DRUGS, CIVIL WAR, AND THE CONDITIONAL IMPACT OF THE ECONOMY ON DEMOCRACY

Michael Coppedge

Angel Alvarez

Lucas González

Working Paper #341 — October 2007

Michael Coppedge is associate professor in the Department of Political Science at the University of Notre Dame. He describes his interests in terms of expanding concentric circles: Venezuelan politics, Latin American party politics and democracy, democratization worldwide, and research methods in comparative politics. His articles on Latin America have appeared in *Comparative Politics, Comparative Political Studies, Party Politics*, and various books. His published work on global democratization consists of coauthored pieces on indicators of democracy and a *CPS* article with Daniel Brinks on the diffusion of democracy. On research methods, he has argued in *Comparative Politics* for the complementarity of large- and small-sample research and qualitative and quantitative methods. He serves on the editorial board of the *Journal of Politics* and coedits *APSA-CP*, the official newsletter of the APSA's Organized Section in Comparative Politics.

Angel E. Alvarez is the director of the Institute for Political Studies at the Universidad Central de Venezuela (UCV) and a PhD candidate in political science at the University of Notre Dame. He has been a political science professor at the UCV since 1982. He was an advisor for the Comisión Presidencial para la Reforma del Estado (COPRE) and an acting member of and technical advisor to the Consejo Nacional Electoral (1997–99). He has lectured at the universities of Salamanca, Ortega y Gasset, Santiago de Compostela, and Carlos III in Spain. He was a columnist for Venezuelan newspapers from 1999 to 2004, and an independent political analyst for *Latin Source* between 1999 and 2003. He is the author of books, book sections, and articles on Venezuelan politics. His most recent books are: *El Sistema Político Venezolano: Crisis y Transformaciones* (UCV, 1996), *Los Dineros de la Política* (UCV, 1997) and, coedited with José Enrique Molina, *Los Partidos Políticos Venezolanoas en el Siglo XXI* (Vadell Hermanos, 2004).

Lucas González, a PhD candidate in political science at the University of Notre Dame, is currently working on his dissertation on federalism and fiscal relations between the central government and subnational units in Argentina and Brazil. He holds an MSc in Latin American Studies (University of Oxford) and an MA in public policy (Georgetown University-UNSAM). He received a Fulbright Scholarship (2003–05) and a Chevening-British Council Scholarship (2002–03), as well as the "Presidency of the Nation" Award for the best student in political science and international relations in Argentina (1998). He was assistant editor of the newsletter of the American Political Science Association Organized Section in Comparative Politics (2005–07). He has taught at various universities in Argentina, including the Universidad Católica Argentina, Escuela Nacional de Gobierno, and Católica de Córdoba. He has coauthored two books and written articles in edited volumes and peer-reviewed journals. He worked as a researcher for the federal government of Argentina at the Institute of Public Administration and the Secretary for Strategic Planning, President's Office.

ABSTRACT

Theorizing about the influence of modernization on democracy is once again in vogue. Nevertheless, this theme faces an important obstacle: the leverage of modernization hypotheses is generally modest. Key modernization variables, especially per capita GDP, almost always explain part of the variance in democracy, but rarely more than half. Also, as one can see in certain Latin American cases, economic growth sometimes has a negative impact on democracy. This paper argues that the impact of economic growth varies from country to country for systematic, not random, reasons. Using Hierarchical Linear Modeling (HLM) in a cross-regional sample of 108 countries from 1978 to 1999, the paper shows that it is crucial to distinguish between the short-term effect of per capita GDP growth within each country and the cross-national effect of long-term growth. A distinct causal mechanism is at work at each level of analysis. More precisely, the paper identifies four factors that condition the impact of economic growth on democracy: the existing political regime, the democratic experience of each country, the frequency of civil war, and the importance of drug trafficking in the domestic economy. Although other factors probably also condition the effect of the economy on democracy and democratization, the model used in this paper explains 82 percent of the variance in the sample, which is substantially greater than what is typically found in other studies of democratization. Consequently, this paper shows that it is necessary to continue to refine hypotheses about the conditional effect of the economy in order to improve conventional explanations of variation in levels of democracy, whether within one country or in comparative perspective.

RESUMEN

Una vez más, se ha puesto en boga hipotetizar sobre la influencia de la modernización en la democracia. Sin embargo, este enfoque enfrenta un importante obstáculo. El ajuste que se obtiene al contrastar empíricamente sus hipótesis es generalmente mediocre. Las variables claves de la teoría de la modernización, especialmente el PIB per capita, casi siempre explican parte de la varianza en democracia, pero esta parte raramente llega al 50% del total. Más aun, como se evidencia en algunos casos en América Latina, el crecimiento tiene a veces un impacto negativo sobre la democracia. Este trabajo arguye que el impacto del crecimiento económico varía de país a país por razones sistemáticas y no sólo de manera aleatoria. Haciendo uso de un modelo jerárquico lineal (HLM, por sus siglas en inglés), en una muestra de 108 países de distintas regiones entre 1978 y 1999, el trabajo muestra que es crucial establecer las diferencias existentes entre el efecto a corto plazo de las variaciones del PIB per cápita en cada país y el efecto del crecimiento al largo plazo (cross-national). A cada nivel de análisis opera un mecanismo causal diferente. Dicho con más exactitud, el trabajo identifica cuatro factores condicionantes del impacto del crecimiento económico sobre la democracia: el régimen político existente, la experiencia democrática de cada país, la frecuencia de las guerras civiles y la importancia del tráfico de drogas en la economía doméstica. Aunque otros factores probablemente también condicionan el efecto de la economía sobre la democracia y la democratización, el modelo usado en este trabajo explica el 82% de la varianza en la muestra, lo cual es sustancialmente superior a lo que típicamente es encontrado en otros trabajos sobre democratización. En consecuencia, este trabajo muestra que es necesario refinar aún más las hipótesis sobre el efecto condicional de la economía a fin de mejorar las explicaciones convencionales de las variaciones en los niveles de democracia tanto en un mismo país como desde una perspectiva comparada.

Drugs, Civil War, and the Conditional Impact of the Economy on Democracy

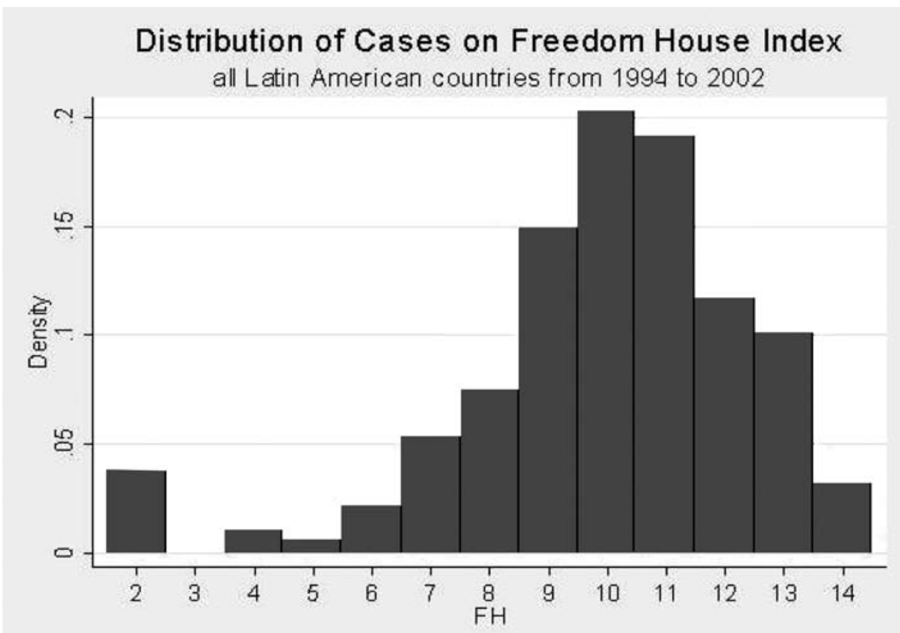
Modernization-type hypotheses are enjoying a comeback as explanations for democratization (Boix 2003; Hadenius 1992; Przeworski et al. 1996; Przeworski et al. 2000; Przeworski and Limongi 1997). However, one of the obstacles that such explanations face is the mediocre fit that is usually obtained. There is a low ratio of "signal" to "noise." Modernization variables, particularly per capita GDP, almost always explain some variance in democracy, but they rarely explain as much as half of it (Diamond 1992). This paper argues that per capita GDP can do a better job of explaining democratization if we specify the conditions under which the economy exerts a positive impact, a negative one, or something in between.

The analysis opens by identifying a puzzle about Latin American democratization: in some countries, per capita GDP has had the expected positive impact on democracy in the 1973–2002 period, but in others the impact has been negative. These Latin American cases inspire some hypotheses about the factors that may condition the impact of the economy on democracy. We then use a hierarchical linear model to test some of these hypotheses using a cross-regional set of 108 countries from 1978 to 1999.[1] Our evidence shows that 1) per capita GDP is mainly useful for explaining long-term cross-national variation in levels of democracy, 2) short-term economic growth is more useful for explaining within-country over-time variation in democracy, 3) the impact of economic growth tends to be positive for democracies but negative for non-democracies, 4) drug trafficking makes the impact of growth on democracy more negative, and 5) chronic civil war dampens the impact of growth on democratization, at least in nondemocratic countries.

A PUZZLE

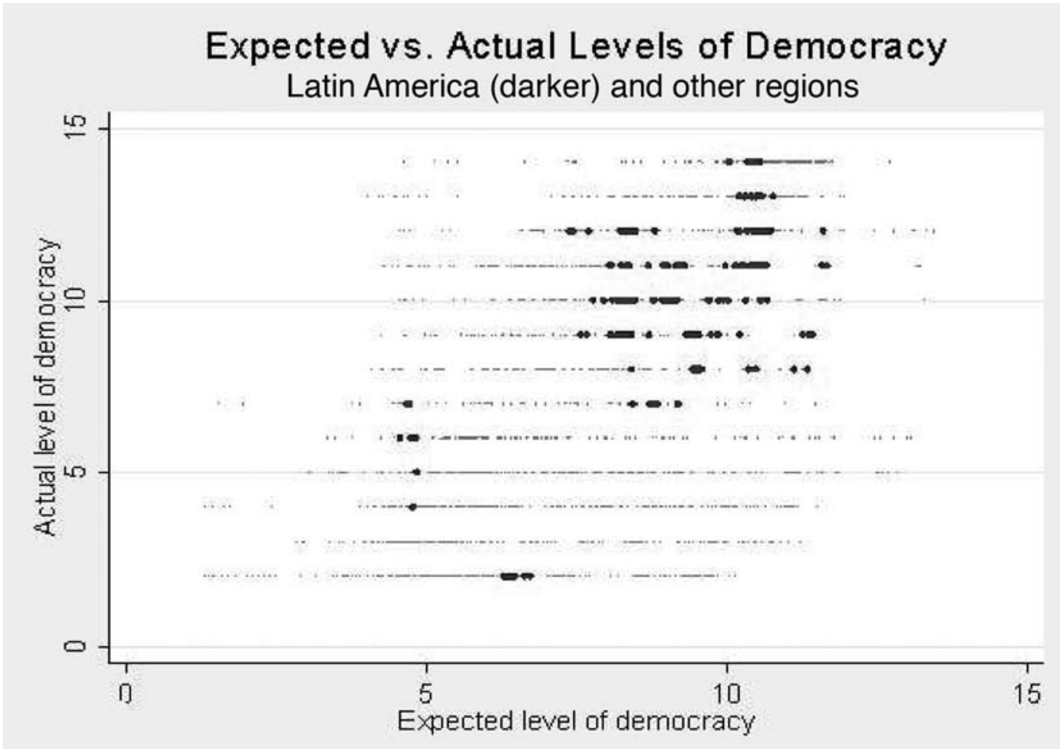
Latin American countries tend not to be among the most democratic countries in the world. If we construct a democracy index from the Freedom House indicators ranging from a least-free 2 to a most-free 14, and set a score of at least 11 as the cutoff for an adequate level of democracy (the score finally reached by Mexico in 2000 and typical of Peru before Fujimori, Venezuela before Chávez, Argentina and Bolivia in the late 1980s to early 1990s, etc.), 56 percent of the region's country-years since 1994 fell below it. Figure 1 provides more information about the distribution on this measure.

Figure 1



If there is any validity to modernization theory, this distribution should come as no surprise. Latin American countries are as democratic, on average, as we would expect middle-income countries to be: closer to full democracy than not, but rarely fully democratic. Figure 2 illustrates this point. Its vertical axis corresponds to actual Freedom House scores and its horizontal axis corresponds to the expected scores, obtained by regressing the actual scores on the log of per capita gross domestic product, the annual economic growth rate, and some regional dummies.[2] The larger points in this scatterplot mark the Latin American cases since 1994; the smaller points mark all the other country-years. Aside from Haiti and Cuba (in the lower left quadrant), Latin American countries are predicted to score approximately 10, and do score approximately 10.

Figure 2



Obviously there is a great deal of variation around the predicted and expected score of 10. The relationship between the level of economic development and degrees of democracy has never been precise enough to explain small differences in democracy. Nevertheless, the fit is good enough to account for differences between some regions (Western Europe and Latin America, for example, or Latin America and Africa). The fit is also good enough to account for the biggest differences within regions. In Latin America, the level of economic development seems to be the most important reason that Chile and Uruguay are so much more democratic than Haiti and Cuba. The theoretical reasons for such tendencies are still being debated (Boix 2003; Boix and Stokes 2003; Przeworski et al. 2000), but up to a point it does not matter which one is correct, for they would all apply to these large differences. It may be that economic development creates a middle class or a working class that, by its very nature, demands democracy. It may be that it is only in developed economies that some citizens have the education, information, free time, and organizational skills to press successfully for democracy. It may be that a wealthy society, and particularly a growing economy, creates a positive-sum game with lower stakes so that conflicts are less intense, polarization diminishes, and democratic values such as trust, tolerance, and cooperation flourish. Another possibility is that wealthy societies are more likely to have moderate political parties that are supportive of democracy (Lipset 1959). Or it could also be the case that economic prosperity has nothing to do with making countries democratic, but it does help prevent democracy from breaking down (Przeworski and Limongi 1997). All of these factors would predict that Chile and Uruguay are more democratic than Cuba and Haiti.

Nevertheless, the less extreme cross-national comparisons within the region still contain puzzles. For example, why did Mexico in 1994, with a per capita GDP of $6,364, score only an 8 on the Freedom House scale while Bolivia scored an 11 in that year, with a per capita GDP of only $1,769?[3] How could two countries with approximately the same per capita GDP, such as Venezuela in 1989 ($5,907) and Argentina in 1976 ($5,849), have such different Freedom House scores—12 and 5, respectively? Puzzles also emerge when tracking the evolution of democracy and wealth over time within a single country. Many scholars have noted the paradox that the third wave of democratization hit Latin America during the "lost decade" of the 1980s, when their economies were stagnant or contracting (Remmer 1996). For example, Argentina became democratic in 1983 during a real economic crisis (including hyperinflation) under President Alfonsín. Even more puzzling, its democracy score dropped a bit when the economy stabilized and began to grow under President Menem. Costa Rica's economic decline was brief, ending by 1984, yet its score never fell below a perfect 14 before 1993; and curiously, it slipped to 13 during a long period of modest economic growth. The Dominican Republic seems to fit the expected pattern better, becoming less democratic from 1983 to 1995, then more democratic until 2003; but statistically there is no significant relationship between its per capita GDP and its democracy scores, and in fact during all those years the regime was more democratic than any economic model would have predicted.

How are we to reconcile the general positive relationship between per capita GDP and democracy with the many specific exceptions? The most common answer is simply to accept that it is a weak and "noisy" relationship. However, this answer begs the question; we would still like to know *why* it is a weak and noisy relationship. The answer that is usually implied is that there are omitted variables—other factors that must be added to any model to produce a more complete explanation. Once the model is more fully specified, one hopes, predictions will be more accurate. If we accept this answer, then our task is to search for these omitted variables and add them to the model. We should then be able to solve many of the remaining puzzles, like the ones in the previous paragraph.

Although we agree that there are omitted variables that should be added to the model, we think there is another way to reconcile the exceptions with the rule that is different in a subtle yet critically important way. We suspect that per capita GDP could explain more about democratization if we took into account conditions that alter the impact of the economy on democracy. What our models have been estimating so far is a generic impact of the economy on democracy, regardless of conditions that could alter that relationship. But in the messier real world, under some conditions the economy could have a very powerful positive impact on democracy; under other conditions, the impact may be positive but weak; still other conditions could nullify any relationship whatsoever; and perhaps there are conditions that would render the relationship negative: the better the economy, the worse the democracy, and vice versa. If these conditional relationships were real and we ignored them when estimating the impact of the economy on democracy, then we would expect to find some kind of weak, noisy relationship—as we do. The fact that the average relationship is weak and noisy does not prove that the impact of the economy on democracy is conditional, but it is consistent with this possibility.

One way to get an idea of how likely it is that the impact of economic performance is conditional is to obtain a separate regression estimate for each country. (Fortunately, the Freedom House time series is now long enough—thirty years—to make regression a reasonable way to analyze these data.) If the coefficients of our two independent variables—the log of per capita GDP and the growth of per capita GDP—are approximately the same from country to country, then there is no need to consider conditional relationships further. If the coefficients are different, then conditional relationships are worth further exploration. Table 1 reports the results, which could hardly be more disparate. For per capita GDP (logged), eight of the twenty countries have significant positive coefficients, six have coefficients that are indistinguishable from zero, and six have significant negative coefficients. Furthermore, the absolute magnitudes of the coefficients range from the small single digits to more than twenty. For economic growth rates, most of the coefficients are not significant, but the five significant ones range from -36 to +34.

Table 1: The Impact of Economic Performance on Freedom House Scores by Country 1973–2002

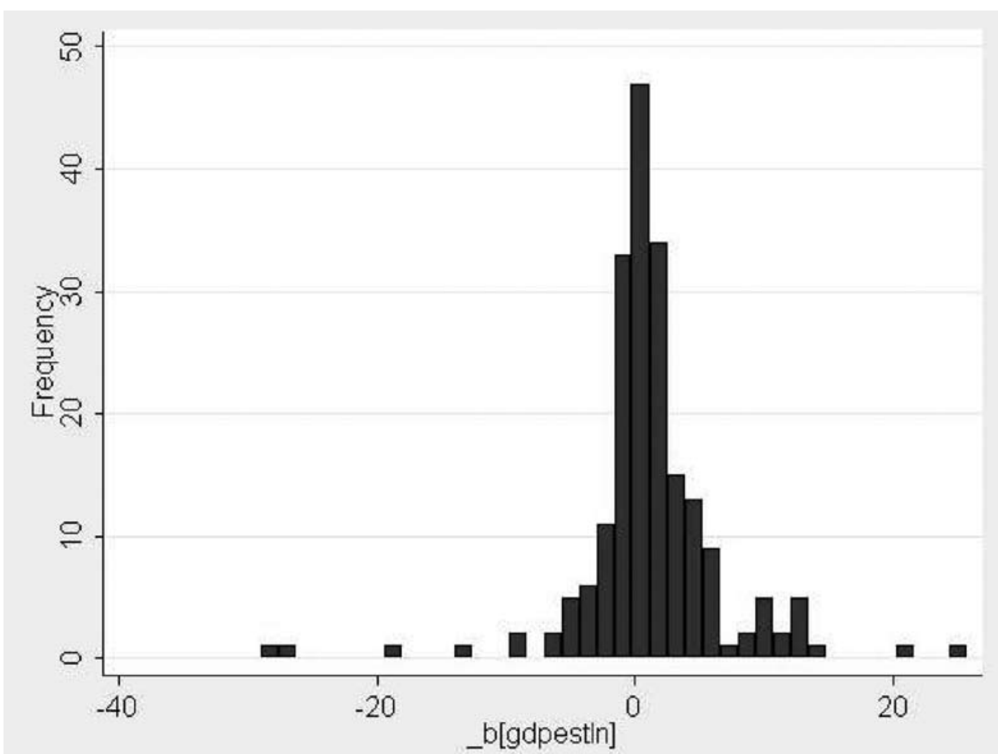
	ln (per capita GDP)		Change in per capita GDP		R^2
Country	Coefficient	Std. Err.	Coefficient	Std. Err.	
Panama	**24.3**	4.1	2.9	8.3	.585
Uruguay	**15.9**	4.3	-4.9	10.6	.337
Chile	**11.6**	1.2	0.7	4.9	.808
Ecuador	**10.9**	4.3	**-35.6**	6.8	.644
Brazil	**10.2**	2.7	-9.2	5.5	.419
Venezuela	**9.4**	2.7	-4.3	5.8	.306
Mexico	**4.3**	1.3	3.4	3.5	.334
El Salvador	4.2	2.4	**27.2**	5.8	.547
Honduras	3.3	6.2	-16.4	8.6	.120
Dominican Republic	2.1	1.3	-6.2	4.5	.105
Cuba	**2.0**	0.6	**4.6**	1.8	.405
Paraguay	1.8	3	-6.0	5.4	.053
Peru	0.9	4.1	-6.4	7.4	.026
Haiti	**-3.1**	1.2	9.1	5.7	.230
Costa Rica	**-4.0**	0.7	1.1	1.7	.564
Nicaragua	**-5.3**	1.2	**7.3**	3.5	.430
Colombia	**-8.5**	0.8	6.2	5.8	.813
Bolivia	-8.7	6.8	-13.3	17.3	.096
Guatemala	**-11.3**	4.3	**34.4**	8.6	.411
Argentina	**-21.7**	6.9	15.3	9.6	.271

A separate regression was run for each country. N = 30 for each one.
Coefficients that are significant at $p<.05$ or better are in bold.

Of course, it is possible that there is no real puzzle here. If one randomly drew small samples of country-years from a large pooled dataset and used them to estimate a coefficient, it would be normal (literally) to expect them to vary—perhaps by a lot—around a global average. And in fact, in a global sample, we do find that these estimated coefficients of the impact of per capita GDP on the Freedom House index vary widely, but normally, around a nevertheless statistically significant positive global mean (Figure 3). However, these small samples were drawn by country, anything but randomly. If they were random, the mean of their coefficients should approximate the coefficient for the whole population. But the mean of these estimates is 1.23, with a standard deviation of 5.64, which gives us no confidence that the true coefficient is not zero. The pooled-sample regression coefficient (without controls) is 2.06, with a standard error of 0.04 and therefore a high level of significance. Statistically, there seems to be something systematic going on.

Figure 3

Distribution of Coefficient Estimates for the Impact of ln(per capita GDP) on Freedom House Index; 199 countries, 1973-2004



Some Hypotheses Inspired by Latin American Cases

The first step toward solving this puzzle is to realize how different in nature a global coefficient from a pooled sample is from the coefficients obtained by running a separate time-series regression for each country. It is not just a difference in sample size. The global coefficient is based on the large variations in both income and democracy that are found across countries; the country coefficients are based only on the much smaller variations in income and democracy that any country experiences over the span of two to three decades. The global coefficient therefore captures primarily cross-national relationships, i.e., the level of development, consistent with modernization theory; country coefficients pick up only the impact of short-term economic growth on democracy, taking the level of economic development for granted.

The puzzle, then, is really a puzzle about whether we should expect the impact of per capita GDP to be the same in the short run and in the long run. The default assumption is that the impact is uniform: i.e., that if a country's per capita GDP increases from $2000 to $3000 in five years, its expected level of democracy would be the same as that of a country that had been at $3000 for years, and that of a country that had recently fallen to $3000 from $6000. The rapid growth or decline would have no impact beyond that of the current level of per capita GDP. There may be lags, and there is certainly random variation around the expected impact, but it would be only the level that matters, not how the country gets there, according to this line of thought. This has been the implicit assumption behind all quantitative analyses of democratization that specify per capita GDP but not growth rates as predictors. It is an appropriate assumption for all modernization-style arguments that emphasize long-term trends. These include some of Lipset's arguments: that economic development creates a middle class and a working class that demands democracy, and that development gives citizens the education and other resources that create demand for democracy and help it function well (Lipset 1959). It is also an appropriate assumption for the competing hypothesis of Przeworski et al.

that higher income merely helps democracies survive once other forces establish them (Przeworski et al. 2000).

But there are reasons to believe that short-term economic growth may have its own distinct impact, apart from taking a country to a certain level of per capita GDP. Indeed, there is a well-developed strand of research that gives primary attention to short-term economic performance (Gasiorowski 1995; Haggard and Kaufman 1995; Linz and Stepan 1978; Remmer 1996), and some of the studies that specify per capita GDP also model the impact of growth (Przeworski et al. 2000; Robinson forthcoming).[4] One of the basic lessons of this approach is that the impact of growth is conditional: it depends on whether the growth takes place in a democracy or in a non-democracy, because economic growth tends to strengthen the regime that achieves it, and economic decline tends to undermine the regime that suffers from it. Therefore, while a growing economy could help a democracy become more democratic, it would help a nondemocratic regime survive, even when government leaders move in the direction of less democracy. In contrast, economic decline could undermine a democratic regime; but it could also undermine a nondemocratic regime, making a transition to democracy more likely.[5]

The hypothesized causal mechanisms behind these relationships are various. Economic growth could help legitimate the incumbent government and, by extension in a more diffuse way, the regime in which it acts. Growth erodes opposition to the chief executive and (if relevant) the governing party and buttresses their control of the state. Growth creates a positive-sum game, making citizens more content with their lot and less likely to engage in potentially regime-threatening conflict with other citizens. Growth depoliticizes the public. Through all of these means, economic growth should be expected to favor democracy in democratic regimes and non-democracy in nondemocratic regimes. Chile since 1990 is a good example of the impact in democracies. Although there was substantial support for the authoritarian alternative in the 1989 referendum that spurred Chile's transition to democracy, the outstanding economic growth achieved by a series of democratic governments has depolarized and depoliticized Chilean society, weakening support for a return to authoritarianism. Contemporary Venezuela (rated 9 by Freedom House in 2002) is a good example of the impact in non-democracies. In 2004, the Venezuelan economy grew a phenomenal 17 percent (partly due to recovery from the previous year's general strike and partly due to soaring oil prices), and the abundant government revenues from this growth helped President Hugo Chávez buy enough support through clientelistic programs to survive a recall referendum in August. In the wake of that vote, the opposition became demoralized, the government tightened its control of the press, the courts, and the electoral authorities, and opposition parties boycotted the December 2005 subnational elections, advancing Venezuela's transition to a one-party regime.

Economic *decline* should have the opposite impact in both types of regimes. A shrinking economy should erode support for the incumbent government and, by extension, for the regime in which it acts. Decline fosters opposition to the chief executive and any governing party and undermines their control of the state. Economic decline creates a zero- or negative-sum game, making citizens less content and more likely to engage in potentially regime-threatening conflict. It politicizes and polarizes the public. Therefore, decline should be expected to make democracies less democratic and non-democracies more democratic. For example, the erosion of democracy in Venezuela from 1989 to 1999 has often been attributed to the declining standard of living after 1978, and it most observers take it for granted that economic decline played an important role in the breakdowns of democracy in Chile and Uruguay in 1973, Brazil in 1964, and many other cases. But in the same way, economic decline has been used to help explain the end of authoritarian regimes, and therefore transitions to democracy, in Peru in 1978–80, Argentina in 1983, Uruguay in 1985, Nicaragua in 1990, and many other instances.

However, as recent trends in Colombia and Guatemala suggest, the impact of growth and decline are probably conditional on other factors as well. The best way to begin the search for clues is to understand the nature of the underperformance that each country has suffered.

COLOMBIA

Colombia's secular economic growth has coincided with a secular deterioration of its democratic regime. The regime first dropped below 11 in 1989, when presidential candidate Luis Carlos Galán was assassinated by the Medellín drug cartel. The situation improved temporarily in 1991, when a constituent assembly adopted a new constitution and gave an effective voice to the former guerrilla movement, M-19. However, in 1994 Ernesto Samper became president. His government lived under a cloud due to credible accusations that he had accepted campaign contributions from the Cali drug cartel. Samper narrowly escaped impeachment by, among other tactics, resorting to vote-buying in Congress. Around the same time, Colombia became a center for coca growing rather than merely cocaine transshipment. The drug war escalated and became intertwined with guerrilla wars that had been simmering since the 1940s. Guerrillas profited from taxing the cocaine traffickers in exchange for protection. The government encouraged paramilitary bands to attack the guerrillas, but leftist politicians, labor organizers, and human rights activists often ended up among the victims, and the attackers enjoyed impunity. In 1999, the government accepted more than $1 billion in US aid as part of "Plan Colombia," which contributed to an escalation of the violence. Deaths from political violence reached tens of thousands per year. Current President Alvaro Uribe (2002–present) may eventually help the situation by building up the army enough to defeat the holdout Fuerzas Armadas Revolucionarias de Colombia (FARC, or Revolutionary Armed Forces of Colombia) guerrilla movement militarily, but in the meantime the deaths, and associated human rights violations, continue. The low democracy ratings for Colombia reflect the human rights violations that have accompanied the war on drugs and the violent struggle between government and guerrillas.

In the 1970s and 1980s, the engine driving Colombia's economic growth was drug trafficking—first marijuana, most profitably cocaine, and most recently heroin. In a survey of research on the impact of drug trafficking on the Colombian economy, Francisco Thoumi estimates that proceeds from drugs amounted to seven to ten percent of GNP in the early 1980s and generated real estate booms in the 1970s and 1980s (Thoumi 2002: 110). The net economic impact *on a year-to-year basis* has been positive (Medina 1992).[6] This is especially true when one considers the multiplier effects on construction, real estate, and the service sector. Divested of its moral opprobrium, cocaine is an extremely successful export commodity that transfers billions of dollars every year from the US and Western Europe into the Colombian economy. Of course, there is little doubt that Colombians would be better off socially, politically, and perhaps even economically without the negative externalities of the drug trade—violence, corruption, and overvalued currency, which discourage investment and therefore hurt economic performance. Economists who conclude that the net economic impact of drugs has been negative are taking these consequences into account. But once the drug trade took off in Colombia, especially once drug trafficking became a source of financing for the civil war, these externalities became a given and short-term economic performance became tied to drugs. On a year-to-year basis, which is what our data measure, the economy grows when drug sales boom and shrinks when they fall. Politically, the more the drug cartels, guerrillas, and paramilitaries profit, the more democracy suffers; and if their resources dried up, democracy would have a better chance. This is all we are claiming: that when short-term economic performance depends on drug trafficking or something like it, there is a negative association between democracy and per capita GDP in the short term.

This kind of economic growth had a negative impact on democracy in three ways. First, it undermined state capacity by strengthening challengers to state authority. Colombia was already notorious for having such a weak state that the national government had no authority over large swaths of territory. Insurgent guerrilla armies have occupied some towns and valleys since the 1930s, sometimes becoming strong enough to constitute a "state within a state" in their territories. In later decades, the drug cartels took advantage of Colombia's weak state capacity to establish their organized crime empires in the areas around Medellín and Cali. These organizations, which had already gained a foothold due to the weak state, became stronger as the drug trade flourished. The guerrillas forced local police to resign; set up their own temporary revolutionary governments; "taxed" large landholders in exchange for "protection" (i.e., they extorted funds by threatening to destroy property); and eventually they "taxed" the drug traffickers, too, and there found a lucrative source of revenue. After all, the drug traffickers were not paying taxes to the government in Bogotá. Thus the drug traffickers and guerrillas found a way to help each other out, and all of this further weakened the state's capacity to enforce its laws throughout Colombia territory. At the most extreme point, from 1998 to 2001, the FARC occupied an officially recognized "demilitarized zone," which the Colombian army was not permitted to enter, that was the size of the Netherlands.[7]

Second, the existence of these violent drug traffickers and drug-financed guerrillas provoked an anti-democratic reaction. Paramilitary death squads sprang up to kill the guerrillas and their suspected allies. These organizations, the most powerful of which is now the United Self-Defense Groups of Colombia (Autodefensas Unidas de Colombia, or AUC), did not limit their attacks to known guerrilla fighters. Rather, they also killed leftist politicians, human rights activists, union organizers, and innocent peasants. Worse yet, they carried out these acts with some degree of government support. At the very least, Colombian governments have committed the sin of omission by failing to arrest and prosecute systematically the paramilitaries for murder. But there is also good evidence that soldiers and police participate in these activities either on their time off or as part of their official duties and that the government has given paramilitary groups weapons, intelligence, and other support (Human Rights Watch 1992: 15).

Third, the growth of violence altered the political environment in ways that hurt democracy. Colombia citizens have been conditioned to care more about personal security than the rule of law or even economic performance. They supported a 1968 law that authorized private citizens to arm themselves in self-defense against guerrillas. (This was the legal basis for the paramilitaries until the 1991 constitution.) In 1978, they elected President Julio César Turbay Ayala, who used extreme repression in an effort to defeat the guerrillas, but succeeded only in deepening the conflict. When the peace process of the 1990s failed to end the FARC's insurgency, they turned to current President Alvaro Uribe, whose main priority is building up the armed forces to defeat the guerrillas militarily. His strategy seems to be succeeding and may be good for the country in the long run; an approval rating of over 70 percent suggests that Colombians are supportive. But in the short run we should not ignore the damage that violence does to basic human rights and the quality of democracy.

GUATEMALA

Freedom House has not rated Guatemala sufficiently democratic (11) since 1973 (and it was a very dubious rating then). In the early 1980s, it had possibly the most brutal dictatorship in the region, one that killed approximately 200,000 citizens and displaced even more from their villages and forced men into "civilian defense patrols" (*patrullas de autodefensa civil*, or PACs) that executed the government's repressive policies. Some outward improvement occurred with the election of civilian President Vinicio Cerezo in 1985. However, Cerezo was the target of two failed coup attempts in 1988 and 1989, and he never succeeded in subordinating the armed forces to civilian control. Cerezo did manage to hand over power peacefully to his elected successor, Jorge Serrano, in 1991, but Serrano was forced to resign two years later after a failed attempt to shut down Congress. By 1996, some improvements had taken place: new elections were held, a series of peace accords with the URNG (Unidad Revolucionaria Nacional Guatemalteca, or Guatemalan National Revolutionary Unity) guerrilla movement was signed, and each new civilian president made efforts to fight corruption and increase civilian control of the military. These efforts continue today. However, Guatemala is still a country in which the large indigenous population does not enjoy full citizenship, corruption is rampant, the armed forces sponsor death squads, and labor leaders, human rights activists, and opposition candidates are assassinated with impunity. For example, the reformist Bishop Gerardi was murdered in 1998, and an important witness to his death was murdered in 2001; twenty-seven opposition candidates were killed in the run-up to the 2003 elections. Moreover, the military has become increasingly involved in narcotrafficking; in early 2004, the US government "decertified" Guatemala because of its lack of effort against cocaine transshipment. Even when Guatemala did better than expected (1986–89, under Cerezo), it rated only a 10; since 1991, it has continuously been less democratic than its level of economic development would have predicted.

The explanation offered for Colombia also accounts for the negative relationship between the economy and democracy in Guatemala, but with two differences. First, although we see similar guerrillas and death squads, the drug trafficking developed later and was controlled mostly by the military. Second, the process moved in both directions. From 1974 to 1981, the economy grew but the regime became increasingly authoritarian. In this case, the gains from growth strengthened the conservative agricultural and business elite that sponsored paramilitary groups fighting the guerrillas. The regime was initially, and remained, authoritarian, so it was less responsive to public opinion or economic performance. Under the leadership of authoritarian presidents, most notoriously Gen. Efraín Ríos Montt (1981–82), the government pulled out all the stops to eradicate the URNG guerrilla movement and anyone who remotely sympathized with it, resulting in an appalling loss of life.

When the Latin American debt crisis hit in 1982, the Guatemalan economy began to contract, and the recession lasted until 1986. Yet every year from 1983 to 1986, the country's Freedom House rating improved, culminating in the election of civilian President Vinicio Cerezo. This trend can be interpreted as a case of economic decline undermining support for a nondemocratic government, leading to its replacement by a more democratic one. In this case, the support that mattered was business support. In order to deal with the debt crisis, Guatemalans needed debt rescheduling, reduction, or forgiveness, all of which tended to require good relations with the United States; and the US wanted to see progress toward democracy, so the Guatemalan elite arranged for the election of Cerezo. However, the Cerezo government inherited a very authoritarian state elite, especially the military establishment, so his was never a fully democratic government.

Economic growth returned in 1986–1992, but the democracy scores fell. Once again, growth had strengthened the business and military elite and made them less dependent on the civilian government leaders, so the democratic mask was dropped. Intimidation, assassinations, and general repression continued, and there was little the elected president could do to stop it. In the pit of the next recession (1992–1995), President Serrano attempted a Fujimori-style presidential coup, but he failed. His successor, Ramiro de León Carpio, initiated an ambitious peace process during these bad economic times and signed accords on several reforms in 1994 and 1995, although the Freedom House score did not reflect the improvement until the final accord was signed in 1996.

Since 1995, the relationship between economic performance and democracy in Guatemala appears to have become positive for the first time. The economy grew and the regime liberalized by two points (with a one-point setback in 2001–02). However, this is the exception that proves the rule, because by the mid-1990s, the conditions that had created a negative relationship had been eliminated. Specifically, the URNG had negotiated and signed most of the peace accords in 1994 and 1995, and demobilized after signing the final one in 1996. With the thirty-six-year civil war ended, Guatemalans could begin to pay more attention to economic issues and less to the violence; the justification for the paramilitary organizations had disappeared, undermining their base of support; and civilian leaders gained some legitimacy at the expense of the military, which was also losing legitimacy due to corruption and drug-trafficking scandals. Under these conditions, we should expect the positive relationship to persist.

VENEZUELA

Venezuela was more democratic than one would have expected from the 1970s until 1992—the year of two failed coup attempts, one led by current President Hugo Chávez Frías. From 1992 until 1999, Freedom House considered Venezuela less democratic, but this was the level of democracy that one would have expected in a country at Venezuela's level of economic development. In 1999, however, Venezuela sank to an 8 on the Freedom House scale and has remained below its expected range ever since. Nineteen ninety-nine was the year in which the newly elected President Chávez summoned a constituent assembly that dissolved the old Congress and Supreme Court and replaced them with new bodies stacked with his loyalists. The Chávez government has held several elections without banning political parties or closing down the vigorous opposition-controlled media, and the large and frequent protest demonstrations show that considerable freedom of organization and expression still exists. Nevertheless, the subdemocratic rating is justified because a few opposition leaders have been detained, journalists have received death threats, the electoral council has set laws and its own regulations aside to favor the government, some protesters have been tortured or killed, and the courts have refused to hold the government and its allies accountable.

The relationship between economic performance and democracy was positive all along in Venezuela. This is what the theory would predict, due to the differences between Venezuela and the other two underperformers. There has been no significant guerrilla insurgency there since 1967, no paramilitary organization in reaction, and much less involvement in drug trafficking. Venezuela has a stronger state than either Colombia or Guatemala, although it is a grossly inefficient one. This is because, unlike Colombia, where wealth flows to the drug cartels, and unlike Guatemala, where wealth flows to the agricultural and business elite, in Venezuela most of the wealth flows directly to the state through the state-owned oil company, Petróleos de Venezuela, S.A. (PDVSA).

A positive relationship explains democratic *deterioration* in Venezuela because the economy declined terribly over a period of twenty-five years. Venezuela's per capita GDP in 2003 was down to 1958 levels. Economic decline weakened state capacity, tilted some state actors (specifically military conspirators, including Hugo Chávez) against political democracy, weakened the elected government's control over unelected state elites, and altered the political environment to one in which voters were willing to elect a candidate whose commitment to political democracy was questionable.

Although the relationship is positive, as expected, it is significantly *more* positive than the global estimate. In the Freedom House score model with a global sample, the coefficient of the log of per capita GDP for all countries is 1.97; for the Venezuelan sample, it is 9.4, nearly 5 times as large. This disparity also demands an explanation. We think that the strength of political parties was critical in Venezuela. When support for the two leading parties, Acción Democrática (AD, or Democratic Action) and COPEI was strong, the democratic regime was strong; when citizens began to abstain from voting, there were riots (1989) and coup attempts (1992); and when voters practically stopped voting for AD and COPEI, they opened up a political vacuum, which Hugo Chávez soon filled. Under his leadership, the decline of Venezuelan democracy became a case of a breakdown, but it was preceded by years of deterioration.

But why would party decline link economic decline to regime stability more rigidly than one would normally expect? Answering this question requires some further theoretical elaboration. We have identified several conditions that make this rigid linkage a logical necessity. First, voters knew which parties had been in charge. Second, voters believed that the parties' actions caused the economic decline. Third, they identified the parties with the regime itself, so that when the parties lost support, they took the regime down with them. Whenever these conditions exist (and the state is reasonably strong and there are not overriding concerns such as civil war, etc.), we would expect the impact of an economic decline to be similarly magnified.[8]

* * *

The nature of the democratic deficits varies in these three countries. In Colombia and Guatemala, the problem concerns violence and human rights violations that are intimately connected with guerrilla movements, death squads, and the drug trade. All of these are compounded by corruption and weak civilian control of the military. In Venezuela, there are few guerrillas or very active death squads (although both have started to appear recently). Instead, democracy suffers in Venezuela due to the lack of independence from the chief executive of the courts, the police, and the electoral council, which has created impunity when government supporters commit abuses and makes it increasingly unlikely that the opposition will have a fair chance to win the next election.

These cases suggest that the impact of economic growth on democracy can depend on whether non-state actors who oppose democracy, or whose existence is antithetical to democracy, are strengthened by economic growth. In Colombia, drug traffickers are the actors who meet this criterion. Drug mafias corrupt judges and elected officials; they carry out kidnappings and assassinations, and when corrupted officials protect them, the government shares responsibility for human rights violations. Furthermore, the existence of violent organized crime often provokes illiberal reactions by the government, such as domestic spying, violations of due process, and human rights abuses. Where drug trafficking is important, it can bring in billions of dollars of hard currency, and because it boosts construction and retail sales, its contribution to economic growth can be very important. But this kind of economic growth should be associated with a move away from democracy (other things being equal), in both democratic and nondemocratic regimes.

These cases also suggest that the impact of growth and decline are also conditional on the degree to which growth promotes state consolidation in nondemocratic regimes.[9] The fewer challenges there are to state authority, the fewer impediments there are to autocratic control. Challenges, such as an insurgency or civil war, would not be expected to promote democracy per se, but they are causes or reflections of state weakness that should make the character of the regime less autocratic than it would otherwise be. In some cases there is a positive association between insurgency and economic growth. In Colombia, this is because the same state weakness that allowed drug trafficking to flourish also allowed guerrilla movements to thrive, and because some of the profits from drug trafficking have financed guerrilla movements (via "protection" taxes, extortion, kidnapping, bank robberies, and alliances between guerrillas and drug mafias). In such cases, any negative association between economic growth and democracy in nondemocratic regimes should be dampened by the impact of state weakness on the character of the regime.

These reflections suggest some possible reasons for the coefficients in Table 1 and Figure 3 to range between large positive and large negative numbers. Although we continue to expect per capita GDP to have a positive impact cross-nationally, within countries we would expect economic growth to have the most positive impact in democracies without much drug trafficking, and a less positive impact in democracies with drug trafficking. We would also expect the impact of growth to be negative in non-democracies: more negative where the state is unchallenged, more negative where there is drug trafficking, and less negative where there are significant challenges to state authority.

A GLOBAL TEST

To the extent that these hypotheses go beyond the comparative literature, they were inspired by a few Latin American cases. In order to avoid the trap of falsely "testing" our hypotheses against the same evidence that inspired them, we test them with more extensive evidence, drawn from 108 countries from every world region in the period 1978–1999. In order to distinguish between the long-term cross-national effects of economic performance and its short-term, within-case effects, we turn to hierarchical linear modeling (HLM). This enables us to model the impact of the economy on two levels simultaneously. Our first-level model examines the impact of cumulative economic growth on democracy within countries, while a second-level model handles the impact of per capita GDP on cross-national variation in democracy. HLM also enables us to test our other hypotheses about whether the impact of economic growth is a function of the regime context, the importance of drug trafficking, and challenges to state authority.

Our dependent variable is the Freedom House index already described. The independent variables in the first-level model are economic growth in democracies, economic growth in non-democracies, and a democracy dummy variable. Their effects are estimated using the full set of country-years. The equation is

$$FH = \alpha_0 + \alpha_1 * gc5ge12 + \alpha_2 * gc5lt12 + \epsilon$$

where *FH* is the 2–14 Freedom House index. *Gc5ge12* is the cumulative change in per capita GDP over 5 years if a country had a Freedom House score greater than or equal to 12 in the previous year; otherwise its value is zero.[10] *Gc5lt12* is the cumulative change in per capita GDP over 5 years if a country had a Freedom House score less than 12 in the previous year; otherwise its value is zero.

In HLM, the level-2 model uses cross-national data to explain the size of the intercept (α_0) and the coefficients (α_1 and α_2) in the level-1 model. Therefore, a second equation is estimated for each of these parameters. The equation for the intercept is set up to explain each country's average Freedom House score, i.e., the purely cross-national variation. Our intercept model is

$\alpha_0 = \beta_0 + \beta_{01}$*$ave_i$[ln(per capita GDP)]$+ \beta_{02}$*democracy frequency $+ \beta_{0j}$ *(j regions) $+ r_0$

The natural log of per capita GDP (averaged over all the years the country is in the sample) is specified in this intercept model because we believe its robust significance in models of democracy for the past forty-five years has been due to its usefulness in accounting for cross-national variation. We also specify here the proportion of sample years that a country had a Freedom House score of at least 12 to prevent the level-1 growth coefficients from being biased.[11] In addition, this model includes thirteen dummy variables for various geographic regions.[12] In effect, we are controlling for the average *FH* score in each region as a rough proxy for many omitted variables that are correlated with geography, such as culture, religion, and other historical legacies. We do not attribute substantive importance to them, but they help us model the intercept as well as possible so that we can get more rigorous estimates of the impact of the other variables. Finally, the intercept model also includes an error term, which allows each country's intercept to deviate from the predicted average for reasons that are assumed to be random.

The level-2 models for the growth coefficients α_1 and α_2 are identical, although we expect their coefficients to differ. They are

$\alpha_1 = \beta_1 + \beta_{11}$*civil war frequency $+ \beta_{12}$*Drug $+ \beta_{13}$*democracy frequency

$\alpha_2 = \beta_2 + \beta_{21}$*civil war frequency $+ \beta_{22}$*Drug $+ \beta_{23}$*democracy frequency

The civil war variable is the proportion of sample years in which each country experienced civil war, derived from Nicholas Sambanis's classification of civil wars (Sambanis 2004).[13] The *Drug* variable is a 5-level classification of the economic relevance of drug trafficking, ranging from 1 (no relevance) to 5 (high relevance).[14] These models also include the *democracy frequency* (ranging from 0 to 1 with a mean of 0.30) to control for experience with democracy. This control also ensures that we can distinguish the components of the growth coefficients that are due to drugs and civil war from the component that is due to the tier of democracy that is being modeled. These two models contain no error term.

RESULTS

Table 2 reports the HLM estimates. As expected, average logged per capita GDP has a very significant positive impact on national averages of Freedom House scores, but this merely confirms what was already well known. What are more interesting are the economic growth coefficients and their determinants. In democracies, economic growth tends to have a significant positive impact on democracy; in non-democracies, it tends to have a negative impact. How positive or how negative an impact is, however, is conditional on the frequency of democracy and civil war and the significance of drug trafficking. Democracy frequency and drug trafficking have significant negative impacts on the economic growth coefficient for both democracies and non-democracies; civil war has a significant positive impact on the growth coefficient in non-democracies, but no significant impact in democracies.

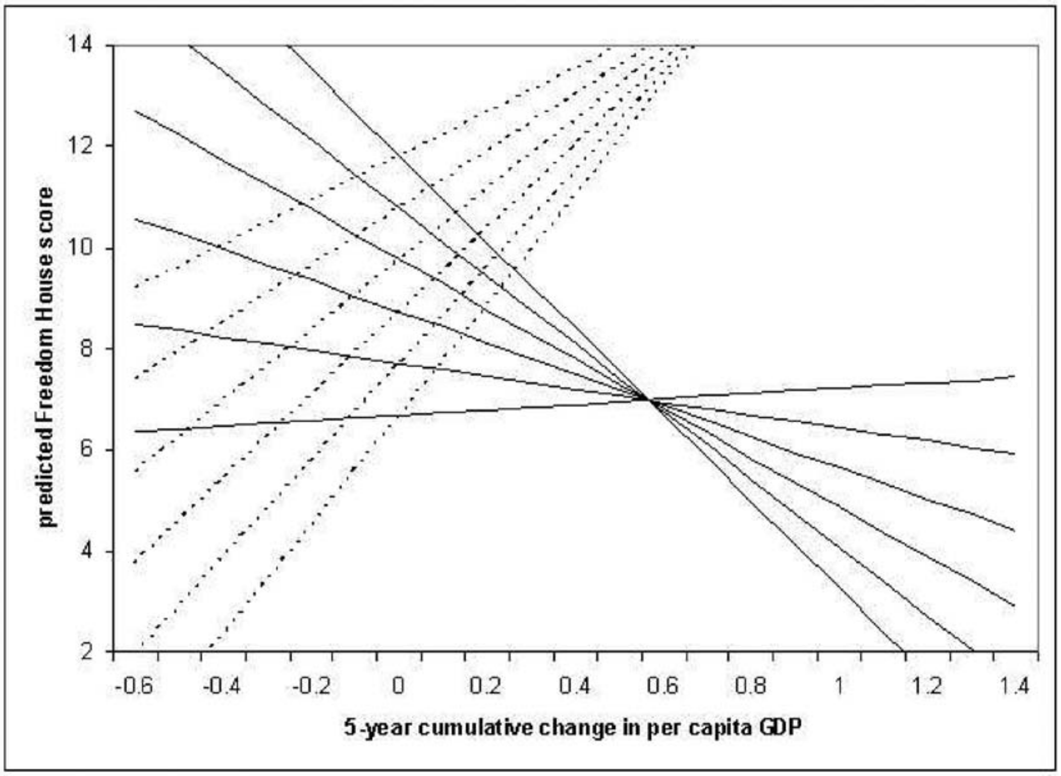
Table 2: Hierarchical Linear Model Estimates

Dependent variable is the Freedom House index. Level 1 variables are headings, level 2 variables are indented.

Variable	Coefficient	standard error	T-ratio	d.f.	p-value
Intercept	-5.23	2.42	-2.16	92	.033
average of ln (per capita GDP)	1.49	0.31	4.84	92	.000
democracy frequency	5.12	0.80	6.44	92	.000
13 region dummies	estimates omitted; available on request				
5-year cumulative economic growth in democracies	14.19	3.39	4.19	1731	.000
democracy frequency	-6.52	3.14	-2.08	1731	.037
civil war frequency	1.99	5.13	0.39	1731	.698
drug trafficking	-3.32	0.96	-3.45	1731	.001
5-year cumulative economic growth in non-democracies	1.47	1.25	1.17	1731	.241
democracy frequency	-9.08	1.62	-5.61	1731	.000
civil war frequency	2.64	1.09	2.42	1731	.016
drug trafficking	-0.93	0.45	-2.05	1731	.040

$sigma^2$=3.113, tau=2.190
likelihood function=-0.00359
R^2=.823*
*R^2 was estimated by regressing the Freedom House index on fitted values from this model.

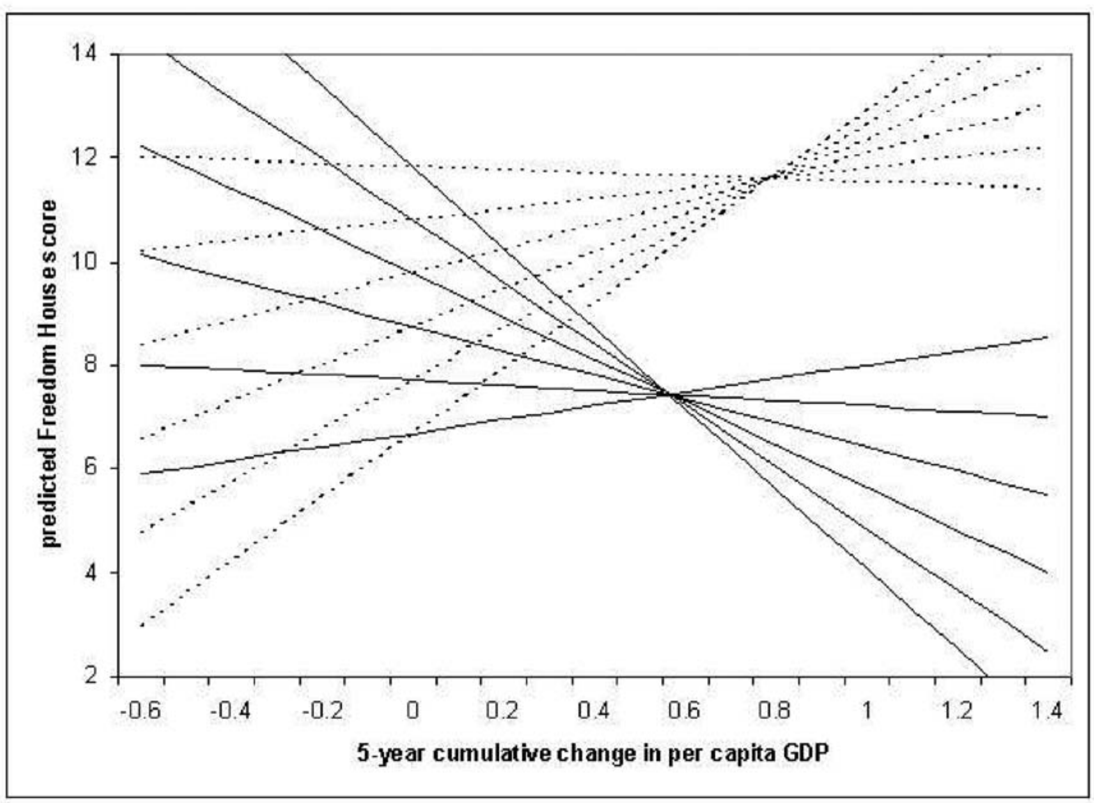
Figure 4:
Impact of Economic Growth Conditional on Regime and Democratic Experience, Assuming No Civil War and Little Drug Trafficking



Solid lines are for non-democracies, dashed lines for democracies. Each set fans out for democratic frequences of 0, .2, .4, .6, .8, and 1.0.

These complex relationships are best illustrated graphically. Figure 4 simulates the predicted slopes for the impact of cumulative five-year growth on the Freedom House index, assuming an average per capita GDP of about $2,980, no civil war, and low economic importance of drug trafficking. In this figure and those to follow, the solid lines correspond to non-democratic regimes and the dashed lines correspond to democratic regimes. Each set of slopes fans out to show the impact of the frequency of democracy on the impact of economic growth. All the slopes are positive for the democracies, but the slope is steepest for countries that have never been democratic and flattest for countries that are always democratic. (The lines correspond to democracy frequencies of 0, .2, .4, .6, .8, and 1.0). Thus, economic growth promotes further democratization of democracies, especially in countries that have less experience with democracy. The opposite is true for non-democracies, where almost all the slopes are negative. In these situations, the slope is most steeply negative for the countries that have always been democratic and flattest for the countries that have never been democratic. This supports the conclusion that economic growth tends to make non-democratic countries even less democratic and economic decline tends to promote democratization, and that these tendencies are most pronounced in the countries that have the most experience with democracy. In fact, according to these estimates, growth has no significant impact in countries with little or no experience with democracy.

Figure 5:
Impact of Economic Growth Conditional on Regime and Democratic Experience, Assuming Constant Civil War and Some Drug Trafficking

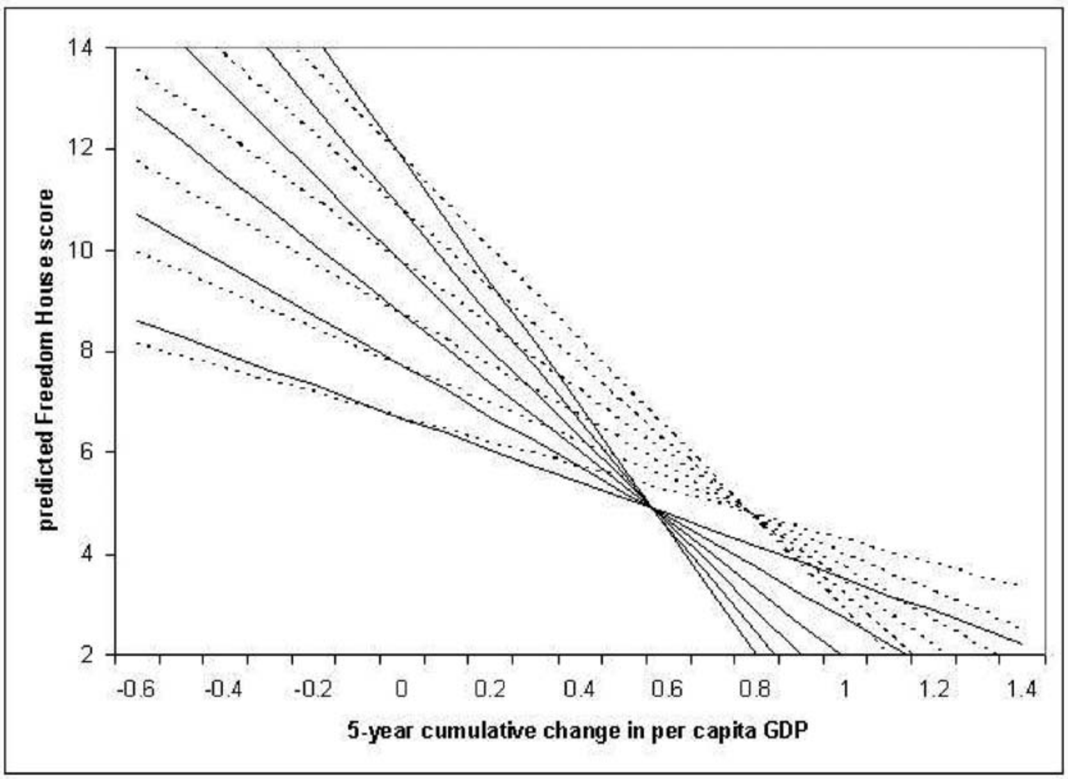


Solid lines are for non-democracies, dashed lines for democracies. Each set fans out for democratic frequences of 0, .2, .4, .6, .8, and 1.0.

Civil war and drug trafficking alter this picture significantly. Figure 5 uses the same model to predict the growth coefficients when there is significant drug trafficking

(3 on the 5-point index) and a hypothetical country is experiencing chronic civil war. The slopes for non-democracies change very little because the drug trafficking coefficient is small (-.93) and countered by the positive coefficient for civil war. But the slopes are dramatically different for democracies, mainly due to the much larger coefficient for drug trafficking (-3.32). In this scenario, economic growth still has a quite positive impact in countries with little democratic experience, but it no longer has a significant positive impact in the countries that have always been democratic.

Figure 6:
Impact of Economic Growth Conditional on Regime and Democratic Experience, Assuming No Civil War and Maximum Drug Trafficking



Solid lines are for non-democracies, dashed lines for democracies. Each set fans out for democratic frequences of 0, .2, .4, .6, .8, and 1.0.

Figure 6 displays the worst-case scenario: the maximum economic relevance of drug trafficking, with no civil war. Here it makes little difference whether economic growth (or decline) takes place in the context of democracy or not: either way, growth undermines democracy and decline promotes it. This is the strongest confirmation of our theoretical expectations for nondemocratic regimes. It is a somewhat unexpected outcome for democracies, however, because we did not expect economic growth would ever have a negative impact. Our prediction was off because we underestimated the negative consequences of a high level of drug trafficking for democracy. Apparently, if drug trafficking reaches severe levels and the economy continues to grow (probably due to the multiplier effects of the drug economy), then democracy can be significantly undermined. One cannot but think of Colombia as a close approximation of this scenario. On the bright side, however, in both regime categories this model predicts that economic decline is powerfully associated with change toward greater democracy.

CONCLUSION

This paper provides some partial solutions to the puzzle posed at the beginning. The impact of the economy on democracy does vary from country to country for systematic reasons, not solely due to random variation. We have shown that it is crucial to distinguish between the long-term cross-national impact of per capita GDP and the impact of short-term changes in per capita GDP within each country. There is a different logic at work at these different levels of analysis; they involve distinct causal mechanisms.

Furthermore, we have identified four factors that condition the impact of growth on democratization: the regime context, the country's experience with democracy, the frequency of civil war, and the importance of drug trafficking to the economy. These four factors interact in complex and sometimes surprising ways. We doubt that these are the only factors that condition the impact of economic growth on democratization. Other research suggests that dependence on oil and other primary commodity exports should be important (Ross 2001), and it seems likely that religion, historical legacies, and other factors matter as well. Our model is only a first step toward a fuller specification of the complex multilevel relationships that determine democratization. Nevertheless, we are encouraged that a few basic hypotheses inspired by close examination of a few Latin American cases turned out to have general empirical support in a much larger sample.

We end by calling attention to the fact that this model, incomplete as it is, explains 82 percent of the Freedom House variance in our sample—a much better fit than is typically found in quantitative studies of democratization. This demonstrates that we need not be content with the low ratio of signal to noise that has characterized modernization-type models of democratization to date. By refining our hypotheses in the light of detailed case knowledge and by adopting quantitative methods that are appropriate for testing these complex hypotheses, we should be able to explain much more than we have, even in large and diverse samples.

ENDNOTES

[1] In the final version we expect to expand this sample to many more countries, from 1973 to 2004.

[2] The sample for this estimate consists of approximately 200 countries from 1973 to 1996 (to 2002 for the Latin American cases). The estimate is FH = -7.66 + 1.97*ln (GDP per capita) +.83*Growth + .99*South America dummy + 1.76*Central America dummy; N = 4165, R^2 = .319.

[3] Most per capita GDP and economic growth figures used in this paper are from the Penn World Table 6.1, using 1985 dollars. Figures for years beyond 1999 were chained forward using World Bank growth rates.

[4] There is also a school of formal theorizing about regime transitions that focuses exclusively on economic actors' expectations about relatively short-term economic performance (Acemoglu and Robinson 2001; Boix 2003; Feng and Zak 1999; Zak and Feng 2003). These theories, however, assume that powerful actors' regime preferences depend on their *prospective* evaluations of the economic performance of different regimes, rather than on their *retrospective* evaluations of the performance of actual regimes. For this reason this body of theory is not relevant for the analysis conducted in this paper.

[5] Although, as has been pointed out, breakdowns of authoritarian regimes can lead to other authoritarian regimes rather than to democracy.

[6] The alternative position is that the violence, corruption, and overvalued currency associated with narcotrafficking discourage investment and therefore hurt economic performance. If we could compare the Colombian economy with drugs to a hypothetical Colombian economy without drugs, we would agree with this position. But the negative externalities of the drug trade have been a constant feature of Colombia for decades. If one takes this as a given, it is hard to view narcotrafficking as anything but a growth sector.

[7] "Colombian lawmakers urge rethinking peace process with leftist rebels," *Christian Science Monitor* (October 3, 2001).

[8] For elaboration on this explanation, see Coppedge (2005).

[9] The relationship between state consolidation and democracy should be different in democratic regimes. To be a consolidated democracy (one with a very low probability of breaking down), a country must also have a consolidated state (Linz and Stepan 1996). That is, all relevant actors must accept the authority of the state and refrain from actions that challenge

state authority, such as armed insurgencies or attempts at secession. However, this is a claim about the survival of democracy, not about levels of democracy. O'Donnell has argued that high-quality democracy requires a democratic state—one that effectively guarantees the full citizenship rights of all (O'Donnell 2002). Although a certain degree of state strength is necessary for a state to behave democratically, states can be strong without being democratic (Singapore, for example). Therefore, we would not expect democracies with strong states necessarily to have a higher quality of democracy than democracies with weak states.

[10] We used a cutoff of 12, rather than the 11 used earlier in this paper, because a threshold of 12 yielded the best F-statistic in preliminary models. We also tried cumulative change in per capita GDP over 1, 2, 3, 4, 5, and 6 years, and every combination of cumulative lags and democracy thresholds because there is no a priori reason to prefer one over the others. However, different thresholds yield very similar results.

[11] Because *gc5ge12* is cumulative growth interacted with a dummy for high values on the dependent variable, it will necessarily have a positive coefficient without this correction. And because *gc5lt12* is cumulative growth interacted with lower values on the dependent variable, it will necessarily have a negative coefficient without this correction. Specifying the democracy frequency in the intercept model allows us to interpret the *gc5ge12* coefficient as the impact of growth in democracies, controlling for each country's experience with democracy, and to interpret the *gc5lt12* coefficient as the impact of growth in non-democracies, controlling for each country's experience with democracy. Graphically, this can be visualized as allowing growth for each frequency of democracy to have its own intercept, rather than forcing all these regression lines through the global intercept.

[12] The regions included for the estimates reported here are South America, Central America, North Africa, Middle East, former Soviet Union, Gulf states, South Asia, Sub-Saharan Africa, Southeast Asia, East Asia, Southern Europe, Southern Africa, and Eastern Europe.

[13] In an earlier model, the annual Civil War variable (Sambanis's *atwarns*) had no significant impact at level 1. Sambanis's data are archived by the *Journal of Conflict Resolution* at http://jcr.sagepub.com/cgi/content/full/48/6/814/DC1.

[14] Lucas González coded this variable using information from the December 2003 CIA *World Factbook*, as compiled by NationMaster at http://www.nationmaster.com/graph-T/cri_ill_dru.

REFERENCES

Acemoglu, Daron , and James A. Robinson. 2001. A Theory of Political Transitions. *The American Economic Review* 91 (4):938–63.

Boix, Carles. 2003. *Democracy and Redistribution*. New York: Cambridge University Press.

Boix, Carles, and Susan C. Stokes. 2003. Endogenous Democratization. *World Politics* 55 (4):517–549.

Coppedge, Michael. 2005. Explaining Democratic Deterioration in Venezuela Through Nested Inference. In *Advances and Setbacks in the Third Wave of Democracy in Latin America*, edited by Frances Hagopian, and Scott Mainwaring. Cambridge: Cambridge University Press, 289–316.

Diamond, Larry. 1992. Economic Development and Democracy Reconsidered. In *Reexamining Democracy*, edited by Gary Marks, and Larry Diamond. Newbury Park: SAGE, 93–139.

Feng, Yi, and Paul J. Zak. 1999. The Determinants of Democratic Transitions. *Journal of Conflict Resolution* 43 (2):162–77.

Gasiorowski, Mark J. 1995. Economic Crisis and Political Regime Change: An Event-History Analysis. *American Political Science Review* 89 (4):882–97.

Hadenius, Axel. 1992. *Democracy and Development*. Cambridge: Cambridge University Press.

Haggard, Stephan, and Robert R. Kaufman. 1995. *The Political Economy of Democratic Transitions*. Princeton: Princeton University Press.

Human Rights Watch. 1992. *Political Murder and Reform in Colombia: The Violence Continues*. New York: Human Rights Watch.

Linz, Juan J., and Alfred Stepan. 1978. *The Breakdown of Democratic Regimes*. Baltimore: Johns Hopkins University Press.

Linz, Juan J., and Alfred Stepan. 1996. *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*. Baltimore: Johns Hopkins University Press.

Lipset, Seymour Martin. 1959. Some Social Requisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review* 53 (1):69–105.

Medina, Medófilo. 1992. Violence and Economic Development, 1945–1950 and 1985–1990. In *Violence in Colombia: The Contemporary Crisis in Historical Perspective*, edited by C. Bergquist, R. Peñaranda and G. Sánchez. Wilmington, DE: Scholarly Resources, 155–166.

O'Donnell, Guillermo. 2002. Human Development, Human Rights and Democracy. Paper read at the conference "Calidad de la democracia y desarrollo humano en América Latina," February 1–2, 2002, Heredia, Costa Rica.

Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 1996. What Makes Democracies Endure? *Journal of Democracy* 7 (1):39–55.

Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*. Cambridge: Cambridge University Press.

Przeworski, Adam, and Fernando Limongi. 1997. Modernization: Theories and Facts. *World Politics* 49 (2):155–83.

Remmer, Karen L. 1996. The Sustainability of Political Democracy: Lessons from South America. *Comparative Political Studies* 29 (6):611–34.

Robinson, James A. Forthcoming. Economic Development and Democracy: A Perspective on Recent Research. *Annual Review of Political Science*.

Ross, Michael L. 2001. Does Oil Hinder Democracy? *World Politics* 53 (3):325–61.

Sambanis, Nicholas. 2004. What Is Civil War? Conceptual and Empirical Complexities of an Operational Definition. *Journal of Conflict Resolution* 48 (6):814–58.

Thoumi, Francisco E. 2002. Illegal Drugs in Colombia: From Illegal Economic Boom to Social Crisis. *Annals of the American Academy of Political and Social Sciences* (582):102–16.

Zak, Paul J., and Yi Feng. 2003. A Dynamic Theory of the Transition to Democracy. *Journal of Economic Behavior and Organization* 52 (1):1–25.