; Vandewalle 1998; Gunn 1993). Because these states have large amounts of unearned income to spend, it is argued, they tend to develop greater capacity in distributive functions such as social welfare, education, and health and productive functions –

3 The main exceptions, according to Robinson *et al.* (2002), will be countries that have strong political and economic institutions.

state-owned enterprise sectors are typically quite large in rentier states – than in functions related to the regulation and supervision of the economy and domestic taxation (Garaibeh 1987; Chaudhry 1994). As Luciani (1987: 74) has put it, rentier states do ‘not need to formulate anything deserving the appellation of economic policy: all [they need] is an expenditure policy’. Karl (1997), Moore (2000, 2004), Auty (2001c, 2001d), and Auty and Gelb (2001) have presented similar analyses to rentier state theorists using slightly different terminology and concepts. Karl (1997: 16) for instance, has argued that dependence on oil revenues leads to the emergence of ‘petro-states’, that is, states that are geared towards the ‘political distribution of rents’ rather than promotion of private investment, production and economic growth. The emergence of petro-states, she suggests, is particularly likely where oil’s domination of the economy coincides with the process of state formation (see also Vandewalle 1998: 33–8). In these cases, the domination of oil gives the state a distributive character from its inception, which, given the stickiness of institutions, becomes locked in. Moore (2000, 2004) has suggested that natural resource abundance leads to ‘bad governance’ in developing countries because states’ financial autonomy means that they have little accountability to their citizens. Auty (2001c, 2001d) and Auty and Gelb (2001) have argued that natural resource abundance significantly increases the likelihood that countries will develop predatory or factional oligarchic states rather than developmental ones for four main reasons: (i) the relative abundance of land and the existence of natural resource rents in these countries creates a relatively high tolerance by the poor majority for inequitable asset distribution and predatory rent extraction, in turn decreasing the chances that the state will promote asset redistribution; (ii) resource abundant countries are more likely to adopt protective trade policies rather than developmental export-oriented policies because they are affected by the Dutch disease; (iii) the large size of the resources sector means that it can support inefficient inward-looking industrial sectors with transfers from the resources sector; and (iv) resource abundant countries are more prone to ‘cumulative policy error’ (Auty and Gelb 2001: 128–9).

- **Historico-structuralist perspectives:** These perspectives have suggested that natural resource abundance has pernicious economic effects not because of its effects on the behaviour of political elites or the institutional capacity of the state but because of its effect on the relative power of different social groups or classes. One group of researchers, for instance, has suggested that natural resource abundance strengthens well-connected business groups, in turn increasing pressure on governments to pursue economic policies that serve the interests of these groups rather than the common economic interest or the interests of the poor (Urrutia 1988; Broad 1995). In a similar vein, several writers have suggested that one of the main reasons that Latin America has performed less well than East Asia in terms of economic growth and poverty reduction in recent decades is the effect of the two region’s natural resource endowments on their industrial policies. In Latin America, it is argued, natural resource abundance led to the social and political dominance of landed and business elites that had a vested interest in import-substitution industrialisation (ISI), hence preventing the development of an externally competitive industrial sector, while in East Asia, resource poverty meant that such elites did not exist, or at least did not exercise significant political and social power, in turn making it easier for governments to shift away from ISI towards export-oriented industrialisation and the development of an externally competitive industrial sector (Mahon 1992; Auty 1995).
- **Social capital perspectives:** These perspectives have suggested that the problem with natural resource abundance, particularly an abundance of point source resources, is that it undermines social cohesion and in turn limits the capacity of governments to manage economic shocks. Ownership of point source resources, it is argued, is typically concentrated in the hands of a few well-connected individuals or families, a situation that creates severe social tensions. While these tensions may be masked

during periods of economic prosperity they come to the surface at times of economic crisis. The result, it is argued, is that it is difficult to generate a social consensus around a reformist strategy for coping with the crisis. In this context, powerful vested interests typically win out and economic reform is stymied (Isham *et al.* 2002: 18–19; see also Rodrik 1999 and Hausman 2003).

- These perspectives have suggested that natural resource abundance makes a developing country a target for forced incorporation into the global capitalist system – a system in which the interests of poor developing countries are subordinated to those of wealthy developed countries – in turn impairing their ability to pursue autonomous programs of economic development. Perelman (2003: 200), for instance has argued: ‘a rich natural resource base makes a poor country, especially a relatively powerless one, an inviting target – both politically and militarily – for dominant nations. In the case of oil, the powerful nations will not risk letting such a valuable resource fall under the control of an independent government, especially one that might pursue policies that do not coincide with the economic interests of the great transnational corporations’. The result, dependency theorists suggest, is that governments in resource abundant developing countries are permitted to engage in corrupt and economically damaging activities so long as they remain loyal to the dominant nations and allow the natural resource wealth within their borders to be looted by firms from wealthy countries (see also Bellamy *et al.* 2004 and Amin 2001).

3.2 Civil war

Numerous scholars have also examined the causal mechanisms linking natural resource abundance and four dimensions of civil war: the onset, duration, intensity and type of civil war. Below we examine their arguments in relation to each of these dimensions in turn.

3.2.1 The onset of civil war

The debate over the causal mechanisms linking natural resource abundance and the onset of civil war needs to be understood within the context of the wider debate over the causes of civil war. In broad terms, this wider debate has centred on two main arguments. The first of these, which reflects behaviouralist ideas, has emphasised the motives of rebel organisations. It has suggested that civil wars are caused by grievances stemming from inequalities of wealth, limited political rights, or ethnic and religious divisions. The second argument, which reflects ideas associated with the rational actor perspective, has emphasised the economic incentives and opportunities facing rebel organisations. In contrast to the grievance argument, it assumes that rebellions are caused by greed – that is, by a desire on the part of rebel leaders to enrich themselves and their followers. At the same time, however, it suggests that civil wars are most likely where opportunities exist for rebels to fund their activities. The former argument has appeared in some form in the work of various political scientists (Regan 2003; Ross 2002) while the latter argument has been advanced most prominently by the economists Collier and Hoeffler (2000) (see also Collier 2000).

In the former argument, natural resource abundance is important in so far as it serves to exacerbate the grievances that lead to rebellion. Particularly important in this respect are grievances stemming from various typical consequences of natural resource exploitation: insufficiently compensated land expropriation, environmental degradation, inadequate job opportunities, and labour migration. In the latter argument, natural resource abundance is important because it constitutes a potential source of funding for rebel activities. More specifically, Collier and Hoeffler (2000) suggest that it constitutes a potential source of funding for the start up costs of initiating a rebellion such as buying arms and hiring soldiers. The existence of primary commodities, it is argued, enables rebel groups to raise money by

extracting and selling resources directly or extorting money from those who do. This is often referred to as the 'looting' mechanism (Ross 2004b: 40).

A number of scholars have argued that neither the grievance nor looting arguments are particularly helpful in understanding the onset of civil war in specific cases, at least not if they are used on their own. After reviewing civil wars in several developing countries, including several resource rich countries, Ballantine (2003: 260), for instance, concluded that: 'Economic incentives and opportunities have not been the only or even the primary cause of these armed conflicts; rather, to varying degrees, they interacted with socio-economic and political grievances, inter-ethnic disputes, and security dilemmas in triggering the outbreak of warfare'. In other words, she suggests that civil wars in resource abundant countries are caused, to varying degrees, by some combination of looting and grievance, rather than just one or the other. In a similar study of 13 civil wars that occurred in resource abundant countries, Ross (2004b) found even less support for the looting and grievance hypotheses. In none of these cases of civil war, he argued, did nascent rebel groups ever fund the start up costs of conflict by extracting or selling natural resources or extorting money from those who did, a finding that contradicts the looting hypothesis. Nor, he argues, were complaints about land expropriation, environmental degradation, insufficient employment opportunities or labour migration associated with the onset of non-separatist civil wars in any of the cases, except possibly that of Sierra Leone. He did, however, find some support for the notion that natural resource-related grievances can cause separatist civil wars, an effect he labels the 'separatist' mechanism.

Ross (2004b) suggests that rather than being caused by the looting or grievance mechanisms, civil wars in resource abundant countries are typically caused by various alternative mechanisms. The other causal mechanisms for which he finds some support in his study are what he labels the 'foreign intervention' mechanism – a mechanism whereby 'resource wealth increases the probability of civil war by increasing the probability of foreign intervention to support a rebel movement' – and the 'booty futures' mechanism – a mechanism whereby 'resource wealth increases the probability of civil war by enabling rebel groups to sell future exploitation rights to minerals they hope to capture' (2004b: 57–8). Both of these mechanisms are consistent with the idea that greed rather than grievance is the primary cause of civil war, but obviously not with the looting hypothesis. At the same time, Ross also suggests that civil wars generally reflect the operation of two or more causal mechanisms operating at once rather than a single causal mechanism. In particular, he finds that some combination of the two above mechanisms and the separatist mechanism account for civil war in virtually all of the cases in his sample.

Other scholars, particularly those operating from a state-centred perspective, have argued that civil wars in resource abundant countries are caused by state weakness rather than the greed or grievances of individual armed actors. Auty (2004), for instance, has argued that natural resources create the conditions for civil war through a two-stage process. In the first stage, natural resource abundance leads to the emergence of predatory states which in turn produces growth collapses, an argument that mirrors his earlier analysis concerning the economic performance of resource abundant states (discussed earlier). This growth collapse, he suggests, is a necessary, although not sufficient, condition, for the onset of civil war. Whether civil war then occurs is a function of the type of natural resources that a country has, specifically whether they are point source or diffuse resources and lootable or non-lootable. According to Auty, point source resources are more likely to produce conflict than diffuse resources because they concentrate rents on the government and thereby encourage military opposition from disaffected groups; and lootable resources are more likely to produce conflict than non-lootable resources because they can be relatively easily captured by secessionist rebels or warlords, especially if they are located near porous borders. Similarly, Pearce (2005: 180) has argued that civil war in Colombia in the 1990s reflected poor economic governance and exclusiveness on the part of the state. Until such time as the Colombian state is fair and effective, she argues, its citizens are unlikely to 'grant it the monopoly of the legitimate use of violence'. And Silberfein (2004: 215) has argued that the civil war in Sierra Leone is linked in part to 'the collapse of the state, the

emergence of pervasive criminality among state and non-state actors along with the proliferation of small arms’.

A final perspective on the causes of civil war has been offered by scholars operating from a dependency perspective. As noted earlier, dependency theorists have argued that natural resource abundance turns developing countries into targets for forced incorporation into the global capitalist system because rich countries desire cheap access to their resources to maintain their own economic development and wealth. In their view, then, violent conflict in resource abundant countries is best understood in terms of contests between rich states over scarce natural resources, an argument often referred to as the ‘resource scarcity’ idea. In essence, this argument is very similar to what Ross has labelled the ‘foreign intervention’ mechanism, although it is different in so far as it reflects certain assumptions (which probably does not share) about the way in which the world works.

3.2.2 Duration and intensity

The sub-literature on natural resources and civil war also contains analyses of the causal mechanisms linking natural resource wealth, on the one hand, and the duration and intensity of civil wars, on the other. In relation to the duration of civil wars, the sub-literature suggests that natural resource wealth may serve to prolong civil wars in four ways: (i) by enabling the weaker side in a conflict to raise funding through looting and thereby sustain itself over time (Ross 2004b; Ballantine 2003); (ii) by giving combatants an incentive to avoid a peace deal (Fearon 2004; Sherman 2000; Ballantine 2003); (iii) in the case of separatist conflicts, by reducing the likelihood that governments will stick to a peace deal that gives a region fiscal autonomy (Fearon 2004; Ross 2004b); and (iv) by enabling the weaker side in a conflict to raise money by selling future exploitation rights to minerals that they want to control (Ross 2004b). There is some debate about the extent to which mechanism (ii) is valid. Ross (2004b), for instance, has argued that analysts should treat claims about the importance of mechanism (ii) with caution because, in his study, while the incentive to avoid a peace deal appeared to lengthen two conflicts, it also appeared to shorten three other conflicts and have no effect in a number of other conflicts. There appears to be less disagreement, however, about the merits of the other causal mechanisms. In relation to the intensity of civil wars, Ross (2004b) has suggested that natural resource wealth may increase the casualty rate during civil wars by (i) ‘causing combatants to fight for resource-rich territory that would otherwise have little value’ (2004b: 45); and (ii) ‘giving the government an incentive to react to small challenges with unusually harsher countermeasures’ (2004b: 61). However, several scholars have suggested that natural resources may in some cases reduce the intensity of conflict by encouraging combatants to cooperate in resource exploitation (Keen 1998; Ballantine 2003; Ross 2004b). Ballantine (2003: 269) notes that this has occurred in Sierra Leone and the DRC, for instance, where ‘the impossibility of any one side securing a full monopoly over lootable resources has ... offered ... a compelling incentive for collusion rather than competition’. Again, these causal mechanisms seen as affecting the duration and intensity of civil wars focus on the economic incentives facing combatants and, as such, are broadly consistent with the view that greed rather than grievance is the cause of civil wars.

3.2.3 Type of civil war

Finally, the sub-literature on natural resources and civil war also contains analyses of the causal links between different types of natural resource and different types of violent conflict. Le Billon (2001), for instance, has distinguished between four different types of natural resource: point source resources that are close to the capital; point source resources that are distant from the capital; diffuse resources that are close to the capital; and diffuse resources that are distant from the capital. Each of these types of natural resource, he suggests, is associated with a different type of violent conflict. There are two dynamics at

work. First, whereas point source resources can be easily captured by a single group because they are concentrated in particular locations, diffuse resources are harder for any single group to capture because they are spread out over a broad geographical area. Second, whereas natural resources that are close to the capital can be easily held by the government, resources that are distant from the capital are easier for rebels to capture. Hence, he concludes that point source resources that are close to the capital will tend to be associated with conflicts over state control; point source resources that are distant from the capital will tend to be associated with separatist conflicts; diffuse resources that are close to the capital will tend to be associated with rebellions and rioting; and diffuse resources that are distant from the capital will tend to be associated with warlordism.

By contrast, Ross (2003b) has presented evidence based on a series of case studies to suggest that the incidence of particular types of civil war depends largely on the extent to which natural resources are lootable. Unlootable resources, he says, are more likely to produce separatist conflicts while lootable resources are more likely to produce non-separatist conflicts. The reason for this, he suggests, is that extraction of unlootable resources relies heavily on skilled labour and capital while extraction of lootable resources relies heavily on unskilled labour. Hence, unlootable resources tend to benefit skilled workers from outside the region in which the resources are located, extraction firms and the government rather than local people and, in turn, fuel grievances among local people. Lootable resources, by contrast, tend to benefit local people, including the local poor.

3.3 Regime type

The debate over the causal mechanisms linking natural resource abundance and regime type has centred on the relative merits of four explanations. The first of these, which reflects a state-centred perspective (and in particular the notion of a rentier state), suggests that natural resource wealth hinders democracy because governments in resource-rich countries are able to use government spending and low taxes to reduce pressures for democratisation. Lam and Wantchekon (2003), for instance, have argued that the economic benefits of resource booms are typically concentrated on political elites, in turn enabling them to maintain support and consolidate their power. In authoritarian political systems, this means more limited scope for democratic change. Similar arguments have been made by Jensen and Wantchekon (2004) in relation to resource abundant states in Africa, Beblawi (1987) and Luciani (1987) in relation to oil states in the Middle East, and Ross (2001a) in relation to oil states in general. The second explanation, which is also broadly consistent with the state-centred perspective, suggests that natural resource wealth hinders democracy by enabling governments in resource-rich countries to spend more on internal security. With stronger internal security forces, it is argued, governments can limit the scope for political opponents to organise and challenge them (Ross 2001a; Jensen and Wantchekon 2004). The third explanation builds on rational actor analyses of the causes of civil war and focuses on the link between civil wars and political regimes. As Jensen and Wantchekon (2004: 822) have argued, the central idea of this explanation is that natural resource wealth can serve to consolidate particular regimes in power, in turn making it rational for opposition groups to pursue power through extra-constitutional means (i.e. war). This in turn, they argue, 'could result in a dictatorship by the opposition party or the incumbent party' depending on the outcome of the war. The final explanation, which is broadly consistent with the historico-structuralist perspective, suggests that natural resource wealth hinders democracy by preventing the social and cultural changes that facilitate democratisation such as rising education levels and occupational specialization. Ross (2001a) has labelled this the 'failed modernisation' effect.⁴ Herb (2003) and Clark (1997) have

4 Herb (2003) and Clark (1997) have challenged this explanation, suggesting that natural resource wealth may in fact lead to various social and cultural changes consistent with 'modernisation'. These in turn may, on balance, outweigh any negative effects of resource wealth.

challenged this explanation, suggesting that natural resource wealth may in fact lead to various social and cultural changes consistent with 'modernisation'. These in turn may, on balance, outweigh any negative effects of resource wealth.

3.4 Commentary

Our purpose here is not to resolve these debates concerning the link between natural resource wealth, on the one hand, and economic performance, civil war, and regime type on the other. To do so would require much more space than is available here and would, in any case, be an impossible task given our level of knowledge concerning the effects of natural resource wealth. Despite, this, however, we think that a few comments are in order.

First, none of the perspectives mentioned above adequately addresses the role of social forces in shaping development outcomes in resource abundant countries. In state-centred and behaviouralist perspectives, the general assumption is that policy elites in resource abundant countries have a high degree of autonomy from domestic social groups because states are financially independent of them. Because domestic social groups do not have to fund the state, it is argued, they tend to make few demands of it. However, as Okruhlik (1999) has illustrated, while the financial independence of states in resource abundant countries may mean that policy elites rarely face social pressure in relation to their taxation policies, they frequently face serious social pressures in relation to spending decisions. Just because citizens do not have to make financial sacrifices to fund their governments, she argues, does not mean that they have no interest in how their governments use their resources nor that they are unwilling to engage in collective action to influence spending decisions. Furthermore, the nature of state institutions in resource-rich countries is often shaped by long-standing social patterns and dynamics, particularly in cases where natural resource domination of the economy occurred after the state was already formed. As Okruhlik (1999: 309) has put it in relation to oil producing states: 'Life did not begin, as many imply, in 1973 with the quadrupling of oil prices. Rather, oil enters into an ongoing process of development and into a constellation of identities. The extent to which social forces were corporate groups before oil has indeed proven important.' The case of Iran in the late 1970 makes this clear: notwithstanding the rentier effects of oil wealth, domestic social groups were able to capture the state in this country by making appeals to primordial sentiments such as religious morality (see, for instance, Skocpol 1982; Shambayati 1994). These points suggest that if we are to properly understand why states in resource abundant countries perform poorly in economic terms, are undemocratic, and are prone to violence, we need to give greater attention to the nature of the social contexts in these countries than behaviouralist or state-centred perspectives allow.

At the same time, we also need to have a better understanding of the characteristics of societies in resource abundant countries than that which underpins rational actor and social capital perspectives. Scholars operating from a rational actor perspective such as Torvik (2002) and Collier and Hoeffler (1998) suggest that societies in resource abundant countries are composed of disconnected rational utility maximising individuals who only join together into organised groups to advance common economic interests. The problem with this approach is that it tells us nothing about the structural characteristics of societies – that is whether, groups are defined primarily in class, ethnic or religious terms and what the relationship between different social elements is. Isham *et al.*'s (2002) social capital approach suggests that there are greater social cleavages in resource abundant countries than in other countries because some groups have greater access to natural resource rents than others. But again it does nothing to tell us whether these groups are class, ethnic or religion-based. Historico-structuralists provide the most sophisticated analysis of the role of social forces in shaping developmental outcomes in resource abundant countries but tend to be too class-centred. As Delacroix (1980) has observed, social groups in resource abundant countries tend to be defined more in ethnic and religious terms than class terms because, with access to large amounts of unearned income, governments in these countries have not

generally needed to promote capitalist production in order to survive. In some cases, of course, class is a significant feature of social structures in resource abundant countries because of historical processes that precede natural resource domination of the economy (Rosser 2004; Acemoglu *et al.* 2003). But in other cases it clearly is not. Whatever the case, however, scholars need to be more aware of the ways in which natural resource wealth affects social structure and in turn development performance.

Second, none of the above sets of perspectives adequately addresses the way in which countries' external environments shape development outcomes in resource abundant countries. Although some non-dependency scholars such as Ross (2004b) have pointed to the role of foreign intervention in creating conflict in resource abundant countries, only dependency theorists have given consistent attention to the role of external factors in mediating the relationship between natural resource wealth and development outcomes – in general, development outcomes are seen as being solely a product of domestic political factors. At the same time, dependency explanations offer an overly simplistic view on this matter. The point here is that, while dependency theorists are probably right to assert that natural resource abundance makes countries a target for forced incorporation into the global capitalist system, they are wrong to imply that this incorporation always has negative developmental consequences. For instance, as a number of scholars have illustrated, the incorporation of several resource abundant East Asian countries – specifically, Indonesia, Malaysia and Thailand – into the global political economy was economically beneficial for them for several reasons. Because these countries had a high degree of geo-strategic importance, they benefited from generous foreign financial assistance and access to lucrative markets. Because they were located close to Japan, they were able to take advantage of the investment and export opportunities opened up by Japan's periodic economic restructuring (Stubbs 1994, 1999; Cumings 1987; Wallerstein 1999). Finally, these economic opportunities in turn helped these countries deal with the after-effects of the 1970s resource boom. Inflows of investment resources in the form of aid and FDI served to compensate for the loss of investment resources caused by the collapse of international natural resource prices. One of the main problems for resource-rich countries is that resource booms can lead to a decline in economic activity in non-resource sectors, particularly those that are export-oriented, leaving them unable to maintain growth in the post-boom period. Inflows of investment resources in the form of aid and FDI during the 1980s and 1990s helped Indonesia, Malaysia, and Thailand to avoid these problems by providing a motor to drive their respective economies following the boom. In short, then, countries' geo-political and geo-economic environments are an important mediating factor in the relationship between natural resource wealth and developmental performance and deserve greater attention than they currently receive in the literature.

Finally, most of the above perspectives are highly deterministic. They tend to suggest that resource abundant countries are more or less undifferentiated in terms of their economic performance, propensity for civil war, and political regimes. They also suggest that these negative development outcomes are ultimately the product of these countries' resource endowments. The problem with these suggestions is twofold. First, they do not comport with the fact that there is considerable variation in the development outcomes experienced by individual resource abundant countries: while many resource abundant countries have performed poorly in economic terms, descended into violence, and developed authoritarian regimes, some have done quite well in these respects. In economic terms, for instance, countries such as Indonesia, Chile, Malaysia, and Botswana have done quite well in recent years, notwithstanding (in the cases of Malaysia and Indonesia) the effects of the Asian economic crisis (Stevens 2003). Nor has any of these countries descended into civil war. All are now democracies, at least in procedural terms. Second, these suggestions do not comport with apparent variation in the extent to which resource abundant countries suffer from the various political pathologies that are seen as mediating the relationship between natural resource abundance and development performance. For instance, not all resource abundant countries have developed predatory, factional or rentier states, Malaysia and

Botswana again being obvious exceptions.⁵ Nor have all resource abundant countries suffered from problems of corruption and rent-seeking to the same extent as most resource abundant countries, with Botswana being the obvious exception to the general pattern (Acemoglu *et al.* 2003). Some such as Indonesia clearly have suffered from corruption and rent-seeking but the economic impact of this has not been so severe as to prevent rapid economic growth (MacIntyre 2003). It seems reasonable to believe that social capital is much lower in countries like Sierra Leone and Angola that have experienced severe violent conflict than it is in many other resource abundant countries.

Some scholars have argued that, in examining the relationship between natural resource wealth, mediating political variables, and development outcomes, they are examining general tendencies rather than iron laws and that their analyses therefore do not necessarily preclude the possibility of variation in the value of mediating variables or in development outcomes (Auty and Gelb 2001; Auty 2001c). This is a fair point. But in failing to explain this variation, they obscure the factors that have enabled some resource abundant countries to make good use of their resource endowments and prevented others from doing the same. This in turn has implications for extent to which this analysis can aid policy development. In trying to develop strategies to help resource abundant countries overcome the resource curse, it is surely more useful to know why some resource abundant countries have done better than others than why resource abundant countries have done less well on average than resource poor countries. Using resource poor countries' experiences as the point of comparison tells us little that is useful about how resource abundant countries can escape the resource curse. It either leads us down the path of finding ways to prevent resource rich countries from having access to their resource wealth or promoting various institutional, social or behavioural reforms aimed at improving economic and conflict management when it is simultaneously implied that any initiatives in these areas are likely to fail because of the political and social effects of resource wealth.

A few scholars have explicitly recognised the variation in individual resource rich countries' development performance and sought to explain this variation in terms of differences in the values of mediating political variables. There is little agreement, however, as to which mediating variables are most important in this respect. Several have emphasised the nature of institutions, albeit different institutions. Atkinson and Hamilton (2003: 1804), for instance, have argued that resource-rich countries with 'good quality institutions' – defined in terms of the extent of the rule of law, bureaucratic quality, the level of government corruption, and the risk of investment expropriation and contract repudiation – have achieved greater rates of investment and, to a lesser extent, saving than resource-rich countries with poor quality institutions. Similarly, Eifert *et al.* (2003) have emphasised regime type. More specifically, they suggest that mature democracies have performed better in terms of managing oil rents than autocracies or factional democracies, because their higher levels of transparency and accountability, lower levels of corruption, and stronger protection of civil and political rights have translated into a higher capacity for long-term decision-making and more stable economic policies. Snyder (2003) has suggested that resource rich countries' respective abilities to avoid civil war may depend on the extent to which rulers are able to construct and maintain institutions of extraction that give them control over the revenues generated by natural resource abundance.

Other scholars have pointed to different mediating variables as being important. Jones Luong and Weinthal (2001) have emphasised the way in which differences in the way in which two variables – the extent to which a country has alternative sources of export revenue besides natural resource reserves and the extent to which there is political contestation over the basis for dispensing political power and economic patronage – influence the calculations of political elites. Chaudhry (1994) and Schrank (2004) have

5 This is explicitly acknowledged, for instance, by Auty and Gelb (2001). But most other scholars do not acknowledge this variation.

emphasised the nature of class alignments. Chaudhry, for instance, has argued that oil wealth constrained development in Iraq and Saudi Arabia by promoting the development of states that had relatively high distributive and productive capacities but relatively low capacities for regulating private sector activity or mobilising taxation revenues. At the same time, however, she argues that these states differed markedly in terms of their social bases. The result of this difference in social bases, she argues, was that when economic crisis struck in the 1980s, the two states went down different reform paths, in turn generating different economic results. Schrank (2004) has presented evidence to suggest that countries in which capitalist property relations have developed are more likely to use their natural resource well than countries in which ethnic or religious divisions predominate. Finally, Bevan *et al.* (1999) have explained Indonesia's relatively strong economic performance compared to Nigeria's prior to the late 1990s in terms of both 'deep-rooted differences in the structure of interest groups' and the 'happenstance of events' and the way these have shifted influence between competing policy cliques within the state.

Despite the disagreement over which variables are most significant in terms of mediating the relationship between natural resource wealth and development performance, however, this work arguably holds the greatest potential for producing the desired understanding of the causes of poor economic performance in resource abundant countries, as well as the conditions that have enabled some countries to escape this problem.

4 How can the resource curse be overcome?

The literature on the resource curse contains a wide variety of recommendations to help resource abundant countries overcome the curse. Below, we examine the most significant of these.

Many scholars have focused on the economic policy changes required to enable resource abundant countries to overcome the resource curse. Several economists, for instance, have emphasised the need for resource abundant countries to adopt sensible macroeconomic policies and, in particular, avoid large foreign and domestic debts, accumulate budget surpluses, control inflation, and pursue competitive exchange rates (Usui 1997; Mikesell 1997; Sarraf and Jiwanji 2001). These measures, it is argued, are likely to be particularly important in terms of helping resource abundant countries avoid the Dutch disease (Usui 1997). A number of other economists have emphasised the need for resource abundant countries to diversify their economies so as to reduce their dependence on natural resources (Auty 1994; Collier 2000). Yet others again have argued that resource abundant countries need to pursue an investment strategy whereby investments are made in accordance with their absorptive capacity, all recurrent costs associated with new investments are taken into consideration, and investments are only made when the expected rate of return is considerably above alternative risk-free investments (Sarraf and Jiwanji 2001: 8). Some economists and other social scientists have also recommended the use of stabilisation funds – that is, funds aimed at reducing the impact of commodity price instability on the economy – pointing to their successful use in countries such as Norway (Seymour 2000; Skancke 2003). But a few scholars have expressed doubt about the usefulness of these funds in resource abundant countries that do not have strong traditions of transparent and accountable government (Davis *et al.* 2003).

A second group of scholars has focused on trying to identify the political and social changes that are required to overcome the resource curse. In their view, it is unlikely that economic policy reforms will be introduced unless political and social environments in resource abundant countries are first transformed, although in many cases they recognise that this transformation will be politically difficult and is unlikely in the short-term. Some scholars

such as Mitra (1994: 294–5) have taken the behaviouralist line that governments in resource abundant countries are unlikely to pursue policies that will overcome the resource curse until there is a change in the mindset of political elites in these countries. In particular, he suggests that these elites need to begin viewing commodity booms as temporary, not permanent, phenomena, so as to stem the euphoria that accompanies booms. Several scholars operating from rational actor and state-centred perspectives have emphasised a need for resource abundant countries to build state capacity and promote institutional reform. Such processes, it is argued, will facilitate policy reform and prevent the growth collapses and misrule that can lead to violent conflict (Karl 1997; Ascher 1999; Auty 2001b, 2004; Pearce 2005). Karl (1997: 240), for instance, has argued that the ‘neoliberal preoccupation with shrinking the jurisdiction of the state’ as it has been applied to resource abundant countries ‘ignores the crying need for strengthening its authority’. Rather than trying to reduce the economic role of the state in resource abundant countries, she argues, the focus should be on measures such as professionalising the civil service, reducing corruption, and democratisation (1997: 241). Similarly, Auty (2001b: 323) has argued that: ‘Economic policy success requires institutional reinforcement that encourages the growth of a developmental state’. Arguing from a social capital perspective, Woolcock *et al.* (2001: 90) have argued that such institutional initiatives need to be supported by measures to build ‘social capacity and political consensus’ in resource abundant countries. Only by doing so, they suggest, will states in these countries develop the required ability to manage the conflicts caused by economic shocks.

A third group of scholars has argued in favour of bypassing the state, rather than trying to strengthen it, by requiring resource abundant countries to distribute all their natural resource revenues, or at least a substantial proportion of them, directly to citizens (Eifert *et al.* 2003; Sala-i-Martin and Subramanian 2003). Such a policy, it is argued, would ‘minimise opportunities for corruption and misappropriation, because windfall revenue would stay out of the hands of public officials’ (Sala-i-Martin and Subramanian 2003: 80); and ‘reduce pressure for explosive spending followed by lock-in and fiscal crisis during downturns’ by reducing the financial resources available to the state during booms (Eifert *et al.* 2003: 119). Ross (2001b: 200) has suggested that, even if resource windfalls are directly transferred to citizens, the state may still receive a significant share of them through their effect on taxation revenues, but nevertheless concedes that the policy is ‘plausible’.

A fourth group of scholars has suggested that resource abundant countries should privatise their natural resource sectors. Ross (2001b: 200), for instance, has suggested that privatisation may forestall the problem of rent-seizing, although for various reasons he argues that it may not be an appropriate strategy in relation to forest resources. Weinthal and Jones Luong (2001) have argued that countries that sell their natural resource sectors to domestic interests are more likely to develop sound taxation systems than those that either do not privatise these sectors or sell them to foreign investors. This, they argue, is because domestic investors have greater bargaining power *vis-à-vis* the state than foreign investors: whereas the bargaining power of foreign investors declines once their capital and costs are sunk, domestic investors maintain their bargaining power *vis-à-vis* the state because ‘both need the other in order to survive, enabling them to reach a compromise or find that their interests have converged over time’ (2001: 222). In this connection, they point to the different experiences of Russia and Kazakhstan, which sold their oil sectors to domestic and foreign interests respectively: whereas ‘domestic oil companies are helping to foster the development of an increasingly viable tax regime in Russia’, they argue, Kazakhstan’s tax regime ‘has become increasingly volatile’ and overly reliant on foreign businesses (2001: 215). Jones Luong and Weinthal (2001) have argued that these conclusions fit a broader range of resource abundant developing countries, although Rosser (2004) has argued that they do help to explain Indonesia’s success in overcoming the resource.

A fifth group of scholars has recommended that various actions could be taken at the international level to help resource abundant countries overcome the resource curse. Attempts to control international commodity prices through international agreements have repeatedly failed, so few scholars now see these as a solution (Ross 2001b: 199). At the

same time, the main mechanisms created by international organisations to help resource abundant countries cope with price shocks – the IMF’s Compensatory Financing Facility and the European Commission’s Stabex Facility – never worked very well and are now dormant (Bannon and Collier 2003: 10). Despite this, however, Bannon and Collier (2003: 10) have argued that the IMF and the World Bank should consider redesigning existing tools or designing new mechanisms to reduce the negative effects of price instability on resource abundant countries. They also suggest that OECD countries should consider reducing subsidies to their own agricultural sectors, because such subsidies serve to exacerbate the effects of international price falls on developing country producers. Shaxson (2005) has argued that attempts to help resource abundant countries, particularly oil dependent countries, deal with price shocks should include revisions to the nature of contracts between governments in these countries and international oil companies. Many developments in the oil sector, he points out, are governed by ‘production sharing agreements’ that are generally structured in such a way as to turn ‘a volatile oil price into an even more volatile revenue stream for the producer country’ (2005: 321). Revising these agreements so as to alter the way in which revenue volatility is shared between government and oil companies is, in his view, one way in which the negative effects of volatility can be reduced. Finally, a number of scholars have also backed the use of international certification processes such as the Kimberley Process for diamonds that are aimed at reducing the economic incentives for violent conflict by restricting international trade in various commodities (Collier 2000: 106; Auty 2004: 46; Bannon and Collier 2003: 13). Ballentine (2003: 274–9), however, has pointed to various problems with this approach including the possibility that, as in the case of narcotics, they may be only partly effective in stemming international trade; the strong likelihood that, in many cases, they will fail to address the non-economic causes of the conflict; and the possibility that they may shift the military balance in favour of government forces, intensifying violence in the short-term.

4.1 Commentary

A brief comment on these recommendations is in order. A key problem with many of these recommendations, particularly those that centre on policy, behavioural, institutional or social changes at the domestic level, relates to their political feasibility. For the most part, these recommendations follow on from analyses of the resource curse that posit a rather deterministic relationship between natural resource abundance, various pathologies (e.g. irrational behaviour by policy elites; rent-seeking by social groups; weak institutions), and various negative developmental outcomes (poor economic performance, civil war, authoritarianism). It is thus unclear how the recommended changes might be brought about – indeed, most analyses of the resource curse suggest that they cannot be, at least as long as countries remain dependent on natural resources. It will only be by further exploring the dynamics underpinning variation in resource abundant countries’ development performance, that we are likely to uncover potential levers that might be employed to trigger the required policy, behavioural, institutional or social changes. As noted earlier, scholars such as Weinthal, Jones Luong, Ross, Snyder, and Schrank have started us on this course. Hopefully, they and others will take this work further. In the meantime, it may therefore be more profitable for those concerned about the resource curse to focus on promoting change at the international level. The fact that the Kimberley Process was created within a couple of years suggests that the political obstacles to achieving change at the international level may be less severe than those at the domestic level. At the same time, the current shift towards increasing aid flows to developing countries, particularly poor countries in Africa, bodes well for any attempt to create new international financial mechanisms for helping poor countries cope with international commodity price instability.

5 Conclusion

This paper has advanced four main arguments. First, while the literature on the resource curse provides considerable evidence that natural resource abundance is associated with various negative development outcomes, this evidence is by no means conclusive. Second, existing explanations for the resource curse do not adequately account for the role of social forces or external political and economic environments in shaping development outcomes in resource abundant countries, nor for the fact that, while most resource abundant countries have performed poorly in developmental terms, some have done quite well. Third, recommendations for overcoming the resource curse have not generally taken into account the issue of political feasibility. And, finally, scholars have been too reductionist in their approaches to resource curse issues and need to focus more on understanding variation in development outcomes between resource rich countries and the associated policy lessons.

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