# Resource Dependence, Economic Performance, and Political Stability

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In many resource-dependent states, elites may face an important trade-off between the economic benefits of diversification and the possibility for future political competition that diversification may engender. However, distinctive features of global resource markets and national political economies may make diversification more or less attractive to political elites. The author argues that in three cases which illustrate the equilibrium paths of the game-theoretic model developed here—postindependence Bostwana, Mobutu's Zaire, and Suharto's Indonesia—three variables influenced elites' incentives for diversification and thereby shaped outcomes along the dimensions of political stability and economic performance: the world market structure for the resource, the degree of societal opposition to elites, and the prior development of the nonresource private sector. These countries' varied paths from resource wealth to political and economic outcomes suggest the need for *conditional* theories of the resource curse.

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Theories of the relationship between natural resource wealth and political instability face important explanatory challenges. On one hand, recent research provides some aggregate evidence linking resource rents to coups and the incidence and duration of armed conflict. On the other hand, analysts are tasked with explaining the large variation in outcomes among natural resource exporters: one only need contrast the political "stability" enjoyed by the house of Saud in Saudi Arabia with the history of postindependence Nigeria to have an idea of the difficulties faced by theories that give causal priority to natural resource endowments.

1. Collier and Hoeffler (inter alia, 1998, 2000); see Fearon (2005 [this issue]) for a discussion; and also Humphreys (2005 [this issue]); Lujala, Gleditsch, and Gilmore (2005 [this issue]); Collier, Hoeffler, and Söderbom (2004); Le Billon (2001); and Ross (2003, 2004).

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This variation in outcomes along a range of dimensions is one reason, perhaps, that research on the resource curse<sup>2</sup> appears to have entered a phase in which analysts are increasingly concerned with specifying the conditional impact of natural resource wealth. In this spirit, Snyder (2003) and Snyder and Bhavnani (2005 [this issue]) note that while "lootable" resources (that is, high-value natural resources with low economic barriers to entry) may provide the means and the motive for rebellion and thus engender political "disorder," under other circumstances such wealth may contribute to the consolidation of political control and, perforce, political stability. Ross (2001, 2003) and Le Billon (2001) provide evidence that various types of natural resources have varied widely in their association with internal conflict, and Fearon (2005 [this issue]) and Humphreys (2005 [this issue]) test various mechanisms that might link resources to conflict. Analysts have also moved toward a more nuanced understanding of the relationship between natural resources and political institutions (e.g., Englebert and Ron 2004).

This article attempts to contribute to such conditional theories of the resource curse. Like Snyder and Bhavnani (2005), I adopt a state-centered and revenue-centered approach, focusing on the incentives that resource wealth may pose to incumbent political elites. I concentrate here, however, on exploring the political causes and consequences of resource dependence. I argue that political elites in control of many resource-dependent states face an important trade-off: while they might like to promote the diversification of the economy, thereby reducing fiscal volatility and potentially improving aggregate economic performance, diversification may create societal bases of power outside of the control of political elites. These independent bases of power may then facilitate future challenges to the political power of state incumbents, especially during the economic downturns and fiscal crises that typically characterize resource-reliant countries. Thus, while diversification may be economically rewarding, it can also be politically costly.

However, distinctive features of global resource markets and national political economies may make diversification of the economy more or less attractive to elites. In postindependence Bostwana, Mobutu Sese Seko's Zaire, and Mohamed Suharto's Indonesia, cases that illustrate the equilibria of the game-theoretic model I develop below, three key factors shaped the incentives of political elites to encourage diversification: the volatility of resource revenues, the degree of societal opposition to incumbent elites, and the prior development of the nonresource private sector. In Botswana, the unusual structure of the world diamond market and Botswana's uncommon relationship to its chief multinational investor reduced the volatility of resource revenues, significantly decreasing the economic imperative for diversification relative to other resource-dependent countries. By contrast, in the more typical cases presented by Mobutu's Zaire and Suharto's Indonesia, the volatility of resource revenues did create important economic incentives for reducing resource dependence. However, in these latter two cases, the degree of societal opposition to incumbent elites shaped the politi-

<sup>2.</sup> The term "resource curse" has described both the tendency of resource-rich countries to perform worse on various economic indicators than comparable resource-poor countries (Sachs and Warner 1995; Karl 1997) and the apparent link between natural resources and other outcomes, including civil war and the political regime type.

cal incentives for diversification. The high degree of societal opposition to Mobutu in Zaire led him to believe that investments in infrastructure and other public goods would pose a threat to his grip on political power. In Indonesia, on the other hand, Suharto was able to reduce the political risk of diversification by promoting the private activities of economically powerful but politically weak groups of ethnic Chinese entrepreneurs, allowing substantial diversification over the course of his tenure in power. The prior development of the nonresource private sector also influenced the attractiveness of diversification in both cases: in Zaire, the potential economic benefits of investments in diversification were minimal, while they were substantial in Indonesia.

By influencing the incentives of elites to promote the diversification of the economic structure, these factors shaped diverse outcomes along the dimensions of economic performance and political stability. Botswana, with its unusually stable flow of diamond income, experienced low fiscal volatility and good economic performance, notwithstanding substantial resource reliance. Continued resource dependence and de-diversification of the economy in Zaire led to poor economic performance but bolstered Mobutu's hold on political power, while Indonesia's diversification under Suharto brought economic benefits but also brought increased risk of political competition. I develop this argument in more detail below.

My focus on the political causes and consequences of resource dependence has several merits. First, although a large literature suggests that oil or mineral development can cripple other sectors of an economy, leading to "monoexport" of the leading commodity, the mechanism posited for this is generally macroeconomic: rising real exchange rates associated with resource booms hurt other exports and draw productive resources away from these sectors (i.e., the "Dutch Disease"). Recent scholarship on the resource curse has apparently paid less attention to the *political* foundations of resource dependence. Yet political decisions do matter, and they mediate the apparent relationship between resource wealth and outcomes like political stability or economic performance.

Second, I focus explicitly on the links between resource dependence, economic performance, and political stability. Since the fiscal accounts of resource-dependent states are famously volatile (see Dehn 2000), and since fiscal crisis is thought by many scholars of comparative politics to encourage political instability and regime change, the political stability of many highly resource-reliant states has posed something of a puzzle. However, the coexistence of political stability and fiscal and economic volatility in resource-dependent states is a key prediction of the framework I develop below. My approach also has implications for the literature on natural resources and internal

<sup>3.</sup> However, Lam and Wantchekon (1999) consider dictatorships as a "political Dutch Disease." Jones Luong and Weinthal (2001) explore development strategies in the energy sector, with an eye more to the form of resource ownership. Robinson, Torvik, and Verdier (2002) consider other political foundations for the resource curse. The perspective I present here is closely related to the literature on "political losers" as barriers to economic development (Acemoglu and Robinson 2000, 2002). The formal model is related in some ways to Robinson (1997), which came to my attention after I wrote the initial drafts of this article.

<sup>4.</sup> See, inter alia, O'Donnell (1973), Linz and Stepan (1978), Collier (1979), Kurth (1979), Haggard and Kaufman (1995), Gasiorowski (1995), and Londregan and Poole (1990) (but also Przeworksi et al. 2000).

conflict, since diversification may itself engender violent challenges to the authority of state elites. Hence, the approach I adopt here connects disparate literatures on the relationship between resource wealth and various dependent variables, including economic performance, political stability, and internal conflict.

Third, the article suggests that features of global markets and national political economies may alter the incentives of elites to invest in economic diversification. To paraphrase Marx, elites may choose to diversify, but they do not choose just as they please: different political and economic landscapes provide different incentives for diversification and thus different paths from resource wealth to economic performance, fiscal volatility, and political stability or instability.<sup>5</sup> Finally, my focus on world market structure suggests an explanation for Botswanan exceptionalism that is not widely found in the literature on the resource curse, while my discussion of Indonesia highlights the role of diversification in helping that country achieve long-term growth during the Suharto period.

I begin the rest of the article with a game-theoretic model that specifies my argument about the relationship between the economics and the politics of the resource curse. This formalization of the argument highlights the dynamic, intertemporal nature of the strategic problem I emphasize, while the comparative statics of the model provide a convenient way to analyze how features of the political and economic land-scape may influence the attractiveness to elites of diversification. The model also motivates the case selection, since it generates three equilibria with quite different predictions for observed outcomes in resource-rich states. Each of the cases to which I turn in the subsequent section of the article illustrates one of the model's three equilibrium paths. After an extensive discussion and comparison of these cases, I then conclude with reflections on the relationship of this argument to the broader literature on the effects of natural resource wealth. Solutions of the model are presented in the appendix.

# SOME FORMAL ANALYTICS OF A POLITICAL RESOURCE CURSE

In this section, I develop a formal model of a resource-rich political economy in which there is social conflict between two groups, one of which initially holds political power (the political "elite") and the other of which does not (the "nonelite").<sup>6</sup> A key idea will be that under some conditions, nonelite actors want to stage a revolt or a coup. There are two economic sectors in the model: one sector, which is controlled by the state, produces a natural resource, while a second sector is controlled by private producers and produces some industrial or agricultural good. The two groups share pro-

<sup>5.</sup> The quote paraphrased is from Marx's (1852/1926, 13) *The Eighteenth Brumaire of Louis Bonaparte*: "Men make their own history, but they do not make it just as they please."

<sup>6.</sup> The technical approach adopted in this paper has been used to study substantive issues ranging from political regime transitions (Acemoglu and Robinson 2001, 2005) to civil wars (Fearon 1995, 2004), bureaucratic delegation (De Figueiredo 2002) and rent-reducing reforms (McBride 2003). Powell (2004) has recently extended and generalized this approach; the model presented here may therefore be seen as a special case of Powell's model.

duction in the private sector. At the beginning of the game, however, the elite actors who control the state alone reap the benefits of resource exploitation.<sup>7</sup>

Total population is normalized to 1, with  $\lambda \in (0, 1)$  nonelite actors (who do not initially hold political power) and  $(1 - \lambda)$  elite actors (who do initially hold power). I assume that the volume of production in the resource sector is supplied inelastically in each period and is equal to R. The resource is sold on the world market at an exogenously given price p, which can take on one of two values: with probability  $\gamma$ , the price is  $p^H$  (for "high price") and with probability  $(1 - \gamma)$ , the price is  $p^L$  (for "low price"), with  $p^H > p^L > 0$  and  $\gamma \in (0, 1)$ . The state's total revenue from the resource sector in any period k is given by  $p_k R$ . During good times (or "booms"), state revenue is  $p^H R$ , while during bad times (or "busts"), it equals  $p^L R$ .

In the private sector, productivity depends on the state's prior investment in some "public good." The intuition here is that, in a highly resource-dependent state, developing a dynamic and diversified economy may require government investments in roads, industrial parks, the provision of credit to industrialists, the use of macroeconomic tools such as tariff protections or exchange rate policy, and so on. I model this intuition by assuming that production in the private sector at time t only occurs if the public good was funded at time t-1. If the public good was funded, then the dichotomous variable F (for "fund") takes on the value  $F_{t-1} = 1$ ; otherwise,  $F_{t-1} = 0$ . (This variable also parameterizes the cost of funding the public good, as described below). If  $F_1 = 1$ , the private sector of the economy produces  $BF_1 = B$  in period two, where B (for "benefit") measures productivity in the private sector. By assumption,  $B \ge \frac{1}{\beta(1-\lambda)}$ , which ensures that (absent a revolt), investing in the private sector in period 1 is profitable for elites.

Elites and nonelites alike seek to maximize expected utility of consumption in each period of the game described below. Both groups discount the future at the common rate of  $\beta \in (0, 1)$ . The structure of the game, the payoffs, players' preferences, and the values of the parameters  $p^H$ ,  $p^I$ ,  $\phi$  (discussed below), and  $\gamma$  are all common knowledge.

## TIMING OF THE GAME

The game has two periods, each of which begins with the stochastic realization of the market price for the resource. These period-specific prices can be thought of as periods of booms and busts, here modeled dichotomously (i.e., times are either good or bad). After the realization of this state variable in each period, the actors take the strategic decisions described below.<sup>9</sup>

- 7. My focus in this article is on natural resources whose high economic barriers to entry and spatial concentration may allow the state to exclude potential rivals from resource production—for example, oil or kimberlite diamonds, which differ in this respect from "diffuse" or "lootable" resources such as alluvial diamonds (see Le Billon 2001; Snyder 2003; Ross 2003; Snyder and Bhavnani 2005 [this issue]).
- 8. As one anonymous referee pointed out, taxing the resource sector might provide disincentives to production and thus reduce R in the long run. However, it makes sense to think of relatively short-run fluctuations in the market price, rather than long-run decreases in R, as the source of fiscal crises in resource-dependent states—thus, the simplifying assumption that R is supplied inelastically.
- 9. In many of the models mentioned in footnote 6, the realization of a random variable determines the relative "power" of two conflicting groups in various periods. A distinguishing feature of the model developed here is that the value of this random variable is endogenous to a prior investment decision made by the group that holds political power.

*Period 1:* The value of  $p_1$ , the world market price of the resource R in period 1, is realized. Elites then decide whether to invest in the public good and consume the state's first-period resource revenue, net of the cost  $F_1$  of funding the public good. The surplus consumed by the elite is therefore  $p_1R - F_1$ .

*Period 2:* The value of  $p_2$ , the world market price of the resource R in period 2, is realized. If the public good was not funded in the first period ( $F_1 = 0$ ), elites remain in power, consume  $p_2R$ , and the period ends. However, if  $F_1 = 1$ , two scenarios can ensue:

- (1) If  $p_2 = p^H$ , then by assumption the cost of revolt  $\to \infty$ , so that no revolt takes place during "good" times. Since elites and nonelites share equally in private-sector production, total consumption of elites is  $p^H R + (1 \lambda)B$  and total consumption of nonelites is  $\lambda B$ . Consumption takes place and the period ends.
- (2) If  $p_2 = p^L$ , then the nonelite group can opt to undertake a revolt, which succeeds with probability  $\phi$  and fails with probability  $(1 \phi)$ , with  $\phi \in (0, 1)$ . Revolt entails a cost of c whether it succeeds or fails. If the revolt succeeds, nonelites take control of the state and consume the resource rent from period 2 as well as their share of private sector production. Thus, the consumption of the nonelite group after a successful revolt in period 2 is given by  $p_2R + \lambda B c$ , while the consumption of elites is  $(1 \lambda)B$ . On the other hand, if the revolt fails, nonelites pay the cost of revolt but only consume their share of private production, giving a payoff of  $\lambda B c$ , while elites consume the resource rent and their share of private production,  $p_2R + (1 \lambda)B$ . The expected utility to nonelites of revolting is therefore

$$\phi(p_2R + \lambda B - c) + (1 - \phi)(\lambda B - c),\tag{1}$$

which is the value of a successful revolt weighted by the probability of success, plus the value of an unsuccessful result weighted by the probability of failure.

If nonelites do not attempt a revolt, they consume  $\lambda B$  while elites consume  $p_2R + (1 - \lambda)B$ . Once nonelites have made a decision on whether to undertake a revolt, the revolt succeeds or fails, consumption takes place, and the period ends.

# SOLVING THE MODEL

I leave a formal solution of the model to the appendix. The intuitions can be summarized as follows. In the second period of the game, if elites have chosen to invest in public goods in the first period, nonelites face a choice between revolting and not revolting. Nonelites revolt whenever the expected benefit of revolting (equation [1] above) is greater than the expected benefit of not revolting (yielding proposition 1[b] in the appendix). Thus, in the first period of the game, elites take into account the second-period decision of nonelites when deciding whether to invest in diversifying the economy away from resource dependence.

There are three pure strategy equilibria of the game (propositions 2 and 3 in the appendix). In the first (perhaps least interesting) equilibrium—call it the "no revolt" equilibrium—elites invest in the public good in the first period and nonelites never revolt in the second. This occurs when the expected benefit to nonelites of revolting in

the second period never exceeds the expected benefit of not revolting, even if elites have invested in public goods in the first period, because the costs of revolt are too high or the probability of successful revolt too low. Under these conditions, it is natural to think that elites will invest in diversifying the economy: the incentives or the ability of nonelites to contest power are weak, so elites might as well reap the benefits of funding public goods. However, whether or not elites invest, the polity is always stable, in the sense that no revolt ever occurs.

There is also a second equilibrium—the "no investment" equilibrium—in which elites never invest in the first period. This equilibrium is inefficient, because aggregate economic output is lowered by the failure of the elite to invest in public goods. When does this inefficient, no-investment equilibrium arise? If the benefits of private sector production are low relative to the value of the resource, or if the probability of a successful revolt is high, nonelites always find it optimal to revolt when the second-period price is low. So any promise to refrain from revolting is not credible. Hence, if the likelihood of a low second-period price is high, elites will not invest in diversifying the economy. In this equilibrium, the state's fiscal revenues are volatile, and economic output is lower than it would have been if elites had invested in public goods, but the polity is stable. <sup>10</sup>

In the final, "investment" equilibrium, elites invest in the public good and nonelites revolt whenever the second-period price of the resource is low (i.e., there is a bust). Why do elites choose to invest, notwithstanding the possibility of revolt? The likelihood of investment in the first period is increasing in the probability of a high second-period price, the cost of revolt to the nonelite group, and the economic benefits of complementary investments in private sector production, and decreasing in the difference between the high and low resource price. The possible sources and meanings of these parameter values will be discussed further in the case studies below. Here, I merely note that in this final equilibrium, the economy diversifies but there may be political instability; that is, a revolt may take place.

In sum, then, the model suggests three equilibria for resource-rich countries: such countries may be politically stable, economically flourishing, and possibly diversified (equilibrium 1); they may be poor, resource-dependent, and fiscally volatile but politically stable (equilibrium 2); or they may be diversified and economically growing but possibly politically unstable (equilibrium 3).

# EVIDENCE FOR A SECTORAL TRADE-OFF

I now turn to three cases that provide illustrations of the model's three equilibrium paths: postindependence Botswana, Mobutu's Zaire, and Suharto's Indonesia. In themselves, these case studies do not constitute a test of the model's predictions. They do, however, provide evidence for the claim that how elites in resource-rich states

10. The tradeoff faced by the elite under proposition 3 relates to Powell's (2004) general "inefficiency condition": if the future benefits of investing in the second sector are small relative to the risk of successful revolution, elites choose to lock in their minmax payoff by failing to invest.

TABLE 1 Explanatory Variables

	Volatility of	Societal Opposition	Prior Development of
	Resource Revenues	to State Elites	Nonresource Sectors
Botswana Low		Low	Low
Mobutu's Zaire	High	High	Low
Suharto's Indonesia	High	Medium	High

resolve the tension between the economic benefits and political risks of diversification explains variation in political and economic outcomes in these states. Moreover, whereas the formal model takes the existence of parameters that influence the political costs and economic benefits of diversification for granted—and asks how the incentives of elites to diversify may vary as a function of the values of those parameters—the case studies provide insight into the sources of these parameter values across different national contexts.

In these resource-rich countries, three explanatory variables determine important model parameters such as the likelihood of busts, the probability of revolt, and the benefits of investment. These variables are the volatility of world markets for the country's resource(s), the degree of societal opposition to would-be diversifying elites, and the prior development of the non-resource private sector. In Table 1, I score each of the cases on these three explanatory variables. Before turning to the individual case studies, I now briefly discuss the coding of the cases on these three variables to place the cases in comparative perspective; the case studies offer more evidence for the score given in each case.

The volatility of resource revenues, recorded in the first column of Table 1, is a variable the value of which is chiefly shaped by the world market structure for a country's resource(s). As the discussion below makes clear, the structure of the world market for diamonds and Botswana's unusual relationship to its leading multinational resource producer, De Beers, has raised Botswana's revenues far above production costs and, in particular, stabilized the country's flow of diamond income, lowering the volatility of resource revenues substantially. By contrast, in Zaire, which has produced copper and other metals, revenue volatility was high at the start of the Mobutu regimes and only increased thereafter. For example, a spate of copper nationalizations around the world in the early 1970s reduced the ability of copper producers to coordinate on price stability and helped contribute to revenue volatility in Zaire. This was also true in Indonesia, which exported copper and other metals. Moreover, Indonesia's principal resource export during the Suharto period, petroleum, became (and remained) more volatile by an order of magnitude in the wake of the 1973 Arab oil embargo (see, e.g., Karl 1997). Thus, on the dimension of revenue volatility, Botswana is coded "low," while Zaire and Indonesia are coded "high."

The second column of Table 1 scores each case on the degree of societal opposition to incumbent elites. This variable should be understood to measure not just the actual political opposition to incumbents as they made decisions about investments in diversification but also the extent to which leaders saw such investments as potentially engendering future opposition. Though the latter component of this variable is clearly difficult to measure, the case studies below provide some evidence for the extent to which elites believed that investments would pose threats to their future power. In all three cases, the character of state-society relations left by a colonial legacy played an important role in determining the score on this variable. In Botswana, a legacy of "benign neglect" at the hands of the British (who administered the colonial protectorate of Bechuanaland from the remove of the city of Mafeking, across the South African border) and the leadership of the country's first president, Seretse Khama, allowed an unusual degree of cohesion among the country's Tswana political elite in the postindependence period. As has been well documented by scholars of Botswana, this postindependence elite faced few serious challenges to its power from oppositional groups. 11 In Zaire, by contrast, Mobutu came to power after a military coup and confronted a political environment of extreme division and important threats to his power. In contrast to Suharto in Indonesia, Mobutu did not have available to him a viable political strategy for diversification; instead, the evidence suggests that concerns about threats to his power led him to de-diversify the Zairean economy. In Indonesia, Suharto also came to power in the context of serious political turmoil, though subsequent threats to his power were somewhat muted by the massive repression unleashed against remaining elements of the prior regime of Sukarno and Indonesian communists. However, unlike Mobutu, the colonial legacy had also left Suharto with an unusual possibility for mitigating the political risks of economic diversification, by entering into public-private partnerships with politically weak but economically important members of the Chinese ethnic minority. Suharto's use of this group to diversify the economy significantly reduced the political risks to him of diversification. Thus, in the "degree of societal opposition" column of Table 1, Botswana is coded as "low," Zaire as "high," and Indonesia as "medium."

Finally, the third column of Table 1 records the prior development of the non-resource private sector. Recall that in the formal model, investment in public goods is a complement to productivity in the private sector, so productivity may also depend on the prior development of this private sector (that is, if the sector were not developed at all, investment would bring no returns). As with the second variable above, then, this third variable should be understood to measure the potential economic benefits of investments in diversification. As with the degree of societal political opposition, the colonial legacy played an important role in Botswana, Zaire, and Indonesia in shaping the development of the nonresource private sector at independence. In colonial Bechuanaland, British economic activities were extremely limited, and traditional Tswana cattle herding constituted the main nonresource economic activity at the time of Botswana's independence. Although this sector did provide the basis for the devel-

 $<sup>11.\,</sup>See\,Harvey\,(1981), Harvey\,and\,Lewis\,(1990), Lewis\,(1993), Parsons and Robinson\,(2003), and the essays in Stedman (1993) and Edge and Lekorwe (1998).$ 

opment of a beef export industry in the postindependence period, the economic benefit of investments in diversification after the diamond boom of the early 1970s was otherwise limited by the absence of other nonresource private sectors. A similar situation prevailed in Zaire, where the few nonresource firms that existed at independence were foreign-owned and quickly disappeared as productive economic actors in the postindependence period. As is shown below, industrial investments or other efforts at diversification seemed unlikely to boost aggregate economic productivity significantly in Zaire. In Indonesia, by contrast, the legacies of both Dutch colonialism and Japanese occupation during the Second World War did leave behind a viable private sector. In particular, many ethnic Chinese minorities—though they would suffer mightily during the Indonesian revolution and the subsequent period of the Sukarno regime, when their affluence made them scapegoats—thrived economically during Dutch colonialism and Japanese occupation (Twang 1998). Members of the Sino-Indonesian community provided Suharto with an avenue to diversification that promised important economic benefits (without, as seen above, forcing Suharto to incur substantial political risks).

Thus, the cases considered here display important variation on key explanatory variables. I now turn to a more extended analysis of how the explanatory variables help to explicate political and economic outcomes in each case, in the ways suggested above. I then close this section with a comparative discussion of the outcomes in each case.

#### BOTSWANA'S PUZZLE: DEPENDENCE AND STABILITY WITH GROWTH

Botswana has recently garnered analytic attention as an exception to the vicissitudes of the resource curse (inter alia, Acemoglu, Johnson, and Robinson 2003). Consistent with the model developed above, in which the absence of nonresource bases of economic power inhibits challenges to the authority of an incumbent elite, a high degree of political stability has characterized this resource-reliant country. Yet resource dependence and political stability have clearly not come at the price of fiscal volatility or poor economic performance. At the time of independence from the British in 1966, Botswana was the second-poorest country in the world after Bangladesh (Edge 1998, 343). Between 1970 and 1997, however, Botswana achieved the highest average rate of economic growth in the world (Samatar 1999), a record all the more astounding when compared to the many resource-rich Sub-Saharan African countries that are poorer today than they were at independence. The World Bank now classifies Botswana as an "upper middle-income" developing country. Botswana has also provided a model of fiscal and macroeconomic stability (Acemoglu, Johnson, and Robinson 2003). What explains the Botswanan anomaly?

In Botswana, two factors have stabilized the flow of resource revenues and blunted the trade-off between the political risks and economic benefits of diversification: the structure of the world gem diamond market and Botswana's unusual relationship to its

<sup>12.</sup> In Botswana, the major nonresource economic base, cattle ranching, is controlled by the same Tswana elite that controls the state (and perforce the resource sector).

principal multinational investor, De Beers. While other variables also help to explain Botswana's economic performance—and have contributed to its success in managing the flow of income induced by its diamond boom<sup>13</sup>—these two factors have created a profitable and nonvolatile source of resource revenue that is notable for its absence of busts. They are therefore crucial to explaining why Botswana's resource reliance has not come at the cost of economic performance.

First, although the diamond industry is highly secretive (making reliable price series and other relevant data difficult to obtain), it is uncontroversial that De Beers's control of the world market has allowed it both to stabilize diamond prices and to raise the price it pays producers far above their production costs. Although the company operates many of its own mines in South Africa, Botswana, Namibia, and elsewhere, De Beers's control of the sale of diamonds through its marketing cartel, the Central Selling Office (CSO), is perhaps most important to stabilizing prices. At exclusive sightings in London and elsewhere, to which the company invites only a small number of diamond dealers, the CSO sells rough diamonds produced both at its own mines and at mines owned by other producers with which De Beers contracts. As Jefferis (1998, 306) says, "The CSO is thought to control about 80% of the world's supply of rough diamonds, which gives it a dominant role in the setting of diamond prices. The result is that diamond prices are, firstly, relatively high compared to the cost of production (containing an element of monopoly profit), and secondly, relatively stable when compared to the prices of other primary commodities." The company also operates a "buffer stock arrangement," in which it buys and stores production from producers during periods of excess world supply and sells off the stored production during periods of excess world demand, which further helps to stabilize prices. Moreover, along with its quasi-monopoly (as a significant "upstream" producer of diamonds) and quasi-monopsony (as the world's principal purchaser of rough diamonds) powers, De Beers's successful marketing campaigns targeting individual consumers have prompted gem diamond prices to fluctuate narrowly around a long-term upward trend.

Second, Botswana has achieved an unusual degree of bargaining power relative to De Beers, which has allowed the country to appropriate a large share of the revenue from its resource production. International mining companies began prospecting in colonial Bechuanaland in the 1950s, and there is some evidence that the country's first president, Seretse Khama, knew about the existence of important kimberlite diamond pipes at the time of independence—possibly even before local Tswana tribal chiefs, who either did not know about the extent of the diamond pipes or did not understand their importance, agreed to cede mineral rights to the national state through the Mineral Rights in Tribal Territories Act of 1967 (Parsons, Tlou, and Henderson 1995, 255). In any case, not long after the public announcement in 1967 of what became the large Orapa mine, it became clear that Botswana would become an important producer for the global diamond market, which gave the country important leverage to negotiate a favorable division of diamond revenues with De Beers. Unlike many developing countries at the time, Botswana did not nationalize the diamond industry but rather

<sup>13.</sup> For example, scholars have pointed to the legal-rational quality of the Botswanan state and its relatively meritocratic civil service, low levels of corruption, and democratic regime.

TABLE 2
Botswana and the World Diamond Market

Year	Botswana's Share of Sales of Central Selling Office (De Beers)	Diamond Exports (Millions of Current US\$)	Percentage Increase (Decrease) of Diamond Exports over Previous Year
1976	3	43	_
1977	3	56	30.2
1978	4	92	64.3
1979	9	226	145.6
1980	11	305	35.0
1981	11	163	(46.6)
1982	19	246	50.9
1983	26	421	71.1
1984	30	480	14.0
1985	30	555	15.6
1986	26	656	18.2
1987	44	1,342	104.6
1988	26	1,083	(19.3)
1989	35	1,422	31.3
1990	34	1,412	(0.7)
1991	37	1,465	3.8
1992	40	1,363	(7.0)
1993	32	1,378	1.1
1994	33	1,396	1.3

SOURCE: For columns 2 and 3, Jefferis (1998); column 4 is calculated from column 3.

used its growing importance as a producer to leverage important concessions from De Beers, which was anxious to maintain control over the production side of the world market. For example, when De Beers sought a lease from the Botswanan government in 1974 to begin production at a second mine, at Letlhakane, the government was apparently able to increase its total share in the profits of diamond mining from 50 percent to around 75 percent (Jefferis 1998, 304). The Botswanan government also acquired a 50 percent equity interest in Debswana, a joint venture company half owned by De Beers, which further ensured that the government would continue to benefit from high and stable diamond revenues into the foreseeable future.<sup>14</sup>

Finally, the discovery of Botswana's most important diamond pipes at Jwaneng in 1977 helped make Botswana one of the world's most important diamond producers. The second column of Table 2 provides an idea of the growing importance of the country's production to De Beers and helps explain why De Beers would strike deals that promised long-term advantage to Botswana: the country's share of total sales of the CSO grew from 3 percent in 1976 to a high of 44 percent in 1987. (These sales data lag behind the discovery of new diamond pipes and, consequently, follow the evidence of

<sup>14.</sup> Unlike many resource-rich former colonies in Africa, former administrators in the colonial government and employees of multilateral development groups all worked on behalf of the country in its negotiations with De Beers.

Botswana's productive potential by a number of years.) Today, Botswana produces one-third of the world's gem diamonds by value.

These factors have led to a sustained resource boom for Botswana—without any important period of bust. The third and fourth columns of Table 2 show, respectively, the annual dollar value of Botswana's diamond exports and the annual percentage change in exports over the previous year. Exports rose dramatically from the 1970s to the 1990s, and downturns in the value of exports were rare: as the fourth column shows, the value of diamond exports increased over the previous year in fourteen out of eighteen years, while they declined in just four years. Exports have increased over the previous year by an overall average of 30.2 percent; in the fourteen years of export increases, the average gain has been 41.9 percent, while the average percentage decrease (in the four years of export declines) has been just 18.4 percent. <sup>15</sup> Gains have been much more frequent than losses, and the magnitude of diamond export growth has greatly outpaced any contractions that have occurred. Thus, the adverse fiscal and economic consequences of resource dependence that became apparent to leaders in Zaire and Indonesia (see below) did not appear to threaten economic performance in Botswana and therefore did not provide a major economic incentive for diversification.

However, a more complete analysis of elites' incentives to diversify the economy after the resource boom depends on the introduction of our other two explanatory variables: the degree of societal opposition to state elites and the prior development of the nonresource private sector. Political elites faced a low degree of societal opposition in the postindependence period, which very plausibly decreased the political risk of diversification. Scholars have pointed both to the colonial legacy of "benign neglect" at the hands of the British-who administered the Bechuanaland Protectorate from across the South African border at Mafeking yet did not adopt the divisive colonial strategies of indirect rule that characterized British colonialism elsewhere in Sub-Saharan Africa<sup>16</sup>—and to the leadership of Seretse Khama as reasons for the coherence of Botswana's traditional elite group and, in particular, the absence of challenges to the traditional authority of this elite. During the transition to independence, Khama—himself hereditary chief of the Bangwato tribe—was able to convince other Tswana chiefs to vest authority in the larger national state (Parsons, Tlou, and Henderson 1995). Yet scholars have pointed out both the continued inequality of Tswana society, which dates from the social order of the precolonial and colonial periods, and the anemic character of any opposition to the traditional political and tribal elite.17

<sup>15.</sup> The magnitude of these gains allays any concern that they are an artifact of accounting in current U.S. dollars, rather than in real (inflation-adjusted) terms; percentage decreases in the purchasing power of the U.S. dollar were mostly in the single digits during this period.

<sup>16.</sup> Robinson and Parsons (2003) stress the importance of "defensive modernization" during the colonial period, while Steenkamp (1991) challenges the conventional story about British colonial benign neglect.

<sup>17.</sup> There are eight (roughly ethnolinguistically homogeneous) Tswana tribes. In addition to the Tswana, a substantial ethnic minority makes up 20 percent of the population, of which the Kalahari-dwelling San people (Bushmen) form an important part.

Although the identity of Botswana's highest office holder has changed three times since independence in 1966, the country's three presidents—Seretse Khama, Ketumile Masire (Khama's vice president), and Festus Mogae (a leading figure in Masire's administration)—have belonged to the same political party, the Botswana Democratic Party (BDP). Other elected officials have been culled from the ranks of the same elite; the current vice president and leader of the BDP, for example, is Ian Khama, the son of Seretse Khama. Notwithstanding the formally democratic nature of the regime, Picard (1987, 142, cited in Snyder 2001) comments that "although elections since independence have been formally free and open, they function as a symbol of a style of political rule rather than as a mechanism for a change of government." 18 It is widely accepted among scholars that the largely rural, cattle-herding Tswana society threatened little serious challenge to the authority of the Tswana elite at the start of the resource boom. 19

According the model developed above, the absence of serious challenges to the power of elites increases the likelihood of diversification. In fact, Botswanan elites have invested heavily in education, infrastructure projects, and health care, with important consequences for Botswana's social development indicators (Edge 1998), but these investments have not been aimed at the fostering of specific alternative, nonresource economic sectors. Investments with such objectives have been more tentative and much less successful. For example, although Samatar (1999) has seen in certain ministries and agencies of the Botswanan state a Sub-Saharan African equivalent of the East Asian developmental bureaucracies, Good (1994) notes the Ministry of Finance and Development Planning's responsibilities in the "near-collapse of the National Development Bank in the early 1990s." The same analyst has described the Botswana Development Corporation's "incapacities in the selection and supervision of [foreign] investing companies . . . most spectacularly of all in the rise and sudden collapse of Hyundai and Volvo car assembly," a plant that was meant to supply the South African market (see also Good 1992). In light of such failures to foster alternative industries, the economy has remained centered largely on cattle herding—the traditional industry at the time of independence—and the diamond sector. The absence of a viable nonresource private sector at the start of the resource boom helps to explain why this is so. Particularly as compared to Indonesia, where (as will be seen) Suharto could strike public-private parterships that promised large economic returns, the economic benefits of investment in the private sector were small in Botswana.

In sum, diversification away from resource dependence did not threaten serious political risks to elites, due to the low degree of societal opposition, but it also may not have promised major economic benefits, due to the absence of a well-developed private sector. The incentives of elites to diversify the economy in Botswana were therefore mixed, but the country has remained largely resource-reliant. Continued resource reliance, however, has not hampered economic performance or led to fiscal volatility; the unusual structure of the world market for diamonds and Botswana's special rela-

<sup>18.</sup> There has been well-known debate in the literature about Botswana's status as a democracy (e.g.,

<sup>19.</sup> Even today, the capital, Gaborone, has around just 170,000 residents, while the country consists of some 1.7 million.

tionship to De Beers have elevated resource revenues far above the cost of production and made them much more stable than for the governments of other resource-reliant countries.

#### MOBUTU'S ZAIRE: STABILITY, DEPENDENCE, AND ECONOMIC IMPLOSION

Copper was the most important mineral resource in Congo-Kinshasa (renamed Zaire in 1971, today the Democratic Republic of Congo) when Joseph Mobutu Sese Seko came to power in 1965. In contrast to Botswana's diamonds, the market for copper was highly volatile, and the structure of the world industry became even more competitive during the late 1960s and 1970s, when nationalizations of major foreign copper companies around the developing world weakened the oligopoly power of the large copper corporations. Efforts to create effective international cartels among the producing countries failed, and developing countries that relied on copper exports were thereafter subject to even greater fluctuations in revenue (Moran 1974; Cobbe 1979). Thus, the market for copper, long an unstable commodity, became even more volatile over the course of Mobutu's tenure. This created a powerful—and recognized—economic incentive for diversification of the Zairean economy.

Strikingly, however, Zaire's reliance on resources only increased over the period of Mobutu's rule. Between 1961 and 1978, the percentage share of Zaire's top three exports (all minerals, topped by copper) grew from 52 to more than 91 percent of total exports (Shafer 1983, 95). Not only did Mobutu fail to diversify Zaire's export profile, the evidence presented below suggests that he actually took steps to dediversify the economy, with dramatically negative economic consequences. What explains the logic of this de-diversification, and what were its economic and political consequences?

First, after coming to power with a coup in 1965 against President Joseph Kasavubu, Mobutu faced an important degree of societal opposition. In 1966, for example, Mobutu struggled to suppress a Katangese uprising of gendarmes in Kisangani. In mid-1967, mercenaries paid by the government of neighboring Congo attempted a coup, while in 1969, Mobutu's security forces clashed with demonstrating students at Lovanium University, killing hundreds (Kabwit 1979, 395). Mobutu's inner circle was small and ethnically distinct from much of the Zairean population, and control of the state apparatus was "vested in a small group of personalistically interconnected individuals" (Evans 1989, 570), especially a clique comprised of some fifty of Mobutu's kinsmen. Foreign intervention by Belgian paratroopers, French legionnaires, and the U.S. Central Intelligence Agency played an important role in propping up Mobutu's rule during his early years, a fact that only underscores Mobutu's initially fragile hold on power. In this atmosphere, according to a number of analysts, Mobutu believed that investments in economic infrastructure, including those as simple as maintaining the network of roads left by the Belgian colonials, would pose a threat to his hold on political power by facilitating collective mobilization against his regime (Robinson 1997; Callaghy 1984; Young 1983). Like Suharto in Indonesia (discussed below), Mobutu and earlier nationalist leaders displaced the colonial private sector after coming to power. Unlike Suharto in Indonesia, however, Mobutu could not take advantage of the presence of a politically weak but economically powerful expatriate group to diversify the economy while protecting his own hold on power. Instead, given the fact that Mobutu repressed but could not entirely destroy resistance to his regime, nonelite groups outside of the president's inner circle were unable to commit not to mobilize against Mobutu, should he foster alternative bases of economic power outside the resource sector.

Second, to a much greater extent than in Indonesia, the nonresource indigenous private sector was not well developed at the time of Zaire's independence. Belgian colonialism had emphasized the extraction of natural resources and their transfer to the colonial metropole. Moreover, while rubber, cotton, coffee, cocoa, tea, palm oil, and cattle remained important at the time of independence (around 40 percent of exports), major plantations were foreign-owned. Even small farmers in the Zairean hinterland depended on trade networks organized by Greek and Portuguese merchants (Kabwit 1979, 402). While the question of what to do with foreign-owned businesses after independence was an important one—and indeed would pose an important dilemma for Mobutu in the early years of his rule—a concentrated, developed, and taxable indigenous private sector barely existed. Mobutu certainly could have done much more to foster agriculture (by the end of the 1970s, as Kabwit [1979] notes, agriculture only received 4 percent of the national budget), but the potential economic benefits of complementary investments in public goods were nonetheless limited by the weak development of the indigenous private sector.

Diversification therefore posed important political risks to Mobutu but arguably offered few economic rewards. As predicted by the model, Mobutu did not promote the diversification of the economy away from resource dependence. Instead, he pursued a program that reduced the stock of national infrastructure, even relative to the stock left by the Belgian colonial regime. At independence, the country had around ninety thousand miles of roads, while by the time Mobutu fell from power in 1997, only several thousand miles remained intact (Robinson 1997). On the advice of international financial institutions, a flurry of foreign borrowing after independence had as its ostensible goal the industrialization of the Zairian economy, but the major projects were never built or failed, in part due to the government's unwillingness to build and maintain the necessary infrastructure. After his "Zairianization" program nationalized the country's nonresource, foreign-owned businesses beginning in November 1973, Mobutu placed these businesses in the hands of his kinsmen and other political cronies; economic production in many of these nationalized industries subsequently collapsed. Meanwhile, instead of adopting developmentalist policies aimed at fostering a true nonresource private sector, Mobutu focused on transforming the extractive resource sector into a personal cash cow, nationalizing the Belgian-owned mining company Upper Katanga Mining Union (Union Minière du Haut-Katanga—UMHK) and creating the state-run General Quarries and Mines (Générale des Carrières et des Mines—Gécamines) in its place. The near-total disintegration of public infrastructure, the concentration of productive potential in Mobutu's political allies, and the exclusive emphasis on the resource sector resulted in an astonishing instance of dediversification in Zaire.

The economic consequences of this de-diversification were dramatic. Average growth rate of per capita income was negative over the course of Mobutu's rule, declining for example at an annual average rate of more than 2 percent during the first two decades of Mobutu's tenure (Evans 1989, 569), so that the country was poorer in 1997 than it was at independence in 1960. Moreover, Zaire was beset by enormous revenue volatility, typified for example by the consequences of the collapse of copper prices in 1974. At this time, the country's ability to repay its debts was severely compromised, and Mobutu entered into a long pattern of negotiations with international financial institutions in which initial tranches of loans would be disbursed only to have financing cut off when the Zairian government refused to implement diversifying reforms. Yet despite the fiscal volatility caused by resource dependence, and despite continued opposition to his rule from within Zaire and from abroad, Mobutu's tenure in office was prolonged. Support from foreign patrons, of course, had an important role in sustaining Mobutu's rule, but so did Mobutu's ability to limit and disorganize mobilization against his regime. <sup>20</sup>

Thus, if postindependence Zaire has provided social scientists with an archetype of the "predatory state" (Evans 1989, 1995), Mobutu's reign of power also offers an example of a leader taking steps to concentrate economic production in easily exploitable resource sectors while discouraging the growth of economic sectors from which a future challenge to his political power might stem. The de-diversification of the Zairean economy can be viewed as a result of Mobutu's political objectives. As Evans (1995, cited in Robinson 1997) argues with respect to Zaire, "Extracting a larger share from a shrinking pie is not the optimal way to maximize revenues, but it may be the only way consistent with the survival of predatory states. The disorganization of civil society is the sine qua non of political survival for predatory rulers. Generating an entrepreneurial class with an interest in industrial transformation would be almost as dangerous as promoting the political organization of civil society." Although many theories of comparative politics suggest that economic contraction and fiscal crisis should cause political instability and regime change, an idea for which there is much empirical evidence,<sup>21</sup> Mobutu was able to limit mobilization against his regime and thereby retain a sustained grip on power. Indeed, poor economic performance and political stability were, in a sense, jointly determined by Mobutu's efforts to de-diversify the economy, which were in turn influenced by the degree of societal opposition to Mobutu and the prior nondevelopment of the private sector. The Zairean case therefore illustrates the consequences of an inefficient, "no-investment" equilibrium—the second equilibrium in the model.

<sup>20.</sup> The United States was a principal sponsor during the cold war. The end of the cold war, and the assistance of Rwanda and Uganda to the rebel army of Laurent Kabila, hastened Mobutu's demise in 1997. The gradual exhaustion of resource revenues may also have played a role (but see also Snyder and Bhavnani 2005).

# NEW ORDER INDONESIA: RESOURCES, GROWTH, AND THE POLITICAL LOGIC OF DIVERSIFICATION

Like Botswana in the postcolonial period, Indonesia's economic performance during the Suharto years has seemed anomalous from the perspective of the "resource curse" literature (see, e.g., Karl 1997). Not only did per capita GDP not decline over the two decades following the first oil boom, as it did in many other oil exporters outside of the Middle East, but the country experienced a major developmental boom under Suharto. Real GDP per capita grew at an annual rate of 5 percent from 1966 to 1997, reversing the declining growth rates and accelerating inflation that immediately preceded Suharto's ascension to power (World Bank 2000). Unlike Botswana, however, the world market for Indonesia's resources was volatile, and economic growth was accomplished in part by moving away from resource reliance. The Indonesian economy became more diverse in the first decade of Suharto's New Order government and continued to diversify after the oil boom of the 1970s and the bust of the 1980s, when the effects of resource dependence and revenue volatility had become particularly clear. In 1966, oil and a few agricultural products (rice, coffee, sugar, and palm oil) constituted the bulk of production, exports and employment, while over the subsequent thirty years, this pattern would change markedly. For example, manufactures, which were less than 10 percent of GDP in 1966, rose to 25 percent by 1996 (World Bank 2000). The percentage of exports stemming from oil and liquefied natural gas went from more than 80 percent in 1981 to less than 36 percent in 1989 (World Bank 1989).<sup>22</sup> Unlike many other cases, Suharto's New Order Indonesia provides an example of relatively successful diversification away from a reliance on resource exports and, in particular, from oil.

How did Indonesia accomplish this surprising outcome? As in Botswana and Zaire, the degree of societal opposition to Suharto and the prior development of the private sector played important roles. First, like Mobutu in Zaire, Suharto came to power in the context of a coup and faced strong opposition from a number of elements of Indonesian society. Although many threats to the new regime's power were quelled by Suharto's massive repression of elements of the former Sukarno regime and the Indonesian Communist Party, significant societal opposition to Suharto remained. However, unlike Mobutu, Suharto had available to him an unusual strategy for fomenting the growth of a nonresource private sector in a way that did not seem to threaten his political power. At the time of independence (Chalmers and Hadiz 1997, 8-9), Indonesian elites were determined to turn a "colonial economy" (ekonomi kolonial), which had characterized first Dutch and then Japanese occupation, into a strong and diversified economy founded on a national bourgeoisie (an ekonomi nasional). Suharto, however, rather than promote private business among indigenous Indonesian entrepreneurs (known as *pribumi* enterprises), developed tight relationships with a quite small number of Sino-Indonesian entrepreneurs (cukong), who were offered tariff protections, preferential access to monopoly licenses and contracts, subsidized cred-

<sup>21.</sup> Among others, see Haggard and Kaufman (1995), O'Donnell (1973), Linz (1978), Gasiorowski (1995), and Londregan and Poole (1990); but see Pzreworski et al. (2000).

<sup>22.</sup> Dehn (2000) calculates a Herfindahl export concentration index for Indonesia (in which a score of 1.00 indicates complete concentration of a country's exports in a single industry) of a mere .33.

its, and other benefits. Networks of these Chinese entrepreneurs in turn provided Suharto with an important source of financing as well as an increased domestic tax base (Rock 1999). What is perhaps most crucial is that this Sino-Indonesian bourgeoisie, who bore the brunt of widespread ethnic antipathy on the part of the Indonesian public at large, did not seem to pose a credible future threat to Suharto's power, precisely because of the group's ethnic minority status (Robison 1986, 41-45): the costs of claims to political power by this group, at least in the short term, were certainly prohibitive. Suharto's diversification program was therefore premised on a political logic, in that he empowered a private sector dominated by a small group of ethnic minority Chinese, whose ethnicity precisely served to discount any credible future claim they could lay national political power (Mackie and MacIntyre 1994). Like Mobutu in Zaire, nationalist leaders in Indonesia displaced the colonial private sector. Unlike Zaire, however, Suharto took advantage of a second expatriate (but noncolonial) private sector that he could both tolerate and use to advance his political and economic goals.

Second, the prior development of the private sector, and in particular the development of this Sino-Indonesian private sector, was also crucial, for if this sector did not seem to threaten political risks to Suharto, it certainly offered economic benefits. Under the Dutch, a number of ethnic Chinese Indonesians acquired an important measure of wealth, which would later prompt resentment among other Indonesians; in other ways, Sino-Indonesians thrived during the short Japanese occupation during the Second World War (Twang 1998). Though this commercial bourgeoisie suffered mightily at the hands of the Indonesian revolution, the prior development of this sector provided an important economic rationale for complementary investments on the part of political elites. In sharp contrast to Mobutu, then, Suharto was able to devise a method of diversifying the economy that promised important economic benefits to himself and to the Indonesian state.

Indonesia's experience under Suharto's New Order therefore provides an illustration of the third equilibrium path of the model above. The volatile world market for Indonesia's resources, particularly oil, raised the probability of resource busts and promised fiscal and economic volatility from continued resource dependence. Investment in alternative sectors could have threatened Suharto's political power, yet Suharto also found a way to minimize these risks by investing in partnerships with the Sino-Indonesian business class rather than with indigenous entrepreneurs. Suharto's developmentalist project weaned the country of its resource dependence, led to the growth of significant alternative exports as well as an important manufacturing sector and, by almost all accounts, is crucial to explaining how Indonesia grew at such a remarkable average rate from 1966 to 1997 and avoided to a large extent the fiscal and macroeconomic volatility that beset other resource exporters.<sup>24</sup>

<sup>23.</sup> As one of the anonymous reviewers pointed out, Suharto's use of Chinese entrepreneurs to carry out his diversification program is all the more dramatic an illustration of realpolitik because the massacres carried out under the first years of the military takeover targeted, among other victims, Chinese merchants and their families.

<sup>24.</sup> Suharto's technocrats are often given credit, probably deservedly, for the macroeconomic stability during the period in which he held power. However, the diversification of the economy away from reliance on a few volatile exports also played an important role.

It bears emphasis that although Suharto had a long and stable tenure in power, over time the diversification of the economy, and the creation of independent bases of economic power, did nonetheless entail some important political changes. As an abundant literature on social change during the New Order suggests, a credible interpretation of Suharto's fall from power in 1998 stresses not only the immediate effects of the Asian financial crisis but also the long-term role of the middle-class business community in pressing for political change—a class precisely created and empowered by Suharto's developmentalist policies geared towards diversification of the economy.<sup>25</sup> In its early years, Suharto's New Order government established peak business and labor associations that had little autonomy or capacity to press independent demands upon the state. For example, the Indonesian Chamber of Commerce and Industry (KADIN) was the corporatist business institution within which individual industry associations were gathered, yet KADIN was seen as a moribund association of native Indonesian (pribumi) businessmen who had neither economic nor political power. MacIntyre (1990, 376) comments that an indicator of KADIN's weakness in the first decades of the New Order was "the fact that very few of the major Chinese business people bother[ed] to join it. This [was] particularly true of the giant Chinese corporate groups, which [had] their own individual patron-client links to decision makers within the state." Nonetheless, the structural changes in the economy induced by Suharto's diversification efforts did end up empowering independent business and industry associations, particularly as Sino-Indonesian industrialists began to use these associations to advance their independent claims rather than simply working within patron-client relationships with state elites. MacIntyre (1990) suggests that

while there is no clear indication that traditional communal resentment towards the dominant position of the Chinese in the Indonesian economy is waning, it does appear that the growth of active industry associations is providing a means by which this hurdle can at least to some extent at least [be overcome]. The fact that a given industry is almost certainly dominated by Chinese rather than pribumi (indigenous Indonesian) business people can often be disguised by the institutional public face of a business association. In other words, the issue of ethnicity can be made less conspicuous through group-based action in an industry association. This is of course particularly so if the head or spokesperson of the association is pribumi. (p. 384)

Large Chinese business groups also increasingly promoted pribumi to senior management positions, a development that spurred more collaboration between pribumi and cukong (Chinese) businesspeople in industry associations. Thus, the New Order government's corporatist strategy of restricting the capacity for independent interest intermediation in the business sector was increasingly challenged, as industry associations developed "the capacity to promote the collective interests of members in an independent fashion" (MacIntyre 1990, 384-85; see also Robison 1986).

Increasingly, independent business interests also played a larger political role, for example, through the support of this class for the Indonesian Democratic Party (PDI) of Megawati Sukarnoputri (Eklof 2003). According to a number of authorities, the

25. See Lev (1990, 44-48) and Evers (1995, 164-74). Suryadinata (1997, 270-71) has a somewhat critical view that emphasizes the rise of specifically Islamist elements of the middle class.

increasingly autonomous labor movement, the growing strength of which during the 1980s and 1990s was also related to the diversification of the economy undertaken by Suharto (Hadiz 1997), also played an important role in creating pressure for reform and democratization. Taken together, the structural changes encouraged by Suharto's diversification efforts, over the long run, contributed to his eventual fall from power. Anwar (2001, 83), for example, suggests that three decades of economic diversification and development promoted by the Suharto regime created a middle class large enough "to form a critical mass that finally toppled Suharto from power." As a former ambassador to Indonesia from New Zealand put it, "In a way, Suharto was a victim of his own success. The growth of a significant middle class was a product of Indonesia's achievements in economic development under his leadership. Like middle classes elsewhere—Thailand's and South Korea's, for example—they were increasingly dissatisfied with political restrictions and, in particular, limits on their own participation in decision-making" (Green 2002, 7). When fiscal and macroeconomic crisis arrived in the context of the Asian financial crisis of 1997, the social structure that had been importantly shaped by the choices of the New Order elite about diversification played an important role in the political transition.

#### COMPARING OUTCOMES ACROSS THE CASES

With the individual discussion of the three cases completed, I can turn to an explicitly comparative discussion of outcomes in Botswana, Zaire, and Indonesia. In particular, how did the values of the variables in Table 1 influence outcomes along the dimensions of resource dependence, economic performance, and political stability? In each case, the volatility of resource revenues set up the trade-off between the economic benefits and possible political costs of diversification. The markets for most minerals are highly volatile and bring unpredictable booms and busts to resource exporters (Dehn 2000). In Botswana, however, the stability of the diamond market and the price supports provided by De Beers during market downturns helped to even out prices in a predictable and sustained manner. This makes the Botswanan case, which is notable for its sustained resource boom and absence of busts, an important kind of negative case that stands prior to the analysis of the other two cases. Together with the low degree of societal opposition to elites, the absence of busts leads the model to predict political stability and good economic performance in Botswana (the efficient, "no revolt" equilibrium in the model), as well as elite investment in diversification. In both Zaire and Indonesia, market volatility created an important economic incentive for diversification. However, outcomes in these cases were influenced by the other two explanatory variables—the degree of societal opposition and the prior development of nonresource sectors—the values of which were in turn shaped by the colonial legacy in each case. In Zaire, the high degree of societal opposition, together with the weak development of the nonresource sectors, raised the perceived political cost of investment and reduced its economic benefit. Mobutu did not diversify, and even took intentional steps to de-diversify, the economy. As this argument suggests, he was able to prolong his hold on power by doing so but at the cost of fiscal volatility and economic implosion. In Indonesia, on the other hand, Suharto was able to reduce the potential opposition engendered by diversification significantly, and the prior development of the nonresource private sector offered substantial economic benefits to diversification as well. Thus, as suggested by the argument, Suharto's Indonesia diversified and experienced a sustained period of economic growth, to an extent that was anomalous among comparable resource-rich developing countries (Karl 1997).

It is important to note that both Mobutu and Suharto held on to power for nearly equivalent amounts of time: Mobutu from 1965 to 1997 and Suharto from 1965 to 1998. The longevity of both leaders is consistent with the model, but for different reasons. Mobutu's failure to invest in the diversification of the economy and, indeed, his de-diversification of the economy, limited the development of sources of autonomous societal power that could threaten his rule. Regime change, when it finally came, was prompted substantially by changes in the international environment and, particularly, by the support that Rwanda and Uganda provided to the rebel army of Laurent Kabila (see footnote 20). Thus, a rebel army, based in the country's geographic outskirts and strongly aided by Zaire's regional rivals, finally displaced Mobutu. In Indonesia, on the other hand, Suharto did risk economic diversification, but he bolstered his hold on power by investing in the politically weak Chinese minority group at the expense of other Indonesians. However, as the discussion above suggested, Suharto's investments in diversification did, over time, end up empowering societal groups relative to the state (MacIntyre 1990). <sup>26</sup>

While international forces (in the form of the end of the cold war, which diminished the American support for Suharto, and the currency crisis of 1997 to 1998) created conditions that facilitated challenges to Suharto's power, so did challenges from new domestic social groups that were precisely empowered by Suharto's investments in diversification. Thus, both Mobutu and Suharto retained power over time; and both were undone in part by a changing international climate, but the agents of political change—the identities of which were shaped by rulers' prior diversification (or nondiversification) strategies—were quite different in each case. Thus, the different mechanisms by which Suharto and Mobutu were displaced help to illustrate my argument.<sup>27</sup>

To summarize, Table 3 records the qualitative predictions of the model, given the values of the explanatory variables in each case, and records the actual outcomes along the dimensions of resource dependence, economic performance, and political stability. To a substantial extent, the table suggests that the cases do provide good illustrations of the model's equilibria. However, the cases also deviate in some respects from the predictions of the model. For example, although the Botswanan elite has invested significantly in education, infrastructure, and other goods, the country has also remained resource-reliant to a greater extent than the model would suggest. As suggested above, it may be that the low economic benefits to investment, due to the weak prior development of the nonresource sector, play some role here. The political stability in Indonesia, at least over the medium-term of Suharto's rule, is also not necessarily the predicted outcome of diversification, although here the prediction of the model is

<sup>26.</sup> It bears emphasis that in the model, threats to the power of incumbent elites arise probabilistically, not deterministically, as a function of investments in diversification.

<sup>27.</sup> I thank James Ron for his suggestions on these points.

TABLE 3
Outcome Variables

Political Stability	Predicted: high; actual: high Predicted: high; actual: high Predicted: mixed (probabilistic); actual: high in medium-run
Fiscal and Economic Volatility	Predicted: low; actual: low Predicted: high; actual: high Predicted: low; actual: low
Diversified?	Predicted: yes; actual: mixed Predicted: no; actual: no Predicted: yes; actual: yes
"Predicted" Equilibrium Path	Path 1: "No revolt" Path 2: "No investment" Path 3: "Investment"
	Botswana Zaire Indonesia

explicitly probabilistic (since, in the third, "investment" equilibrium of the model, the potential for revolt is stochastic). In the long run, social changes encouraged by diversification away from resource dependence may well claim some credit for political change in Indonesia.

#### **CONCLUSION**

Understanding the political incentives posed by resource wealth can help contribute to more nuanced, conditional theories of the resource curse. The emphasis I have adopted in this article has several advantages. First, it stresses the role of political choices in producing the resource curse, underscoring the importance of what might be called structured contingency (Karl 1997) in mediating the relationship between resources and political and economic outcomes. The model I have developed is an explicitly dynamic one, in which economic outcomes are seen as contingent on past political decisions; the structure of the economy is seen as endogenous to political factors, an emphasis shared by Snyder and Bhavnani (2005). Second, my approach provides a way to understand the variation in outcomes among resource-rich countries and to link this variation to the political and economic incentives of elites to diversify away from resource dependence. Third, the case studies provide insight into the factors that may influence these political and economic incentives. In the cases I examined here, the structure of the world market, the degree of societal opposition faced by political elites, and the prior development of the private sector all influenced the incentives of elites to invest in diversification and therefore the observed outcomes along the dimensions of political stability and economic performance. Finally, and perhaps most important, by exploring the link between fiscal volatility, economic performance, and political stability in resource-rich countries, this article offers an initial way to bring together disparate literatures on the effects of resource wealth.

Does the argument developed in this article travel beyond the three cases I have studied here? Many resource-rich countries seem to illustrate the features of the model's second equilibrium: they are resource-dependent and fiscally and economically volatile yet nonetheless remain politically stable. Indeed, it bears emphasis that in virtually all of the empirical papers that probe the relationship between resources and political institutions or political stability, the independent variable is not resource wealth per se but rather dependence on resource wealth.<sup>28</sup>

For example, the empirical association between resource dependence and poor economic performance has been widely studied in the literature on the economic resource curse (e.g., Sachs and Warner 1995; Karl 1997). Yet somewhat paradoxically from the perspective of the relevant literature in comparative politics, which suggests that fiscal crisis and poor economic contraction tend to lead to regime change, many resource-dependent countries do not seem to suffer political instability. Instead, they are arguably more stable, on average, than comparable nonresource exporters (Smith

<sup>28.</sup> For example, Smith (2004) operationalizes resource dependence as the proportion of oil exports to gross domestic product. Ross (2001) uses similar measures.

2004). My argument suggests one reason why this may be so: resource dependence is the outcome of strategic decisions by incumbent elites to limit the extent to which political opponents can challenge their power. Thus, fiscal crisis and economic contraction do not cause regime change or political instability in resource-dependent states, because promoting resource dependence is itself a way that elites can block the viability of challenges to incumbent power. Mobutu's Zaire is perhaps an extreme example of a logic common to many resource-rich developing countries, but one could plausibly cite a number of other Sub-Saharan African (Gabon under Omar Bongo, Zambia under Kenneth Kaunda) or Persian Gulf (Saudi Arabia, Kuwait) states. In Gabon, for example, Omar Bongo has ruled an autocratic regime for almost four decades (despite a nominal liberalization during the 1990s), in large part because oil exports have constituted the majority of the country's economic production since the early 1970s, and the would-be political opposition is financially dependent on the state. Copper in Zambia arguably played a similar role during Kaunda's regime, though copper became a less important source of state revenue over time due to the gradual collapse of the sector (Shafer 1983) (and, indeed, the country held multiparty elections during the 1990s).

On the other hand, exemplars of the model's first equilibrium may be rare. Indeed, Botswana may be unique among resource exporters with respect to its score on the world market volatility variable: not only is the world diamond market significantly more stable than the market for many mineral resources, but Botswana's importance as a diamond producer has given it unusual leverage over De Beers, as well as important market power of its own. The low probability of resource busts in Botswana, together with the uniquely cohered nature of the country's political elites, have also meant that potential political opposition is unusually low. The first equilibrium in the model is perhaps best understood as a limiting negative case, in which the more usual economic and political tensions caused by overexposure to volatile resource markets are substantially reduced.

The most interesting cases to study may therefore be conflictual resource-rich societies that have nonetheless moved away from resource dependence, through investments in diversification, as in the third equilibrium of the model. South Africa during the apartheid era, for example, had some success in developing an industrial economy that gradually helped supplant, to some extent, dependence on minerals. The framework adopted in this article may have some relevance for this case as well, where state investments in Afrikaner capital played a role in moving away from reliance on Anglodominated mining, in ways that nonetheless retained the hegemony of the white elite as a group (Fine and Rustomjee 1996). Among the Arab states of the Persian Gulf, the United Arab Emirates (UAE) has been significantly less oil-dependent than Qatar, Kuwait, Saudi Arabia, Bahrain, or Oman, building, for example, an important financial services sector. Understanding how elites in South Africa, the UAE, and other cases confronted political constraints to diversification and moved away from resource dependence may lend some insight into this third path from resource wealth to political and economic outcomes. Future work could be oriented towards identifying and studying such cases in greater detail.

A number of analysts, including the contributors to this special issue, have called for new approaches to what Snyder and Bhavnani (2005) call the "second generation" of research on the resource curse in which analysts focus on specifying the conditional impact of resources in different political and economic settings. This article has argued that elites have different incentives for diversifying away from resource dependence, and these divergent incentives may mediate the relationship between resources and political and economic outcomes. Explaining how and why resource reliance emerges among resource-rich states, and how some resource-rich states diversify away from this dependence, therefore seems an increasingly important priority for the second generation of research on the resource curse.

# **APPENDIX**

We can solve for the pure-strategy subgame perfect Nash equilibria of the game presented in the text through backwards induction. First, however, I establish a preliminary result.

#### **PROPOSITION 1:**

a)  $F_1 = 0$  or if  $p_2 = p^H$ , nonelites never revolt in the second period.

b) If  $F_1 = 1$  and  $p_2 = p^L$ , nonelites revolt with probability one in the second period if and only if  $\phi p^L R \ge c$  and with probability zero otherwise.

# **PROOF OF PROPOSITION 1:**

a) If  $p_2 = p^H$ ,  $c \to \infty$ ; if  $F_1 = 0$ , there is no possibility of revolt in period 2.

b) First consider the choice that nonelites face in period 2 of whether to launch a revolt if  $F_1 = 1$  and  $p_2 = p^L$ . With probability  $\phi$ , a revolt succeeds and nonelites consume  $p^L R + \lambda B - c$  in period 2. With probability  $(1 - \phi)$ , the revolt fails, and nonelites consume  $\lambda B - c$  in period 2. The expected value to nonelites of undertaking a revolt in period 2 is therefore

$$\phi(p^L R + \lambda B - c) + (1 - \phi)(\lambda B - c).$$

Nonelites must compare this expected value to the payoff of not undertaking a revolt. If nonelites do not undertake a revolt, elites remain in control of the state, but nonelites still consume a positive share of production in the private sector in period 2. The payoff to nonelites of not undertaking a revolt when  $F_1 = 1$  is therefore  $\lambda B$ .

Thus, when  $F_1 = 1$  and  $p_2 = p^L$ , nonelites undertake a revolt if and only if

$$\phi(p^L R + \lambda B - c) + (1 - \phi)(\lambda B - c) \ge \lambda B$$
,

which reduces to the condition that

$$\phi p^L R \ge c$$
,

as stated in proposition 1(b).

Having solved for the second-period revolt decision of nonelites, we can now consider the first-period investment decision of elites (i.e., their decision whether to set  $F_1 = 1$  or  $F_1 = 0$ ).

Funding the public good in period 1 means that, with probability  $\gamma$ , the world-market price of the resource is high in period 2 and elites retain power; moreover, they receive a benefit from private sector production that is proportional to the size of their group. The present value of the payoff to funding the private sector in the case of high second-period price is therefore  $p_1R - F_1 + \beta(p^HR + (1 - \lambda)B)$ . However, with probability  $(1 - \gamma)$ , the world-market price of the resource is low in period 2. In this case, according to proposition 1(b), nonelites will decide to revolt with probability one whenever  $\phi p^L R \ge c$  and with probability zero otherwise.

Given these constraints on elite action, it turns out that there are three pure-strategy subgame perfect Nash equilibria, one in the condition in which  $\phi p_2 R < c$  holds for all  $p_2$  and nonelites never revolt or stage a coup and two in which  $\phi p_2 R \ge c$  and nonelites sometimes revolt. These equilibria are defined in propositions 2 and 3. Note that I (slightly or greatly, depending on one's perspective) abuse the game-theoretic concept of equilibrium in the following propositions; equilibria here refer to the observed equilibrium outcomes, not to equilibrium strategy profiles, though I also make reference to equilibrium strategies.

#### **PROPOSITION 2:**

If  $\phi p^L R < c$ , there is a unique subgame perfect equilibrium, in which the incumbent elites invest in the public good in period 1 with probability one and nonelites do not revolt in period 2.

#### PROOF OF PROPOSITION 2:

When  $F_1 = 1$  and  $\phi p^L R < c$ , nonelites revolt with probability zero whether the second-period price is high or low, by propositions 1(a) and 1(b). Under these conditions, elites simply compare the present value of investing in the private sector in period 1 and thereby harvesting a share (proportionate to the size of their group) of private-sector production in period 2 to the present value of failing to invest in the private sector. (They do not have to take into account the possibility of revolt in period 2 because nonelites revolt with probability zero.) The present value of investing in the private sector is the weighted sum of the present value of investing when the second-period price of the resource is high, weighted by the probability of a high price, and the probability of a low price, as expressed in equation (A1):

$$\gamma(p_1R - 1 + \beta(p^HR + [1 - \lambda]B)) + (1 - \gamma)(p_1R - 1 + \beta(p^LR + [1 - \lambda]B)).$$
 (A1)

Note that in equation (A1),  $F_1 = 1$ , since we are considering elites' first-period present value of total two-period consumption, conditional on investing in the private sector in the first period.

Equation (A1) is compared to the present value of failing to invest in the private sector, which again is a weighted sum, where the weights are the probabilities of  $p^H$  and  $p^L$ :

$$\gamma (p_1 R + \beta p^H R) + (1 - \gamma) (p_1 R + \beta p^L R).$$
 (A2)

Note there is no term in equation (A2) for  $F_1$ , since  $F_1 = 0$ , and the terms in equation (A1) representing the present value of second-period production in the private sector also do not appear, since there is no first-period investment and thus no second-period production.

Elites invest in the public good whenever equation (A1) is greater than or equal to equation (A2), which implies (after rearranging terms) that elites invest whenever

$$B \ge \frac{1}{\beta(1-\lambda)}$$

which is true by assumption, establishing the claim in Proposition 2.

We can now solve for the two subgame perfect equilibria that occur under the condition that  $\phi p^L R \ge c$ .

#### **PROPOSITION 3:**

If  $\phi p^L R \ge c$ , there are two subgame perfect equilibria:

a) If

$$B \ge \frac{1 + \beta \phi \, p^H R \gamma}{\beta (1 - \lambda)},$$

elites invest in the public good in period 1 and production in the private sector takes place in period 2. Nonelites do not revolt if  $p_2 = p^H$  and do revolt if  $p_2 = p^L$ . If  $p_2 = p^L$ , the revolt succeeds with probability  $\phi$ .

b) If

$$B < \frac{1 + \beta \phi \, p^H R \gamma}{\beta (1 - \lambda)},$$

elites do not invest in period 1, remain in power in period 2, and consume the entirety of the resource rent in both periods (and production in the private sector does not take place).

## **PROOF OF PROPOSITION 3:**

Note that since  $\phi p^L R \ge c$ , by proposition 1(b) nonelites stage a coup with certainty if  $p_2 = p^L$ . Thus, in deciding whether to fund the public good in period 1, elites must consider the probability that the resource price in period 2 will be low as well as the probability that a revolt will, if launched, be successful.

If the price is high in period 2, the first-period present value of investment  $(F_1 = 1)$  is

$$p_1 R - 1 + \beta(\phi(1 - \lambda)B + (1 - \phi)(p^H R + (1 - \lambda)B)),$$
 (A3)

while if the second-period price is low, the present value of investment is

$$p_1 R - 1 + \beta (p^L R + (1 - \lambda)B).$$
 (A4)

Thus, the present value of investing in the public good in period 1 is the weighted sum of equations (A3) and (A4), where the weights are the probabilities that the state of the world will be  $p^H$  and  $p^L$ , respectively, in period 2:

$$\gamma (p_1 R - 1 + \beta(\phi(1 - \lambda)B + (1 - \phi)(p^H R + (1 - \lambda)B))) + (A5)$$

$$(1 - \gamma)(p_1 R - 1 + \beta(p^L R + (1 - \lambda)B)).$$

The present value of not funding the public good (i.e., failing to invest) in period 1 is the same as in equation (A2) above. Therefore, in period 1, elites invest in the public good if and only if equation (A5) is greater than or equal to equation (A2). After some algebra, this reduces to the condition that

$$B \ge \frac{1 + \beta \phi p^H R \gamma}{\beta (1 - \lambda)} \tag{A6}$$

When  $\phi p^L R \ge c$ , elites invest in the public good if and only if this expression holds, proving part (a) of proposition 3.

Equation (A6) provides a necessary condition for elites to invest in the public good when  $\phi p^L R \ge c$ . In consequence, if  $\phi p^L R \ge c$  and the inequality in (A6) does not hold, elites do not invest in the public good in period 1. By assumption, then, nonelites cannot revolt in period 2. Elites therefore retain power, consuming the resource rent in both periods, but do not benefit from production in the private sector. This proves the second claim in proposition 3.

#### REFERENCES

- Acemoglu, Daron, Simon Johnson, and James Robinson. 2003. An African success: Botswana. In In search of prosperity: Analytic narratives on economic growth, ed. Dani Rodrik. Princeton, NJ: Princeton University Press.
- Acemoglu, Daron, and James Robinson. 2000. Political losers as barriers to economic development. *American Economic Review* 90:126-30.
- ———. 2001. A theory of political transitions. *American Economic Review* 91:938-63.
- ———. 2002. Economic backwardness in political perspective. NBER Working Paper no. 8831, National Bureau of Economic Research, Cambridge, MA.
- Acemoglu, Daron, and James Robinson. 2005. Economic origins of dictatorship and democracy. Cambridge, UK: Cambridge University Press.
- Anwar, Dewi Fortuna. 2001. The transition to democracy in Indonesia: A historical perspective. In *Crafting Indonesian democracy*, ed. R. William Liddle. Bandung, Indonesia: Ford Foundation.
- Callaghy, Thomas M. 1984. The state-society struggle: Zaire in comparative perspective. New York: Columbia University Press.
- Chalmers, I., and V. R. Hadiz, eds. 1997. *The politics of economic development in Indonesia*. London: Routledge.
- Cobbe, James. 1979. Governments and mining companies in developing countries. Boulder, CO: Westview.
  Collier, David, ed. 1979. The new authoritarianism in Latin America. Princeton, NJ: Princeton University
  Press
- Collier, Paul, and Anke Hoeffler. 1998. On economic causes of civil war. *Oxford Economic Papers* 50:563-73
- ———. 2000. Greed and grievance in civil war. World Bank, Policy Research Working Paper 2355, World Bank, Washington, DC. (Subsequent version published as Paul Collier and Anke Hoeffler, Greed and grievance in civil war, Oxford Economic Papers 56, no. 4 [2004]: 563-596).
- Collier, Paul, Anke Hoeffler, and Måns Söderbom. 2004. On the duration of civil war. *Journal of Peace Research* 41 (3): 253-73.
- De Figueiredo, Rui. 2003. Electoral competition, political uncertainty, and policy insulation. *American Political Science Review* 96 (2): 321-35.
- ———. 2003. Budget institutions and political insulation: Why states adopt the line item veto. *Journal of Public Economics* 87:1967-83.
- Dehn, Jan. 2000. Commodity price uncertainty in developing countries. Center for the Study of African Economies, Working Paper 122, Berkeley Electronic Press, Berkeley, CA.
- Edge, Wayne. 1998. Botswana: A developmental state. In *Botswana: Politics and society*, ed. Wayne Edge and Mogopodi Lekorwe. Pretoria, South Africa: J.L. van Schaik Publishers.
- Edge, W. A., and M. H. Lekorwe, eds. 1998. *Botswana: Politics and society*. Hatfield, South Africa: J. L. Van Schaik.
- Eklof, Stefan. 2003. Power and political culture in Suharto's Indonesia: The Indonesia Democratic Party (PDI) and decline of the new order (1986-98). London: Taylor & Francis.

- Englebert, Pierre, and James Ron. 2004. Primary commodities and war: Congo Brazzaville's ambivalent resource curse. *Comparative Politics* 37 (1): 61-68.
- Evans, Peter. 1989. Predatory, developmental, and other apparatuses: A comparative political economy perspective on the third world state. *Sociological Forum* 4:561-87.
- -----. 1995. Embedded autonomy. Princeton, NJ: Princeton University Press.
- Evers, Hans-Dieter. 1995. The growth of an industrial labour force and the decline of poverty in Indonesia. Southeast Asian Affairs 22: 164-74.
- Fearon, James. 1995. Rationalist explanations for war. International Organization 49 (3): 379-414.
- ———. 2004. Why do some civil wars last so much longer than others? *Journal of Peace Research* 41 (3): 275-302.
- 2005. Primary commodities exports and civil war. Journal of Conflict Resolution 49 (4): 483-507.
- Fine, Ben, and Zavareh Rustomjee. 1996. The political economy of South Africa: From minerals-energy complex to industrialization. London: Hurst & Company.
- Gasiorowski, Mark. 1995. Economic crises and political regime change: An event history analysis. American Political Science Review 89:882-97.
- Good, Kenneth. 1992. Interpreting the exceptionality of Botswana. Journal of Modern African Studies 30:69-95.
- ——. 1994. Corruption and mismanagement in Botswana: A best-cast example? *Journal of Modern African Studies* 32 (5): 499-521.
- Green, Michael. 2002. Reflections on Indonesia's transition. New Zealand International Review 27 (4): 6-10.
- Hadiz, Vedi R. 1997. Workers and the state in new order Indonesia. New York: Routledge.
- Haggard, Stephan, and Robert R. Kaufman. 1995. The political economy of democratic transitions. Princeton, NJ: Princeton University Press.
- Harvey, Charles, ed. 1981. Papers on the economy of Botswana. London: Heinemann.
- Harvey, Charles, and Stephen Lewis. 1990. Policy choice and development performance in Botswana. London: Macmillan.
- Humphreys, Macartan. 2005. Natural resources, conflict, and conflict resolution: Uncovering the mechanisms. *Journal of Conflict Resolution* 49 (4): 508-37.
- Jefferis, Keith. 1998. Botswana and diamond-dependent development. In *Botswana: Politics and society*, ed. Wayne Edge and Mogopodi Lekorwe. Pretoria, South Africa: J.L. van Schaik Publishers.
- Jones Luong, Pauline, and Erika Weinthal. 2001. Prelude to the resource curse: Explaining energy development strategies in the Soviet successor states and beyond. *Comparative Political Studies* 34 (4): 367-99.
- Kabwit, G. 1979. Zaire: The roots of the continuing crisis. Journal of Modern African Studies 79:381-407.
- Karl, Terry Lynn. 1997. The paradox of plenty: Oil booms and petro-states. Berkeley: University of California Press.
- Kurth, James R. 1979. Industrial change and political change: A European perspective. In *The new authoritarianism in Latin America*, ed. David Collier, 319-62. Princeton, NJ: Princeton University Press.
- Lam, Ricky, and Leonard Wantchekon. 1999. Dictatorships as a political Dutch Disease. Manuscript, Department of Politics, New York University.
- Le Billon, Philippe. 2001. The political ecology of war: Natural resources and armed conflicts. *Political Geography* 20 (5): 561-84.
- Lev, Daniel. 1990. Notes on the middle class and change in Indonesia. In *The politics of the middle class in Indonesia*, ed. Richard Tanter and Kenneth Young. Monash Papers on Southeast Asia no. 19, Monash University. Victoria, Australia.
- Linz, Juan, and Alfred Stepan, eds. 1978. *The breakdown of democratic regimes*. Baltimore: Johns Hopkins University Press.
- Londregan, Jon, and Keith Poole. 1990. Poverty, the coup trap, and the seizure of executive power. World Politics 42 (2): 151-83.
- Lujala, Päivi, Nils Petter Gleditsch, and Elisabeth Gilmore. 2005. A diamond curse? Civil war and a lootable resource. *Journal of Conflict Resolution* 49 (4): 538-62.

- MacIntyre, Andrew. 1990. State-society relations in new order Indonesia: The case of business. In State and civil society in Indonesia, ed. Ariel Budiman. Monash Papers on Southeast Asia no. 22, Monash University, Victoria, Australia.
- Mackie, Jamie, and Andrew MacIntyre. 1994. Politics. In *Indonesia's new order: The dynamics of socio-economic transformation*, ed. Hal Hill. Honolulu: University of Hawaii Press.
- Marx, Karl. 1852/1926. The Eighteenth Brumaire of Louis Bonaparte. New York: International Publishers.
- McBride, Michael. 2003. Reforms as political entry deterrence: On crises, coups, and reforms in Sub-Saharan Africa. Manuscript, Department of Economics, University of California, Riverside.
- Moran, Theodore H. 1974. *Multinational corporations and the politics of dependence: Copper in Chile*. Princeton, NJ: Princeton University Press.
- O'Donnell, Guillermo. 1973. Modernization and bureaucratic-authoritarianism: Studies in South American politics. Politics of Modernization Series 9, Institute of International Studies, University of California, Berkeley.
- Parsons, Neil, Thomas Tlou, and Willie Henderson. 1995. Seretse Khama, 1921-1980. Braamfontein, South Africa: Macmillan.
- Parsons, Q. Neil, and James Robinson. 2004. State formation and governance in Botswana. Manuscript, Department of History, University of Botswana, and Department of Government, Harvard University, Cambridge, MA.
- Picard, Louis. 1987. The politics of development in Botswana: A model for success? Boulder, CO: Lynne Rienner.
- Powell, Robert. 2004. The inefficient use of power: Costly conflict with complete information. *American Political Science Review* 98 (2): 231-41.
- Przeworski, Adam, Michael Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and development: Political institutions and well-being in the world, 1950-1990.* Cambridge: Cambridge University Press.
- Robinson, James. 1997. When is a state predatory? Manuscript, Department of Government, Harvard University, Cambridge, MA.
- Robinson, James, Ragnar Torvik, and Thierry Verdier. 2002. Political foundations of the resource curse. Manuscript, Department of Government, Harvard University, Cambridge, MA.
- Robison, Richard. 1986. Indonesia and the rise of capital. Sydney, Australia: Allen & Unwin.
- Rock, Michael. 1999. Reassessing the effectiveness of industrial policy in Indonesia: Can the neoliberals be wrong? *World Development* 27 (4): 691-704.
- Ross, Michael L. 2001. Does oil hinder democracy? World Politics 53 (3): 325-61.
- 2003. Oil, drugs, and diamonds: How do natural resources vary in the impact on civil war? In Beyond greed and grievance: The political economy of armed conflict, ed. Karen Ballentine and Jake Sherman. Boulder, CO: Lynne Rienner.
- ———. 2004. How does natural resource wealth influence civil war? Evidence from thirteen cases. *International Organization* 58 (1): 35-67.
- Sachs, Jeffrey D., and Andrew Warner. 1995. Resource abundance and economic growth. Harvard Institute for International Development, Development Discussion Paper no. 517, Cambridge, MA.
- Samatar, Abdi Ismail. 1999. An African miracle: State and class leadership and colonial legacy in Botswana development. Portsmouth, NH: Heinemann.
- Shafer, Michael D. 1983. Capturing the mining multinationals: Advantage or disadvantage? *International Organization* 37 (1): 93-119.
- Smith, Benjamin. 2004. Oil wealth and regime survival in the developing world. *American Journal of Political Science* 48 (2): 232-46.
- Snyder, Richard. 2001. Does lootable wealth breed disorder? States, regimes, and the political economy of extraction. Paper presented at the annual meeting of the American Political Science Association, San Francisco
- Snyder, Richard, and Ravi Bhavnani. 2005. Diamonds, blood, and taxes: A revenue-centered framework for explaining political order. *Journal of Conflict Resolution* 49 (4): 563-97.
- Stedman, Stephen John, ed. 1993. Botswana: The political economy of democratic development. Boulder, CO: Lynne Rienner.

- Steenkamp, Philip. 1991. Cinderella of the empire? Development policy in Bechuanaland in the 1930s. Journal of Southern African Studies 17 (2): 292-308.
- Suryadinata, Leo. 1997. Democratization and political succession in Suharto's Indonesia. *Asian Survey* 37 (3): 269-81.
- Twang, Peck Yang. 1998. The Chinese business elite in Indonesia and the transition to independence 1940-1950. Kuala Lumpur, Malaysia: Oxford University Press.
- World Bank. 1989. Indonesia: Strategy for growth and structural change. Country Department V, Report no. 77758-IND, World Bank, Washington, DC.
- ———. 2000. World development indicators 2000. CD-ROM. Washington, DC: International Bank for Reconstruction and Development.
- Young, Crawford. 1983. Zaire: The politics of penury. SAIS Review 3:115-30.