Endogenizing Syndromes

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1   Introduction

We have seen that Africa's geography has distinctively shaped its opportunities. Two-thirds of Africa's population live in countries that are either dominated by natural resource wealth, or are landlocked and resource-scarce. Both of these conditions are difficult to cope with, and both are far more common in Africa than in other parts of the developing world. In this chapter we suggest that not only have Africa's opportunities been shaped by its geography, but that to a significant extent so have its choices.

Policy choices do not lend themselves to quantitative analysis: they are highly multifaceted with no obvious procedure for aggregation, and they are often continuous but ordinal, lying on the qualitative spectrum better–worse. In addition, individual variables often measure policy outcomes rather than policy settings: they become endogenous to growth. We have reduced this complexity to a manageable set of "syndromes" – patterns of policy choice that are plausibly causally prior to growth outcomes and that an economist would expect to be seriously dysfunctional for growth. This simplification has naturally come at the price of a substantial loss of

information. However, as we saw in chapter 2, the syndromes are associated with a substantial part of Africa's growth shortfall. If this association is causal, which we shall investigate, then the loss of information is not overly severe, at least in terms of the impact of policies on growth. Attention then properly shifts to *explaining* policy choices, and here the syndrome structure provides a powerful focal point for analysis. Under what circumstances did particular syndromes arise in post-independence Africa, and under what circumstances were they abandoned? Earlier chapters – including the whole of part 2 – have already begun the task of explanation. We continue it here by exploring the conditions under which the syndromes occurred, both individually and as a group.

In addressing the origins of policy choice we concentrate on the manner in which those who operate in the real economy – private citizens – can affect the behavior of their governments. We focus on the role of interest groups and political parties, and particularly on the role of the party system, emphasizing not only the role of political parties in representing private interests but also the impact of the party system on the incentives of politicians. In addition, we emphasize the size and composition of what, following Roeder (1993) and Bueno de Mesquita *et al.* (2003), we call the selectorate: the group that mediates the political life chances of politicians. As stressed by Zolberg (1966) and Kasfir (1976), in post-independence Africa there was a "shrinking" of the political arena: the selectorate narrowed. Following the logic of Adam and O'Connell (1999) and Bueno de Mesquita *et al.* (2003), we argue that as a selectorate diminishes in size, the incentives to engage in redistribution rise; the benefits become more concentrated and the costs more dispersed, thus leading to a greater demand for redistributive transfers to the powerful few. Moreover, by the logic of Humphreys and Bates (2005), as a selectorate increases in size, the incentives to form public goods increase as well; as the number of people that a government must reward rises, it becomes less expensive to reward them through the provision of a public good rather than through the distribution of private payoffs. Focusing on the instruments of representation – political parties and interest groups – and the changing scope of the selectorate yields, we argue, provides insight into the origins of the anti-growth patterns of policy-making that characterize late-twentieth-century Africa.

2   Building blocks of political geography

Policy choices reflect who holds power, what growth opportunities they face, and what they understand about those opportunities. We consider these three building blocks of political choices in turn.

2.1   Power structures

The impact of political power structures on policy choices is mediated, we shall argue, by the concentration, composition, and durability of executive power. The more concentrated is power, the greater are the returns to redistribution to the group in power, relative to the public good of inclusive growth. For a given concentration, in turn, the distortions imposed to achieve redistribution depend on the match between political and economic power, so that policy will depend on precisely which group is incumbent. The expected durability of rule, finally, affects the incentives of those in power to sacrifice the future for the present.

Anti-growth syndromes, by this logic, are more likely to emerge where power is highly concentrated, is held by economically less productive groups, and is viewed by those in power as precarious.

In much of Africa, power gradually shifted from being highly diffuse to being radically concentrated. Its composition, meanwhile, shifted from groups that broadly reflected the interests of citizens to groups that acquired influence wholly disproportional to their numbers. Finally, the durability of African executive power has been distinctively bimodal: many leaders have ruled only briefly, but many have ruled for decades. In this section, we explore the motive forces and implications of this evolution by tracking a "representative" political system over the decades following the end of colonial rule. We focus on the manner in which changes in the structure of representation and the size of the selectorate altered incentives for policy-making. Our purpose in following this fictive polity through its four canonical stages – starting and ending with constitutional democracy – is to advance a line of argument. At the end of the chapter, we move from conjecture to evidence, making use of data from our sample of countries in the post-independence period to test hypotheses advanced in this and subsequent sections.

2.1.1   Stage 1: constitutional democracy in conditions of ethnic identity

Our representative polity embarks upon independence with a constitution that, formally at least, is democratic. Power is diffused across the electorate as parties compete for votes. The selectorate is large: to win a party needs to attract the support of at least 50 percent of the electorate. Politicians therefore have strong incentives to champion the delivery of national public goods.

Some countries – Botswana, Mauritius, and Senegal, for example – remained at this stage throughout.

If voters identify with ethnic groups, a cost-effective way of forming a political party may be to base it on ethnic allegiance rather than upon a program that is nationally appealing. Thus the chapter on Uganda that

appears in volume 2 (Kasekende and Atingi-Ego 2007): the governing party (the United People's Congress, UPC, headed by Milton Obote) drew solid electoral support from the Acholi and Langi in the North while the Kabaka Yekka and the Democratic Parties drew their support from kingdoms in the south. Thus, too, the case of Nigeria (Iyoha and Oriakhi 2007), where immediately after independence three major parties competed for power, each based on a major ethno-regional group: the Hausa–Fulani in the North, the Yoruba in the West, and the Ibo in the East.

In a competitive political setting, political parties face a choice between offering programs that feature national public goods and programs that offer ethno-regional goods. Should some parties offer regional public goods, then the nationally oriented parties face the prospect of free-riding. It is rational for each ethnic group to vote for its "own" party, even though all groups would gain were they to vote for parties that championed the provision of national rather than regional public goods. In competitive political settings, regional public goods may therefore crowd out national public goods in the political marketplace.

Implicitly, at least, much of the literature on post-independence politics stops at this point: electoral competition, it argues, leads to ethnic capture as office-seeking politicians trim their policy platforms to the preferences of their constituencies.[1] But consideration of the size and partitioning of the selectorate suggests a more nuanced account, including the circumstances under which the championing of redistributive, sub-national political agendas will be most likely.[2]

The incentive to adopt ethno-regional politics rather than national public goods depends in part upon the ethnic composition of the population. If the majority of the population is from a common ethnic group, as in Botswana (Werbner 1993), then there is little incentive for ethno-regionalism: even were the ethnic majority to use its power for redistribution, it would be too large to secure big gains. Conversely, if the society is ethnically highly fragmented, as in Tanzania (Norris and Mattes 2003), in a majoritarian political system, no ethnic party could credibly gain from political redistribution. The incentive for ethno-regional politics may therefore peak when there are a few large groups, each able to become a substantial political force. The impetus may intensify insofar as the groups are polarized – that is to say, internally compact but with large differences between them, so that differences between groups become salient relative to differences within.

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[1] See the contributions in Rothchild and Olorunsula (1983).

[2] The contributions of Posner are highly relevant to this line of analysis; see, for example, Posner (2005).

There are additional reasons for locating the "danger zone" at the intermediate level of ethic concentration. As stressed by Fearon and Laitin (1996), Collier (2000), and Bates and Yacolev (2002), in a majoritarian electoral environment high levels of ethnic fragmentation may in fact strengthen rather than weaken incentives to provide national public goods.[3] Although each party would like to deliver only regional public goods to its own group, unless it is a majority it will not be able to do so. The ethnic parties would need to form coalitions. Further, an ethnic group that is initially excluded from the coalition can bid its way into it by offering its votes at a lower price in terms of ethno-regional public goods than some group in the coalition. Hence, in an ethnic democracy, while parties would like to deliver regional public goods to their own group, they may be driven to supplying national public goods as the only thing that they can agree upon.

Further, we have already seen that if the winning ethnic party does not need to form a coalition because it is a *large* majority, it will not have much incentive to favor regional public goods over national public goods. Hence, the danger zone for democratic politics would be where the largest ethnic group forms a small majority of the population, – large enough to control the polity but small enough for it to be worthwhile sacrificing the national for the ethnic interest. This phenomenon is termed "ethnic dominance." We would thus predict that under conditions of ethnic dominance even democratic politics would not deliver national public goods.[4]

2.1.2 Stage 2: single-party systems

As documented in chapters 9 and 10, within a decade after independence, most states in Africa abandoned multi-party systems of government. Roughly 50 percent adopted single-party systems; over 30 percent no-party systems;[5] while fewer than 20 percent gave legal sanction to the formation of opposition parties. In one-third of the cases, the military seized power; when they did so, they tended to suspend the holding of elections and to outlaw the formation of parties.

In terms of the framework advanced in this chapter, the end of party competition led to a change in both the system of representation and the size and composition of the selectorate. Interest groups, rather than political parties, dominated the process of representation; the selectorate narrowed; and the result of both was an intensification of the incentives to employ public policy to seize wealth rather than to foster its creation.

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[3] Note the contrast with Easterly and Levine (1997) and Alesina, Baqir, and Easterly (1999).
[4] For a formal model of the conditions under which parties will appeal to "ethnic" as opposed to "national" interests, see Penn (2006).
[5] That is, systems of personal rule.

Returning to our representative state, we can follow the impact upon the policy-making elite of the termination of party competition. Our illustration assumes a change from a competitive to a single-party system. But the arguments linking changes in the party system to changes in policy preferences would apply as well to a shift to a no-party system – i.e. one ruled by a big man and his cronies.

With the abandonment of multi-party democracy, the incentive for the ruling party to appeal to a mass base diminishes. Rather, depending upon the arrangements for internal party democracy, the maximum require-ment is that the leader retain the support of the majority of the original party. Whereas to win the first election the leader needed to secure the support of at least 50 percent of the electorate, he now needs as little as 25 percent.

Two groups lose from the banning of opposition parties. One is the voters who supported these opposition parties, potentially 50 percent of the elec-torate. In multi-party, coalition politics these groups are not powerless: they retain the power to bid themselves into the ruling coalition by demanding a lower price than some group already in the coalition. The banning of rival parties essentially removes this right to bid into the ruling group.

The other groups that lose power reside *within* the ruling party. The President needs to retain the support of the party, but not its universal support. Even if internal party structures are democratic, he is compelled to retain the support of only half of the voters who originally supported the party. Thus, supposing the party to have gained 50 percent of the votes, the President now has to retain the support of only 25 percent of the national electorate.

One result of the change in the party system, then, is that the selectorate shrinks in size. Another is that the incentives that shape policies change. The President and his remaining supporters are now in a position to set policies so as to benefit the 25 percent support they need to retain in order to rule. To the extent that internal party structures are less than fully democratic, the ruling group may be able to retain power while being supported by even less than half of the original party.

If the ruling faction of the single party is ethno-regional, regional public goods now become a more efficient way of targeting benefits to the 25 percent than national public goods, which wastefully also benefit the remaining 75 percent who are now disempowered. The more ethno-regionally fragmented is the society, the narrower the support base of a single party is likely to be. As in the case of Burundi (Nkurunziza and Ngaruko 2007) or in Mobutu's Zaïre (Nzongola-Ntanlaja 2002), the support base of the President may narrow to his district, his co-ethnics, or his family. The narrower the support base, the stronger the incentive for regional as opposed to national public goods.

Hence, the more ethnically fragmented the society, the more damaging would we expect to be the move from competitive party politics.[6]

When representation is achieved through electoral competition, numbers count. Because politicians have an incentive to recruit supporters, large groups become influential even if widely scattered. And because political parties bear the costs of organizing, these groups can be powerful even though they are poor. When interest groups, rather than political parties, represent the interests of citizens, however, then the political advantage shifts.[7] In particular, it shifts in favor of minorities and especially wealthy minorities. Geographically, the costs of organizing are lower the more concentrated the group; large groups that lie widely scattered are less likely to form organized interests. Economically, industries in which production is concentrated are more likely to exert political pressure; when a firm's decisions can alter market prices, it can perceive the benefits that can be derived from collusive agreements.

It is the politicians who provide the regulations that lead to the restructuring of markets. The more wealthy the interests, the better they can afford to pay for the services of politicians. In exchange for financial contributions from businesses, members of the ruling group forge licensing agreements, impose restrictions on trade, and regulate prices in markets. Escaping the pressures of market competition, businesses gain the power to restrict output and set prices and thereby secure greater profits than would be possible in a competitive market. The mass of the consumers pay the costs. Because of the change in the system of representation, the power of numbers is reduced; in the absence of electoral competition, the majority cannot secure a change in the policies that benefit the concentrated minority. One result is the adoption – or retention – of the kinds of policies that we have characterized as "control" or "redistributive" regimes (see chapters 3, 4, and 6). Another is the creation of a narrow elite, in which wealth melds with power.

Note a basic problem with this account: as 75 percent of the population loses out from this transition, the change should be blocked, especially as it takes place while under majority rule. How, then, could so many states abandon competitive party systems?

One reason is that people may have misread the implications of the move to single-party rule. The political opposition may recognize that they may lose the power to bid themselves into the ruling coalition. But the half of the winning coalition that is due to lose its power may be deceived into thinking that it is actually gaining power at the expense of the 50 percent

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[6] Subject to a qualification discussed below concerning resource rents.
[7] See Olson (1977), Becker (1983), and Adam and O'Connell (1999); for an application to Africa, see Bates (1981).

who will undoubtedly lose it. As noted in the chapter by Mwanawina and Mulungushi (2007), such appears to have been the case in Zambia. The Bemba-speaking politicians from the Northern Province had been among the most militant supporters of the United National Independence Party (UNIP), the governing party. They had vigorously campaigned on behalf of the formation of a single-party state. But, when UNIP became the sole legal party, then found themselves marginalized by a coalition based in the Eastern Province and were later excluded from power.

Secondly, few of the parties that ended up with power in Africa had campaigned on a program of national public goods. Elections had been contested by parties based on ethnic–regional coalitions. Hence, the switch from the championing of national programs to the sponsorship of ethno-regional "club" goods was not a difficult one. For many in the governing party, even those who were eventually marginalized, it represented a return to a familiar – and appealing – political formula.

Third, the leaders that presided over the transition to one-party or no-party states invariably argued that multi-party competition would validate and deepen existing ethno-regional cleavages, and thereby undermine political and economic progress. Our own argument – along with those of Azam in chapter 6 and Bates in chapter 7 – gives more credence to this under conditions of polarization than when fractionalization is high. Experience suggests, however, that the political valence of an appeal for "national unity" may be robust to these distinctions of degree.

Lastly, resistance to political restructuring was costly. For some, it meant forgoing rewards for compliance: a job as the head of a parastatal or a junior ministry, for example. For others, it meant running the risk of financial losses or physical harm. Presidents are powerful; they control the means of rewarding or punishing others; and they could selectively target sanctions so as to disorganize those who opposed the suppression of party competition. They could and did make it privately advantageous for individual opponents to endorse policy changes that would be harmful to the opposition as a group.

2.1.3   Stage 3: rule by fear

By the late 1980s, the vast majority – 80 percent or more – of Africa's political systems were authoritarian: they were based on no- or one-party political systems. The nature of the party system narrowed the scope of the selectorate, allowing elites to adopt policies that redistributed income from the mass of the population to finance narrowly targeted benefits: profits for protected industries or regional or ethnic public goods.

In a no- or single-party system, power need not be highly concentrated in the President. It could be dispersed around a range of interest groups, with the President having to appease powerful groups or to play them off against each other. Such appears to have been the case in the early days of

Moi's presidency in Kenya, as he played one of the Central Province barons off against another, or in the early days of single-party rule in Zambia, when President Kaunda sometimes appeared a captive of the powerful politicians in the Central Committee.

By the figures employed in our example, 75 percent of the population were excluded from power. And in particular, in some instances, the figures were even greater. In Equatorial Guinea, the Nguema family controls the government and pockets the earnings of the oil industry. In Rwanda, the families of Juvénal Habyarimana and his wife formed the *akasu* – the little house – that dominated the government, until overthrown by the Rwandan Patriotic Front (RPF). And as argued by Nkurunziza and Ngaruko (2007), following the coup of Micombero in Burundi, the denizens of Bururi seized power, retaining it for more than three decades. Power, and the benefits it could supply, became narrowly concentrated.

A major reason that narrowly based regimes could remain in power is that their leaders ruled by fear. A review of the conduct of African presidents suggests that in roughly 40 percent of the country-years in our sample, they based their rule to a significant degree on the use of force. Examples would include Marien Ngouabi in Congo; Hissène Habré in Chad; Siaka Stevens in Sierra Leone; and Jose Eduardo dos Santos in Angola.

Those who ruled by fear mobilized the coercive apparatus of the state to jail, kill, or exile political opponents and to intimidate those who might otherwise be drawn into the ranks of their political opponents. Note, for example, the commentary of Nguza Karl-i-Bond, the chimerical politician from Shaba Province in Zaire (now DRC), whose memoirs document political practices in Mobutu's Zaire. As he recounts, when Mobutu convened a new Council of Ministers – and he convened many new ones – he gave a set speech. "The responsibility of the . . . men of state," Mobutu would pronounce, "was to know how to guard secrets." "If we decide to kill someone for reasons of state," he would declare, "it must remain between us" (Huband 2001: 227). As did other heads of state, Mobutu controlled a variety of organizations capable of killing "for reasons of state"; these included the Civil Guard, commanded by his brother-in-law, Kpama Buramoto; the Special Research and Surveillance Brigade, commanded by General Blaise Bolozi, also related to the President by marriage; the Special Action Forces, a paramilitary unit, commanded by Honore Ngabanda Nzambo-ku-Atumba, a close aide of Mobutu and his chief of intelligence; and the Special Presidential Division, by all accounts the most effective unit of them all, commanded by General Nzimbi Ngabale, a "close relative" (Nzongola-Ntanlaja 2002: 154).

Others, such as Mathieu Kérékou in Benin, presided over a less baroque security apparatus: a People's Militia, a Presidential Guard, an army, and a Ministry of Interior (Allen 1989: 52, 71). While modest in scope by
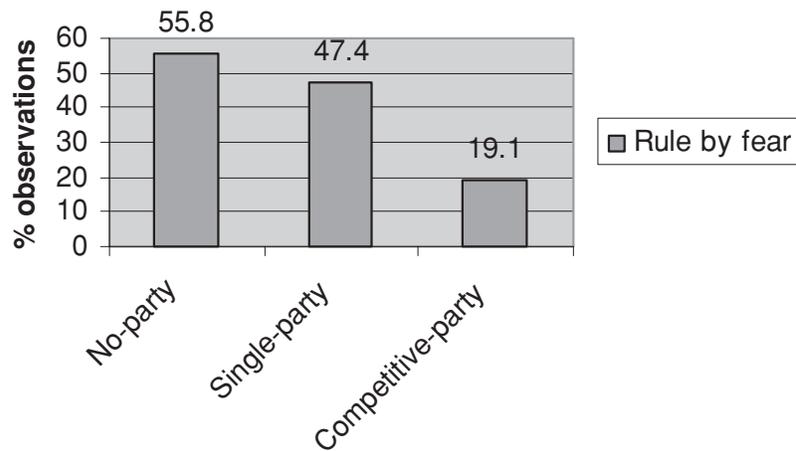
Figure 11.1 Rule by fear and party system
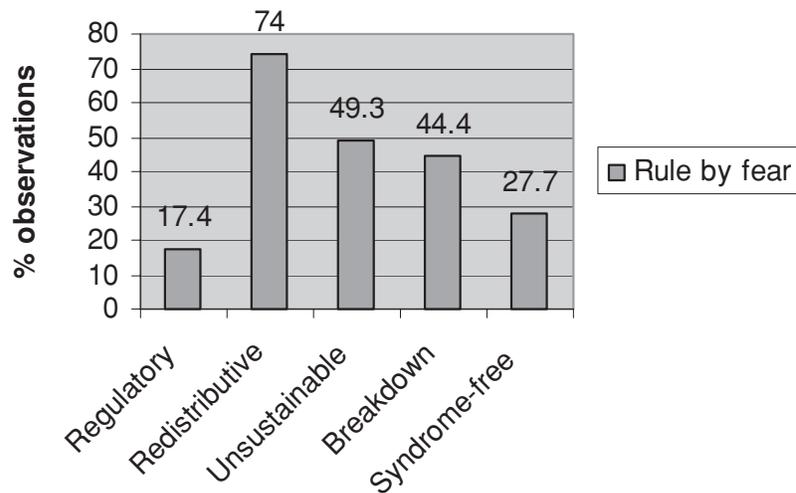
Figure 11.2 Rule by fear

comparison with those of Mobutu, the forces at Kérékou's disposal suf-
ficed to detain political rivals, jail students, and to drive into exile those who
actively opposed his regime. The units were so organized that, in the words
of Allen (1989: 52) they "concentrate[d] the entire repressive apparatus in
the hands of the President."

   Observing the distribution of regimes based on fear, we note that they
tended to prevail in one or no-party systems (figure 11.1).

   The narrow scope of the selectorate in such regimes, in turn, cre-
ates incentives to employ public policies to secure the redistribution of
economic resources. As seen in figure 11.2, in states ruled by fear, economic
redistribution constitutes the modal choice of public policy.

How did some African societies get to rule by fear? One route is a *gradual exclusion* from power starting from a stage-2 single-party system. The leader dismantles whatever checks and balances are in place and replaces party supporters in positions of power with family members. Newly excluded supporters have an incentive, as a group, to arrest the process, but face a free-rider problem: to arrest the process essentially involves challenging the President, and this exposes those making the challenge to risk. As the support base shrinks below the 25 percent of stage 2, even ethnically specific public goods become wasteful relative to private patronage. The redistribution ceases to be ethno-regional and becomes family-based looting.

Gradual exclusion, in which a single-party system erodes into personal rule, is not the only means by which rule by fear has evolved, however. There are two other routes: coups and rebellions. Both place the head of a hierarchical military organization at the head of the government, and the President therefore enters office with the tools in place to rule by fear.

The only effective threat to this concentration of power comes from a blocking coalition within the military: that is, a further coup or rebellion. The risk of a coup is roughly 6 percent in states ruled by fear; among others, it is roughly 4 percent, and the difference is significant at the 0.01 level. Rule by fear thus associates with political instability. And the combination of political risk and economic redistribution is costly, lowering the prospects for growth.

2.1.4   Stage 4: restored democracy

A final step, which may come after stages 2 or 3, is the restoration of democracy. Democracy has two distinct dimensions; electoral competition (Schumpeter 1950), which is relatively easy to introduce, and checks and balances (Dahl 1971), which are not. By the mid-1990s, one-half of the states of Africa were governed by regimes chosen in competitive elections. More elusive has been the creation of checks and balances. Whether judged in terms of electoral competition or checks and blances, the nations of Africa continue to lodge at the lower end of the global distribution of the democracy ratings. The form of democracy that they exhibit more closely resembles the illiberal democracies of Farheed Zakaria (Zakaria 1997) than the polyarchies of Robert Dahl (Dahl 1971).

2.1.5   Concentration, composition, and duration: a summary of their implications for growth

The greater is the concentration of power the greater the incentive for the group in power to choose the private rewards of redistribution over the public good of growth. As interest groups come to dominate the process of

representation, their differential abilities to overcome the collective action problem shape who is going to benefit from redistribution. In Africa, the biggest single industry is agriculture; but because it was dominated by small-holders, once contested elections were banned, the costs of collective action lowered the power of farmers. Instead, power shifted to well-organized interests such as public sector employees and large firms.

When leaders see their position as precarious, their discount rates rise. The higher the discount rate the lower the payoff to the gains from a growth strategy, and so the more attractive is redistribution at the expense of growth. Superficially, African leaders should in retrospect usually not have seen their positions as precarious: they include many of the longest-serving rulers in the world and the single-party systems and rule-by-fear systems over which they presided eliminated constitutional means for their replacement. However, unconstitutional means of replacement were common through coups and rebellions. Unlike democratic challenges, these could occur at any moment: leaders were never safe. Again unlike democratic challenges, the consequences could be violent: *vide* President Doe of Liberia, tortured to death by his political opponents. While facing an objectively low probability of being replaced, and so ending up holding office for long periods, leaders felt endangered.

2.2   Opportunities

Opportunities affect the magnitude and distribution of costs and benefits of the syndromes.

2.2.1   Landlocked, resource-scarce countries

One of the key choices is between short-term gains to the group in power and long-term growth for the country as a whole. As argued by Sachs and Warner (1995), landlocked countries that are resource-scarce simply lack good growth opportunities. The returns to the choice of a strategy of long-term national growth are therefore going to be more modest than in other settings. Realizing this, the group in power has a stronger relative incentive to opt for redistribution. In keeping with this reasoning, we find (figure 11.3) that landlocked countries are more likely to have either single-party or no-party systems than are coastal regions or regions that are resource-rich; they are more likely than coastal regions to be ruled by fear (figure 11.4); and they are more likely to exhibit redistributive and less likely to adopt syndrome-free policy regimes than are coastal or resource-rich nations (figure 11.5). They are also more likely to experience state breakdown and civil war (figures 11.5 and 11.6), themselves the result of attempts to use the power of the state to engage in, or to protect against, redistribution.
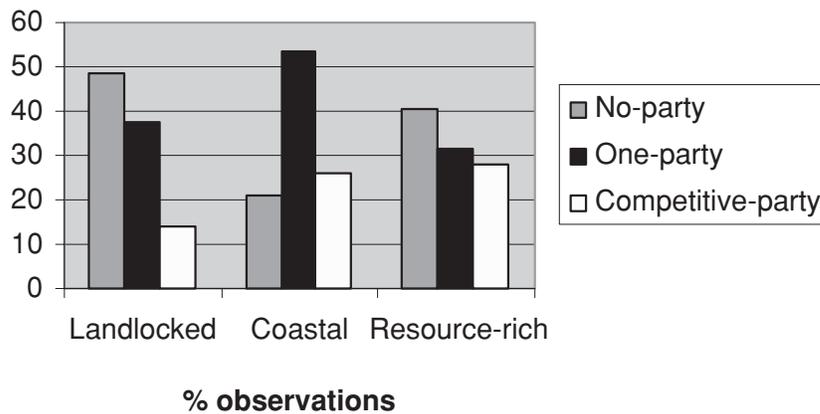
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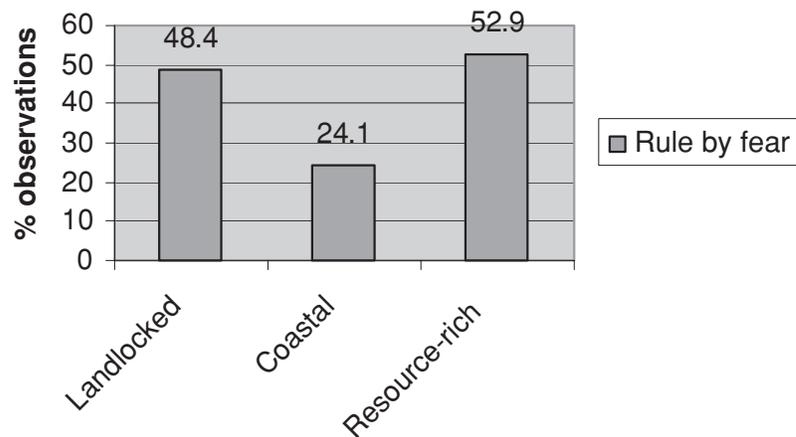**Figure 11.3** Opportunities and party system

Figure 11.4 Opportunities and rule by fear

2.2.2   Resource-rich countries

Resource-rich countries have the potential for national growth and so do not have the same political economy problems of landlocked, resource-scarce societies. However, because they have low levels of taxation they are likely to under-supply the public good of scrutiny, as discussed in chapter 7. With low scrutiny, rulers are in a position to divert public funds to improper uses. In the context of democratic competitive electoral politics, this diversion can make patronage politics financially feasible: the massive patronage needed to win elections despite failing to deliver public goods can be financed by the resource rents. In this situation, the more competitive is party competition, the more will parties be driven to spend on patronage. The political equilibrium is when the party maximizes the amount of public funds that can be diverted into patronage, and this patronage in turn is sufficient to maintain it in power. Indeed, with sufficiently intense competition the government will need to raid the commons of the future by borrowing in an unsustainable
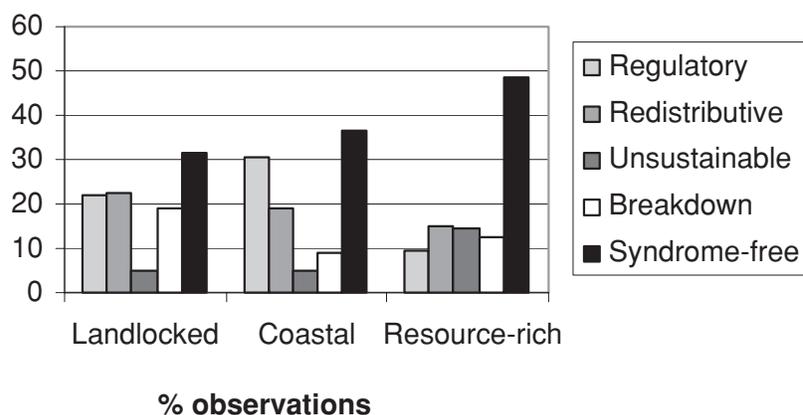
Figure 11.5 Opportunities and syndromes
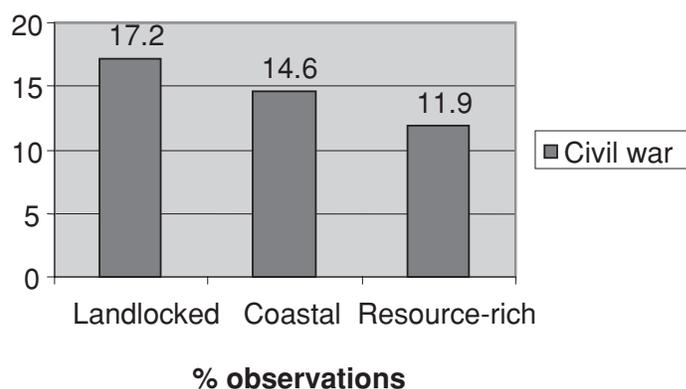
Figure 11.6 Civil war

way. Hence, we would expect that in the context of large resource rents electoral competition would lead to the syndrome of unsustainable spending. Large resource rents make the syndrome of unsustainable spending much more likely because they provide the government with the collateral against which it can borrow.

2.2.3   Coastal, resource-scarce countries

During a part of our period coastal, resource-scarce countries had remarkable opportunities for growth, namely through breaking into international markets for manufactures. Even without this, they had superior opportunities to the landlocked, resource-scarce countries due to their lower costs of international trade. Lacking large natural resource rents, they do not face the problems of low scrutiny common to the resource-rich. Hence, this group should have good returns to a strategy for national growth, while having sufficient scrutiny to impose constraints on patronage. We would therefore

expect democratic politics in this group of countries to work better than elsewhere in Africa.

2.3 Influences on knowledge

Power structures determine who gets to choose, and opportunities combine with these choices to determine economic payoffs. However, people take decisions in the context of limited information. Influences on knowledge therefore potentially shape choices. We distinguish between three levels of influence: in-country, regional, and global.

2.3.1 In-country knowledge

In-country knowledge can usefully be divided into the knowledge base of the leader and the knowledge base of the population. As argued in chapters 4 and 9, many of Africa's first generation of leaders were influenced by socialism, whether in its Fabian or Marxist varieties. Socialist beliefs directly suggested that control regimes were a necessary strategy for economic development.

The knowledge base of the population, which can be proxied by its education, might affect political choices in two main ways. First, conditional upon democracy, a higher level of knowledge might increase the pressure to choose national public goods over regional public goods and private patronage. Second, even in the absence of democracy, the more educated is the population the more rapidly is the society likely to learn from errors. Hence, we might expect the syndromes to be less persistent the more educated is the population.

2.3.2 Learning from the region

Potentially, countries can learn from the successes of their neighbors. For example, in Latin America the Chile model was influential, while in East Asia the "gang of four" provided a role model that was widely emulated. In Africa there is some limited evidence for this: during the 1990s Madagascar started to copy Mauritius, and Namibia may have copied Botswana. Countries can also learn from the failure of neighbors: the fact that the ANC was based in Zambia during a phase of manifest economic failure is sometimes used to account for the careful economic management that the ANC has adopted since coming to power in South Africa. We would thus expect the adoption and escape from the syndromes to be serially correlated across the region.

2.3.3 Learning from the world

All societies learn from others. The global fashion for privatization that started in the 1980s was clearly sparked by the example of the Thatcher government in the UK. In Africa, two major world phenomena are of sufficient

importance to warrant explicit investigation: the rise of Asia and the fall of the USSR. The rise of East Asia as a global exporter beginning in the 1980s provided a new role model for coastal, resource-scarce low-income countries. Potentially, the success of such countries in Asia revealed to those in Africa that the cost of the syndromes was higher than they had previously realized. The fall of the USSR was an important learning event for those societies with control regimes. Examples of its influence are that the governments of Eritrea and ANC South Africa which formed shortly afterwards did not adopt the socialist model, even though while liberation movements they had espoused it.

3   Predicting the syndromes

Our analysis relates the occurrence of syndromes to the nature of power structures, opportunities, and influences on knowledge. To test these hypotheses empirically we begin by pooling the syndromes and considering only what determines whether a society is free of them. We then conduct a similar analysis for the individual syndromes.

3.1   Determinants of syndrome-free status

Table 11.1 presents our analysis of the characteristics that are significant in determining whether a country is free of the syndromes. The statistical method is logit analysis, with each country-year experience in Africa since 1970 forming an observation. A positive sign indicates a variable which increases the likelihood that a country will be free of all syndromes. The estimates have been derived after employing multiple imputation methods to derive estimates of the values for missing observations.[8]

We begin with variables that describe power structures, whether via the political system or the structure of ethnic allegiances. Consider first the variable indicating the mode of representation: "multi-party." When this variable takes the value 1, the head of state was picked in an election contested by competing political parties. When 0, there was a single party or personal rule, and representation is undertaken by organized interests. The "multi-party" variable itself is highly significant and its coefficient is large and positive: multi-party competition makes an African country much more likely to be syndrome-free.

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[8] We use methods developed by Rubin (1996) and Schafer (1997) to impute multiple estimates of the missing values and to calculate their distributions, and techniques developed by the Harvard Data Center to estimate and to interpret the estimates derived from the resultant data. See Honaker (2000) and King, Tomz, and Wittenberg (2000).

Recall our discussion of the role of the size of the selectorate. A measure would be the degree of ethnic concentration, for which we have two measures. The first is "ethnic dominance," which takes a value of 1 if the largest group constitutes 45 percent or more of the population and 0 otherwise. Given such preponderance, our reasoning would suggest, the group would tend to use the state to promote prosperity through the creation of collectively rather than privately beneficial policies and through growth-oriented rather than redistributive measures. As we would expect, the coefficient for this variable is positive, although the level of significance is low (see table 11.1).

A second measure is ethic diversity, as measured by the probability that any two people, selected from a country's population at random, would belong to different ethno-cultural groups. In this instance, we enter the variable in interaction with an indicator of "rule by fear." We do so because we believe that when minorities, which in Africa are often ethnically defined, seize power, they then use the coercive apparatus of the state to implement policies of redistribution. The combination of rule by fear and high levels of fractionalization should therefore produce a significantly negative relationship with syndrome-free policy-making.

To interpret the relevant results in table 11.1, note that "rule by fear" takes on the values of 1 for present and 0 for absent. Note, too, that the average level of ethnic fractionalization in the sample set of counties is 0.725, and let the variable take on the values of 0, indicating complete homogeneity; 0.725, indicating average diversity; and 1, indicating total fractionalization. Employing the coefficients from the model in column (1), we note that were the population ethnically homogenous (i.e. when ethnic diversity = 0), even a government that ruled by fear would adopt syndrome-free policy-making: the coefficient would be positive and significant. Given the size and significance of the coefficient on the interaction term, however, at the average level of ethnic fractionalization (0.725), rule by fear exercises a significantly negative effect on the dependent variable. So too when the measure of fractionalization equals 1. As the level of ethnic diversity rises, then rule by fear impacts more negatively upon the likelihood of syndrome-free policy-making. The results thus suggest that regimes that possess a narrow ethic base – i.e. that have a small selectorate – are willing to employ force to distort markets using the power of the state to create and enforce pubic policies that secure redistribution rather than growth (see also table 11.2, column (1)).

We next investigate the variables that capture economic opportunities. The coefficients for landlocked and coastal resource-scarce variables are each significant and negative. Note that the coastal states chose policy regimes that tended to impose regulatory regimes and to engage in redistribution. That they did so just as coastal states in Asia embraced the international economy

Table 11.1 *Explaining the syndromes: what keeps countries syndrome-free?*

	Syndrome-free (1)	Syndrome-free (2)	Syndrome-free (3)	Syndrome-free (4)
Multi-party	1.176	1.376	1.220	1.093
	(0.239)***	(0.244)***	(0.246)***	(0.238)***
Ethnic dominance	0.417	0.290	0.409	0.487
	(0.231)*	(0.244)	(0.231)*	(0.242)**
Rule by fear	1.902	2.05	1.916	1.977
	(0.513)***	(0.505)***	(513)***	(0.487)***
Ethnic diversity	−0.483	−0.723	−0.482	−0.379
	(0.754)	(0.767)	(0.753)	(0.760)
Rule by fear ×	−3.889	−4.158	−3.907	−3.915
Ethnic diversity	(0.718)***	(0.723)***	(0.719)***	(0.687)***
Accumulated	6.018	10.562	5.851	6.672
knowledge	(1.429)***	(1.741)***	(1.443)***	(1.460)***
Landlocked,	−1.024	−1.029	−1.019	−0.869
resource-scarce	(0.216)***	(0.218)***	(0.216)***	(0.228)***
Coastal,	−1.021	−0.912	−1.018	−1.013
resource-scarce	(0.205)***	(0.205)***	(0.206)***	(0.208)***
Proportion of nat.	−1.650	−1.702	−1.469	−1.581
res. rents in GDP	(0.458)***	(0.459)***	(0.471)***	(0.470)***
Trend	−0.008	0.029	−0.010	−0.018
	(0.015)	(0.017)*	(0.015)	(0.016)
Secondary	0.059	0.076	0.059	0.048
enrollment in 1970	(0.015)***	(0.017)***	(0.015)***	(0.017)***
Post-1989	1.215	1.552	1.208	1.266
	(0.280)***	(0.249)***	(0.281)***	(0.289)***
Average syndrome-		−1.839		
free for neighbors		(0.393)***		
Nat.-res. rents ×			−0.571	
Multi-party			(0.979)	
Risk of				−8.609
coup d'état				(3.748)**
Obs.	1,645	1,645	1,645	1,645
McFadden R^2	0.26	0.27	0.26	0.26
Adjusted R^2	0.24	0.26	0.24	0.25

Notes: Logit estimation, *p*-values in parentheses.
* Significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent; all regressions include an intercept.

Table 11.2 *Explaining the syndromes individually.*

	Regulatory (1)	Redistribution (2)	Unsustainable spending (3)	State breakdown (4)
Multi-party	−0.207	−1.130	−0.637	−0.021
	(0.174)	(0.264)***	(0.349)*	(0.297)
Ethnic dominance	−0.316	−1.30	0.428	−1.169
	(0.222)	(0.264)***	(0.352)	(0.347)***
Rule by fear	0.444	−0.569	0.968	−1.808
	(0.451)	(0.531)	(0.691)	(0.872)*
Ethnic diversity	1.028	−1.917	0.276	−3.506
	(0.746)	(0.836)***	(1.096)	(1.087)***
Rule by fear ×	−0.815	3.624	−0.690	2.911
Ethnic diversity	(0.602)	(0.709)***	(−0.758)	(1.120)**
Accumulated	−5.323	−1.333	−4.679	−1.731
knowledge	(1.438)***	(1.674)	(3.494)	(1.835)
Landlocked,	−0.223	1.293	−1.084	0.085
resource-scarce	(0.192)	(0.218)***	(0.326)***	(0.243)
Coastal,	0.418	0.580	−0.611	−0.116
resource-scarce	(0.175)**	(0.193)***	(0.272)***	(0.226)
Proportion of nat.-	−0.273	2.547	2.312	−2.997
res. rents in GDP	(0.357)	(0.383)***	(0.410)***	(1.097)***
Trend	−0.025	0.007	−0.012	0.006
	(0.015)*	(0.017)	(0.037)	(0.018)
Secondary	−0.146	0.075	−0.076	−0.068
enrollment in 1970	(0.016)***	(0.017)***	(0.025)***	(0.021)***
Post-1989	−1.264	−0.301	−1.701	1.058
	(0.237)***	(0.264)	(0.500)***	(0.305)***
Obs.	1,645	1,645	1,645	1,645
McFadden R^2	0.18	0.23	0.21	0.15
Adjusted R^2	0.17	0.22	0.19	0.11

Notes: Logit estimation, *p*-values in parentheses.
* Significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent; all regressions include an intercept.

and adopted growth-promoting polices helped to lay the foundation for Africa's long-run growth shortfall, as argued in chapter 2. As an indicator for resource wealth, we introduce a continuous variable: the value of the resource rents as a share of GDP. The coefficient on this variable is significantly negative: resource rents systematically make syndromes more likely.

Finally, we investigate a range of knowledge variables. The proportion of the population aged over twenty-five that had been educated significantly increases the predicted frequency of syndrome-free status in subsequent

years. We measure cumulative experience by the population-weighted cumulative proportion of country-years that are syndrome-free. We measure the impact of neighbours by noting the portion of neighboring states that are symptom-free at any given time. The first is highly significant and the coefficient is positive; the second (see table 11.1, column (2)) is significant and negative. The first represents learning; the second, efforts to avoid mistakes made by others.[9]

The data suggest that the fall of the USSR influenced policy choices. Given the impact of this and other temporally-specific variables, the time trend is insignificant, though negative.

As shown in table 11.1, column (3), party competition has less effect in resource-rich countries. While consistent with the hypothesis of the "resource curse" (Ross 2003), the finding is not statistically significant. Equation (4) introduces a measure of coup risk: countries at high levels of risk from coups are significantly less likely to choose a mix of policies that is "syndrome-free."

The central conclusion from this analysis is thus that the syndromes move in concert with the three sets of influences discussed in the previous sections: the nature of the party system, the size and composition of the selectorate, and the level of knowledge.

3.2   Syndrome by syndrome

We now consider how each of the syndromes may be induced by particular power structures, opportunities, and influences on knowledge.

3.2.1   Redistribution

The redistribution syndrome takes three forms: excessive ethno-regional redistribution, looting, and inadequate ethno-regional redistribution.

We have suggested that excessive ethno-regional redistribution is more likely with single-party rule, where power becomes concentrated in a single minority group, and if there are substantial resource rents, since these are likely to be regionally concentrated.

The looting form of redistribution is predicted to be generated by rule by fear, which in turn can develop from single-party rule, coups or rebellions.

Inadequate ethno-regional redistribution occurs where a rich and productive group with power fails to buy off a poorer and potentially aggressive group, and as a result suffers violent expropriation. At the heart of such a

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[9] We also investigated whether the rise of East Asian manufactured exports influenced the coastal countries. We found no significant effect: countries did not change behavior despite the mounting evidence that they were missing an unprecedented opportunity for rapid growth.

missed opportunity is an ability to make binding agreements (Acemoglu and Robinson 2001; Azam and Mesnard 2003). Promises by the rich to transfer resources to the poor lack credibility, given time-inconsistent preferences.[10]

3.2.2   Unsustainable spending and anticipated redistribution

The degree to which countries adopt unsustainable policies is likely to depend upon the scope for debt accumulation. In turn, this will depend upon the initial level of indebtedness and the level of exports. Countries with natural-resource booms are therefore most vulnerable to this syndrome. Unsustainable spending – typically generating a period of rapid but unsustainable growth – results when there is no institutional capacity to protect the "commons" of the future against claims made in the present. When, as is often the case in Africa, states are weak, the governing group may find it difficult to control the level and rate of current public consumption.

Anticipated redistribution occurs where a ruling group, whether ethno-regional or looting, has good reason to believe that it will lose power in the near future. It then has an incentive to asset strip, even if this is costly. The scope for anticipated redistribution depends in part upon the clarity of the threat of loss of power, and the extent to which assets can be run down. Potentially, the group can run down its net assets position without stripping assets by borrowing. However, the same information that tells the group that it risks loss of power may make it non-creditworthy to lenders. An example is South Africa in the later days of minority rule.

An apparently milder form of anticipated redistribution which may enable borrowing, and thus potentially be more damaging, is where the ruling group has an unspecific fear of loss of power, rather than having clear information about a specific threat. Thus, an autocrat may feel insecure due to the possibility of a coup. This is very different from the urgent end-game that likely characterized the behavior of the Afrikaners in the late 1980s.

3.2.3   State breakdown

State breakdown occurs as a result of the capturing of political power by a small, authoritarian minority. One result is the disempowerment and political alienation of a large percent of the population; a second is the adoption of redistributive policies. Such outcomes are more likely when there is a mixture of rule by fear and ethnic fractionalization. There is some evidence that resource rents make rebellions more likely, though not coups – perhaps because, unlike rebellions, coups do not need to be financed.

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[10] Recall the discussion in chapter 7 where it was shown that, in keeping with the argument above, where power has shifted into the hands of more resource-scarce regions, there are lower levels of militarization. This finding, too, is consistent with an argument that stresses the importance of credibility; it may find its cause in the inability of the richer regions to make credible promises of redistribution.

3.2.4   Control regimes

As discussed in chapter 6, single party rule and rule by fear both make control regimes more likely. There are also likely to be role-model effects, with the collapse of the USSR making control regimes much less attractive.

3.2.5   The statistical evidence

We now look at how each particular syndrome deviates from the core regression, the results being reported in table 11.2. Because the dependent variable is now a syndrome rather than the absence of syndromes, we should expect the signs to be the opposite of those observed in table 11.1.

Consider, first, the regulatory syndrome. Consistent with the arguments of chapter 6, the ending of the Cold War, a large proportion of adults with secondary education, and party competition made the adoption of control regimes less likely; the last is not statistically significant, however. Ethnic dominance is now insignificant: the urge to excessive regulation was not affected by a society having a dominant ethnic group. Coastal economies were more likely to adopt such policies than were those that were landlocked.

Now consider the redistribution syndrome. When there is a dominant ethnic group, the incentives to adopt redistributive policies appear to decline. Rather, the important drivers of the syndrome are ethnic diversity joined with rule by fear and the existence of rich resources. When opposition parties can openly contest elections, governments are less likely to engage in redistribution. Somewhat surprisingly, increases in education actually raise the likelihood of the syndrome.

The major driver of the unsustainable spending syndrome is, unsurprisingly, the magnitude of resource wealth. Ethnic diversity and rule by fear appear to have little bearing on the likelihood of exhibiting this syndrome. A more educated population and multi-party democracy make this syndrome less likely.

Finally, turning to state breakdown, it is here that the interaction of rule by fear and ethnic diversity appears to be most potent. In the light of recent scholarship, it is surprising to find that high levels of resource wealth appear to reduce, rather than increase, the likelihood of this syndrome.

4   Conclusions

We close by reiterating our core findings. The form of representation counts: it affects the degree to which policy will be used to promote the formation of national public goods, such as growth, as opposed to targetable "club" goods, such as ethno-regional transfers or private benefits for the elite. So, too, does the selectorate: the narrower the selectorate, the greater the incentives to secure wealth through redistribution rather than growth. And

the states of Africa have learned: from their own experiences, from the fall of communism, and from the mistakes of their neighbors.

Appendix: Data used in analysis of syndromes

Table 11.A1 *Descriptive statistics.*

Variable	Mean	Std dev.	Min	Max	Obs.
Syndrome-free	0.341	0.012	0	1	1645
Regulatory	0.421	0.012	0	1	1645
Redistribution	0.315	0.012	0	1	1645
Unsustainable spending	0.098	0.007	0	1	1645
State breakdown	0.146	0.009	0	1	1645
Rule by fear	0.410	0.014	0	1	1645
Ethnic dominance	0.277	0.011	0	1	1645
Ethnic diversity	0.725	0.014	0.255	0.953	1645
Accumulated knowledge	0.238	0.001	0.172	0.372	1645
Neighbors' syndromes	0.323	0.009	0	1	1645
Landlocked, resource-scarce	0.283	0.011	0	1	1645
Coastal, resource-scarce	0.454	0.012	0	1	1645
Proportion of natural-resource					1645
rents in GDP	0.061	0.005	0	1	1645
Trend	28	10.10	11	45	1645
Secondary enrollment in 1970	8.258	0.151	1	30	1645
Multi-party	0.151	0.359	0	1	1645
Coup risk	0.046	0.001	0	0.16	1645
Resource-rich*					
Competitive parties	0.034	0.013	0	11.5	1645
Rule by fear*					
Ethnic diversity	0.311	0.010	0	1	1645
Post-1989	0.429	0.249	0	1	1645

Sample: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, CAR, Chad, Côte d'Ivoire, DRC, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Mali, Mauritius, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe

Variables:

Syndrome-free

Takes a value of 1 if the country is free of any syndrome in the year in question.

Regulatory

Takes a value of 1 if the country is either in a hard or a soft regulatory regime.

Redistribution

Takes a value of 1 if the country is in any of the three variants of the redistribution syndrome.

Unsustainable spending

Takes a value of 1 if the country is in a phase of the unsustainable spending syndrome.

State breakdown

Takes a value of 1 if the country is experiencing state breakdown.

Rule by fear

Dummy variable taking a value of 1 if authority is highly concentrated in a political leader who indeed "rules by fear." *Source:* classification by authors.

Ethnic dominance

Takes a value of 1 if the largest ethnic group in society makes up between 45 and 90 percent of the total population. *Source*: based on Fearon and Laitin's (2003) "plural" variable.

Ethnic diversity

This cultural fractionalization measure takes a value of 0 for homogenous societies, higher values describe more heterogenous societies. The number is obtained by drawing two people at random from a country and measuring the probability that they belong to the same culture. *Source*: Fearon (2003).

Accumulated knowledge

Population-weighed average (using 1980 populations) of the syndrome-free status for all countries in SSA. This variable is time-varying but the same for all countries. *Source*: authors' calculations.

Neighbors' syndromes

Average of the syndrome-free status of the country's neighbors. *Source*: authors' calculations.

Landlocked, resource-scarce

Dummy variable taking a value of 1 for landlocked, resource-scarce countries. *Source*: classification by authors.

Coastal, resource-scarce

Dummy variable taking a value of 1 for coastal, resource-scarce countries. *Source*: classification by authors.

Proportion of natural-resource rents in GDP

Using data from the World Bank's adjusted savings project we calculated the rents for each commodity by subtracting the cost from the commodity price. We then multiplied the rents per unit by the amount extracted and summed across the different commodities. We then calculated the share of rents in GDP. Since the rents are provided in current US dollars we used the WDI 2003 GDP in current dollars to calculate this share. Natural resources for which rent data were available are: oil, gas, coal, lignite, bauxite, copper, gold, iron, lead, nickel, phosphate, silver, tin, and zinc. The data are available from http://lnweb18.worldbank.org/ESSD/envext.nsf/44ByDocName/ GreenAccountingAdjustedNetSavings.

Trend

A linear trend term, incremented one unit per year.

Secondary enrollment in 1970

Ratio of number of persons enrolled in secondary school to number of persons of secondary school age.

Multi-party

Dummy variable taking a value of 1 if the country has a multi-party system. *Source*: http://africa.govt.harvard.edu.

Coup, risk of

This variable was calculated using the model of *coup d'état* presented in Collier and Hoeffler (2005).

Resource rich × Competitive parties

Interaction between two dummy variables, one taking the value of 1 if the country is resource-rich (and 0 otherwise) and the other taking on the value 1 if the country has a multi-party system (and 0 otherwise).

Rule by fear × ethnic diversity

Interaction between a dummy variable taking a value of 1 if authority is highly concentrated in a political leader who "rules by fear" (and 0 otherwise) and the Fearon index of ethnic diversity.

Post-1989

Dummy variable taking a value of 1 for 1990 and later years.

References

Acemoglu, Daron and James A. Robinson (2001), "Inefficient Redistribution," *American Political Science Review* 95: 649–61

Adam, Christopher S. and Stephen A. O'Connell (1999), "Aid, Taxation, and Development in sub-Saharan Africa," *Economics and Politics* 11: 225–54

Alesina, Alberto, Reza Baqir, and William Easterley (1999), "Public Goods and Ethnic Divisions," *Quarterly Journal of Economics* 114: 1243–84

Allen, Chris (1989), "Benin," in C. Allen, M. S. Radu, K. Somerville, and J. Baxter, *Benin, the Congo, Burkina Fasu: Economics, Politics, and Society*. London and New York: Pinter

Azam, Jean-Paul and Alice Mesnard (2003), "Civil War and the Social Contract," *Public Choice* 115: 455–75

Bates, Robert H. (1981), *Markets and States in Tropical Africa*. Berkeley, CA and Los Angeles, CA: University of California Press

Bates, Robert H. and Irene Yackolev (2002), "Ethnicity in Africa," in C. Grootaert and T. van Bastelaer, eds., *The Role of Social Capital in Development*. New York: Cambridge University Press

Becker, Gary S. (1983), "A Theory of Competition among Pressure Groups for Political Influence," *Quarterly Journal of Economics* 98: 371–400

Bueno de Mesquita, Bruce, Alastair Smith, Randolph Siverson, and James Morrow (2003), *The Logic of Political Survival*. Cambridge, MA: MIT Press

Collier, Paul (2000), "Ethnicity, Politics, and Economic Performance," *Economics and Politics* 12: 225–45

Collier, Paul and Anke Hoeffler (2005), "Grand Extortion Coup Risk and the Military as a Protection Racket," University of Oxford, mimeo

Dahl, Robert (1971), *Polyarchy*. New Haven, CT: Yale University Press

Easterly, William and Ross Levine (1997), "Africa's Growth Tragedy: Policies and Ethnic Divisions," *Quarterly Journal of Economics* 112: 1203–50

Fearon, James (2003), "Ethnic and Cultural Diversity by Country," *Journal of Economic Growth* 8(2): 195–222

Fearon, James D. and David D. Laitin (1996), "Explaining Interethnic Cooperation," *American Political Science Review* 90: 715–35

(2003), "Ethnicity, Insurgency and Civil War," *American Political Science Review* 97: 75–90

Honaker, James (2000), "Issues in Multiple Imputation of Data of the African Research Program," Department of Government, Cambridge, MA: Harvard University

Huband, Mark (2001), *The Skull beneath the Skin: Africa after the Cold War*. Boulder, CO: Westview Press

Humphreys, Macartan and Robert H. Bates (2005), "Political Institutions and Economic Policies: Lessons from Africa," *British Journal of Political Science* 35: 403–28

Iyoha, Milton A. and Dickson E. Oriakhi (2007), "Explaining African Economic Growth Performance: The Case of Nigeria," chapter 18 in Benno J. Ndulu, Stephen A. O'Connell, Jean-Paul Azam, Robert H. Bates, Augustin Kwasi Fosu, Jan Willem Gunning, and Dominique Njinkeu, eds., *The Political Economy of*

Economic Growth in Africa, 1960–2000, vol. 2. Cambridge: Cambridge University Press

Kasekende, Louis A. and Michael Atingi-Ego (2007), "Restarting and Sustaining Growth in a Post-conflict Economy: The Case of Uganda," chapter 8 in Benno J. Ndulu, Stephen A. O'Connell, Jean-Paul Azam, Robert H. Bates, Augustin Kwasi Fosu, Jan Willem Gunning, and Dominique Njinkeu, eds., *The Political Economy of Economic Growth in Africa, 1960–2000*, vol. 2. Cambridge: Cambridge University Press

Kasfir, Nelson (1976), *The Shrinking Political Arena*. Berkeley, CA and Los Angeles, CA: University of California Press

King, Gary, Michael Tomz, and Jason Wittenberg (2000), "Making the Most of Statistical Analyses," *American Journal of Political Science* 44: 347–61

Mwanawina, Inyambo and James Mulungushi (2007), "Zambia," chapter 27 in Benno J. Ndulu, Stephen A. O'Connell, Jean-Paul Azam, Robert H. Bates, Augustin Kwasi Fosu, Jan Willem Gunning, and Dominique Njinkeu, eds., *The Political Economy of Economic Growth in Africa, 1960–2000*, vol. 2. Cambridge: Cambridge University Press

Nkurunziza, Janvier and Floribert Ngaruki (2007), "Why Has Burundi Grown so Slowly? The Political Economy of Redistribution," chapter 2 in Benno J. Ndulu, Stephen A. O'Connell, Jean-Paul Azam, Robert H. Bates, Augustin Kwasi Fosu, Jan Willem Gunning, and Dominique Njinkeu, eds., *The Political Economy of Economic Growth in Africa, 1960–2000*, vol. 2. Cambridge: Cambridge University Press

Norris, Pippa and Robert Mattes (2003), "Does Ethnicity Determine Support for the Governing Party?," The John F. Kennedy School of Government, Harvard University, Cambridge, MA

Nzongola-Ntanlaja, Georges (2002), *The Congo from Leopold to Kabila*. London: Zed Books

Olson, Mancur (1977), *The Logic of Collective Action*. Cambridge, MA: Harvard University Press

Penn, Elizabeth Maggie (2006), "Citizenship versus Ethnicity: The Role of Institutions in Shaping Identity Choice," Institute for Quantitative Social Science, Department of Government, Harvard University, Cambridge, MA

Posner, Daniel (2005), *Institutions and Ethnic Politics in Africa*. New York and London: Cambridge University Press

Roeder, Philip (1993), *Red Sunset*. Princeton, NJ: Princeton University Press

Ross, Mark (2003), "The Natural Resource Curse," in I. Bannon and P. Collier, eds., *Natural Resources and Violent Conflict*. Washington, DC: The World Bank

Rothchild, Donald and Victor Olorunsula, eds. (1983), *State vs Ethnic Claims*. Boulder, CO: Westview Press

Rubin, D. B. (1996), "Multiple Imputation after 18+ Years (with Discussion)," *Journal of the American Statistical Association* 91: 473–89

Sachs, Jeffrey D. and Andrew M. Warner (1995), "Natural Resource Abundance and Economic Growth," National Bureau of Economic Research, Inc., NEBR Working Papers 5398

Schafer, Joseph L. (1997), "Imputation of Missing Covariates in the Multivariate Linear Mixed Model," Department of Statistics, University Park, PA: The Pennsylvania State University

Schumpeter, Joseph A. (1950), *Capitalism, Socialism and Democracy*. New York: Harper & Row

Werbner, Richard (1993), "From Heartland to Hinterland: Elites and the Geopolitics of Land in Botswana," in T. J. Bassett and D. E. Crummey, eds., *Land in African Agrarian Systems*. Madison, WI: University of Wisconsin Press

Zakaria, Fareed (1997), "The Rise of Illiberal Democracy," *Foreign Affairs* 76: 22–43

Zolberg, Aristide (1966), *Creating Political Order: The Party States of West Africa*. Chicago: Rand McNally