

## **Governmental Performance and Political Regimes Latin America in Comparative Perspective, 1990-2004**

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### **Abstract**

This essay seeks to evaluate the governmental performance of democratic (and nondemocratic) political regimes in contemporary Latin America through statistical comparison with “peer countries”—nations in the lower-middle and upper-middle income brackets as defined by the World Bank. Assessment criteria (dependent variables) include annual rates of economic growth, infant mortality, and primary-school attendance. Pooled time-series regression reveals that (1) democracies perform at least as well as nondemocracies in promoting economic growth, (2) democracies consistently outperform nondemocracies with regard to infant mortality and school attendance, and (3) the deeper the level of democracy, the greater the provision of social benefits. Despite these relative gains, popular disenchantment with democracy still persists in Latin America, largely because absolute levels of social welfare continue to be unacceptably low.

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More than a generation has passed since the onset of the current cycle of democratization in Latin America that has come to be known as the “third wave.” In its early stages, popular expectations were euphoric. The anticipation was that free and fair elections would produce efficient, honest, and far-sighted governments that would succeed in providing substantial material benefits—housing, employment, and other tangible improvements in the conditions of life. With the passage of time, however, such hopes have given way to disenchantment. Economic growth has been uneven, poverty has persisted, and inequality has intensified. Citizens have responded with admixtures of anger, distrust, and resignation.

Many Latin Americans seem poised to discard democracy altogether. In 2002, a region-wide survey (with more than 18,000 respondents) found that

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only 57 percent believed that “democracy is preferable to any other form of government.” More to the point, 55 percent, well over half, would support an authoritarian government “if it could resolve economic problems.” A nearly identical number, 56 percent, agreed that “economic development is more important than democracy.”<sup>1</sup> If policy performance falters, it is time for a change in regime. Attitudes have improved only slightly as a result of accelerated economic growth in recent years.

Are these judgments fair? This question raises a number of issues: (1) How should the performance of political democracies in Latin America be assessed? What is the proper basis for evaluation? (2) How does one place Latin America within a suitable comparative framework? With what other regions should Latin American countries be compared? (3) How has democracy actually performed in contrast to nondemocracies, and in comparison with democracies in other areas around the world?

Here, we approach these matters through systematic statistical analysis. Results are preliminary but suggestive. Our general finding is that democracies in Latin America have performed about as well as democracies in other world regions, that they have consistently outperformed nondemocracies in social arenas, and that, within significant limits, they have succeeded in providing important benefits to society and citizens.

## Principal Hypotheses

What are the political determinants of economic development and social welfare? Posed in this fashion, the question presumes that a political regime—democratic, authoritarian, or otherwise—exerts a causal effect on processes of socioeconomic change. It goes without saying that the material well-being of any society results not merely from the form of government, but also from a complex variety of structural and situational factors. In consequence, our interrogation has two distinct facets: first, ascertaining *whether* a political regime displays a meaningful relationship with patterns of development, and second, determining the *form and strength* of that association.<sup>2</sup>

We organize the analysis around three broad hypotheses. One stipulates a positive relationship between political democracy and socioeconomic development.

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<sup>1</sup> Programa de Naciones Unidas para el Desarrollo (PNUD), *La democracia en América Latina: Hacia una democracia de ciudadanas y ciudadanos* (New York and Buenos Aires: United Nations Development Programme, 2004), 115.

<sup>2</sup> For an earlier analysis, see Peter H. Smith, *Democracy in Latin America: Political Change in Comparative Perspective* (New York: Oxford University Press, 2005), especially chap. 8.

H<sub>1</sub>: The greater the prevalence of democratic rule, the greater the provision of material benefits.

According to this view, democracies are better able to tailor policies to citizens' wants and needs. Democratic policymaking is a transparent process: people can see how decisions are made, and they therefore know what to expect. And once decisions are made, they are likely to stay in place—at the very least, they are not subject to the whims and caprices of a junta or a dictator. By representing the popular will, democratic governments can thus provide investors, workers, and consumers with assurances into the future. Such an optimistic outlook suggests that “all good things go together.”<sup>3</sup> Democracy is not only the fairest form of government, but also it provides the most social and economic benefits to its citizens.<sup>4</sup>

The presumption is that democracies are more effective than nondemocracies at promoting growth and welfare because of their “allocative efficiency”—that is, their ability to allocate available resources to productive uses. By protecting property rights, democracies encourage investment. Moreover, the argument goes, the free flow of information improves the quality of economic decisions. As analysts are fond of pointing out, no democracy has ever experienced a famine, presumably because the political costs of resulting popular protest would be intolerable.

Our second hypothesis posits just the opposite—that authoritarian regimes are more effective at economic management than are democracies.

H<sub>2</sub>: The greater the prevalence of undemocratic (authoritarian) rule, the greater the provision of material benefits.

Since autocratic leaders do not have to worry about prospects for reelection, they can make unpopular and difficult decisions. They enjoy considerable degrees of autonomy from social pressures, including lobbyists and interest groups as well as the popular masses.<sup>5</sup> They can design and implement policies for the sake of long-term benefits rather than short-term gratification.

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<sup>3</sup> Robert A. Packenham, *Liberal America and the Third World: Political Development Ideas in Foreign Aid and Social Science* (Princeton, NJ: Princeton University Press, 1973).

<sup>4</sup> U.S. Agency for International Development, *Democracy and Governance* (Washington, DC: USAID, 1991); World Bank, *World Development Report 1991* (New York: Oxford University Press, 1991); and Larry Diamond and Marc F. Plattner, eds., *Economic Reform and Democracy* (Baltimore, MD: Johns Hopkins University Press, 1995).

<sup>5</sup> Guillermo O'Donnell, “Reflections on the Pattern of Change in the Bureaucratic-Authoritarian State,” *Latin American Research Review* 13 (1978): 3-38, and Peter Evans, Dieter Reuschmeyer, and Theda Skocpol, eds., *Bringing the State Back In* (Cambridge, UK: Cambridge University Press, 1985).

Authoritarian regimes can thus engage in coherent planning, they can impose (and collect) taxes as needed, and they can shift emphasis or course as conditions might require. In particular, they are capable of stimulating investment, while democratic politicians tend to favor consumption.<sup>6</sup> Conspicuous success stories of this nondemocratic genre include, of course, the well-known “developmental states” of East Asia.

Our final hypothesis raises the possibility that, ingenious arguments to the contrary, there exists no clear linkage between political regime and governmental performance.

H<sub>3</sub>: The prevalence of democratic or undemocratic rule bears no systematic relationship to the relative provision of material benefits. This is the null hypothesis.

As Adam Przeworski and his associates have pointed out, confirmation of this proposition could mean either that there is no causal connection between regime type and material well-being—or that there are cross-cutting factors at work. With regard to economic growth, for example,

The arguments against democracy claim that it hinders growth by reducing investment; the arguments in its favor maintain that it fosters growth by promoting allocative efficiency. Both may be true. The rate at which productive factors grow might be higher under dictatorship, but the use of those resources might be more efficient under democracy. And because the mechanisms work in opposite directions, the net effect may be that there is no difference between the two regimes in the average rates of growth they generate. The patterns of growth may differ, but the average rates of growth may still be the same.<sup>7</sup>

In other words, verification of the null hypothesis does not necessarily reveal the absence of causal relationships between regime type and policy performance. It simply means that they cannot be observed through conventional statistical analysis.

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<sup>6</sup> Mark Gasiorowski, “Democracy and Macroeconomic Performance in Underdeveloped Countries: An Empirical Analysis,” *Comparative Political Studies* 33, no. 3 (2000): 319-349.

<sup>7</sup> Adam Przeworski, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi, *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990* (Cambridge, UK: Cambridge University Press, 2000), 144-145. See also Adam Przeworski and Fernando Limongi, “Political Regimes and Economic Growth,” *Journal of Economic Perspectives* 7 (Summer 1993): 51-69.

## Data and Variables

For a fair and suitable evaluation of Latin America's policy performance, we focus on a world-wide "peer group" of comparable areas. Our study accordingly embraces countries that the World Bank has placed in "lower-middle" and "upper-middle" income brackets—fifty-five in the lower-middle category and forty-one in the upper-middle group, for a grand total of ninety-six cases. The universe includes countries from such diverse regions as Africa, Asia, Eastern Europe, and the Middle East. (See appendix 1 for a full listing.) And with the exception of Haiti, a low-income country, the Bank's two middle-income brackets include all countries of "Latin America and the Caribbean" and nineteen countries of what is widely considered to be "Latin America."

The timeframe extends from 1900 through 2004, from the end of the Cold War to the near-present. For many nations, this embraces a period of extensive neoliberal reform. As a result, our data matrix contains a total of 1,440 country-years.

For the assessment of policy performance, we have selected three dependent variables:

1. Annual rates of economic growth, measured in percentages (variable name: *Growth*),
2. Levels of infant mortality, defined as number of deaths per 1,000 within the first year of life (*Mortality*), and
3. Primary school attendance, measured as the percentage of appropriate-age children formally attending school (*Schooling*).

Economic growth offers the broadest and most widely used indicator of overall policy performance. Infant mortality provides poignant insight into societal well-being and reflects a host of factors—nutritional levels, sanitary conditions, medical treatment, availability of birth control, and the social rights of women and girls. Primary school attendance reflects many of these factors plus institutional investments in social capital, enhancement of opportunity, reduction (or prohibition) of child labor, and general concern for the future.

All three dependent variables display year-to-year variation, despite our concerns about serial autocorrelation, and they are reasonably responsive to governmental policy. Of course, there remain intransigent questions of cause-and-effect: variations in these data might show statistical associations with changes in political regime, but that does not necessarily mean that they *result* from changes in regime.

We have constructed two sets of independent variables:

1. Geographic region, as defined by the World Bank (with minor adjustments)—East Asia and the Pacific, Eastern Europe and Russia, Latin America and the Caribbean, North Africa and the Middle East,

- sub-Saharan Africa, Central Asia, and South Asia.
2. Political regime, as determined by annual reports of Freedom House; countries classified as “free” are regarded as democratic (variable name: *Democracy*). Among observable country-years, 43.8 percent come out as “democratic” and 56.2 percent as “nondemocratic.”

These are both dummy variables, coded as 0 and 1. Each region constitutes a separate variable. And for each of the fifteen years under consideration, every country receives a 1 if described as “free” by Freedom House, otherwise zero.<sup>8</sup>

The regional variable enables us to locate Latin America within a broad comparative framework. The notion of “region” can have multiple meanings—from geographical location to resource endowment to ethnic composition or cultural proclivity. In deference to such concerns, we occasionally focus only on countries of “Latin America,” excluding the ex-colonies of Britain, France, and Holland in the Caribbean and some mainland areas. (See appendix 1.)

For the within-region analysis of Latin America, we have constructed dummy variables about degrees of democratic governance, as follows:

- *Liberal Democracy*, which combines free and fair elections with extensive enjoyment of civil liberties),
- *Illiberal Democracy*, where elections are free but civil liberties tend to be restrained,
- *Semidemocracy*, where elections are rigged or biased and civil liberties restricted, and
- *Nondemocracy*, where neither elections nor civil liberties are free and fair (the null category).<sup>9</sup>

We employ dummy variables throughout the ensuing regression analysis. We realize that, as dichotomous observations, dummies occupy the bottom-most rung on scales of measurement. At the same time, they have one inestimable advantage: clarity of interpretation. As we hope to show, regression coefficients

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<sup>8</sup> We are fully aware of widespread debates about the validity of Freedom House ratings. We nonetheless believe that they provide appropriate indicators for this macro-level of analysis—and we note, in passing, that Freedom House scores correlate closely with Polity IV and other available measures. See Scott Mainwaring and Aníbal Pérez-Liñán, “Latin American Democratization since 1978: Democratic Transitions, Breakdowns, and Erosions,” in *The Third Wave of Democratization in Latin America: Advances and Setbacks*, ed. Frances Hagopian and Scott P. Mainwaring (Cambridge, UK: Cambridge University Press, 2005), 16-17.

<sup>9</sup> Peter H. Smith and Melissa R. Ziegler, “Liberal and Illiberal Democracy in Latin America,” paper presented at Latin American Studies Association, San Juan, Puerto Rico, March 2006; a revised version under the same title is scheduled to appear in *Latin American Politics and Society* (Spring 2008).

for dummy variables provide unusually straightforward statements about the direction and strength of statistical relationships. What we lose in precision we gain in understanding.

State capacity varies widely across countries and regions. Resource-rich societies have more chances than others of promoting public welfare—stimulating economic growth, reducing infant mortality, and promoting school attendance. All nations do not share the same starting point.

We thus need to control for level of economic development. We do this in several ways:

- The initial selection of cases—that is, of countries in the World Bank’s “middle” income brackets—constitutes a control of sorts. The richest and the poorest are excluded. Consequently, we are dealing with comparable units. To allow distinctions between the lower- and upper-middle groups, we have coded each bracket as a dummy variable (0, 1).
- We introduce GDP/capita as a continuous variable. In point of fact, annual average incomes in the World Bank’s middling strata span a broad range—from a minimum of \$301 USD in 2000 to a maximum of nearly \$16,000 (variable name: *GDPcap*).
- And to consider economic structure, as well as relative wealth, we include manufacturing as a percent of GDP as an interval variable (*Manuf%*).

Since our concern lies with differences across countries, rather than over time, we assign “fixed effects” to both the income and the manufacturing variables.<sup>10</sup> In both instances, 1990 values apply to all years from 1990 through 1997, and 2000 values apply to all years from 1998 through 2004. (See appendix 2 for descriptive statistics on interval-scale variables.)

Equipped with this information, we now proceed to test our principal hypotheses. We seek neither normative satisfaction nor intellectual titillation. We attempt to answer a straightforward question: Which hypothesis comes closest to fitting the facts?

## **Empirical Results**

We employ multiple regression for pooled time-series analysis. Our main analytical concern focuses on regression coefficients for variables for geographic region and, especially, type of political regime. For the sake of parsimony, we report our results in abbreviated, telegraphic fashion.

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<sup>10</sup> In particular, we have wanted to avoid the year-to-year effects of volatile exchange rates.

Table 1 presents results for regressions on all three dependent variables—*Growth*, *Mortality*, and *Schooling*. Controls reflect level of income (*GDPcap1990*, *GDPcap2000*) and economic structure (*Manuf%1990*, *Manuf%2000*). For this initial exercise, the key independent variables represent geographic regions: East Asia and the Pacific, Africa, Latin America and the Caribbean, and so on.

Table 1. Regional Determinants of Policy Performance, 1990-2004: Regression Coefficients

Dependent Variables	Growth	Mortality	Schooling
(N Observations)	(1,091)	(280)	(370)
Control Variables:			
GDPcap1990	-.0021**	.0007	-.0041**
GDPcap2000	.0016**	-.0072**	.0045**
Manuf%1990	-.0636	-.5848**	.1898
Manuf%2000	.0835*	-.4975**	.1107*
Analytical Variables:			
East Asia (0, 1)	-.7383	-5.2242	4.6976
Eastern Europe (0, 1)	-1.9326	-12.7074*	-1.0318
Central Asia (0, 1)	-2.4464**	17.9160	2.5004
Middle East (0, 1)	.5000	1.2581	-5.6995
Sub-Saharan Africa (0, 1)	-.3242	15.1886**	-6.7084
South Asia (0, 0)	—	—	—
Latin America & Caribbean (0, 1)	-.4801	-4.9259	2.8632
Constant:	3.9811**	73.9343**	81.5695**
R <sup>2</sup>	.0960	.5954	.2523

\*Significant at .05 level.

\*\*Significant at .01 level or better.

The results are pretty clear. Economic structure has exerted a greater impact on the provision of material benefits than has regional location. Almost all the control variables show statistically significant relationships with each of the dependent variables. Even so, the overall explanatory power of the equations varies markedly, as R-squared values rise from nearly zero for *Growth* to .60 for *Mortality* and .25 for *Schooling*.

Eastern Europe and Central Asia have exerted negative impacts on economic growth, at rates around -2 percent per year. But while Eastern Europe has exhibited unusually low rates of infant mortality (with a coefficient of -12.7), Central Asia has displayed high levels (+7.1)—though not as devastating as those found in sub-Saharan Africa (+15.2). Similarly, Africa showed a negative effect on primary school attendance (-6.7 percent).

As a region, Latin America and the Caribbean maintained a relatively low

profile. None of the coefficients is statistically significant. The association with economic growth is slightly negative (-0.5 percent per year), perhaps reflecting the impact of serial crises in Mexico, Brazil, and Argentina during the period under review. The coefficient for infant mortality is also negative (-4.9), indicating that Latin American countries outperformed their peers in this crucial social area, and positive with regard to school attendance (+2.9 percent). Such findings are suggestive but not especially powerful.

With table 2, we turn to the political realm. The universe consists of all available country-years (N=1,088) and the analytical variable is *Democracy*—whether countries were rated as “free” or not by Freedom House (1 if so, 0 if not). As before, economic development bears a powerful relationship to material well-being. Almost all the control variables display statistically significant associations with growth, mortality, and schooling, and generally in the predicted directions. The R-squared values are low for *Growth*, in keeping with previous findings, moderate for *Schooling* (.18), and very strong for *Mortality* (.53).<sup>11</sup>

Table 2. Political Determinants of Policy Performance across World Regions, 1990-2004: Regression Coefficients

Dependent Variables	Growth	Mortality	Schooling
(N Observations)	(1,088)	(277)	(369)
Control Variables:			
GDPcap1990	-.0260**	-.0042*	-.0035**
GDPcap2000	.0020**	-.0031*	.0037**
Manuf%1990	-.1090**	-.8883*	.1990**
Manuf%2000	.1069**	-.5168*	.2107
Analytical Variables:			
Democracy (0, 1)	.4206	-10.1158**	6.0896**
Nondemocracy (0, 0)	—	—	—
Constant:	3.9562**	84.2483**	77.0707*
R <sup>2</sup>	.0822	.5336	.1758

\*Significant at .05 level.

\*\*Significant at .01 level or better.

Most striking are the coefficients for *Democracy*: positive for economic growth (+.42 percent per year), negative for infant mortality (-10.1), and positive for school attendance (+6.1 percent). Consistent with widespread findings in the literature, the coefficient for *Growth* is relatively weak and

<sup>11</sup> This general configuration of R<sup>2</sup> values appears in all subsequent tables as well.

statistically insignificant. Economic expansion responds to many factors outside the purview of the political regime and, as Przeworski and his colleagues have suggested, there might be cross-cutting processes at work. In contrast, the coefficients for societal welfare are strong and statistically significant (at the .01 level), and they yield a clear interpretation: when compared with authoritarian regimes, democracies are kinder and gentler to their citizens. These findings provide strong support for existing research on the social benefits of political democracy.<sup>12</sup>

Table 3 extends this analysis by adding a regional dimension. The question is: How do democracies in Latin America and the Caribbean compare with other democracies within the peer group? Analytical variables thus now include two iterations of Democracy—country-years rated as “free” in Latin America and the Caribbean (coded as 0, 1), country-years rated as “free” in other middle-income regions (0, 1), and nondemocratic country-years (0, 0).

Table 3. Policy Performance of Political Democracies across World Regions, 1990-2004: Regression Coefficients

Dependent Variables	Growth	Mortality	Schooling
(N observations)	(1,032)	(266)	(346)
Control Variables:			
GDPcap1990	-.0024**	-.0044**	-.0037**
GDPcap2000	.0018**	-.0028	.0039**
Manuf%1990	-.0804**	-.8570**	.2661**
Manuf%2000	.0874**	-.5233**	.1337
Analytical Variables:			
Latin American and Caribbean Democracy (0, 1)	.2373	-11.8388**	8.5104**
Other Democracy (0,1)	.3569	-10.4353**	4.5804**
Nondemocracy (0, 0)	—	—	—
Constant:	3.9008**	83.8488**	76.6599**
R <sup>2</sup>	.0690	.5336	.2027

\*\*Significant at .01 level or better.

<sup>12</sup> See Thomas D. Zweifel and Patricio Navia, “Democracy, Dictatorship, and Infant Mortality,” *Journal of Democracy* 11, no. 2 (April 2000): 99-114; Navia and Zweifel, “Democracy, Dictatorship, and Infant Mortality Revisited,” *Journal of Democracy* 14, no. 3 (2003): 90-103; David A. Lake and Matthew A. Baum, “The Invisible Hand of Democracy: Political Control and the Provision of Public Services,” *Comparative Political Studies* 34, no. 6 (August 2001): 587-621; and id., “The Political Economy of Growth: Democracy and Human Capital,” *American Journal of Political Science* 47, no. 2 (April 2003): 333-347.

Once again, the control variables present significant relationships with the dependent variables. For Latin America and for other regions, the *Democracy* measures display meaningful coefficients: positive but weak for economic growth, negative and strong for infant mortality, positive and strong for school attendance. Most remarkable, perhaps, is the similarity between democratic performances in Latin America and elsewhere. They are virtually identical. Around the middle-income world, in other words, the presence of political democracy has uniform effects.

We now turn attention to Latin America itself. Table 4 displays regression results for equations, including the control variables and, for countries of the region, the dummy for *Democracy* (1 if free, 0 if not). One conspicuous result is that coefficients for the economic development measures, GDP/capita and manufacturing percent, are less statistically significant and often run in confusing or contradictory directions. This pattern may reflect the relative homogeneity of economic conditions throughout the region.

Table 4. Policy Performance of Political Democracies in Latin America and the Caribbean, 1990-2004: Regression Coefficients

Dependent Variables	Growth	Mortality	Schooling
(N Observations)	(403)	(79)	(131)
Control Variables:			
GDPcap1990	-.0011*	-.0049	-.0009
GDPcap2000	.0009*	.0001	.0012
Manuf%1990	-.1038	.5723	.3262*
Manuf%2000	.1092	-.7105	-.3082*
Analytical Variables:			
Democracy (0, 1)	.3238	-6.7641*	3.5584**
Nondemocracy (0, 0)	—	—	—
Constant:	3.2994*	49.1166	87.7477**
R <sup>2</sup>	.0228	.3854	.1827

\*Significant at .05 level.

\*\*Significant at .01 level or better.

Once again, democracy displays its virtues. The coefficient for *Growth* is weak but positive (+0.3 percent per year). The coefficient for *Mortality* is strong and negative (-6.8, significant at the .05 level). And the coefficient for *Schooling* is strong and positive (+3.6 percent, significant at the .001 level).<sup>13</sup>

<sup>13</sup> Essentially the same results obtain for an analysis of Latin America alone, excluding the Caribbean.

Our final inquiry addresses the *quality* of democratic rule. The dichotomous measure we have used thus far constitutes a rough-and-ready indicator; and, not without reason, the Freedom House evaluations have been frequently called into question. To meet such objections, we have constructed regression equations that include, as principal independent variables, distinctive categories or “degrees” of pluralistic government: *Liberal Democracy* (free and fair elections plus respect for civil liberties), *Illiberal Democracy* (free elections but with restraints on civil liberties), *Semidemocracy* (biased elections with restraints on civil liberties), and *Nondemocracy* (no meaningful elections).

Table 5. Policy Performance by Level of Political Democracy within Latin America, 1990-2004: Regression Coefficients

Dependent Variables	Growth	Mortality	Schooling
(N Observations)	(240)	(48)	(80)
Control Variables:			
GDPcap1990	-.0023*	-.0055	-.0004
GDPcap2000	.0018*	.0001	.0010
Manuf%1990	-.1576*	.8302	.3285
Manuf%2000	.1308	-.7889	-.6505*
Analytical Variables:			
Liberal Democracy	1.1157	-12.5294	.3389
Illiberal Democracy	1.1872	-.0239	-2.2475
Semidemocracy	1.1818	4.2093	2.3719
Nondemocracy	—	—	—
Constant:	3.1253	46.8197*	95.7521*
R <sup>2</sup>	.0609	.4680	.1792

\*Significant at .05 level or better.

The results are utterly remarkable. All gradations of democracy show essentially the same impact on economic growth (+1.1 to +1.2 percent). But with regard to social measures, *Liberal Democracy* clearly outperforms the others. Its coefficient for infant mortality is -12.5, compared with near-zero for *Illiberal Democracy* and +4.2 for *Semidemocracy*. The *Liberal Democracy* coefficient for *Schooling* is also positive (+0.3), while *Illiberal Democracy* shows a negative coefficient (-2.2). Paradoxically, *Semidemocracy* combines positive coefficients for both infant mortality and school attendance; this might result from the modest N for regimes within this category. But the basic implication is this: The deeper the democracy, the better the results.

**(Preliminary) Findings and (Tentative) Reflections**

Broad caveats apply to this investigation. Our units of analysis (nation-states)

are aggregate entities. Our levels of measurement are crude. We cannot account for ideological preferences, policy instruments, or leadership capability. We have substantial amounts of missing data. We examine statistical associations, not causal processes.

Even so, we have reached some meaningful conclusions. First, democratic governments have performed at least as well as authoritarian regimes in promoting economic growth, and perhaps a little bit better. At any rate, pro-growth rationalizations for dictatorial rule have no statistical basis whatsoever.

Second, democratic governments have demonstrably outperformed authoritarian regimes in the social arena, as reflected by infant mortality and school attendance. This finding utterly demolishes authoritarian credos. It was often mentioned, for example, that infant mortality declined in Chile under Pinochet—so his regime cannot have been all that bad. Maybe so, but that one anecdote does not constitute a general finding. When all is said and done, democracies have done much better in social areas than have the nondemocracies.

Third, the *quality* of democracy can have important consequences for public welfare. The more thorough the democracy, as suggested by data on Latin America, the greater the provision of basic material benefits. This relationship is dimly apparent with regard to economic growth; it is clearly apparent with regard to infant mortality and school attendance.

Such findings suggest that citizens of Latin America (and other world regions) should think twice about discarding democracy in favor of dictatorship. Material gains, if any, are likely to be fleeting. As Winston Churchill so clearly proclaimed, democracy is the worst possible form of government—“except for all the others.” The ultimate test for any society, it has been said, is the way that it treats its children. To judge from our regression coefficients, democracy nurtures its children and sends them to school. It is clearly the more beneficial form of rule.

This does not mean that popular disenchantment has no basis. Cross-regional analysis provides scant consolation to earnest citizens with disappointed hopes and broken dreams.

Their plight can be presented in technical terms. Multiple regression and other tools of social statistics uncover patterns in variations around *average* values. These are relative measures. From the standpoint of everyday citizens, however, the important concern is not the variance around the means—it is the absolute value of the means themselves. The problem with economic growth, for example, is that the mean is only 3.2, instead of 8.0 or 8.5.<sup>14</sup> The problem with infant mortality is that the average level is 30 rather than 10. The problem

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<sup>14</sup> They would also want to reduce the standard deviation—from 7, the current level, to 2 or 3.

with primary school attendance (not to mention secondary or post-secondary school enrollment) is that the average is 89 percent instead of 99 percent.

In an era of globalization and near-instant communication, in other words, Latin American citizens may not be content with results that seem positive “for middle-income countries.” They want Scandinavian, first-world, top-tier results. That is understandable. But the most effective route toward that goal appears to be political democracy, not authoritarian rule.

## Appendix 1. Countries by Region and Income Level

	Lower-Middle	Upper-Middle
East Asia and Pacific	China Fiji Indonesia Kiribati Marshall Islands Micronesia Philippines Samoa Thailand Tonga Vanuatu	American Samoa Malaysia Northern Marianas Palau
Central Asia	Armenia Azerbaijan Georgia Turkmenistan	Kazakhstan Turkey
South Asia	Bhutan Maldives Sri Lanka	
Eastern Europe and Russia	Albania Belarus Bosnia-Herzegovina Macedonia Moldova Ukraine	Bulgaria Croatia Hungary Latvia Lithuania Montenegro Poland Romania Russia Serbia Slovak Republic
Middle East and North Africa	Algeria Djibouti Egypt Iran Iraq Jordan Morocco Syria Tunisia West Bank/Gaza	Lebanon Libya Oman

	Lower-Middle	Upper-Middle
Sub-Saharan Africa	Angola Cameroon Cape Verde Congo Lesotho Namibia Swaziland	Botswana Equatorial Guinea Gabon Mauritius Mayotte Seychelles South Africa
Latin America and Caribbean	<i>Bolivia</i> <i>Colombia</i> <i>Cuba</i> <i>Dominican Republic</i> <i>Ecuador</i> <i>El Salvador</i> <i>Guatemala</i> <i>Guyana</i> <i>Honduras</i> <i>Jamaica</i> <i>Nicaragua</i> <i>Paraguay</i> <i>Peru</i> <i>Suriname</i>	<i>Argentina</i> Belize <i>Brazil</i> <i>Chile</i> <i>Costa Rica</i> Dominica Grenada <i>Mexico</i> <i>Panama</i> St. Kitts and Nevis St. Lucia St. Vincent / Grenadines <i>Uruguay</i> <i>Venezuela</i>

Note: Italics indicate countries of Latin America.

## Appendix 2. Descriptive Statistics for Key Variables

	N	Mean	sd	Min	Max
GDP/capita 90	1284	2346.1	1855.0	385.8	11581.9
GDP/capita 00	1386	2678.2	2405.0	301.4	15997.5
Manufact% 90	1149	17.2	9.9	0.7	43.5
Manufact% 00	1296	15.2	8.2	0.9	38.3
InfantMortality	396	30.7	25.4	6	154
PrimarySchool%	470	89.0	10.7	27.7	99.8
GDPgrowth%	1361	3.2	7.2	-44.9	85.9

Notes:

*Schooling (%)*. This represents the ratio of children who are enrolled in school to those who are of appropriate school age, based on the International Standard Classification of Education (ISCED) 1997. Break in series between 1997 and 1998 due to change from ISCED76 to ISCED97.

Source: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. Recent data are provisional.

*Mortality*. Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year.

Sources: Harmonized estimates of the World Health Organization, UNICEF, and the World Bank.

