Whither the Resource Curse?

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Carbon Democracy: Political Power in the Age of Oil. By Timothy Mitchell. London: Verso, 2011. 288p. $26.95 cloth, $19.95 paper.

The Oil Curse: How Petroleum Wealth Shapes the Development of Nations. By Michael L. Ross. Princeton: Princeton University Press, 2012. 312p. $29.95 cloth, $22.95 paper.

What is it about oil? Whereas one might think that countries that produce the world's energy have it good, much scholarship has come to the conclusion that countries that produce oil have it bad: they are worse off economically and politically than they would otherwise be. This counter-intuitive idea has become so widespread that the "resource curse" is often discussed in popular outlets, from Thomas Friedman to Stephen Colbert.[1] And yet scholarship is increasingly questioning whether this curse actually exists. After several decades of research on the topic, we still do not have a clear idea what it is about oil—if anything—that causes problems.

These two important books enter this debate from different perspectives and with different goals, and to understand their contributions it is helpful to have a clearer picture of the recent trajectory of work in this area. Modern scholarship on the idea that there might be a negative relationship between oil and economic and political development began in earnest in the 1980s, with important case studies of countries with these resources. In these early works, scholars tended to conclude that (contrary to traditional expectations about the benefits of having natural endowments like oil) the resources provided great challenges for countries' development.[2]

The idea that there might be a "resource curse" began to gain wide traction when scholars first systematically compared the experiences of resource-rich countries with countries that did not have these resources. This was the goal of the seminal initial studies that examined worldwide data to see if there was a statistically significant correlation between oil and various measures of economic and political development. On the economic side, the benchmark work was by Jeffrey Sachs and Andrew Warner, who showed that a high ratio of natural resource exports to GDP was correlated with lower growth, controlling for other factors.[3] And on the political side, the benchmark works were by Ross, who showed that this same ratio was correlated with less democracy, controlling for other factors, and by James Fearon and David Laitin and Paul Collier and Anke Hoeffler, who showed that it was correlated with civil war onset.[4]

There have been two main types of responses to these benchmark statistical works, one empirical and the other theoretical. The empirical response has been to see whether the negative correlation between natural resources and development holds up as statistical techniques improve and other data on natural resources become available. This part of the response has resulted in important papers that question the original findings, on both the economic and political sides.[5] These papers tend to show a null result between measures of natural resources and the phenomenon in question (or sometimes even a "positive" result, as opposed to a curse) when using different data or statistical techniques (particularly the inclusion of country fixed effects). It should be noted that there have also been studies that corroborate the original "curse" hypotheses using newer techniques, both on the economic and political sides,[6] so that the current state of the empirical literature might be described as "mixed."

The second response to the benchmark works has been theoretical, and it has largely consisted of bringing work on oil into the broader theoretical work on economic and political development in the fields of economics and political science. As the work on natural resources and development was beginning, there was a sense that resource-rich countries were simply different than other countries, and so many important scholarly works in economics and political science excluded them from their analyses of economic growth and democracy.[7] During this period of exclusion, the major thrust of the literature on economic

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growth and democracy was the importance of institutions in determining the trajectory of countries' political and economic development.[8] And this exclusion may be why the role of institutions came relatively late to the literature on the resource curse.

Regardless of the reason for its delay, the focus on institutions has arrived: The theoretical response to the benchmark works on the resource curse has been to explore the possibility that the effects of natural resources are largely determined by the institutional environment in which they are found. Indeed, this provides a possible explanation for the null empirical results mentioned above: If one looks at the direct relationship between oil and certain outcomes, one will not observe a connection if the real relationship is conditional on institutional factors. The most recent and important theoretical work on the economic "resource curse" has highlighted the possibility that these resources have very different effects depending on the institutional environment in place in a given country.[9] In beneficial institutional environments, natural resources have no negative effect and can even have positive economic impacts, while in poor institutional environments these resources have negative effects. Similarly, on the political side, most recent theoretical work has focused on how these resources can stabilize democratic regimes and leaders, not just authoritarian ones, and can have beneficial effects depending on other institutional factors.[10] And this theoretical turn has been supported by several recent empirical works.[11]

To clarify the difference between the "curse" approach and its critics, let us say there are two countries: A and B. Country A generally runs its affairs well in terms of its economy and politics; B does not. The resource curse would exist if, when either of these countries discovered oil, it would do worse economically and politically than otherwise. A conditional approach to the effects of resources, instead, argues that oil will have negative effects only in Country B. The idea is sort of like what would happen if you gave a lot of money either to a compulsive gambler or a responsible investor. A "curse" approach would suggest that giving lots of money to the responsible investor would turn her into a compulsive gambler. The conditional approach would argue that the money would end up wasted by the gambler and spent well by the responsible investor.

Only one of these hypotheses can be correct, it seems. Either oil is a curse, and institutions do not matter for its effects (indeed, oil may undermine good institutions). Or oil is not a curse, because institutions can determine its effects.

In this literature, there is therefore a fairly clear research frontier:

- If one wants to argue that oil's relationship with economics and politics is conditional, what are the kinds of institutions that matter? What is it about oil that causes problems, and what are the kinds of institutions that can counter these characteristics? That is, is there a way to help countries improve their institutions for managing oil?
- If one wants to argue that oil's relationship with economics and politics is unconditional—that is, if there really is a resource curse—one needs to establish why. What is it about oil that makes it special, making it immune to institutional effects, and indeed possibly able to unravel good institutions?

The two books reviewed here each make one of these kinds of arguments: Ross the former, Mitchell the latter.

The Oil Curse

Having done more than anyone to push our thinking about natural resources and politics over the past 15 years, Michael Ross tries again to advance the research frontier with *The Oil Curse*. The most important development in this work, compared with his previous, is that Ross has moved from largely arguing that oil's effects are unconditionally bad to arguing that under certain conditions oil may not have negative effects. Indeed, in perhaps the most dramatic difference from his past work, he emphasizes that oil revenues did not have negative effects in the past, largely before the 1980s.

As just discussed, in order to make this kind of conditional argument, Ross first needs to spell out what it is about oil that causes the problems. His argument is that that "the political and economic problems of oil states can be traced to the unusual properties of petroleum revenues," and he provides a very clear statement of what he thinks the "distinctive qualities" of oil revenues are: their scale, source, instability, and secrecy.[12] Oil revenues are extremely large (scale), they tend to come as revenue from state-owned enterprises as opposed to taxes (source), they fluctuate a great deal as oil prices go up and down (instability), and they tend to be opaque so that citizens do not know how large they are (secrecy). Ross examines these characteristics in detail in the second chapter of the book, and in separate subsequent chapters he examines the effects of these revenues on four different outcomes: democracy, the status of women in societies, civil war, and economic growth. The distinctive qualities of oil then form the basis of his policy recommendations in the last chapter of the book (that is, whether and how to reduce the scale, change the source, and so forth).

In the chapter on democracy, he argues that oil is generally associated with greater authoritarian stability, with less clear effects on democratic stability. In the chapter on the status of women in societies, he argues that the presence of oil leads to less participation by women in the labor force and fewer women in countries' legislatures. In the chapter on civil war, he argues that the presence of oil—particularly on-shore oil as opposed to off-shore—is associated with more civil war onset. In the chapter on economic growth, he argues that oil-producing countries

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have had about the same rates of growth as other countries (while this is not as bad as one might expect, Ross argues that one would think they would have had higher rates of growth than other countries, given their natural endowments).

Throughout the book, Ross is clear that he thinks the resource curse can be avoided. He writes that "not all states with oil are susceptible to the curse,"[13] and in various chapters he finds conditioning factors. As mentioned above, he argues throughout the book that there seems to have been a shift around 1980 in the effects of oil: prior to 1980, oil did not have bad effects. In the chapter on democracy, he argues that oil's anti-democratic properties are strongest when government transparency is weak, and that oil has not had negative effects in Latin America.[14] In the chapter on women, he argues that oil's negative effects accrue principally when women are (already) excluded from jobs in the service sector and government. In the chapter on civil war, he argues that oil mainly has detrimental effects in terms of civil war onset in poor countries.

Given the state of the literature into which it enters, the main weakness of the book is a lack of theoretical and empirical sharpness regarding why his four distinctive characteristics matter (size, scale, instability, and secrecy), and what different institutional environments do to alleviate those characteristics. The four qualities come and go throughout the four main chapters (that is, some qualities appear in each chapter and some do not), and even when they do appear, their implications are often unclear. Moreover, although Ross wants to argue that these are the four problems with oil, he never actually shows us that these are doing the negative work. And this means it is unclear what should be done to make oil less of a curse.

Take, for example, the chapter on democracy. The size and source of oil revenues play the most prominent roles in this chapter, with secrecy playing an auxiliary role and volatility not discussed. In focusing on the size and source of revenues, Ross follows recent theoretical work focusing on oil as a source of nontax revenue or unearned income, because most oil accrues to governments through state-owned enterprises.[15] Ross argues that "oil production leads to a rise in non-tax revenues—enabling governments to deliver more benefits to citizens than they collect in taxes."[16] Early in his theoretical discussion, Ross includes a footnote that refers to my work, writing "For a more formal treatment of this issue that differs from this account in important ways, see Morrison 2009."[17] The problem is that I use the (same) theoretical apparatus to argue that oil provides nontax revenues to regimes in general—democratic and authoritarian—and that it therefore stabilizes *all* regimes. The implications of the theory are therefore quite different from the "More Petroleum, Less Democracy" conclusion that Ross draws using it.[18]

Perhaps as a result of this problem, when Ross later addresses the issue of what oil does to already existing democracies, he makes the odd step of saying that the theory outlined earlier in the chapter was really about how nontax revenues stabilize *incumbents,* not authoritarian regimes.[19] This is a jarring move considering that the chapter up to that point has been about the stability of authoritarian regimes. However, Ross uses this as a way to say that the size and source of oil revenues should not stabilize democracies, but only their incumbents. The possibility that nontax revenues may stabilize democratic incumbents is an interesting idea that has been developed elsewhere,[20] and it seems to have important implications for oil's effects on authoritarian and democratic stability. Yet Ross provides a mere two sentences on the topic, essentially saying that the authoritarian incumbents empowered by oil will want to remain autocratic, while democratic incumbents "may not necessarily want their countries to remain democratic."[21] This is not a powerful argument.

Elsewhere in the chapter, Ross discusses the role of secrecy. He argues that secrecy helps autocratic rulers because "autocrats can increase their government's *perceived* spending-to-revenue ratio," and therefore keep their people happy.[22] However, this is only true if people *underestimate* the amount of oil revenue flowing into a government's coffers. Anyone who has traveled in countries with newly discovered oil likely has witnessed expectations that oil revenues will be so large that they could conceivably fix all the countries' problems. Yet if citizens overestimate the amount of oil revenue, secrecy would have the exact opposite effect that Ross predicts, leading to increased dissatisfaction and pressure on the regime. Moreover, even if people systematically underestimate the extent of oil flows, would their secrecy not also help democracies stay in power?[23]

In other words, one exits the chapter on democracy unconvinced that the size, source, and secrecy of oil revenues really lead to more authoritarian regimes. One also wonders about the role of volatility of oil revenues, which is highlighted in other chapters. Because Ross argues that this volatility causes problems for economic management, it seems possible that it might also cause problems for managing politics, undermining the stability of authoritarian regimes instead in stabilizing them.[24] However, Ross does not address this possibility.

In addition to lacking clarity on why these factors cause problems, Ross is also unfortunately vague on whether and why these four characteristics caused oil to act differently in recent decades than in prior ones, which is one of the central assertions of his book. On the first page of the book, Ross states that "before 1980 there was little evidence of a resource curse," but he never gives a convincing answer as to why this is the case.[25] His four distinctive qualities of oil do not seem to provide one. In Chapter 2, Ross mentions that oil generates more revenues than other

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industries (size), but he never discusses a change in this size around the 1980s. Indeed, the oil price spike occurred in the 1970s, with the price of oil falling dramatically in the 1980s and 1990s.[26] In terms of nationalization of oil (source), while nationalization did pick up speed in the 1970s, many countries had nationalized well before then (the Soviet Union in 1918, Mexico in 1938, Iran in 1951, Brazil in 1953, Iraq in 1961, Egypt in 1962, and so forth). It is odd that the main comparative static on which Ross focuses in his analyses is whether or not a country-year observation is after 1980, rather than going through his dataset to specify which countries had state-owned enterprises and which not, and seeing if there was a statistically significant difference between oil's effects in the different groups.[27] In terms of price volatility (instability), as Ross discusses, this was mainly a problem between 1973 and 1986, and "from 1986 to 1999, oil prices were relatively stable."[28] Finally, there is secrecy, but it is difficult to imagine (and Ross does not argue) that the "Seven Sisters" oil companies that owned most oil prior to nationalization were more transparent than national oil companies have been.

These theoretical weaknesses in the book—about what characteristics of oil cause problems and why oil's effects are sometimes negative and sometimes not—limit the power of its conclusion. Ross wants to argue that "countries are only hurt by oil wealth under certain conditions," and as discussed earlier, this puts him on one side of the resource curse debate.[29] However, many scholars have now made this general point, and the frontier of this side of the literature is about which conditions and institutions matter for oil, and why. The book's lack of a convincing answer about why oil sometimes causes problems undermines Ross's ability to tell us much about what can be done to avoid those problems. As such, though in his conclusion Ross discusses how to make changes to oil's scale, source, instability, and secrecy—and some of these initiatives (such as those on budget transparency) seem desirable in and of themselves—one is unfortunately left unconvinced about whether they will have much of an impact on oil's effects.

Crude Democracy

Unlike Ross's book, Timothy Mitchell's *Carbon Democracy* focuses on oil's *un*conditional effects, which he argues are negative. In order to make his argument, he makes an interesting and important theoretical move. He observes (as many have) that scholars of the resource curse focus principally on the revenues that the oil generates. This has been central to the classic *rentier* literature, and it is also central to more recent work that has asked why, if oil's effects are through revenue, the institutional environment into which that revenue flows would not matter.

Mitchell argues that this focus on oil revenues has distracted scholars from other aspects of oil that cause problems. Building on work that has analyzed the "production network" of oil,[30] Mitchell focuses his attention on the production process, particularly the ways producers of oil have fought for access and profits, and how these battles have affected various aspects of democracy. I say "various aspects" because Mitchell's focus is broad, beginning with a somewhat more traditional resource-curse focus on the effects of oil on democratization (though with an unorthodox argument I will review later), and then expanding into other areas such as how the presence of oil has affected the way "the economy" is conceived in democracies. As he writes, his goal is to explore a "set of connections . . . between carbon fuels and certain kinds of democratic and undemocratic politics."[31]

The most intriguing part of the book consists of the first few chapters, in which Mitchell develops an argument about what makes oil unique, particularly compared to its predecessor as the world's energy source: coal. Whereas oil and coal are both carbon-based energy sources, Mitchell links the rise of coal production to the very opposite of oil's supposedly curse-like properties: the democratization of coal-producing countries in the late nineteenth and early twentieth centuries. And the reason he gives for this difference yields a new perspective on why oil is problematic.

Mitchell begins by recounting how coal revolutionized the provision of energy in the modern world, causing a move from dependence on renewable resources (sun, wind, and water) that required large amounts of land to exploit them to dependence on a resource that was concentrated in very small places: coal mines. Importantly, the new great industrial centers arising out of this transformation were built above or adjacent to these supplies of coal, and by the end of the nineteenth century, water and rail networks had been built to move coal to other manufacturing sites. These "narrow" channels of transport were what formed the link between coal and movements for democratization.[32]

The reason is that the relatively few coal production areas, combined with the few channels for transporting it, gave extraordinary power to the workers at these production locations: if they stopped working, they could do great damage to the booming industrial engine of the West. Indeed, Mitchell comes close to attributing almost all of the success of mass democracy movements during this time to the power of coal workers. In describing why previous mass movements had been unsuccessful, he writes that "the rise of mass democracy is often attributed to the emergence of new forms of political consciousness . . . . There is no need, however, to detour into questions of a shared culture or collective consciousness . . . . The detour would be misleading, for it would imply that there was some shortage in earlier periods or other places of people demanding a less precarious life. What was missing was not consciousness, not a repertoire of demands, but an effective way of forcing the powerful to

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listen to those demands."[33] Coal mines provided this way.

Across Europe and North America between the 1880s and the World Wars, workers gained the rights to vote, to organize, and to create political parties, among other advances, and Mitchell argues that the power for coal miners to strike was essential to this progress. Large coal miner strikes would start, and then "the most common pattern . . . was for strikes to spread through the interconnected industries of coal mining, railways, docking and shipping."[34] These strikes had the potential to bring economies to their knees, and Mitchell argues that companies and governments were extremely fearful of them.

Interestingly, particularly in the context of the resource curse literature, Mitchell also recounts how strikes at *oil* mines in certain places had similar effects. The rapid spread of the internal combustion engine after 1900 quickly increased the power of oil miners, and Mitchell recounts how the oil industry in Baku (in modern-day Azerbaijan) launched protests that would eventually result in the 1905 Russian revolution. Mitchell's key argument is that

> the power of the oil workers reflected the fact that the Baku industry at the turn of the century was organised and connected in ways that more closely resembled the contemporary coal industries of northern Europe than oil production elsewhere or in later periods . . . . The proximity of wells, workshops, pumps, power supplies and refineries created a concentrated labour force with the ability to disrupt supplies of energy across a broad region."[35]

Why, then, is oil production today not associated with successful demands for democratic progress? The reason Mitchell offers is essentially the organization of the industry, which companies and governments have altered precisely to avoid the sorts of worker problems associated with coal and oil in their early history. Ethnic divisions have been exploited to insulate the oil industry in many producer countries, with companies even importing workers to work oil mines, a strategy facilitated by the fact that oil mines are not often located near industrial centers as coal mines were (endogenously, as mentioned earlier). More importantly, Mitchell argues that companies developed an oil transportation network with more than one possible path by which oil could be delivered (by sea, pipeline, etc.), lessening the role of labor in both the extraction and transportation processes and diminishing the control any one particular area had over energy flows.[36] These developments essentially ended the ability of workers in these industries to threaten the economies of their countries.[37]

This is a stimulating story, and it helpfully highlights the possibility that one of the problems with oil is the industrial structure that results in its production and delivery to market. However, rather than highlighting the distinctiveness of oil compared to coal, one wonders if the key to Mitchell's account is simply what has affected workers in almost all industries: the increasing ability for owners of capital to use technological advances to reduce labor strength. If we are to believe Mitchell's account about the problems associated with oil as opposed to coal, we must accept the counterfactual that is implied: If an alternative for coal as a global energy source never arose, coal production would have continued to have been associated with democratization efforts. The idea is startling: if this had happened, perhaps today we would be pointing to very authoritarian, underdeveloped countries and saying that the problem is that they never found coal.

However, this is also difficult to believe, precisely because of the changes in technology that have affected all industries and led to diminished abilities for workers to bargain. Do we really believe that companies would not have developed ways to transport coal across oceans and ways to make themselves less vulnerable to strikes? These are key aspects of Mitchell's argument, as he contends that oil companies systematically developed ways to diminish the power of miners in ways unavailable to coal companies. However, one is struck by Mitchell's discussion of the increasing mechanization of coal after the Second World War, and how this "reduced the ability of coal miners to carry out effective strikes by rapidly reducing their numbers and facilitating the supply of coal across national borders."[38] Clearly this would have happened even if oil had not gained traction as an alternative energy supply. And it is therefore difficult to believe that oil's effects as the global energy source are really that "different" from what those of coal would have been.

One comes away with the impression that oil may not be very unique, and indeed if there is uniqueness to observe, it rather belongs to the period of coal-based democratization movements, when for a moment workers had tremendous leverage over a resource essential to the economy. It is difficult to imagine that occurring again in today's world, even with alternative energy sources, which is oddly something that Mitchell does not return to in his conclusion.

The lack of a convincing argument about why oil is unique means that subsequent chapters in Mitchell's book are less satisfying than the book's beginning. His examinations of oil's "connections" with certain kinds of democratic and nondemocratic politics seem as if they are simply perspectives on modern history through the lens of oil. We are told how oil affected thinking about the social construction that is "the economy" (Chapter 5), and how oil companies developed ways of keeping the oil price officially high (Chapter 6), including the oil crisis (Chapter 7). Parts of chapters, in their focus on workers and with a more circumspect view of governments and oil companies, provide a useful counterweight to Daniel Yergin's well-known historical work.[39] However, lacking throughout these chapters is a clear argument about why Mitchell thinks that it is *oil* causing these problems: Why do we think that the general story of energy companies

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and world powers acting badly would be much different if the major source of energy were something else?

Mitchell never answers this question, which is why his conclusion, which looks to the future and the possible decline of oil, falls flat. After so many chapters in which oil has been argued to have an effect on various aspects of society, one expects Mitchell to turn to what might happen as oil's prominence declines and other energy sources take its place. And indeed, Mitchell raises this issue and then, quite strangely, argues that "many attempts to answer this question fall into some kind of energy determinism, as though each form of energy produces a corresponding politics."[40] This unfortunately sounds as if Mitchell has lost the courage of his convictions. If particular forms of energy do not produce a corresponding politics, then it is unclear what his book is about. It would have been far more satisfying for him to explore the implications of the central idea of his book for the effects of new energy sources like solar and wind. How much power would "ordinary people" have in their production, and how might this affect their politics and, indeed, incentives for governments and companies to transition to these new energy sources?

Conclusion

At the core of the resource curse hypothesis is the idea that the presence of oil in a country is like a "universal acid," to use Daniel Dennett's phrase, cutting through institutions such that "most of the old landmarks [are] still recognizable, but transformed in fundamental ways."[41] Oil is a curse, the argument goes, because it makes countries perform worse economically than they would otherwise, and leads them to be more autocratic, civil war-prone, and more badly off politically than they would be otherwise. As reviewed in the introduction, in recent years there have been serious empirical and theoretical challenges to this idea, with the theoretical challengers positing that oil is less like a universal acid and more like a powerful tool, which can have good or bad effects depending on the circumstances. This is a major shift in the literature: put simply, if oil's effect is conditional, there is no curse. If there is a curse to be discussed, it regards a country's institutions, not its natural resources.

Given Ross's status in the field and the overall message in his book—that oil does not always have bad effects—the literature seems to be trending toward the "conditionalists," but it is likely premature to call this debate finished. In this context, this review has hopefully highlighted what proponents of the resource curse need to do in order to make their case convincing. They must make a convincing argument for why oil (or other natural resources) has certain effects regardless of the institutional environment in which it is found. While some of the most powerful critiques of the resource curse have been empirical in focus, my sense is that the necessary response from supporters of the resource curse is theoretical. In a way, the idea that billions of dollars flowing into a country would have *no* effect seems strange. But resource curse theorists need to tell us why those effects will always be negative with regard to some outcomes.

For their part, the "conditionalists" have now come up with many different causal stories for why oil's effects should vary with the institutional environment, with relevant institutional differences including regime type, the degree of clientelism, and whether institutions are "grabber-friendly" or "producer-friendly."[42] Taken as a whole, because "good" institutions tend to correlate highly, this side of the literature seems to be telling poor countries with natural resources, "Become Norway." The worst-case scenario is that this is really all we can tell such countries—that is, that the problem of dealing with oil is essentially the problem of economic and political development. This may indeed be true, but it would be helpful to have research that attempts to differentiate between which institutional environments matter the most for natural resource governance. However, this line of inquiry faces both empirical and theoretical challenges, mainly relating to the specific kinds of institutions that matter, and how to measure them for empirical work. This, of course, is not a problem unique to work on natural resources.[43]

It may be that in this endeavor, experimental work becomes a useful tool, as it enables the researcher to vary the important variables of interest in a way that scholars cannot do with the observational data that has driven most work on this topic to date. Until recently, there has been almost no experimental work on the resource curse, but that is gradually changing, both on the economic side and the political one.[44] When done well, experiments can give great insight into the mechanisms that drive the results, and it may be that they will help tell us what sorts of institutional characteristics matter for the effects of resources and—just as important—which ones do not.

One can only hope we will continue to make progress in this area. With natural resource exploration continuing worldwide, understanding whether or not countries can harness their resources for the good of their people remains as urgent a topic as ever.

Notes

1 As Ross 2012, 1, notes, "the resource curse is overwhelmingly an oil curse." Other minerals and natural endowments do not seem to have the same effects, for reasons only some have explored. See, for example, Boschini, Pettersson, and Roine 2007.

2 Beblawi and Luciani 1987; Gelb et al. 1988; Auty 1990; Karl 1997.

3 Sachs and Warner 1995, 1999. Other important cross-country work around the same time was that by Leite and Weidmann 2002.

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4 Ross 2001; Fearon and Laitin 2003; Collier and Hoeffler 2004. Other important works around the same time were those by Jensen and Wantchekon 2004 and Smith 2004.
5 On the economic side, see Brunnschweiler and Bulte 2008 and Alexeev and Conrad 2009. On the political side, see Haber and Menaldo 2011, Brückner and Ciccone 2012, and Cotet and Tsui 2013.
6 On the economic side, see Brückner 2010 and Arezki and van der Ploeg 2011. On the political side, see Ramsay 2011, Tsui 2011, and Andersen and Ross (Forthcoming).
7 For example, Levine and Renelt 1992 and Przeworski et al. 2000.
8 North and Weingast 1989; North 1990; Engerman and Sokoloff 1994; Acemoglu, Johnson, and Robinson 2001.
9 Hodler 2006; Mehlum, Moene, and Torvik 2006; Robinson, Torvik, and Verdier 2006; Bhattacharyya and Hodler 2009; Frankel 2010.
10 Dunning 2008; Goldberg, Wibbels, and Mvukiyehe 2008; Smith 2008; Morrison 2009; Jones Luong and Weinthal 2010.
11 Hodler 2006; Mehlum, Moene, and Torvik 2006; Boschini, Pettersson, and Roine 2007; Bhattacharyya and Hodler 2009.
12 Ross 2012, 5.
13 Ibid., 2.
14 Ross acknowledges that in identifying the Latin America effect, he is building off of Dunning's 2008 work.
15 Morrison 2007, 2009; Smith 2008; Jones Luong and Weinthal 2010.
16 Ross 2012, 69.
17 Ross 2012, 68.
18 "More Petroleum, Less Democracy" is the name of Ross's chapter on this topic.
19 Ross 2012, 87.
20 Goldberg, Wibbels, and Mvukiyehe 2008; Gervasoni 2010; Brollo et al. forthcoming; Litschig and Morrison forthcoming.
21 Ross 2012, 87.
22 Ibid., 70, emphasis original..
23 Ross does not address the issue of whether democracies are more transparent with their oil than authoritarian regimes.
24 Ross, ch. 6.
25 Indeed, in the chapter on civil war, the 1980s cutpoint is not important, as Ross acknowledges. Rather, it is after the 1990s that oil seems to cause civil war, which Ross attributes to the end of the Cold War.
26 Ross 2012, 51.
27 Alternatively, he could have used a direct measure of nontax revenue. Ross writes (p. 70) that "in countries without oil, all of the government's revenues come from taxes." This is not true. See Morrison 2009.
28 Ross 2012, 50–54.
29 Ibid., 230.
30 For example, Bridge 2008 and Bridge and Le Billon 2013.
31 Mitchell 2011, 252.
32 Ibid., 21.
33 Ibid., 21.
34 Ibid., 23.
35 Ibid., 34.
36 In various passages, Mitchell argues that this different organization was made possible by oil's unique physical characteristics. For example, he writes of "reasons connected in part to the different physical and chemical form of the carbon [oil] contains" (36). And he writes that oil's "location, abundance, density and other properties shape the methods of apparatus of its control" (44).
37 It is interesting how dramatically this account of oil's effects differs from that of scholars who point to how "fixed" oil is in the ground (e.g., Boix 2003).
38 Mitchell 2011, 29.
39 Yergin 1991.
40 Mitchell 2011, 238.
41 Dennett 1995, 63. The quotation is in reference to the idea of evolution, not oil or the resource curse.
42 "Grabber-friendly" and "producer friendly" are terms used by Mehlum, Moene, and Torvik 2006.
43 See Woodruff 2007.
44 Al-Ubaydli, McCabe, and Twieg 2012; Paler Forthcoming.

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