

# RULE OF LAW, DEMOCRACY, AND ECONOMIC PERFORMANCE

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A country's economic performance depends on various aspects of government policy, but no aspect is more important than the quality of political, legal, and economic institutions. Differences in institutions have proven empirically to be among the most important determinants of cross-country differences in rates of economic growth and investment. Consequently, basic reforms that improve institutions provide one of the best routes for transforming a country over the long run from poverty to prosperity. This view, which underlies a good deal of recent empirical research on economic growth, is also the central theme of The Heritage Foundation's annual *Index of Economic Freedom*.<sup>2</sup>

Determining which aspects of institutions matter for long-run economic performance has proven to be more controversial than the proposition that institutions are important overall. One strand of recent research focuses on democracy—specifically, on the strength of electoral rights and civil liberties. The second strand emphasizes property rights and legal structures that promote the rule of law. Some scholars, such as Milton Friedman in *Capitalism and Freedom*,<sup>3</sup> argue that these two aspects of liberal institutions—democracy and the rule of law—are mutually reinforcing and that both are conducive to economic performance. Recent empirical research supports the idea that property rights and the rule of law are key determinants of economic growth and

investment, but the research also delivers mixed results with respect to the contributions from democracy. Before turning to this empirical evidence, it is worthwhile to assess the determinants theoretically.

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## ECONOMIC EFFECTS OF PROPERTY RIGHTS AND THE LEGAL SYSTEM

The economic effects of secure property rights and a well-functioning legal system are reasonably straightforward. Since people are, to a considerable degree, self-interested, they tend to undertake hard work and investments only if they have a reasonable probability of enjoying the fruits of their efforts. Thus, if property rights are insecure—for example, because of high crime rates or high rates of taxation or high chances of government expropriation—people tend to work less and invest little. The concept of high taxation can be extended from income taxes or other formal levies to include onerous government regulations and licensing requirements, as well as bribes required by corrupt officials.

Vigorous business activity also depends to a considerable extent on a legal system that allows contracts to be clearly specified and enforced. This contracting potential influences the relations of businesses with suppliers, creditors, workers, and customers. For example, if the legal system does not enforce the repayment of loans, then loans will be scarce and many productive investments therefore will not occur. (The private sector can respond to this public vacuum to some extent by creating its own enforcement mechanism, such as that provided by the Mafia.)

One way that a business can react to poorly defined property rights is to reduce its level of operation. However, another possibility—especially in response to high rates of taxation and oppressive regulations—is to move from the formal part of the economy to the informal or black-market sector. This informality may be better for the economy than a cessation of operations, but it does entail costs. Informal operation tends to be less efficient because businesses have to expend resources to conceal their activities. In addition, black-market participants typically lose access to useful government services, such as contract enforcement. Another effect is that the government fails to raise much in taxes on black-market activities, and the amounts collected from legal enterprises must therefore rise to pay for a given level of public expenditures.<sup>4</sup>

The stress on property rights and the legal system does not yield unambiguous implications about the relation between economic performance and the size of the government. Some public actions—such as maintenance of internal and external security and enforcement of contracts—would entail additional government spending and tend to enhance economic activity. Others, such as burdensome regulations and nonproductive expenditures that require high tax rates, would hinder the economy.

## **ECONOMIC EFFECTS OF DEMOCRACY**

What effects on the economy would one anticipate from an expansion of democracy—say, in the form of an increase in electoral rights? One effect, characteristic of systems that have one-person/one-vote majority voting, involves the pressure to enact redistributions of income from

rich to poor. These redistributions may involve land reforms and an array of social welfare programs. Although the direct effects on income distribution may be desirable (because they are equalizing), these programs tend to compromise property rights and reduce the incentives of people to work and invest. One kind of disincentive involves the transfers given to poor people. Since the amount received typically falls as the person earns more income, the recipient is motivated to remain on welfare or otherwise disengage from productive activities. The other adverse effect involves the income taxes or other levies that are needed to pay for the transfers. An increase in these taxes encourages the non-poor to work less and invest less.

One offsetting effect is that an equalizing of income distribution may reduce the tendency for social unrest. Specifically, transfers to the poor may reduce incentives to engage in criminal activity, including riots and revolutions. Since social unrest reduces everyone's incentives to work and invest, some amount of publicly organized income redistribution would contribute to overall economic activity. However, even a dictator would be willing to engage in transfers to the extent that the decrease in social unrest is worth the cost of the transfers. Thus, the main point is that democracy will tend to generate "excessive" transfers purely from the standpoint of maximizing the economy's total output.

Although democracy has its down side, one cannot conclude that autocracy would provide ideal economic incentives. One problem with dictators is that they have the power—and hence the inclination—to steal the nation's wealth. More specifically, an autocrat may find it difficult to convince people that their property will not be confiscated once investments have been made. This convincing can sometimes be accomplished through reputation—that is, from a history of good behavior—but also by relaxing to some extent the hold on power. Ways in which a dictator can constrain his own power include the writing of a constitution with designated rights, creating a legislature, allowing for elections with widespread participation, permitting the participation of competing political parties, and so on. In this context, an expansion of democracy—viewed as a mechanism for checking the power of the central authority—may enhance property rights

and thereby encourage economic activity. From this perspective, democracy would encompass not only electoral rights, but also civil liberties that allow for freedom of expression, assembly, and so on.

Theoretical reasoning suggests that enhanced property rights and the rule of law will likely encourage economic activity. The overall effects of expanded democracy, particularly in the sense of voting rights, are ambiguous. To sort out these relationships, we must examine the empirical evidence, but the first thing to consider is the measurement of democracy, the rule of law, and related concepts.

### Measuring Democracy

A number of researchers have provided quantitative measures of democracy, and Alex Inkeles finds in an overview study a “high degree of agreement produced by the classification of nations as democratic or not, even when democracy is measured in somewhat different ways by different analysts.”<sup>5</sup> One of the most useful measures—because it is available for almost all countries annually on a consistent basis since 1972—is that of Raymond Gastil<sup>6</sup> and his followers at Freedom House. This source provides separate indexes for electoral rights and civil liberties.

The Freedom House concept of electoral rights uses the following basic definition: “Political rights are rights to participate meaningfully in the political process. In a democracy this means the right of all adults to vote and compete for public office, and for elected representatives to have a decisive vote on public policies.”<sup>7</sup> In addition to the basic definition, the classification scheme rates countries (somewhat impressionistically) as less democratic if minority parties have little influence on policy.

Freedom House applies the concept of electoral rights on a subjective basis to classify countries annually into seven categories, where group one has the highest level of rights and group seven the lowest. Gastil and his associates and followers based this classification on an array of published and unpublished information about each country. The original ranking from one to seven is converted here to a scale from zero to one, where zero corresponds to the fewest rights (Freedom House rank seven) and one to the most rights (Freedom House rank one). The scale from zero

to one corresponds to a classification made by Kenneth Bollen<sup>8</sup> for 1960 and 1965. The Bollen index differs mainly in that its concept of democracy goes beyond electoral rights.

To fix ideas on the meaning of the zero-to-one subjective scale, note first that the United States and most other countries in the Organization for Economic Cooperation and Development (OECD) in recent years received the value 1.0, thereby designating them full representative democracies. Some other countries that received the rating 1.0 in 1998 were Bolivia, Costa Rica, Israel, Mauritius, South Africa, Trinidad, and Uruguay. Dictatorships that received the value 0.0 in 1998 included China, Iraq, Myanmar, Saudi Arabia, Syria, and several countries in sub-Saharan Africa. Places that were rated in 1998 at 0.5—halfway between a dictatorship and a democracy—included Jordan, Pakistan, Paraguay, Senegal, Turkey, and Uganda.

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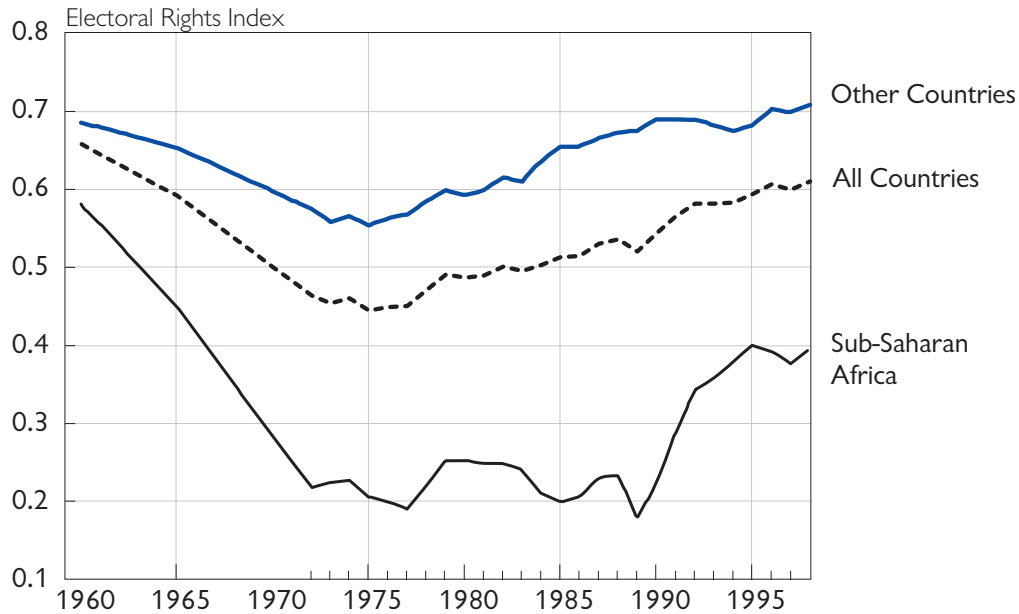
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The line labelled “All Countries” in Chart 2.1 shows the time path of the unweighted average of the electoral rights index for the years 1960, 1965, and 1972–1998. The number of countries covered rises from 99 in 1960 to 109 in 1965, and 138 from 1972 to 1998.<sup>9</sup> The figure shows that the mean of the index peaked at 0.66 at the start in 1960, fell to a low point of 0.44 in 1975, and rose subsequently to 0.61 in 1998. Thus, there has been noticeable democratization since the mid-1970s, but the level has not yet reattained the value for 1960. (This comparison may not be fully accurate, however, because the data for 1960 are not precisely comparable to those used since 1972.)

Chart 2.1 also demonstrates that the main reason for the decline in the world average of electoral rights after 1960 is the experience in sub-Saharan Africa. The average of the index in sub-Saharan Africa peaked at 0.58 in 1960 (26 countries), then (for 43 countries) fell to low points of 0.19 in 1977 and 0.18 in 1989 before rising to 0.40 in 1995 and 1998. This pattern emerges

### Electoral Rights: 1960, 1965, 1972–98



Note: Index score of 1 = Significant Electoral Rights, 0 = Few Electoral Rights.  
 Source: Freedom House, *Freedom in the World*, various years.

because many of the African countries began with ostensibly democratic institutions when they became independent in the early 1960s, but most evolved into one-party dictatorships by the early 1970s. Democratization in Africa since 1989 has been substantial, and some of this development has likely reflected pressure from international aid givers, including international agencies and the United States. Whether this democratization will be sustained—unlike in the 1960s—is not yet known.

For countries outside of sub-Saharan Africa labelled “Other”, in Chart 2.1 shows that the average of the electoral rights index fell from 0.68 in 1960 (73 countries) to 0.55 in 1975 (95 countries). The index then rose to 0.70 in 1998. Thus, outside of sub-Saharan Africa, the democratization since the mid-1970s has been sufficient to surpass the value for 1960.

The Freedom House index of civil liberties is constructed in a similar way. The definition here is that “civil liberties are rights to free expression, to organize or demonstrate, as well as rights to a degree of autonomy such as is provided by freedom of religion, education, travel, and other personal rights.”<sup>10</sup> In practice, the indicator for

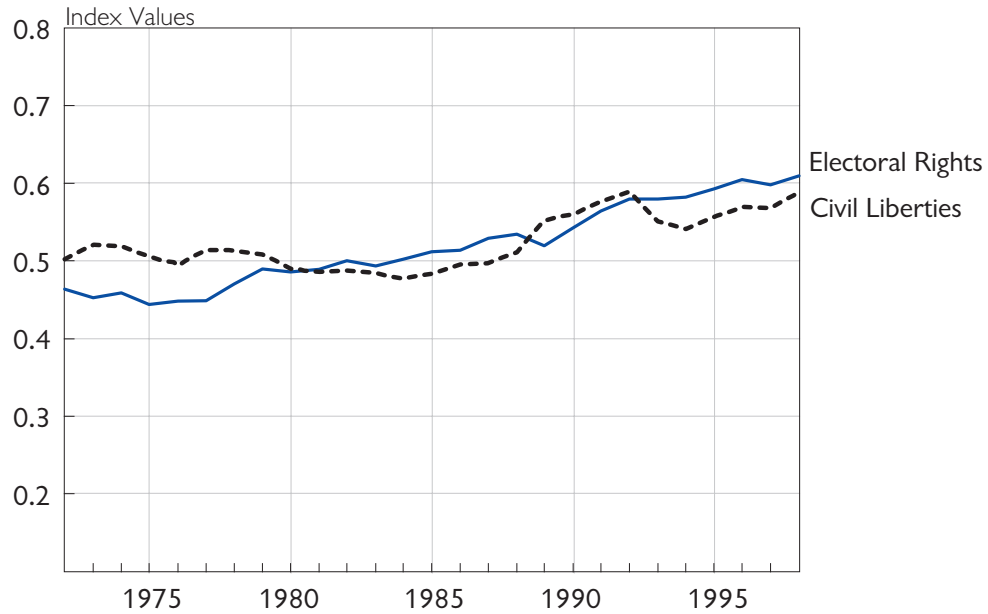
civil liberties is highly correlated with that for electoral rights. For a given year, the typical correlation between the two indicators across the countries is around 0.9; for example, for 138 countries in 1998 the correlation is 0.89. Chart 2.2 shows the close correspondence over time for the unweighted averages of the two indexes for the 138 countries from 1972 to 1998.

For practical purposes, it makes little difference in the subsequent analysis—for example, in looking at the relation between democracy and economic growth—whether one uses the index for electoral rights or the one for civil liberties. The rest of the discussion focuses on the index of electoral rights and sometimes refers to this indicator as simply a measure of democracy.

### Measuring the Rule of Law

Many analysts believe that maintenance of property rights and the rule of law is central to investment and other aspects of economic activity. The empirical challenge has been to measure these concepts in a reliable way across countries and over time. Probably the best indicators available come from international consulting firms that advise clients on the attractiveness of countries as

### Electoral Rights and Civil Liberties: 1972–98



Note: Index score of 1 = Significant Rights/Liberties, 0 = Few Rights/Liberties.  
 Source: Freedom House, *Freedom in the World*, various years.

places for investment. These investors are concerned about institutional matters such as the prevalence of law and order, the capacity of the legal system to enforce contracts, the efficiency of the bureaucracy, the likelihood of government expropriation, and the extent of official corruption. These kinds of factors have been assessed by a number of consulting companies, including Political Risk Services in its monthly publication, *International Country Risk Guide*.<sup>11</sup> This source is especially useful because it covers over 100 countries since the early 1980s. Although the data are subjective, they have the virtue of being prepared contemporaneously by local experts. Moreover, the willingness of customers to pay substantial fees for this information is perhaps some testament to its validity.

Among the various indicators available, the index for overall maintenance of the rule of law (also referred to as “law and order tradition”) turns out to have the most explanatory power for investment and economic growth. This index was measured by Political Risk Services in seven categories on a zero-to-six scale, with six the most favorable. To make the index comparable with the ones discussed before for electoral rights and civil

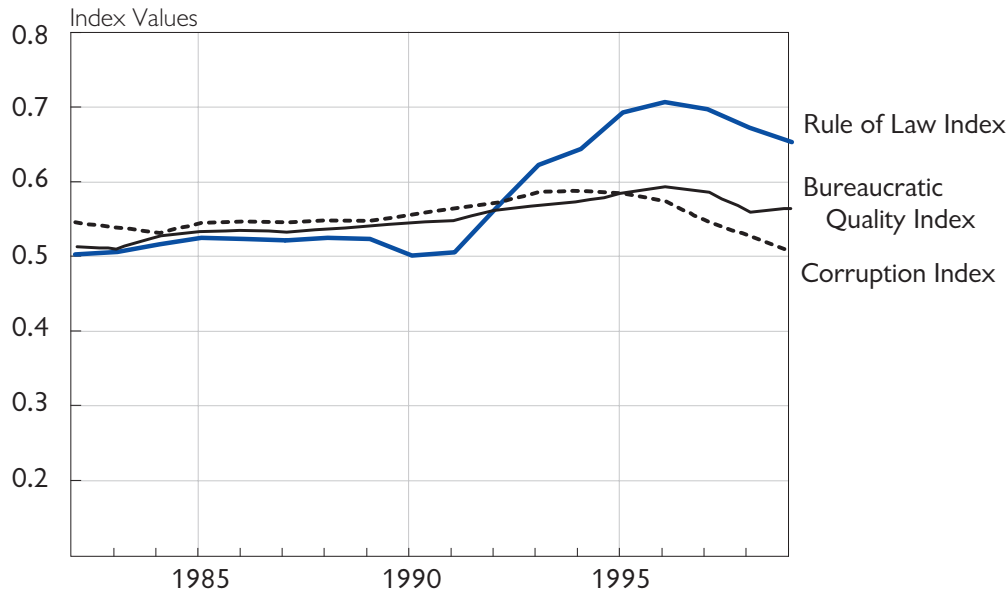
liberties, the rule of law variable was converted to a zero-to-one scale, with zero indicating the poorest maintenance of the rule of law and one the best.

To understand the scale, note that the United States and most of the OECD countries had values of 1.0 for the rule of law index in recent years. However, in 1999, Greece was rated at only 0.50, Spain at 0.67, and Belgium, France, and Portugal at 0.83. Countries outside the OECD that were rated at 1.0 in 1999 were Hungary, Malta, Morocco, and Singapore. (Hong Kong was downgraded upon its return to China from 1.0 in 1996 to 0.83 from 1997 to 1999.)

No country had a rating of 0.0 for the rule of law in 1999, but countries rated at 0.0 in some earlier years included Ethiopia, Guyana, Haiti, Sri Lanka, Yugoslavia, and Zaire. Countries rated at 0.5 in 1999 included Bangladesh, Bolivia, Ecuador, El Salvador, Greece, Malaysia, Myanmar, Pakistan, Panama, Paraguay, Peru, Suriname, Sri Lanka, Uruguay, Yugoslavia (Serbia), and several countries in sub-Saharan Africa.

The solid line in Chart 2.3 shows how the unweighted average of the rule of law indicator evolved from 1982 to 1999. (The number of

### Institutional Indicators: 1982–99



Note: Index score of 1 = Significant Rule of Law/Efficient Bureacracy/Least Corruption, 0 = Poor Rule of Law/Inefficient Bureacracy/Most Corruption.  
 Source: Freedom House, *Freedom in the World*, various years.

countries covered was 88 in 1982–1983, 100 in 1984, and 114 since 1985.) The average began at 0.50 in 1982 and showed little change from there to 1991. Then the average rose to 0.71 in 1996 but fell to 0.65 in 1999. Hence, the decade of the 1990s has been a period in which the world average of maintenance of the rule of law expanded, although the peak occurred in 1996.

Chart 2.3 also shows the behavior of two other series constructed by Political Risk Services, one for corruption in government and the other for the quality of the bureaucracy. In these cases, zero indicates the most corruption and the least efficiency, whereas one indicates the least corruption and greatest efficiency. These two indicators are highly correlated with the rule of law indicator in terms of variations over time and across countries. For most years, the correlation of the rule of law indicator with either of the other two series was close to 0.8. However, for 1999, the correlation of the rule of law value with the corruption variable was only 0.64, and the correlation of the rule of law value with the bureaucratic quality variable was only 0.67. For explaining economic growth, it turns out that once the rule of law measure is held constant, the indicators for corruption and

bureaucratic quality do not contribute much.

The last findings may reflect the two-sided nature of political corruption and bureaucratic efficiency. In some circumstances, corruption may be preferable to honest enforcement of bad rules. For example, outcomes may be worse if a regulation that prohibits some useful economic activity is thoroughly enforced rather than circumvented through bribes. However, the economy will be hampered when few legitimate activities can be undertaken without bribes. Thus, the overall impact of more official corruption may be ambiguous.

Similarly, enhanced bureaucratic efficiency has obvious advantages. However, if bureaucrats are carrying out activities in which they ought to be absent, then the economy may suffer from the increased bureaucratic efficiency. Moreover, there may be a tendency for the bureaucracy to grow larger when it functions more smoothly. Thus, the predicted net effect of bureaucratic quality is also uncertain.

Countries that are strong in terms of rule of law (and in terms of low corruption and high bureaucratic efficiency) tend also to be strong in terms of the democracy indicators—that is, electoral rights

## Countries with Large Gaps Between Rule of Law and Electoral Rights Indexes

### I. High Rule of Law Relative to Electoral Rights in 1982

	Rule of Law Index	Electoral Rights Index
Burkina Faso	0.50	0.00
Chile	0.83	0.17
Ethiopia	0.50	0.00
Guinea	0.50	0.00
Hong Kong	1.00	0.50
Hungary*	0.83	0.33
Myanmar (Burma)	0.50	0.00
Niger	0.67	0.00
Poland*	0.67	0.17
Singapore	1.00	0.50
Somalia	0.50	0.00
Taiwan	1.00	0.33

### II. High Rule of Law Relative to Electoral Rights in 1998

	Rule of Law Index	Electoral Rights Index
Bahrain	0.83	0.00
Cameroon	0.50	0.00
China	0.83	0.00
Egypt	0.67	0.17
Gambia	0.83	0.00
Hong Kong	0.83	0.33
Iran	0.83	0.17
Kuwait	0.83	0.33
Malaysia	0.83	0.33
Morocco	1.00	0.33
Myanmar (Burma)	0.50	0.00
Oman	0.83	0.17
Saudi Arabia	0.83	0.00
Singapore	1.00	0.33
Syria	0.83	0.00
Tanzania	0.83	0.33
Tunisia	0.83	0.17
United Arab Emirates	0.67	0.17
Yugoslavia	0.83	0.17

### III. Low Rule of Law Relative to Electoral Rights in 1982

	Rule of Law Index	Electoral Rights Index
Bolivia	0.17	0.83
Colombia	0.33	0.83
Cyprus*	0.33	1.00
Dominican Republic	0.50	1.00
Greece	0.50	1.00
Honduras	0.17	0.83
South Africa	0.50	1.00
Uruguay	0.50	1.00

Note: \*Data are unavailable for 1982 and are shown for 1985. The table shows observations for which the magnitude of the gap between the rule of law and electoral rights indexes was at least 0.5.

Source: Political Risk Services.

and civil liberties. However, the correlation between any of the property-rights/legal-structure indicators and either of the democracy indicators is weaker than that within either of the two categories. For example, for the electoral rights and rule of law indexes, the correlation in a given year ranges from 0.4 to 0.6; in 1998, for 114 countries, the correlation is 0.41. Thus, there are many cases in which the rule of law index is high while the electoral rights index is low, and vice versa. These cross-country differences between rule of law and electoral rights make it possible to distinguish empirically the effects of these institutional characteristics on economic growth and other variables.

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*“The correlation between any of the property-rights/legal-structure indicators and either of the democracy indicators is weaker than that within either of the two categories.”*

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Table 2.1 shows countries with large gaps (magnitude of at least 0.5) between the rule of law index and the electoral rights index. Cases for 1982 or 1985 in which the rule of law was high in relation to electoral rights included Chile, Hong Kong, Hungary, Myanmar, Poland, Singapore, and Taiwan. For 1998, the countries with large positive gaps between rule of law and electoral rights included China, Egypt, Hong Kong, Iran, Malaysia, Morocco, Myanmar, Saudi Arabia, Singapore, Syria, Tunisia, and Yugoslavia (Serbia).<sup>12</sup> These countries maintained strong law and order but had relatively little democracy. In the typical case (with Hong Kong as an historical exception as a British colony), the country was run by a dictator who nevertheless promoted property rights and a reliable legal system. Prototypes of this kind of dictator are Augusto Pinochet in Chile, Lee Kuan Yew in Singapore, and Shah Mohammed Reza Pahlavi in Iran.

Countries in which electoral rights were high in relation to the rule of law in 1982 or 1985 included Bolivia, Colombia, Cyprus, the Dominican Republic, Greece, Honduras, Israel, Jamaica, Peru, Sri Lanka, Trinidad, and Venezuela. In 1998, countries in this situation included Bolivia, Honduras, South Africa, and Uruguay.<sup>13</sup> (Countries with gaps

of 0.33 in 1998 included Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Greece, Guatemala, Jamaica, Mexico, Panama, Spain, and Trinidad.) Countries in this group maintained a lot of democracy, but they were relatively weak in terms of property rights and legal protections.

### **Effects of the Rule of Law and Electoral Rights on Economic Growth**

My 1997 study<sup>14</sup> describes an empirical framework for assessing the effects of various factors on the rate of growth of real per capita gross domestic product (GDP). The growth rate is determined from an equation of the form

$$\text{growth rate} = F(y, y^*)$$

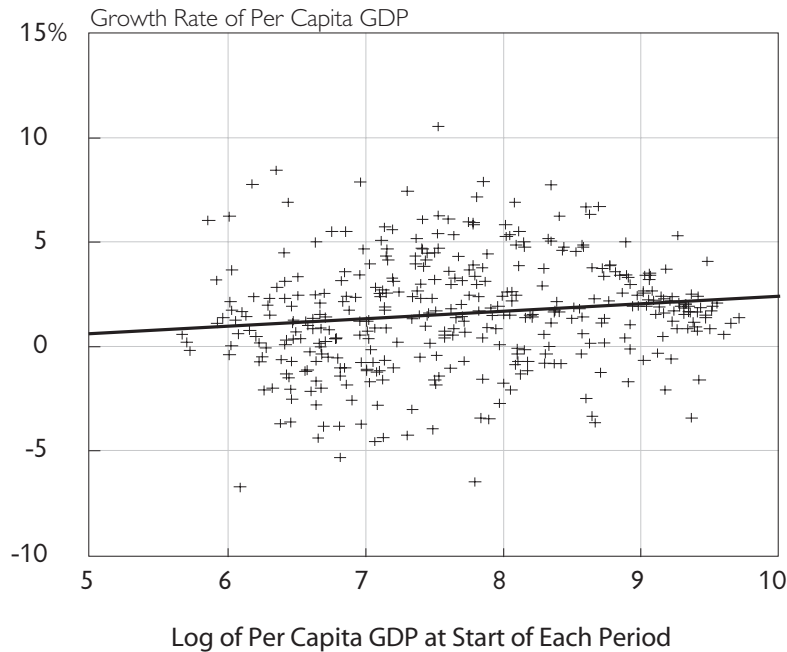
The variable  $y$  represents the starting position of the economy, including the initial level of per capita GDP and the amounts of human capital in the form of education and health. The variable  $y^*$  represents the long-run position toward which the economy is heading. This position depends on government policies and other factors. For example, improved maintenance of property rights raises  $y^*$ .

For given  $y^*$ , the growth rate falls with  $y$  because of diminishing returns to the accumulation of physical and human capital. This force tends to generate a convergence pattern, whereby poor countries catch up to rich ones. For given  $y$ , the growth rate rises with  $y^*$ . Therefore, improved policies—such as better maintenance of property rights—increase the growth rate.

The sample consists of roughly 100 countries observed from 1960 to 1995. Specifically, the analysis seeks to explain the average growth rate of real per capita GDP for each country over three 10-year periods: 1965–1975, 1975–1985, and 1985–1995. In this study, the GDP data are the ones computed by Robert Summers and Alan Heston on an internationally comparable basis.<sup>15</sup> The sample includes countries at vastly different levels of economic development, and places are excluded only because of missing data.

Chart 2.4 shows a simple scatter diagram for the growth rates against the log of real per capita GDP observed at the start of each sub-period. That is, the growth rate from 1965 to 1975 is arrayed against the log of real per capita GDP for 1965, the growth rate from 1975 to 1985 is arrayed against the log of real per capita GDP for 1975, and so on. Since each country is observed three

### Scatter of Growth Rate against Level of GDP



Source: Author calculations.

times (data permitting), there are roughly 300 data points in this diagram.

A simple convergence hypothesis would predict an inverse relationship between the growth rate and the starting level of the log of real per capita GDP. However, as is clear from Chart 2.4, there is no such relationship in the broad cross-country data. If the only thing one knows about a country is how rich it is at some point in time, this information reveals basically nothing about how fast the country will grow over the next 10 years. This fact implies that there is no tendency for equalization of per capita GDP across the broad set of countries.

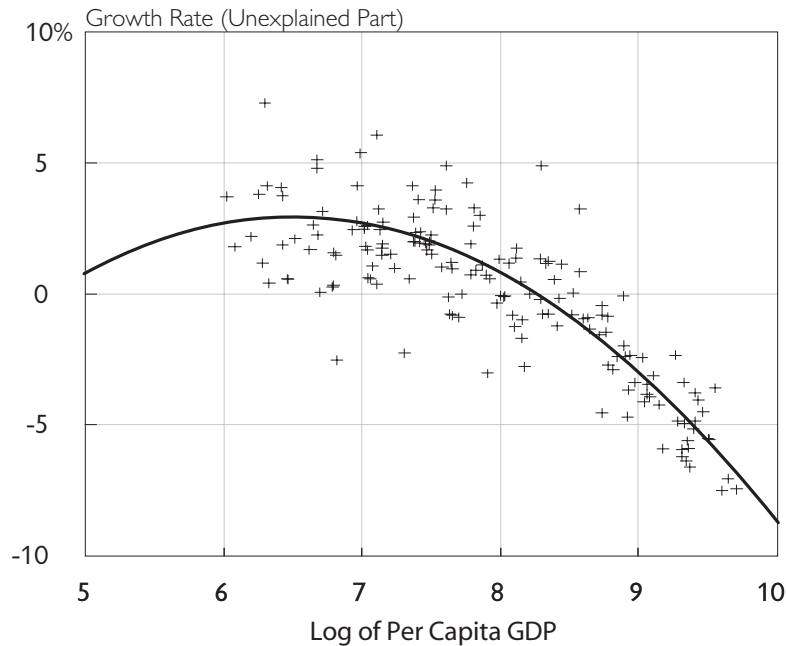
From the standpoint of the framework laid out in the equation above, the lack of simple convergence can be explained by the role of the variables that underlie  $y^*$ , which represents a country's long-run target for per capita GDP. If a country is observed to be poor—that is, to have a low value of  $y$ —at some point in time, then this condition likely reflects the presence of a low value of  $y^*$  for some time in the past. Furthermore, a low value of  $y^*$  tends to persist, partly because governments that have pursued bad policies in the past tend to continue this pattern. Therefore, although a low

value of  $y$  predicts high growth for given  $y^*$ , the tendency for a low value of  $y^*$  to accompany a low value of  $y$  offsets the simple convergence effect. In the cross-country data, these two influences are nearly fully offsetting, so that poor countries grow, on average, at roughly the same rate as rich ones.

Chart 2.5 shows the recomputed relationship between growth rates and starting levels of the log of per capita GDP after holding constant an array of explanatory variables that are thought to determine the target position,  $y^*$ . The variables, detailed in previous research,<sup>16</sup> are the ratio of government consumption to GDP, the index of the rule of law, the index of electoral rights and its square, the inflation rate, the fertility rate, the starting level of educational attainment at the secondary and higher levels, the ratio of investment to GDP, and the growth rate of the terms of trade.<sup>17</sup>

In contrast to Chart 2.4, Chart 2.5 reveals a clear and statistically significant inverse relation between the growth rate and the starting level of the log of per capita GDP. That is, the data exhibit a pattern of conditional convergence, whereby the growth rate declines with  $y$  for given  $y^*$ . This

### Growth Rate versus Level of GDP



Source: Author calculations.

effect can be interpreted as diminishing returns to the accumulation of physical and human capital. For given underlying policies and institutions—represented by the variable  $y^*$ —the rate of economic growth tends to decline as a country gets richer (by accumulating more capital).<sup>18</sup>

The same type of partial relation between the growth rate and the initial level of per capita GDP comes through if additional variables are included to hold fixed the value of  $y^*$ . For example, my recent research includes measures of international openness, the extent of income inequality, the level of public debt, and the nature of exchange-rate regimes.

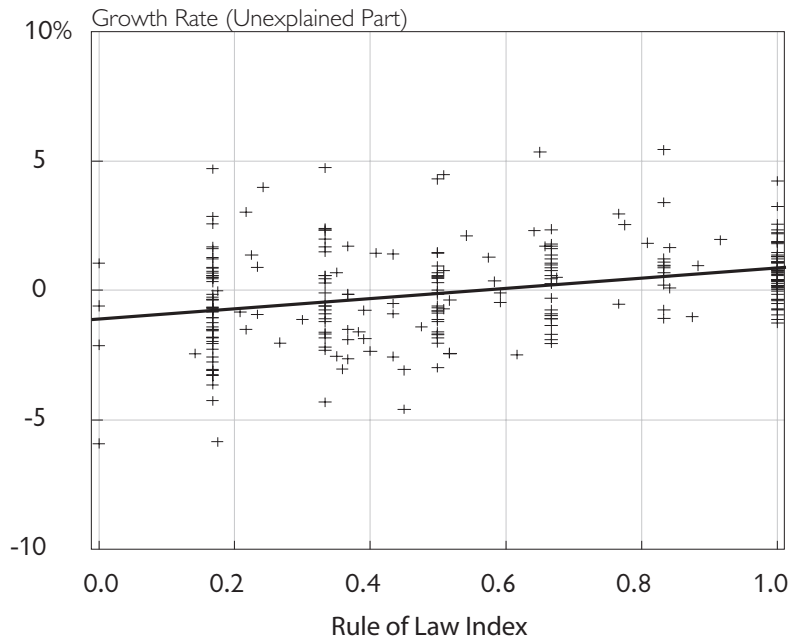
For present purposes, I want to highlight the role of the two political/institutional variables—the rule of law and electoral rights—in the determination of the growth rate. For the rule of law index, the empirical relation with the rate of economic growth is shown in Chart 2.6. As with Chart 2.5, the association between the growth rate and the variable shown on the horizontal axis—in this case, the rule of law index—is computed after holding constant a set of other explanatory variables (including now the initial level of per capita GDP). The important implication of Chart

2.6 is that a higher value of the rule of law index generates a higher rate of economic growth. This relation is significant in a statistical sense.

The estimated effect of improved rule of law on growth is quantitatively large. Specifically, a rise by one category (among the seven used) in the Political Risk Services index is estimated to raise the growth rate on impact by 0.5 percent per year.<sup>19</sup> A change from the worst rule of law (0.0) to the best (1.0) would contribute 3.0 percent per year to the growth rate. However, this kind of growth dividend from legal reform could arise only for cases, such as Haiti and Zaire in the past, that began as total institutional disasters. For countries that already have reasonably well-functioning legal systems, such as the United States and most other OECD countries in the 1990s, the potential for this kind of growth enhancement through institutional improvement does not exist.

If the ratio of investment to GDP is graphed against the rule of law index, then a relation similar to that shown in Chart 2.6 would result. That is, one route by which better rule of law promotes growth is by encouraging investment. However, most of the positive effect of the rule of

### Growth Rate Versus Rule of Law



Note: Index score of 1 = Established Rule of Law, 0 = Poor Maintenance of Rule of Law.  
Source: Author calculations.

law index on economic growth applies for a given value of the ratio of investment to GDP. This effect would involve improved productivity of resources and the encouragement of investments that are not measured by the standard national-accounts variable.

Chart 2.7 shows the relation between the growth rate and the extent of democracy, as measured by the electoral rights index. The overall relation between economic growth and democracy is statistically weak. In particular, there are examples of dictatorships (values of electoral rights near 0.0) with high and low rates of growth, and similar examples for democracies (values of democracy near 1.0). However, there is some suggestion of a nonlinear relation—an inverted U-shape—in which growth rises initially with democracy, reaches a peak at a value for the electoral rights index of around 0.5, and then declines subsequently with further rises in democracy. This relationship, shown by the curve in the figure, is only marginally significant in a statistical sense. A similar relationship appears if the ratio of investment to GDP replaces the growth rate on the vertical axis.

One way to interpret the results in Chart 2.7

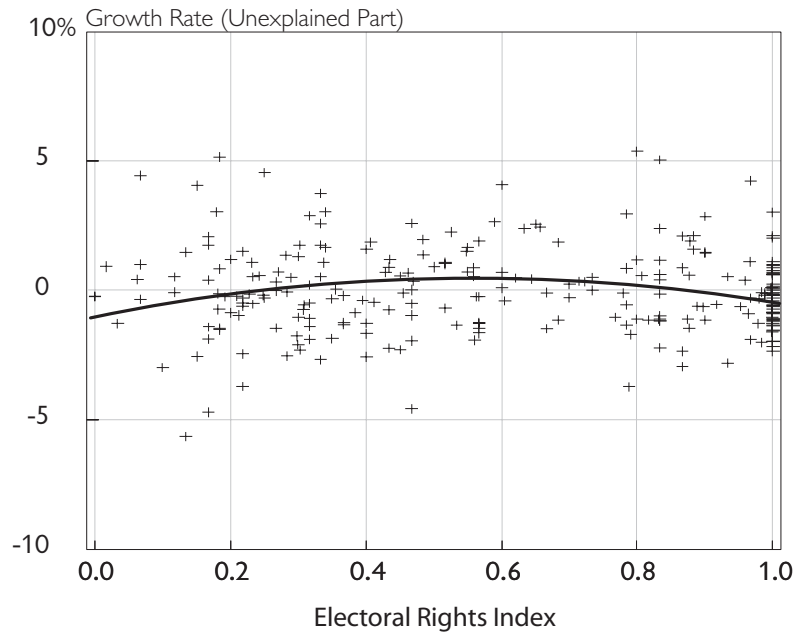
is that, in the worst dictatorships, an increase in electoral rights tends to increase growth and investment because the benefit from the limitations on governmental power is the key matter. In places that already have attained a moderate amount of democracy, however, a further increase in electoral rights tends to impair growth and investment. As electoral rights are increased, the dominant effect becomes an intensified concern with social programs and income redistribution.

The main information to take from Chart 2.7 is that the overall relation between economic growth and democracy—measured by electoral rights—is weak. Therefore, these findings support neither the popular notion that democracy is necessary for growth nor the idea that dictatorship is the route to prosperity.

### Determinants of Democracy and the Rule of Law

Thus far, this analysis has considered the impact of alternative institutional arrangements—specifically, more or less democracy and the rule of law—on the economy. But nothing has been said about how the different institutional arrangements come about and, particularly, how these

## Growth Rate Versus Democracy



Note: Index score of 1 = Significant Electoral Rights, 0 = Few Electoral Rights.  
 Source: Author calculations.

arrangements are influenced by the state of the economy.

A common view since the research of Seymour Martin Lipset<sup>20</sup> is that prosperity, measured in various ways, stimulates democracy. This idea is often called the Lipset hypothesis, although Lipset<sup>21</sup> appropriately credits the basic notion to Aristotle:

From Aristotle down to the present, men have argued that only in a wealthy society in which relatively few citizens lived in real poverty could a situation exist in which the mass of the population could intelligently participate in politics and could develop the self-restraint necessary to avoid succumbing to the appeals of irresponsible demagogues.<sup>22</sup>

The fair thing seems to be to refer to this idea as the Aristotle–Lipset hypothesis.

Theories of the effect of economic conditions on the extent of democracy or property rights are not well developed. Lipset<sup>23</sup> emphasized increased education and an enlarged middle class as key elements, and he stressed Alexis de

Tocqueville’s idea that private organizations and institutions are important as checks on centralized government power.<sup>24</sup> In some models, an autocrat would voluntarily relinquish authority—for example, by establishing a constitution, allowing power to a legislative body, expanding voting rights, and extending civil liberties—to deter revolutions and to encourage the private sector to invest (and, thereby, to expand the economic pie that the government can tax).

Despite the lack of strong theoretical underpinnings, the cross-country data confirm the Aristotle–Lipset hypothesis as an empirical regularity. In particular, increases in various measures of the standard of living forecast a gradual rise in democracy. In contrast, democracies that arise without prior economic development—sometimes because they are imposed by former colonial powers or by international agencies—tend not to last.

Table 2.2 summarizes empirical findings on the determinants of democracy, as measured by the electoral rights index. The system attempts to explain the level of this index for each of the roughly 100 countries at six points in time—1972, 1975, 1980, 1985, 1990, and 1995. The first part of

the table uses a basic system that includes as explanatory variables an array of economic and social factors. The nine variables included are described in the table. The results in the right-hand column show the effect of each explanatory variable on the electoral rights index when all of the other explanatory variables are held constant.

From the standpoint of the Aristotle–Lipset hypothesis, the key findings from the basic system are the positive and statistically significant effects on electoral rights from real per capita GDP and primary schooling. These results strongly confirm the idea that a higher standard of living goes along with more democracy. Moreover, the effects are predictive in the sense that, for a given current value of the electoral rights index, higher values of per capita GDP and primary schooling predict that future values of the electoral rights index will be greater.

The result shown for reliance on oil production also fits in with the spirit of the Aristotle–Lipset framework. The negative effect here means that GDP based primarily on natural resources—in this case, oil—does not provide the same pressure for democratization as GDP derived from the accumulation of physical and human capital.

Another variable with considerable explanatory power for democracy is the gap in years of education at the primary level between males and females. The negative effect here means that, if the education system treats males and females more equally, then it is more likely that electoral rights will be greater (which includes, in part, the extension of the voting franchise to women). The causation here is not clear, however, because an expansion of electoral rights also makes it more likely that the school system will treat males and females more equally.

Although the simple relation (when per capita GDP, education, and the other explanatory variables are *not* held constant) between electoral rights and urbanization is positive, the effect shown for urbanization in Table 2.2 is negative. (Urbanization has a strong positive correlation with per capita GDP and schooling, but these variables are held constant for the findings presented in the table.) This result may indicate that it is easier to maintain dictatorial powers when the populace is concentrated in cities. However, as a demonstration of the weakness of

the underlying theory, some political scientists have argued in reverse that the urban population is harder to suppress because of its better access to communications and transport.

Country size, measured by population, turns out not to be systematically related to democracy. On a theoretical level, the expected relation could go either way, depending on how the technology of suppression relates to the overall scale of operations (that is, to the size of the country).

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*“The key findings from the basic system are the positive and statistically significant effects on electoral rights from real per capita GDP and primary schooling. These results strongly confirm the idea that a higher standard of living goes along with more democracy. Moreover, the effects are predictive.”*

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Finally, the basic system shown in the table includes 5-year and 10-year lags of the electoral rights index. These effects are positive (and highly significant), and thereby indicate substantial inertia in changing democratic institutions in response to changes in the economic and social variables that are included in the system. In practice, the changes in democracy (as measured, and also in reality) are often discrete, with either no change or a substantial shift occurring in a particular year. If, for example, per capita GDP or education rises, then an increase in democracy becomes more likely, and the probability that this increase will occur becomes greater as time passes. Quantitatively, the results imply that, on average, about 25 percent of the full adjustment of democracy to a change in an explanatory variable occurs over 5 years, and nearly 70 percent occurs over 20 years. Thus, after 20 or more years, the level of democracy is nearly fully determined by the economic and social variables—the kinds of influences stressed by Aristotle and Lipset—and very little by the country’s longer-term history of democracy. Table 2.2 also shows some additional variables that were added, one at a time, to the basic system. One result is that years of educational attainment at the secondary and higher levels have no predictive power for the electoral

## Effects of Explanatory Variables on Electoral Rights Index

### I. Basic System (all variables considered together)

Explanatory variable	Estimated effect and statistical significance
5-year and 10-year lags of electoral rights index	Positive and significant (full effect is less than one-to-one)
Real per capita GDP	Positive and significant
Years of primary schooling	Positive and significant
Gap between male and female primary schooling	Negative and significant
Urbanization rate	Negative and marginally significant
Country size (population)	Insignificant
Heavy reliance on oil production	Negative and significant

### II. Additional Variables (added one at a time to basic system)

Explanatory variable	Estimated effect and statistical significance
Years of secondary and higher schooling	Insignificant
Greater income inequality	Negative and marginally significant
Rule of law index	Insignificant
Colonial history (distinguished by identity of former ruler among Britain, France, Spain, Portugal, and others)	Prior colony and identity of former ruler are all insignificant
Religious affiliation (broken down into nine groupings)	Muslim, non-religion, and other religion are significantly negative relative to Catholic (the most prominent category). Protestant, Hindu, Buddhist, miscellaneous Eastern religions, and Jewish are insignificant relative to Catholic.

rights index. Hence, it appears to be early education that interacts with a country's propensity for democracy.

Greater income inequality, measured in some alternative ways, turns out to be negatively related to democracy; Aristotle and Lipset also predicted this finding. (Klaus Deininger and Lyn Squire compiled the data on inequality.<sup>25</sup>) The main difficulty presented here is that the limited availability and poor quality of the data on income distribution cause the sample size to contract substantially when an income-distribution variable is included in the system. It seems likely that, with more and better data, the negative impact of income inequality on democracy would show up more clearly in a statistical sense.

One important idea stressed by Milton Friedman and others is that political and economic freedoms are reinforcing. Our interpretation of

this idea is that greater rule of law should predict more democracy in the future and that, similarly, greater democracy should predict more rule of law in the future.

The results shown in Table 2.2 fail to confirm any reliable direct effect of the rule of law index on the electoral rights index. That is, given the current state of democracy and the values for the economic and social variables, a higher level for rule of law does not predict future increases in the extent of democracy. An indirect connection would, however, be important. An expansion in the rule of law promotes economic growth, as shown before, and leads thereby to higher levels of per capita GDP over time. The levels of school attainment would probably also rise along with per capita GDP. Then the higher values of per capita GDP and schooling would tend to raise the value of the democracy index. Through these

## Effects of Explanatory Variables on Rule of Law Index

### I. Basic System (all variables considered together)

Explanatory variable	Estimated effect and statistical significance
5 -year lag of rule of law index	Positive and significant (less than one)
Real per capita GDP	Positive and significant
Years of primary schooling	Positive and significant
Gap between male and female primary schooling	Insignificant
Urbanization rate	Negative and marginally significant
Country size (population)	Insignificant
Heavy reliance on oil production	Insignificant

### I. Additional variables (added one at a time to basic system)

Explanatory variable	Estimated effect and statistical significance
Years of secondary and higher schooling	Insignificant
Greater income inequality	Negative and significant
Electoral rights index	Insignificant
Colonial history (distinguished by identity of former ruler among Britain, France, Spain, Portugal, and others)	Prior colony is significantly negative; among rulers, some indication that this effect is most negative for Portugal, then other countries, then Spain, then France, then Britain
Religious affiliation (broken down into nine groupings)	All insignificant

**Sources:** Robert J. Barro, *Determinants of Economic Growth: A Cross-Country Empirical Study*, 1997; Robert J. Barro, "Determinants of Economic Growth: Applications of the Global Evidence to Chile," *Cuadernos de Economia*, forthcoming; Freedom House, *Freedom in the World*, various years; Political Risk Services.

channels, an improvement in the rule of law would, in the long run, lead to more democracy.

Colonial heritage would be important for democracy if countries inherited a tendency for more or less electoral rights from their previous rulers. For example, Lipset has argued that British rule provided a crucial learning experience for subsequent democracy. It is true that former colonies are less likely than non-colonies to be democratic: The average of the electoral rights index from 1975 to 1995 was 0.69 for 32 non-colonies and 0.46 for 106 former colonies. Moreover, within the colonies, electoral rights were higher, on average from 1975 to 1995, among former possessions of Britain and Spain than among those of France, Portugal, and other countries (in the present sample, Australia, Belgium, the Netherlands, New Zealand, and the United States).

However, the empirical results summarized in Table 2.2 fail to find these kinds of linkages. Given a country's economic and social conditions—as reflected in the explanatory variables shown in the table—differences in colonial history have no predictive content for democracy. Hence, if colonial status matters for democracy, then this influence must operate indirectly by influencing the pace of economic development. This indirect channel is worth exploring but has not yet been documented.

Religious affiliation has also been stressed by some political theorists, such as Samuel Huntington,<sup>26</sup> as an important determinant of democracy. This connection was assessed here by using data on professed religious affiliation among eight major groups: Catholic (including Eastern Orthodox); Protestant (including Anglican and some other Christian denominations); Hindu (including

Jains and Sikhs); Buddhist; miscellaneous Eastern religions (Chinese folk religions, Shinto, Confucianism, and new-religionists); Jewish; no professed religion (including atheists); and other religions (such as Parsis, Bahais, Spiritists, tribal religions, and indigenous Third World Christians). These data are from the *World Christian Encyclopedia* published in 1982.<sup>27</sup>

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*“Economic development tends to raise the levels of both indexes. Moreover, an independent improvement in the rule of law tends to stimulate economic growth and, therefore, to set in motion the kinds of increases in the economic variables that lead to expansions of electoral rights (and further increases in the rule of law).”*

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The simple relation between religion and democracy is strong. If one classifies countries in accordance with their largest religious affiliation, then the averages for democracy from 1975 to 1995 were 0.9 for Jewish countries (1 [Israel]); 0.8 for Protestant (24); 0.7 for Hindu (5); 0.6 for Catholic (49) and Buddhist (4); 0.5 for miscellaneous Eastern religions (3); 0.3 for other religions (17) and Muslim (32); and 0.1 for non-religion (1 [China]). However, the estimated effect of religion on democracy becomes much weaker once one holds fixed a country’s economic and social variables, as in Table 2.2. In this context, the significant results are—using Catholic affiliation as a benchmark—negative effects from Muslim, non-religion, and other religions. The Muslim effect may reflect the strong connection between church and state in Muslim countries. The non-religion effect becomes less clear if China is eliminated from the sample.

Table 2.3 shows the results from the application of the same kind of analysis to the determination of the rule of law index. Because the data on the rule of law begin only in the early 1980s, this system seeks to explain the rule of law index at only three points in time—1985, 1990, and 1995. Many of the results are similar to those shown for the electoral rights index in Table 2.2. In particular, the Aristotle–Lipset hypothesis works also for the rule of law in the sense of the significantly

positive effects shown in Table 2.3 for per capita GDP and years of primary schooling. Also similar are the negative effect of urbanization, insignificant effect of country size, and insignificant effect from average years of schooling at the secondary and higher levels. Greater income inequality again has a negative impact, and this effect is statistically more reliable for the rule of law than for democracy. As before, the positive effect from the lagged value of the rule of law index indicates the gradual adjustment of this institutional feature to changes in the economic and social variables.

Some differences in the results are found in that the gap between male and female primary schooling, the oil variable, and the array of religious affiliations have no influence on the rule of law index. Also, colonial heritage is much more important for the rule of law than for democracy. Even with the economic and social variables held constant, former colonies have significantly lower values of the rule of law index than do non-colonies. Within the colonies, the ordering of the size of the negative effect goes from former possessions of Portugal to those of the group of other countries, to those of Spain, to those of France, and to those of Britain. Hence, colonial powers seem to bequeath propensities for the rule of law more than they bequeath propensities for democracy. Britain and France probably were best at making these bequests because they themselves had better legal systems established than did Spain, Portugal, and some of the other colonial rulers.

Finally, Table 2.3 indicates that the electoral rights index has no predictive content for the rule of law index. This result parallels the finding from Table 2.2 that the rule of law index does not predict the electoral rights index. Putting the two results together, we conclude that—given economic and social conditions—the evolution of electoral rights and the rule of law are largely independent.<sup>28</sup> That is why we found numerous instances of substantial gaps between the two indexes in Table 2.1.

Recall, however, that the electoral rights index and the rule of law index exhibit a substantial positive correlation overall across countries and over time. This relation can be explained by noting that movements in the economic and social variables—for example, increases in per capita GDP and years of primary schooling—will tend

to shift the two institutional measures in the same direction. Specifically, economic development tends to raise the levels of both indexes. Moreover, an independent improvement in the rule of law tends to stimulate economic growth and, therefore, to set in motion the kinds of increases in the economic variables that lead to expansions of electoral rights (and further increases in the rule of law).

## CONCLUDING OBSERVATIONS

The findings about democracy and the rule of law can be summarized by considering examples of U.S. foreign policy toward developing countries. The U.S. focus for many years has been toward promoting democracy—notably free elections with multiple parties—in all times and places. For example, when Haiti was run by a military dictator, the United States intervened to restore the previously elected president, despite his doubtful credentials. When President Alberto Fujimori of Peru disbanded the legislature and assumed dictatorial powers—ostensibly for a temporary period to counter a terrorist threat and to enact drastic economic and political reforms—the United States complained bitterly. When President Mobutu Sesi Seko of Zaire was finally toppled by a revolution after more than 30 years of mismanagement and corruption, the United States called immediately for the new leader, Laurent Kabila, to organize free elections. Moreover, the United States continually criticizes China for its lack of democracy even though China has made major strides in enhancing the rule of law, whereas Russia has been applauded for free elections despite difficulties in maintaining law and order.

The current U.S. Secretary of State, Madeleine Albright, once was asked whether it was sometimes necessary to sacrifice democracy in the short run to promote economic growth. She replied to

the effect that there was no such trade-off because democracy was a prerequisite for economic growth. This response sounds pleasant but is simply false. The idea that democracy—in terms of electoral rights—is necessary for growth is just as false as the proposition that dictatorship is essential for poor countries to escape poverty. The more nearly correct statement is that the extent of democracy has little relation to subsequent economic performance.

For a country that starts with weak institutions—little democracy and little rule of law—an increase in democracy is less important than an expansion of the rule of law as a stimulus for economic growth and investment. In addition, democracy does not seem to have a strong direct role in fostering the rule of law. Thus, one cannot argue that democracy is critical for growth because democracy is a prerequisite for the rule of law.

The problem in having the United States recommend democracy to a country such as Zaire (now the Republic of Congo) is not that democracy would harm economic performance but, rather, that it would have little impact. If there is a limited amount of energy that can be used to accomplish institutional reforms, then it is much better spent in a poor country by attempting to implement the rule of law—or, more generally, property rights and free markets. These are the institutional features that matter most for economic growth, and these features are not the same thing as democracy. Moreover, in the long run, the rule of law tends to generate sustainable democracy by first promoting economic development. Thus, even if democracy is the principal objective in the end, the best way to proceed is to encourage the rule of law in the short run. U.S. advice to poor countries should focus more on the rule of law, property rights, and free markets, and less on the romance of democracy.

## Notes

- <sup>1</sup> Robert J. Barro is a senior fellow at the Hoover Institution and Robert C. Waggoner Professor of Economics at Harvard University. This chapter is adapted from a presentation at The Heritage Foundation in July 1999.
- <sup>2</sup> See Bryan T. Johnson, Kim R. Holmes, and Melanie Kirkpatrick, *1999 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation, 1999).
- <sup>3</sup> See Milton Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962).
- <sup>4</sup> For a discussion of these issues, see Norman V. Loayza, "The Economics of the Informal Sector: A Simple Model and Some Empirical Evidence from Latin America," *Carnegie-Rochester Conference Series on Public Policy*, 1996, pp. 129–162.
- <sup>5</sup> See Alex Inkeles, *On Measuring Democracy* (New Brunswick, N.J.: Transaction Publishers, 1991), p. x.
- <sup>6</sup> Raymond D. Gastil, *Freedom in the World* (Westport, Conn.: Greenwood Press, 1982–1983) and subsequent editions.
- <sup>7</sup> *Ibid.*, 1986–1987 edition, p. 7.
- <sup>8</sup> Kenneth A. Bollen, "Political Democracy: Conceptual and Measurement Traps," *Studies in Comparative International Development*, Spring 1990, pp. 7–24.
- <sup>9</sup> The Freedom House data cover more than 138 countries, but some countries were omitted here because of the lack of other historical data, especially on national accounts. The main countries left out are from the formerly centrally planned group (aside from China, Hungary, Poland, and Yugoslavia, which are included in the sample).
- <sup>10</sup> Gastil, *Freedom in the World*, 1986–1987 edition, p. 7.
- <sup>11</sup> These data were introduced to economists by Stephen Knack and Philip Keefer, in "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures," *Economics and Politics*, 1995, pp. 7, 207–227. Two other consulting services that construct these types of data are BERI (Business Environmental Risk Intelligence) and Business International (now part of the Economist Intelligence Unit).
- <sup>12</sup> Malaysia and Yugoslavia (Serbia) were each downgraded for rule of law from 0.83 in 1998 to 0.50 in 1999. Hence, these countries would likely not be on the large-gap list for 1999.
- <sup>13</sup> South Africa was downgraded for rule of law from 0.50 in 1998 to 0.33 in 1999. Hence, the gap between electoral rights and rule of law in South Africa probably was even larger in 1999.
- <sup>14</sup> Robert J. Barro, *Determinants of Economic Growth: A Cross-Country Empirical Study* (Cambridge, Mass.: MIT Press, 1997).
- <sup>15</sup> For a discussion, see Robert Summers and Alan Heston, "The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950–1988," *Quarterly Journal of Economics*, Vol. 106 (May 1991), pp. 327–368. Their data are available on the Internet at <http://www.nber.org>. The figures beyond 1992 were updated using information on real per capita GDP from the World Bank.
- <sup>16</sup> The results in Barro's 1997 *Determinants of Economic Growth: A Cross-Country Empirical Study* include growth rates only up to 1990, but these values were updated to 1995 in Robert J. Barro, "Determinants of Economic Growth: Applications of the Global Evidence to Chile," *Cuadernos de Economia*, 1999.
- <sup>17</sup> Some of these variables, such as initial school attainment, should be interpreted as refining the measure of an economy's initial position,  $y$ , rather than as determinants of the target position,  $y^*$ .
- <sup>18</sup> Chart 2.5 indicates that the relation between the growth rate and the starting level is non-linear: As the level of per capita GDP rises, the negative effect on growth becomes larger in magnitude. This effect is picked up empirically by including the log of per capita GDP and its square as explanatory variables. For a range of very low values of per capita GDP, the relation between the growth rate and level of per capita GDP may be positive.
- <sup>19</sup> In the framework used, this growth-rate effect persists for a long time. However, the magnitude of the effect diminishes slowly as the economy develops, and the influence in the very long run is on the level of economic activity, not its rate of growth.
- <sup>20</sup> Seymour M. Lipset, "Some Social Requisites of Democracy: Economic Development and Political Legitimacy," *American Political Science Review*, 1959, pp. 53, 69–105.

- <sup>21</sup> *Ibid.*, p. 75.
- <sup>22</sup> For a statement of Aristotle's views, see Aristotle, *Politics*, Book VI, trans. H. Rackham (Cambridge, Mass.: Harvard University Press, 1932).
- <sup>23</sup> Lipset, "Some Social Requisites of Democracy," pp. 83–84.
- <sup>24</sup> Alexis de Tocqueville, *Democracy in America*, trans. Henry Reeve (London: Saunders & Otley, 1835).
- <sup>25</sup> Klaus Deininger and Lyn Squire, "Measuring Income Inequality: A New Database," The World Bank, 1996, unpublished.
- <sup>26</sup> Samuel P. Huntington, *The Third Wave: Democratization in the Late Twentieth Century* (Norman, Okla.: University of Oklahoma Press, 1991).
- <sup>27</sup> David B. Barrett, ed., *World Christian Encyclopedia* (Oxford: Oxford University Press, 1982).
- <sup>28</sup> If one examines the residual errors in the equations for the electoral rights and rule of law indexes, then the contemporaneous correlation of these errors turns out to be positive but small.

