

# POLITICAL COMPETITION AND ECONOMIC GROWTH

*Bruce Bueno de Mesquita, James D. Morrow,  
Randolph Siverson, and Alastair Smith*

**Bruce Bueno de Mesquita** is senior fellow at the Hoover Institution at Stanford University. **James D. Morrow** is professor of political science at the University of Michigan. **Randolph Siverson** is professor of political science at the University of California–Davis. **Alastair Smith** is assistant professor of political science at Yale University. This essay draws from their forthcoming book, tentatively titled *Staying Alive: Political Institutions and Leadership Incentives*.

Economists long ago established that competition fosters efficiency and growth. This is no less true in the nonmarket world of politics. Political competition promotes economic growth and prosperity when the focus of such competition is ideas for improving the welfare of a broad base of citizens through the provision of market-enhancing public policies. When leaders hold power for long periods, this typically reflects institutional arrangements that stifle just such competition, rewarding cronyism and corruption instead. Competition for national leadership is a hallmark of economic growth, but it also creates problems for leaders who aspire to maximize their time in office. This leads to a central paradox of politics: Under many political systems, good policy is bad politics, and bad policy helps leaders stay in office. In those (mostly democratic) systems in which good policy is also good politics, leaders face greater obstacles to maintaining incumbency than their counterparts in nondemocratic systems.

We outline here a theory that ties political incentives to the interest that leaders have in staying in office. Specifically, we examine how political institutions shape decisions about the allocation of government resources in ways that promote public welfare or that support cronyism, corruption, and kleptocracy.

Every political system depends, in part, on two institutions. One is the *selectorate* and the other is the *winning coalition*, the subset of the selectorate that keeps a ruler in power.<sup>1</sup> The selectorate is the set of

citizens who have a chance of becoming members of the ruler's winning coalition. In a political system with universal adult suffrage, such as prevails in most democracies and in rigged-election autocracies, any citizen has some chance of rising to political influence. In monarchies, military juntas, and many autocracies, by contrast, only a small portion of the population has a chance of becoming influential in politics or of gaining access to the benefits that involvement in politics can bring.

It is easy to identify the selectorate in democracies. All enfranchised citizens fall within it. It is less obvious in other political systems. A few examples may help clarify the concept. Following the death of England's King Richard I on 6 April 1199, a successor had to be chosen from among three candidates. The responsibility of appointing a new monarch fell to 197 barons and the pope. This tiny group—and no one else—constituted the selectorate. In the former Soviet Union, the selectorate consisted of something close to the entire electorate. That is, just about any Soviet citizen had a chance (albeit a tiny one), to rise to political prominence. This was important, for it allowed the ruling elite to pick ready substitutes for any disloyal member of the winning coalition.

The winning coalition, made up of a portion of the selectorate, has two distinct qualities. First, its support is essential for the incumbent to stay in office. If members of the winning coalition defect to a rival and new members cannot quickly be added to replace them, then the incumbent is deposed and the rival comes to power. Second, members of the winning coalition are accorded privileges unavailable to nonmembers. Specifically, members share in any of the private benefits that the leadership distributes. These benefits include opportunities for corruption, black marketeering, and so on.

In most democracies, the winning coalition consists of the set of voters whose support is essential to selecting and keeping a leader in office. In a plurality-voting system like the United States, for example, Bill Clinton's 1992 winning coalition included about 43 percent of the electorate (or, perhaps, all of his supporters up to just beyond 38 percent, the share of the vote earned by George Bush). Though these people received few and small private benefits, we can still think of Clinton's legislative agenda as partially motivated to shift resources disproportionately to these constituents through taxation, welfare programs, and other redistributive policies. In an autocracy like Saddam Hussein's Iraq, by contrast, the winning coalition is tiny. Though Iraq has universal adult suffrage, keeping Hussein in power depends on the support of the Republican Guard and the Takriti Clan—that is, his close personal kinsmen, a small group indeed. In King Leopold's Congo during the latter third of the nineteenth century, the winning coalition was made up of the Force Publique, Leopold's small group of henchmen who maintained the extractive and exploitative regime that he put in place to steal the wealth of the Congo.<sup>2</sup>

Maintaining the loyalty of the winning coalition is crucial for any political leader. How best to do so depends on the size both of the selectorate and of the winning coalition. We will show when loyalty is best achieved by giving coalition members special privileges (“private goods” in the vocabulary of economics) and when it is best achieved by implementing public policies that raise the welfare of the whole society.

Before turning to the development of our theory, we pause to help clarify the distinction between nominal regime types (like democracy, autocracy, and monarchy) and our institutional variables (the size of the selectorate and the size of the winning coalition). Most large-coalition systems are democracies, just as most small-coalition, large-selectorate polities are autocracies. Systems with a small coalition and a small selectorate tend to be monarchies or military juntas. Because it is simple enough to relate coalition size and selectorate size to well-known regime types, one might wonder whether we are just adding complexity to well-established distinctions.

The correlation between the size of a coalition or selectorate and regime type is useful as a heuristic device, but no two democracies are alike, nor are any two autocracies, monarchies, or juntas. Inevitably, categorical discussions of regime type lead to the construction of arbitrarily drawn boundaries. That is, of course, why there are so many different ways in which people define democracy. Our two institutional variables are far more fine-grained. Though difficult to estimate in practice because little effort has been put into their measurement to date, they are essentially continuous—rather than categorical or ordinal—variables. This means that they have both conceptual and mathematical properties that facilitate drawing generalizations about the marginal impact of even small changes in their values on important political factors. This is not as true of the more common regime typologies. Therefore, as we learn more about estimating the values of the winning coalition and the selectorate, we will learn more about politics than is possible by focusing on categorical schemes for defining regimes.

There is an additional, perhaps more important, reason to distinguish between (continuous) institutional variables, like the selectorate and the winning coalition, and (categorical) regime types. While most systems with large winning coalitions and large selectorates are democratic, a large selectorate and a large coalition do not define democracy *per se*. Democracy is generally associated with a variety of other characteristics, such as an independent judiciary, a free press, civil liberties, legal constraints on leaders, and reliance on law, which are not part of what defines the winning coalition or the selectorate. Rather, many of these features are themselves expected policy consequences of a large winning coalition and a large selectorate. Equivalently, although autocracy is not defined by the presence of corrupt politicians whose actions imply indifference to public welfare, we will show that such behavior is an expected

consequence of having a small winning coalition and a large selectorate. Ours is thus not a theory of democracy or autocracy dressed up in new clothes. *It is a theory of political institutions that considers the size of the selectorate and that of the winning coalition as a means of accounting for many of the characteristics associated with different types of regimes.*

Before returning to the development of the selectorate theory, we offer a few examples that highlight differences between the measurement of coalition size and the assessment of democraticness drawn from the widely used Polity data set (see the Appendix on p. 71 for further details).<sup>3</sup> In doing so, we emphasize a general principle: At the extremes of democracy or autocracy, there is an almost perfect correlation (0.9995) between our indicator of coalition size and the type of regime.<sup>4</sup> In the interior of both indicators, however, the correlation is only 0.63. It is in the subtleties of nearly democratic (or only partly autocratic) systems that the indicators and concepts of coalition size and democracy diverge.

Gorbachev's Soviet Union earned a score of 0.75 on our coalition-size indicator in 1990. On our measure of democracy (see note 4) his regime scored only 0.50 in 1990, but 0.90 a year later. Apparently, the indicator of coalition size captured the change in Soviet political arrangements more quickly than did the standard democracy index. Prior to the presidency of Ulysses S. Grant, the United States generally scored 0.95 on democracy and 0.75 on coalition size. The coalition indicator does a better job of capturing the restricted American franchise before the Civil War than does the democracy indicator. Lee Kwan Yew's Singapore (1965–90) scored 0.75 on the coalition index, but only 0.40 on democracy. The higher score for coalition size can be read as either indicating a more broadly based government than Lee and his party actually had or, alternatively, as capturing a breadth of popular support for his government and its programs that is missed by the democracy score. Taiwan also had a larger coalition score (0.25) than democracy score (0.10) during Chiang Kai-shek's rule. Both scores are very low (indicating very little democracy and a small coalition), but still the relatively larger coalition score favors somewhat more public-spirited, less corrupt policy than does the democracy-autocracy indicator. Later, we return to these differences in indicators and discuss the example of India to illustrate how coalition size and democracy can differ in practice.

## Resource Allocations

Governments raise resources through taxation. These resources are presumably allocated by political leaders in a way that helps them stay in office. Leaders can invest resources in the production of public goods or in providing private benefits for their supporters. Whereas all members of society benefit from public goods, only members of the winning

coalition enjoy the fruits of private goods. Public goods include national security, property rights, individual liberties, the rule of law, public health, education, and other social services. Private goods extend special privileges to selected citizens, such as idiosyncratic, personal protection from the law, advantages in business transactions, nepotism, cronyism, rights to corrupt practices, and the like.

With an eye toward staying in office, the incumbent ruler decides how much public policy to purchase and how many private goods to generate, given the available resources. Members of the winning coalition continue to support the incumbent, provided the benefits that they receive outweigh those they would expect from a successful challenger. That expectation depends on two factors. One is how much the challenger can credibly offer. (This, of course, is limited by the available budget of resources.) The second is how readily any member of the winning coalition believes he will be essential to a new government and so continue to get private benefits if he defects. As we will see, this risk of exclusion from benefits is closely linked to the size of the selectorate and the size of the winning coalition.

The larger the selectorate, the larger the pool from which a leader can draw supporters. Thus, given a certain size of the winning coalition, any individual's chance of becoming an essential member of the winning coalition is lower when the selectorate is big than when it is small. By contrast, when the winning coalition is large, as in an electoral democracy, many supporters are needed, and so each individual in the selectorate has a better chance of joining the winning coalition. This means that a defector in a small-coalition, large-selectorate system, such as a rigged-election autocracy, runs a high risk of losing access to the private benefits provided by the leadership, not to mention, in extreme cases, the risk of losing her or his life. In a democracy, the risk of losing such access is comparatively small (equaling about one-half), while there is virtually no risk of losing one's life.

The allocation of resources that maximizes incumbents' chances of political survival determines the degree to which they emphasize good public policy versus cronyism and corruption. When the winning coalition is small, a leader only needs the support of a few individuals to stay in office. Suppose that, under such circumstances, a leader decides to allocate the majority of resources to private goods. Since the winning coalition is small, each supporter receives a relatively large proportion of the available resources. As the size of the winning coalition increases, however, each member's share of the private goods shrinks. Once the size of the winning coalition increases beyond a certain point, the provision of private goods is no longer an efficient way to enrich supporters. Leaders of large winning coalitions are thus better able to enrich their supporters by investing a greater proportion of available resources in public goods. But when public goods are provided, everyone in the

society benefits. The logic is straightforward: When the winning coalition is small, leaders are more inclined to provide *private* benefits, rather than public goods, because such an allocation better serves their desire to stay in office. When the winning coalition is large, leaders must be more concerned with the provision of *public* goods, not out of civic-mindedness, but because providing such goods is compatible with their desire to stay in office. Thus large winning coalitions, such as exist in democracies, encourage attention to the quality of public policy.

Leaders of small winning coalitions who emphasize good public policy over bribing supporters are likely to lose to a challenger as members of their winning coalition defect to get a better deal. Small winning coalitions discourage emphasis on good public policy because such a focus diverts attention from them, raising the risk of defection and thus of the incumbent's being removed from office. Suppose that one or more members of a small winning coalition defect and the incumbent is removed from office. A challenger now has the opportunity to form a new government, for which he or she must draw enough supporters from the electorate. Since the winning coalition is always smaller than the electorate, defectors cannot be certain of making it into the new winning coalition. Many of them may be weeded out as they prove irrelevant to the new coalition. There is thus a risk and a cost associated with political defection. The risk involves the chance of exclusion and the cost entails being cut off from the future stream of private goods that flows to members of the new winning coalition. As the size of the winning coalition becomes smaller, or the size of the electorate becomes larger, challengers are less likely to rely on any particular individual in forming their winning coalition. Hence, as the size of the winning coalition shrinks or as the size of the electorate grows, defecting becomes riskier.

Political systems with large electorates and small winning coalitions (like many autocracies) thus induce a norm of loyalty toward the incumbent leadership by making defection from the current winning coalition unattractive. Loyalty is a powerful force in autocracy. It insulates leaders from being turned out of office just because they do a poor job on public policy. They are protected as long as they do not "squander" resources on economic development, using those resources instead to bribe their few essential supporters. Loyalty to the incumbent declines as the winning coalition grows relative to the electorate because the cost and risk of defection declines.

In democracy, the value of individual private goods is small because they must be distributed among so many people. Lacking the ability to secure the loyalty of their supporters through cronyism and corruption, democratic leaders must compete over the provision of successful policies. Or, to put it more precisely, leaders of systems dependent on a large coalition work harder at producing effective policies, spend more public resources to produce public goods, enjoy less loyalty, and get

turned out of office more frequently than their small-coalition, autocratic counterparts. For autocrats, bad policy is often good politics because their focus on cronyism and corruption ensures their enduring leadership. This is almost never true for democrats.

Several implications follow from the theory sketched above. Large coalitions induce leaders to emphasize public welfare, while small coalitions encourage leaders to focus on private goods. The few autocrats who do focus on public goods tend to abbreviate their tenure in office as compared to those who emphasize corruption and cronyism. Because of a weaker loyalty norm, leaders of large coalitions spend more, on average, than those who head a small coalition. The opportunity for kleptocracy grows when the gap between government revenue and expenditures grows. Because small-coalition leaders, including autocrats and monarchs, are predicted to spend less per capita than large-coalition leaders, such as democrats, theft of society's resources is greater in small-coalition systems than in large-coalition systems.

If given the chance to select the political institutions, leaders who want only to stay in office would erect polities with small coalitions and large selectorates, emphasizing rigged elections with universal suffrage rather than truly competitive democratic polities. In contrast, if coalition members get to choose institutions, they would favor systems with a weak loyalty norm, meaning either small coalitions and small selectorates (monarchy, military junta) or large coalitions and large selectorates (democracy, and not autocracy). Those excluded from the winning coalition, including selectorate members and the disenfranchised, prefer institutional arrangements that encourage the production of public goods. Thus they favor democracy and, if they could vote with their feet, would be expected to emigrate from autocratic systems to democratic polities with easy rules for citizenship.

To maximize his tenure in office, a leader must allocate resources in a manner compatible with the institutional arrangements of the type of regime. Civic-mindedness, therefore, is neither necessary nor sufficient to produce successful public policies; what is essential is a system that makes leaders rely on a large winning coalition and a large selectorate. As mentioned earlier, although these characteristics do not define democracy, they are most frequently found in democracies.

Unfortunately, other aspects of democracy—such as bloc or ethnic voting, or subtly restrictive rules of enfranchisement—may detract from the benefits of a relatively large-coalition, large-selectorate political system. For example, bloc-voting systems can give the impression of being highly democratic, while leaders actually rely on a more limited coalition. India, for instance, briefly scored as low as 0.85 on our democracy index (in the late 1970s, when Indira Gandhi attempted to alter the Indian constitution to strengthen the executive), while generally scoring between 0.90 and 0.95. In our data set, India's democracy score

never reaches the upper bound of 1.00. On our indicator of coalition size, India consistently earns a score of 0.75. That is, the country's coalition size is consistently estimated to be smaller than its free, competitive electoral system or degree of democracy suggests. In many (if not most) Indian constituencies, a local patron can deliver a bloc of votes, thereby requiring political leaders to satisfy the needs of the few patrons rather than the many voters. Thus, while the system appears to require the prime minister's party to muster a huge coalition, in reality, a relatively small group of key voters (bloc leaders) is all that is needed to elect and maintain the leadership. The same was true in Boss Tweed's New York, Mayor Daley's Chicago, and the PRI's Mexico (until the 2000 election). In such "democratic" systems, pork, patronage, and cronyism play an important role that reduces the size of the winning coalition and thus diminishes the incentives that leaders have to enhance public welfare. Yet such systems frequently earn a high "democracy" rating by standard measures.

### **Political Survival and Policy Performance**

In democracies and autocracies alike, economic growth increases with turnover in power. The uncertainty provoked by instability might be thought to scare investors, but it is offset by the advantages inherent in political competition, even when that competition occurs in an autocratic environment. Although leadership turnover is generally beneficial for growth, the benefits are smaller in autocracies than in democracies. Just how growth rates vary according to coalition size is the subject to which we now turn our attention.

It is natural to consider successful those leaders who foster economic growth and prosperity for their citizens. By contrast, leaders who produce famine, poverty, and misery seem like dismal failures who ought to be removed from office as quickly as possible. Yet the irony is that leaders who produce poverty and misery keep their jobs much longer than those who make their country richer.

We divide the world into two categories—largest-coalition, most democratic governments and smallest-coalition, most autocratic governments—and compare each group's track record in producing prosperity.<sup>5</sup> To evaluate prosperity, we examine the average annual real growth rate in per-capita income delivered by the 176 most democratic leaders and the 179 most autocratic leaders since 1952. The average democratic leader produces a real growth rate of over 3.04 percent per annum, compared to 1.78 percent for the average autocrat.

The difference in economic growth rates tells a dramatic story. Two countries starting out with the same average per-capita income in 1950 would look radically different in 2000 if they had different forms of government. Suppose the average resident in a democracy and an



autocracy each had an income of \$500 in 1950 and suppose real incomes grew at the rate typical for the type of government. In 2000, the “democratic” citizen would have a real per-capita income of about \$4,480, whereas the “autocratic” one would have a real income of only \$1,200. Assuming that each kept its form of government and that the average performance of these government types did not change, by 2050 the “democratic” citizen’s real per-capita income would be expected to grow to over \$10,035, whereas the “autocratic” citizen’s would rise to just \$2,910—a 3.5 to 1 advantage. Apparently, prosperity for the average citizen seems closely tied to democracy, and poverty to autocracy.

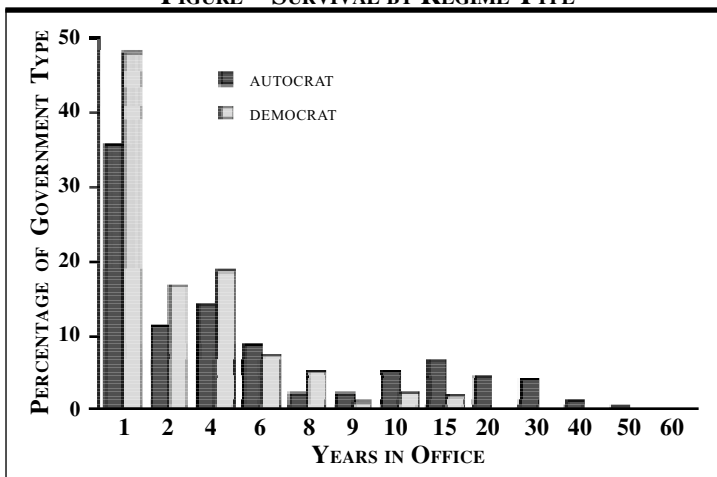
The advantages for citizens from large-coalition, democratic systems are much broader than what an evaluation of growth in per-capita income alone might suggest. Polities dominated by a small winning coalition, such as autocracies, do markedly worse on average than large-coalition systems on a host of indicators of public welfare. For example, more democratic, large-coalition systems generally do better than more autocratic systems at producing safe drinking water, offering access to medical care, encouraging free trade, avoiding corruption and black marketeering, attracting investors, and so forth. Each of these effects remains strong across time and geographic locale, even after controlling for per-capita income. That is, even poorer large-coalition societies offer more of these advantages than do their autocratic counterparts.<sup>6</sup>

With individual prosperity and general social welfare closely associated with political institutions, we might well ask why all leaders do not adopt the governance structures that encourage the creation of healthy, educated, prosperous citizens. Standard economic accounts conceive of leaders as the benign agents of their citizens. They explain failures to adopt effective policies by appeals to ignorance or ideological blinders. We offer a different account.

What does political survival look like from the viewpoint of large-coalition and small-coalition leaders? With rare exceptions, only autocrats hold on to power for a really long time. The Figure on the following page looks at political survival by assessing the percentage of leaders in democracies and autocracies who have lasted for particular periods in office. The results are striking. For instance, 100 percent of those lasting 40 or more years are autocrats (although only a little more than 2 percent of autocrats actually hold on to power that long). Yet two facts are clear: First, nearly half of all democratic leaders are out of office within about one year of coming to power. Such a short tenure is true of only about one third of autocrats. This is a remarkable difference in survivability. Second, virtually no democrats, but one quarter of autocrats, stay in office for more than eight years. Autocratic systems seem to favor long-term political survival.

A look back at the twentieth century confirms this. Over the past 40 years, the world’s most autocratic governments have averaged only seven

**FIGURE—SURVIVAL BY REGIME TYPE**



leaders, some countries managing only one or two leaders in that time span. Fidel Castro, for instance, has led the Cuban government for four decades, running its economy into the ground the whole time. Since its revolution, China has had only five leaders (and strong growth for two of the five decades). In the more than 75 years since Lenin’s death, Russia has had only nine leaders (and poor growth for most of its history). By contrast, established democracies like the United States and Britain have had many more leaders since the end of World War II. The average number of leaders in the most democratic countries since 1961 is 12.

As troubling as the differences in prospects for political survival are across regime types, even more disturbing is the relation of policy performance to political survival. Consider the survival rates of leaders who perform exceptionally well or exceptionally poorly when it comes to promoting public welfare. The selectorate theory suggests that those who head a large-coalition government improve their prospects for political survival by promulgating effective public policies. Those who head a small-coalition government, however, enhance their survival by distributing private goods at the expense of effective public policy.

We define as exceptionally effective those leaders whose countries both avoid involvement in military conflicts and enjoy growth in per-capita income in the upper quartile of all countries. We define as ineffective those leaders whose countries have black-market exchange-rate premiums in the upper quartile. Table 1 on p. 69 compares survival rates in office for leaders of large-coalition (at least as large as 0.75) and small-coalition systems, conditioned by whether they offer exceptionally effective or exceptionally ineffective policies. That is, we ask the following question: For how many years do the leaders of large-coalition systems and those of small-coalition systems have a 50 percent,

25 percent, and 10 percent chance of remaining in office if they produce public or private goods at exceptional levels? Table 2 displays the same assessment, but is based on whether a leader heads a democratic or nondemocratic government.<sup>7</sup>

The lessons portrayed in Tables 1 and 2 are depressing. Truly bad policy turns out to be good politics for small-coalition leaders and for autocrats. Small-coalition autocratic leaders who promote or protect the black market have a 10 percent chance of lasting in office for at least 19 years. If they follow good policies instead, their 10 percent survival time drops to 13.5 years for small-coalition leaders and to 16.5 years for nondemocrats. Good policy is bad politics for small-coalition leaders and almost as bad for nondemocrats. Early in their terms, small-coalition leaders and autocrats benefit a little from good policy, but once they secure their hold on power, they do much better at keeping their jobs by emphasizing a vibrant black market rather than income growth. The effects are more pronounced for small coalition size than for nondemocracy.

For those dependent on a large coalition and for democrats, the opposite is true, although again, the benefits of good policy are more pronounced as a function of coalition size than as a function of democracy. Though at a survival disadvantage compared to small-coalition leaders or autocrats, those who head large-coalition governments or democracies improve their chances of staying in office by promoting growth in real per-capita income and avoiding an emphasis on private-goods production such as typifies economies with vibrant black markets. Large-coalition leaders with exceptionally good policies have a 10 percent chance of surviving in office for 12.5 years. If they foolishly follow the bad-policy approach that is good politics for small-coalition leaders, the large-coalition cohort reduces its outer (10 percent) survival prospect to only eight years. The comparable figures for democratic leaders are 9.5 years for exceptionally good policy and 7.5 years for exceptionally bad policy.

### **A Tale of Two Leopolds**

Politicians, like everyone else, are concerned with their personal welfare. Peace and prosperity may be good for most people, but they are not good for many leaders. Systems that encourage poor policy performance also provide a strong incumbency advantage. This derives from the strength of the loyalty norm in autocratic systems, which have a small coalition and a large selectorate. Leaders undoubtedly understand this. That is why, given the chance, most would prefer to establish a small-coalition, large-selectorate autocracy rather than a democracy.

A cursory look at postcolonial Africa supports this inference. Although many anticolonial independence movements established their newly won states as democracies, almost all switched quickly to rigged-election autocratic systems. The few exceptions, like South Africa and Zimbabwe,

**TABLE 1—POLITICAL SURVIVAL, COALITION SIZE, AND EXCEPTIONALLY GOOD OR EXCEPTIONALLY POOR POLICY PERFORMANCE**

<b>SURVIVAL PROBABILITY</b>	<b>50 PERCENT (YEARS)</b>	<b>25 PERCENT (YEARS)</b>	<b>10 PERCENT (YEARS)</b>
Exceptional Income Growth and Peace—Large Coalition	4.5	8.0	12.5
Exceptional Black Market Premium—Large Coalition	1.5	4.0	8.0
Exceptional Income Growth and Peace—Small Coalition	5.0	8.5	13.5
Exceptional Black Market Premium—Small Coalition	4.0	10.0	19.0

**TABLE 2—POLITICAL SURVIVAL, DEMOCRATICNESS, AND EXCEPTIONALLY GOOD OR EXCEPTIONALLY POOR POLICY PERFORMANCE**

<b>SURVIVAL PROBABILITY</b>	<b>50 PERCENT (YEARS)</b>	<b>25 PERCENT (YEARS)</b>	<b>10 PERCENT (YEARS)</b>
Exceptional Income Growth and Peace—Democracy	3.5	6.0	9.5
Exceptional Black Market Premium—Democracy	1.5	4.0	7.5
Exceptional Income Growth and Peace—Non-Democracy	5.5	10.0	16.5
Exceptional Black Market Premium—Non-Democracy	4.0	10.0	19.0

involved places where freedom fighters had to negotiate a power-sharing deal with their foes. The selectorate theory shows that when broad coalitions form institutions, they do not opt for rigged-election autocracy because such a system, possessing a strong loyalty norm, requires incumbents to spend less on the public than more democratic systems. But when a leader rather than a coalition chooses, the preference is for the strong loyalty norm generated by a small-coalition autocracy. To illustrate this point, we consider briefly the institutional constraints and policy choices of Leopold II of Belgium.

Leopold II was king of Belgium from 1865 to 1909. He was also the personal owner and ruler of the Congo Free State from 1885 to 1908. When he acceded to the throne, Belgium was already a constitutional monarchy, but the king still wielded considerable authority. Leopold proved skillful in its use. Belgian governments initially depended on a fairly large selectorate for the time. During his reign, Leopold helped promote universal adult male suffrage in free, competitive elections, thereby greatly expanding the selectorate and the winning coalition. This suggests an emphasis on providing public goods at home.

By most accounts, Leopold was an excellent leader. Belgium experienced exceptional economic growth and rapid industrialization under his leadership. Fueled by a free-trade economy, imports and exports expanded at a remarkable pace. As early as 1866, Leopold declared his intention to improve the lot of the working class, and by 1873, in response to a downturn in the business cycle, workers were given the right to strike. In 1886, Leopold strongly supported a huge public-works program and in 1889 he supported legislation to protect women and children. Leopold was instrumental in promoting numerous additional reforms within Belgium, including proportional-representation voting and improvements in education and defense.

In ruling Belgium, Leopold worked hard to deliver public goods to

the people. He did so because he depended on the largesse of a popularly elected government—in other words, on a large winning coalition. In ruling the Congo during the same period, however, he relied only on himself and the (quite literally) hired guns who supported his objectives. The Congo winning coalition was minuscule. The selectorate model suggests that in the Congo Leopold would have to turn his efforts to generating private goods for his backers and opportunities for kleptocracy for himself. He did exactly that.

As liberal and progressive a reformer as he was in Belgium, Leopold was a monstrously cruel and greedy leader of the Congo. There, through surrogates, he ruled for the sole purpose of enriching himself and his key backers. Slave labor first extracted ivory and then the rubber that fueled his kleptocracy and the corrupt gains of his overseers. Those Congolese who failed to meet their quotas were beaten, maimed, and often killed. As many as 10 million may have been killed so that Leopold and his cronies could become rich.<sup>8</sup>

While Leopold and his supporters in the Force Publique grew fabulously wealthy off ill-gotten gains from the Congo Free State, little, if anything, was invested in improving conditions in that hapless land. Roads were built only where they facilitated moving rubber to market. Leopold worried about improving the welfare of his Belgian subjects, but he ravaged the welfare of his Congolese subjects. Laws protecting women, children, or workers were unheard of in the Congo Free State. Virtually the only items exported to the Congo Free State were weapons for the Force Publique, while vast riches were imported to Belgium. It was this extraordinary imbalance in trade that eventually led to the discovery by outsiders that Leopold was growing rich through the use of slave labor. By 1908, the atrocities reached such a level that they could no longer be denied. With great reluctance, Leopold ceded his control of the Congo to the Belgian government.

Who was the real Leopold? Was he the civic-minded king of Belgium or the murderous ruler of the Congo Free State? We must conclude that he was the latter. In Belgium, Leopold operated under the institutional constraint of a large winning coalition. He inherited such a system and acted in accordance with the incentives created by it. In the Congo, Leopold was free to choose whatever institutional arrangements he wished. Finding himself unconstrained, he chose to focus on providing private goods for a small coalition and vast opportunities for kleptocracy for himself. In each case, his actions were consistent with the institutional incentives he faced.

### **The Importance of the Institutional Setting**

Economic growth depends on good economic policies, but good economic policies are not always in the best interest of political leaders.

Market competition is an essential step toward prosperity, but it is not sufficient. When authoritarian leaders face a choice between promoting economic growth at the expense of losing office and protecting themselves in office at the risk of slowing growth, they can be expected to choose the latter.

Authoritarianism is especially conducive to political success, at least in the sense of long-lasting leadership. Autocrats sometimes make use of discretionary resources to encourage growth, but more often they use those resources for their own benefit. When politicians depend on a few supporters and the latter's risks from defecting to a political rival are high, so too is the incidence of corruption and kleptocracy. Though neither corruption nor kleptocracy is conducive to economic growth, both are closely tied to political survival.

Public welfare is enhanced when leaders depend on a large coalition to keep them in office. Under these conditions, those motivated to stay in power have no choice but to promote the public's welfare. To do otherwise is to risk being ousted from office. Those who depend on a small coalition, by contrast, are harmed politically if they promote good public policy. Therefore, exhortations or instructions to such leaders about policies that promote peace and prosperity can be expected to fall on deaf ears. Unless the institutional setting within which they operate changes their incentives, they can be expected to continue engendering corruption and kleptocracy rather than peace and prosperity. Civic-mindedness is no substitute for correctly configured political institutions designed to link longevity in office to the promotion of public welfare.

## Appendix

The Polity II data and Polity III data provide detailed variables about the institutional characteristics of almost all states since 1800. These data are routinely updated and available on the worldwide web. We focus on four institutional variables that provide a reasonable basis for constructing an index of the size of winning coalitions. A fifth variable, Legislative Selection (LEGSELEC), appears to be an appropriate indicator of selectorate size. We discuss the latter first.

LEGSELEC measures the breadth of the selectiveness of the members of each country's legislature. This variable is coded as a trichotomy, where 0 means that there is no legislature; 1 means that the legislature is chosen by heredity, ascription, or simply by the effective executive; and a code of 2, the highest category, means that members of the legislature are directly or indirectly selected by popular election. It is evident that the larger the value of LEGSELEC, the more likely it is that the selectorate is large. We divide LEGSELEC by its maximum value of two so that it varies between 0 and 1. It should be evident that in reality the size difference between a selectorate with a score of 0 and a selectorate with a score of 1 is smaller than the size difference between a score of 1 and a score of 2. We are developing alternative indicators, partially based on enfranchisement rules.

To estimate the size of the winning coalition, we construct a composite index based on the variables REGTYPE, XRCOMP, XROPEN, and PARCOMP in Polity II. When REGTYPE (regime type—the only one of these variables not updated in Polity III and beyond) indicates the regime is not military or military-civilian, we award one point to our index of coalition size. When XRCOMP (the competitiveness of executive recruitment) is larger than or equal to a score of 2, another point is assigned to coalition size. An

XRCOMP score of 1 means that the chief executive was selected by heredity or in rigged, unopposed elections, suggesting dependence on few people. Scores of 2 and 3 refer to greater degrees of responsiveness to supporters, indicating a larger winning coalition. XROPEN (the openness of executive recruitment) contributes an additional point to coalition size if the executive is recruited in a more open setting than heredity (that is, the variable's value is greater than 2). Finally, one more point can be contributed to the index if PARCOMP (competitiveness of participation) has a score of 5, meaning that there are relatively stable and enduring political groups which regularly compete for political influence at the national level" (Polity II, p. 18).

We divide the total value of our index of the winning coalition by its maximum point score of 4, so that its final minimum value is 0 and its maximum is 1. And again, it is evident that the progression from 0 to 1 to 2, up to 4 is not linear, as the indicator suggests.

The correlation between coalition size and selectorate size is 0.46 ( $n=9,623$ ), while these two variables have correlations with our democracy scaler (that is, the difference between the Polity democracy and autocracy scores) of 0.83 ( $n=11,865$ ) and 0.36 ( $n=9,185$ ), respectively. The observation unit is a leader-year; some of the data, depending on the variable, spans the period from 1763–1992, but most variables are observed only since 1950.

## NOTES

The study on which this article is based is supported by National Science Foundation grant SBER 9709454. A more detailed, technical description of the selectorate theory advanced here, including formal proof of the claims made here, is found in Bruce Bueno de Mesquita, James D. Morrow, Randolph Siverson, and Alastair Smith, "Institutions, Outcomes and the Survival of Leaders," Hoover Institution Working Paper, 2000.

1. Our measurements of selectorate size and winning coalition size are crude and primitive. Still, the indicators should be adequate to evaluate whether the central tendencies of politics are aligned with the expectations that follow from the selectorate model. See the appendix for a detailed description of our measures.

2. At its peak, the Force Publique was under 20,000 mostly African employees and 400 European officers in a country of tens of millions.

3. See Ted Robert Gurr, "Polity II: Political Structures and Regime Change, 1800–1986" (Ann Arbor: Inter-university Consortium for Political and Social Research, 1990); Keith Jagers and Ted Robert Gurr, "Tracking Democracy's Third Wave with the Polity III Data," *Journal of Peace Research* 32 (November 1995): 469–82.

4. Our indicator for a complete regime type is a score of 0 to 1 when we subtract the "autocracy" score in the Polity III data set from the "democracy" score and then normalize (readjust) the scores so that they range from 0 (complete autocracy) to 1 (complete democracy). The original scores range from +10 to –10.

5. When we subtract the Polity III data's autocracy score from its democracy score, we are left with 176 leaders who have the maximum democratic score of +10 (see the Appendix). We choose a level of autocracy that yields an equivalent number of leaders (179) and compare their performance.

6. For the details behind these analyses, see Bueno de Mesquita et al., *Staying Alive: Political Institutions and Leadership Incentives* (working title of forthcoming publication).

7. The indicator we use here for a democratic government is a score of 0.60 or higher on our normalized scale of democracy.

8. Adam Hochschild, *King Leopold's Ghost* (Boston: Houghton Mifflin, 1998); and Peter Forbath *The River Congo* (New York: Harper and Row, 1977).