

Presidential Success and the World Economy

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Economic voting is a widely accepted regularity in the political science literature, yet most work on the subject either assumes that economic performance is a direct result of policy making or, more recently, argues that voters are able to identify when this is not the case. Our article challenges these claims by showing that, in a large subset of Latin American countries, both presidential popularity and prospects of reelection strongly depend on factors unambiguously exogenous to presidents' policy choices. These findings advance the literature on assignment of responsibility for economic performance and pose important implications for democratic accountability.

Carlos Andrés Pérez governed oil-rich Venezuela for the first time between 1974 and 1979, during an unprecedented oil boom. A decade after leaving the presidency with high approval ratings, Pérez won another term on the promise of reviving the “good old days.” His second government, however, coincided with the lowest oil prices in modern history, and the president could not live up to his promise. After mass protests and two coup attempts, Pérez was forced out of office before finishing his term. Even though the president could not set oil prices, Venezuelans neither adjusted their expectations in the face of a rough economic scenario in the early 1990s nor did they discount the impressive performance delivered in the 1970s.

Dependence on the prices of commodities—such as oil—is not the only characteristic that exposes Latin American economies to international conditions beyond governments' control. When the US Federal Reserve Bank sharply raised interest rates to contain inflation in the late 1970s, previously abundant capital inflows to the region dried up, governments faced extreme duress, and countries entered a decade-long crisis. Most military regimes still in power collapsed; presidents governing through the hard times were extremely unpopular and had a dismal record electing their successors. In contrast, when international interest rates reached their lowest

point in recent history in the early 1990s, capital flowed once again into Latin America in search of higher returns. The accumulation of massive international reserves allowed governments throughout the region to adopt exchange-rate based stabilization plans, putting an end to long-lasting inflationary crises.¹ Popular support for incumbents was such that numerous presidents spearheaded constitutional changes to allow for immediate reelection; indeed, many were reelected. Voters neither discounted the fact that international conditions beyond the presidents' control were very favorable, nor that inflation was brought under control in most of the region at roughly the same point in time.

To some extent, these narratives corroborate the standard accounts of economic voting, which at least since Kramer (1971), have established a positive correlation between economic outcomes and incumbent support. What they also suggest, however, is that voters may not always recognize situations in which economic performance is largely determined by factors beyond government control. In this article, we focus on this latter proposition and examine whether and to what extent the political success of Latin American presidents is influenced by the state of the world economy. This is a straightforward empirical question that has far-reaching theoretical implications for our understanding of how voters

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1. Krugman (1995, 28), for instance, argues that both the reversal of Latin American governments toward neoliberal policies and the improvement in investor sentiment that occurred in the early 1990s were the results of external factors, among them “low interest rates in the advanced countries, which encouraged investors to look again at opportunities in the Third World.”

assign responsibility for economic outcomes, extract information about governments' competence from economic performance, and ultimately hold (or fail to hold) leaders accountable.

Latin America offers an excellent venue for this research. The fact that countries in the region share institutional features—a presidential system with strong executives and relatively weak parties competing in mostly multiparty systems—and a democratic history that is shorter than that of Western Europe but longer than most other emerging countries considerably reduces variation that could affect voters' capacity to assign responsibility for economic outcomes (Powell and Whitten 1993). The region is also attractive because it is composed of two subsets of countries with distinct modes of insertion into the world economy. We develop a theoretically grounded indicator that captures economic shocks affecting only one of these subsets (i.e., “low-savings–commodity-exporting” countries), leveraging this intraregional economic variation to hypothesize that it predicts presidential electoral success for this group and not the other. Our indicator is based on commodity prices and international interest rates and therefore exogenous to the influence of any Latin American president. This exogeneity allows us to employ a fairly simple research design and make bolder claims of causal inference than is usual in observational research.

Our results corroborate the insights from the opening anecdotes. We show that in low-savings–commodity-exporting countries of Latin America, **voters reward incumbents who rule when international interest rates are low and commodity prices are high and sanction them when the opposite happens.** The fact that presidents' success is largely predictable by features of the world economy implies that voters ignore the impact of exogenous shocks on domestic economic outcomes.² The contrast between the misattribution we find in much of Latin America and previous results from advanced democracies suggests that the limits of voters' ability to extract competence information from economic outcomes still need to be developed theoretically and tested empirically.

Our results have considerable normative implications. Finding that punishment and reward are unrelated to economic **policy making implies that voters neither sanction nor reward performance appropriately (Ferejohn 1986),** which means they do not discount international economic conditions when making prospective evaluations of electoral options

(Ashworth 2012; Fearon 1999). Our findings are even more consequential considering that it is precisely in countries such as the ones we examine (in which political systems are **inchoate** and citizens generally less partisan than in developed democracies; Mainwaring and Scully 1995) **that retrospective economic voting has been identified as the main mechanism to ensure democratic accountability (Stokes 2001).**

We first turn to the relevant literature and our contribution to its advancement. Next, we address the question of why and how commodity prices and international interest rates determine economic performance in Latin America. We then introduce our empirical research design, and the two subsequent sections examine the extent to which exogenous changes in the international economic outlook affect incumbent reelection and presidential popularity rates in the two subsets of Latin American countries. We conclude with a summary of the results and a discussion of their normative implications.

ASSIGNING RESPONSIBILITY FOR ECONOMIC PERFORMANCE

Voters' capacity to evaluate and sanction elected officials is a central topic in the study of democracy. This debate has been traditionally anchored by two radically different viewpoints. The Michigan school asserts voters' **dearth** of political acumen and lack of a coherent ideological structure (Campbell et al. 1960; Converse 1969). In contrast, the retrospective voting literature (Canes-Wrone, Herron, and Shotts 2001; Fearon 1999; Ferejohn 1986; Torsten, Roland, and Tabellini 1997) posits that, by using information at hand and heuristic shortcuts from like-minded citizens and parties, voters are capable of sanctioning and selecting the most competent and honest leaders. As Healy and Malhotra (2013) argue, recent research suggests that real voters occupy a “middle ground” where they sometimes, but not always, make mistakes when observing economic outcomes, assigning responsibility for them, and deciding to punish or reward incumbents accordingly. **These mistakes, however, only matter as long as they distort the incentives for good policy making.**

Scholarly work has progressively focused on establishing the conditions under which the economic vote can actually function as a mechanism for improving democratic accountability. **The literature on clarity of responsibility proposes that economic voting is more likely to promote accountability the more that citizens can identify the party responsible for economic conditions (Powell and Whitten 1993).** In the particular case of presidential systems, scholars have explored how electoral laws (Benton 2005) and separation of powers (Johnson and Schwindt-Bayer 2009; Samuels 2004) affect voters' capacity to attribute responsibility and to hold politicians ac-

2. Voters might be aware of this impact but choose not to act on it. Future work will distinguish between these two alternatives, but for the purpose of this article, both mechanisms lead to the same observable outcomes.

countable; the conclusion is that executives are subject to relatively greater sanctioning than legislators (Carlin and Singh 2015; Samuels 2004).

More directly relevant to our analysis, the increasing levels of economic internationalization motivated another strand of the literature to investigate the conditions that allow voters to punish and reward governments exclusively for economic outcomes they can control or influence. For this to happen, voters should be able to identify (and discount) exogenous components of their country's economic performance. Alesina and Rosenthal (1995) offered a theoretical foundation for this by modeling economic growth as a function of a natural rate plus unanticipated shocks that are caused either by incumbents' competence or by an exogenous element. In this model, voters cannot directly identify the components of economic shocks. However, they know the distribution of possible exogenous shocks and can therefore discount them and correctly assess incumbent competence.

Duch and Stevenson (2008) elaborated on the classic model by stressing that both elected and nonelected decision makers influence the domestic economy. Thus, the voters' conundrum is to identify and distinguish competency shocks (those associated with elected officials) from everything else that can be considered exogenous shocks. In countries where nonelected decision makers have relatively large influence over economic outcomes, the observed variance of exogenous shocks is substantially larger than the variance of the competency shock. In these settings, voters should not evaluate their governments based on the state of the economy, a proposition that finds support in a sample of European countries. Importantly for us, while Alesina and Rosenthal assume that voters know the distribution of exogenous shocks, Duch and Stevenson suggest that they learn it by "observing global economic outcomes" (2008, 150). So even when the competency shock is substantial, voters can only extract the information necessary to reward or punish leaders by observing economic performance over time and comparing it to the performance of other countries.

The logic that voters need to engage in comparisons over time and across jurisdictions in order to extract competency signals resonates with several other recent studies. Hellwig and Samuels (2007), for instance, find that greater exposure to trade and capital flows weakens economic voting in a large sample of countries. Alcañiz and Hellwig (2011) show that economic integration is also associated with an increased propensity to blame nonelected agents (such as the IMF) for economic performance in Latin America. Ebeid and Rodden (2005) demonstrated that the connection between macroeconomic performance and incumbent governor success is weak in states in the United States where the economy is based on natural resources and farming but is strong else-

where in the country. Finally, Kayser and Peress (2012) show that voters mostly punish and reward governments based on their country's relative economic performance, which serves as a proxy for government competence. Based on data from the United Kingdom, Kayser and Peress further contend that the media may play an important role in enabling this process.

The fact that most empirical studies on this topic have been conducted on European nations becomes quite relevant when one considers that extracting a competency signal from economic performance requires a comparison of outcomes across countries and over time. The exposure of European citizens to information about neighboring economies is probably not typical. The process of regional integration in Europe is unique and has deep historical roots; economic interdependence has been high for a longer period of time than in any other region, domestic markets have been integrated for decades, citizens of the European Union move freely within its borders, and Eurozone countries share a single currency and a central bank. As such, it is reasonable to argue that Europeans' capacity and willingness to benchmark across borders is most likely higher than that of citizens of most (if not all) other regions in the world.

Voters not exposed to such levels of economic integration and with less access to information about global economic outcomes are less likely to benchmark their country's economic performance and therefore to punish and reward incumbents for factors they cannot control. Our article tests this hypothesis in Latin America, and contributes to a more general understanding of the conditions under which voters can distinguish competence from chance in their assessment of governments' performance. In contrast to Europe, most countries in Latin America experienced inward-looking development models during much of the twentieth century, and the region still displays very limited levels of economic or political integration. Citizens' access to information is generally low, and as a result of these factors, exposure to news about other economies is limited at best.³ In such a scenario, voters are less likely to benchmark economic performance and thus to distinguish competence from chance when assessing government's management of the economy.

3. Average circulation of daily newspapers in the region is only about 54 per 1,000 people, compared to 289 in the United Kingdom, 267 in Germany, and 313 in the Netherlands ("Total average circulation per 1,000 inhabitants," UIS Data Centre and UNESCO Institute for Statistics, available at <http://data.un.org/>) (accessed March 15, 2015). Internet penetration in Latin American countries stands, on average, at 48% of the population whereas in the European Union this figure is 75%, and reaches 90% in some Western European countries ("Internet users per 100 inhabitants," World Development Indicators, available at <http://databank.worldbank.org>) (accessed March 15, 2015).

We adopt a simple research design to test this hypothesis, one that benefits from the fact that the economics literature has long established the centrality of a few exogenous factors on Latin America's economic performance. Rather than using a measure of domestic economic performance relative to other countries as the main independent variable (as was done in Kayser and Peress [2012] and Leigh [2009]), we develop a theoretically grounded indicator of the state of the world economy as it affects our countries of interest. We employ this indicator first to predict presidential reelection, and then we subsequently assess its impact on popularity. If, as we hypothesize, voters do not discount exogenous factors when evaluating presidents, we should find strong results. Null results, in contrast, would indicate that Latin American voters behave similarly to their European counterparts.

EXOGENOUS DETERMINANTS OF ECONOMIC PERFORMANCE

A vast literature in economics has shown that Latin American countries generally do well when international interest rates are low and commodity prices are high, and are hurt when the opposite happens (Gavin, Hausmann, and Leiderman 1995; Izquierdo, Romero, and Talvi 2008; Maxfield 1998).⁴ Many countries in the region are commodity exporters and therefore price takers in the international trade markets. This makes them vulnerable to price cycles, which lead to dramatic fluctuations in exports earnings. In periods when commodity prices are low, countries face economic hardship. In contrast, when commodity prices are high, export revenues soar and boost economic performance.⁵ The impact of international interest rates is less straightforward. They matter because countries with low savings depend on foreign inflows of capital to foster investment and economic growth. Yet transnational flows of capital to emerging economies are largely driven by international costs of capital that, for all practical purposes, are determined by fluctuations in US interest rates. When rates are low, international liquidity

increases, and capital is more likely to flow to emerging economies in search of better returns. Conversely, higher rates prompt an exit of international capital to safer havens (Calvo, Leiderman, and Reinhart 1996; Santiso 2003).

In order to capture the conditions of the world economy facing Latin American countries, we created a "good economic times" (GET) index that combines commodity prices and US interest rates into a one-dimensional summary indicator.⁶ The GET index is measured in a unitless normalized scale, but it has the intuitive property that higher values represent "good times" and lower values represent "bad times" for economies in the region. Although there is some loss of information in combining the two variables into a single index, we justify our decision by its parsimony and by the fact that we are theoretically more interested in capturing variation in the international conditions (represented by the combination of both variables) than in the effects of commodity prices or international interest rates per se.

Figure 1 shows the behavior of the monthly GET index and its components over the past 30 years, a period in which it varied from -1.7 in 1982 to just over 3 in 2011. This figure is a cogent summary of the economic conditions facing numerous Latin American economies. The increase in US interest rates in 1979 precipitated the debt crisis that ravaged the region and, coupled with extremely low commodity prices in the 1980s, produced a "lost decade." In the early 1990s, lower US interest rates prompted a boom of private capital inflows that helped improve economic conditions, which worsened again with the Russian and Asian crises at the end of the decade. In the 2000s, rising commodity prices combined with even lower interest rates to fuel a period of unprecedented wealth creation. In this context, the "great recession" was no more than a ripple in a region that was shielded from the crisis by high commodity prices and further decreases in US interest rates.

Commodity prices and international interest rates, however, are not equally important for all Latin American economies. Their effects are contingent on a country's mode of insertion into the world economy. Countries for which commodities make up a large share of total exports, for instance, are more exposed to variations in international prices. Similarly, countries that necessitate greater inflows of foreign capital are more exposed to shifts in international interest

4. Malan and Bonelli (1977), for instance, argued that the Brazilian "economic miracle" of the early 1970s had depended heavily on "an exceptional and elusively temporary international situation" (21) that had been channeled through "two dimensions, one related to commodity trade and the other to net inflows of foreign capital" (24). At the time such flows were mostly foreign direct investment; since then, however, portfolio flows have increased considerably and become much more relevant to countries' balance of payments, particularly in the short term.

5. Latin America's dependence on commodity exports has been at the center of economic thinking about the region for decades. Dependency theorists, for instance, were concerned both with price volatility and the (then seemingly secular) declining terms of trade, for which the natural remedy consisted of inward growth policies that reduced countries' exposure to "unequal exchange" conditions (Prebisch 1949; Singer 1950).

6. GET is the result of a principal components decomposition monthly values of the US 10 Year Treasury Constant Maturity Rate—provided by the Federal Reserve Bank of Saint Louis (FRED)—and UNCTAD's aggregate "free market commodity prices" index. GET accounts for 77% of the variance in the original data and each of the two components has a communality (h^2) of 0.64. In the supplemental information we discuss alternative renderings of the index.

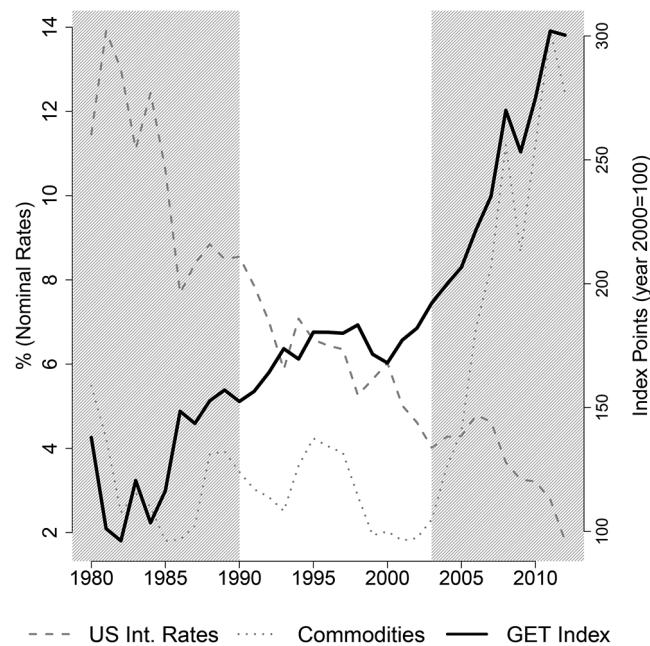


Figure 1. Good economic times index (GET) and its constituent components. The figure shows the evolution of GET and its two constituent components (US interest rates expressed in percentages and commodity price index expressed in index points) over three periods of interest that correspond roughly to the 1980s, 1990s, and 2000s, and which are discussed in more detail in the next section.

rates. These concepts can be captured by objective indicators. The first we measure in a straightforward manner by the value of commodity exports divided by the sum of merchandise and service exports for each country.⁷ For the second, there are several possible indicators, but we employed the value of yearly debt service obligations divided by the total value of exports, which is a frequently used solvency indicator.⁸

Figure 2 shows the values of both indicators for all Latin American countries. Countries in the lower-left quadrant should theoretically not be influenced by GET. In contrast, the further up and to the right in the graph that a country is located, the greater the influence we would expect GET to have on that country's economy. Almost all South American countries plus Nicaragua clearly fall in the latter situation, while most Central American countries and Mexico lie in the former. Paraguay, Honduras, and, to a lesser degree, Guatemala occupy a more ambiguous intermediate position. The first is extremely dependent on commodities but not subject to financial flows. The last two are slightly more subject to international financial flows but less dependent on commodities. We adopted a restrictive definition and considered only the countries in the shaded area of

the figure as "low-savings-commodity-exporting" (LSCE), while the remaining countries comprise the "comparison group."⁹

Table 1 strengthens the case for this classification by showing that GET affects domestic economic indicators in the LSCE sample but not in the comparison group.¹⁰ It reports estimates of how GET affects economic growth, unemployment, inflation, and combinations thereof—such as the "economic discomfort" or "misery" index proposed by Okun (1971) and a modified version developed by Hanke (2014).¹¹ For each of these domestic economic indicators, we estimated one ordinary least-squares (OLS) regression on a pooled set of all country/year observations that included country fixed effects, the lagged dependent variable, and an interaction between GET and an indicator for whether the country is in the LSCE sample. The effect of GET is always statistically significant and in the expected direction in the LSCE sample; no such effect is ever found in the comparison group. The difference between the effects of GET in each group of countries is statistically significant for all but one of the indicators we examined.

Considering the differences between the two groups of countries, and our hypothesis that voters do not discount exogenous factors when evaluating incumbents, we expect to find that in countries where GET affects the economy, it also affects presidential performance. In the next section we discuss how we test this hypothesis.

RESEARCH DESIGN

We test the hypothesis that voters do not discount exogenous factors when evaluating presidents by examining whether factors beyond incumbents' control—but that have a great deal of influence on domestic economies—determine presidential success. Our research design is schematically described in figure 3. We do not question standard economic voting theories, which hold that domestic economic performance affects voters' assessments of incumbent governments. The

9. The two "core" groups remain unaltered using alternative criteria to split the countries, and results are largely unaltered if we classify the three ambiguous cases differently.

10. It is important to underscore that we are not claiming that the comparison group does not depend on any international conditions. Our argument is simply that these countries do not depend on commodity prices and US interest rates in the same way as LSCE countries. In principle, it should be possible to construct equivalent GET indices for other groups of countries, according to how they are inserted into the global economy. This exercise will be the subject of future research.

11. The Okun index is simply a sum of the unemployment and inflation rate for the year. The Hanke index adds domestic interest rates and subtracts growth from the original index. It is a version of Barro's (1996) misery index, modified to allow for easy cross-national computation.

7. Data were obtained from the World Trade Organization.

8. Data are from the World Bank and the Central Bank of Chile.

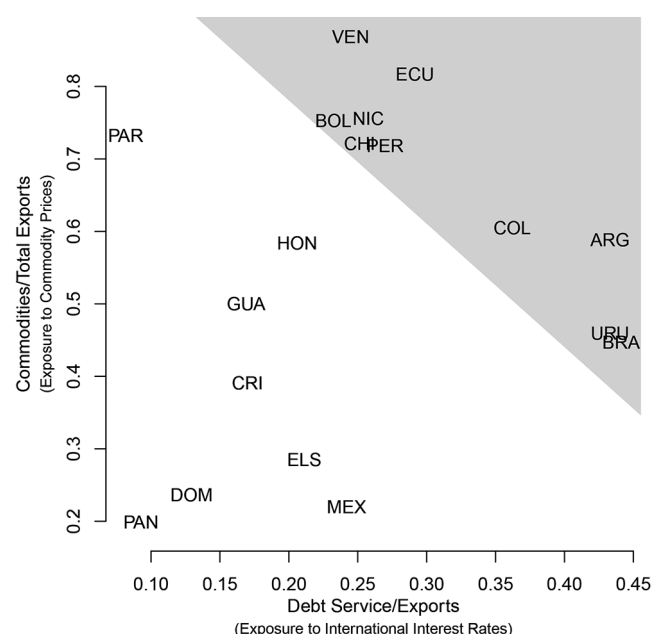


Figure 2. Exposure to commodity prices and international interest rates. The horizontal axis is debt service as a share of total exports. The vertical axis is the share of commodity exports. Both indicators are averages for the period between 1980 (or the first democratic election thereafter) and 2012. Countries in the shaded area compose the “low-savings-commodity-exporting” group, and all others are in the comparison group. See text for sources.

literature we reviewed above establishes that this connection exists. Our contribution is to explore the extent to which conditions of the world economy not under the control of presidents affect voters’ assessments and to elaborate on the implications of this phenomenon for democratic accountability.

The crucial feature of our empirical setup is that GET is exogenous to any other variable of interest. In other words, there are no incoming arrows leading to the world economy that originate, even if indirectly, from any domestic variables of interest. While this exogeneity is evident with regards to international interest rates, it can be debated when it comes to commodity prices. We recognize that policies can change a country’s reliance on commodities in the long run, but it is also the case that presidents have no room to change this in relevant ways—at least not in the medium- to short-term horizons that characterize electoral politics. Although the Organization of Petroleum Exporting Countries (OPEC) is frequently singled out as an example of a mechanism by which oil-producing countries can affect prices in the international market, the ability of Venezuela and Ecuador (the only OPEC countries in the sample) to individually affect prices is null, and there is no evidence that any country can unilaterally influence the prices of any other commodity beyond oil. Moreover, in cases in which disruptions in a single country can affect international prices of a commodity

(i.e., copper in Chile), the country is so dependent on sales of the commodity that its government has no incentive to intentionally pursue this course, and if it did, experience shows it would not be able to cajole all relevant players into action (Mikesell [1979] 2013). Still, we guard against such a possibility by using a composite commodity price index that, as a whole, is indisputably independent from any single government’s actions (Deaton and Miller 1995).

The exogeneity of GET has two important and related consequences for our research design. **First, estimating the effects of the world economy on presidential success precludes controlling for the effect of domestic economic factors,** which should be evident from figure 3. It is well established that one should not condition on a consequence of the causal variable of interest when estimating causal effects (Morgan and Winship 2014; Rubin 2005). Moreover, it is not necessary (though this would be acceptable) to control for other determinants of presidential success that are causally unrelated to the international economy.

Second, our argument requires examining the total effect of GET on presidents’ performance, regardless of whether this effect is channeled through different paths.¹² Therefore, even if factors other than the domestic economy mediated the effect of GET on presidents’ success, it would not be necessary to control for them. This also means that for our present objectives it is not necessary to identify which domestic economic variables serve as mediators. We recognize the theoretical importance of exploring these channels but leave this for future research.

The resulting research design is one in which we simply assess whether GET is associated with presidents’ electoral success and popularity in the LSCE countries. **A positive finding, such as the one we report, implies that voters fail to discount the world economy when evaluating presidents, rewarding and punishing them for factors beyond their control (i.e., “chance”).**¹³

THE WORLD ECONOMY AND PRESIDENTIAL ELECTIONS

In order to evaluate the association between GET and the electoral success of presidents, we identified a total of 121

12. There is some evidence that GET affects voters’ assessments of incumbents almost exclusively through its effects on the domestic economy. In the supplemental information we report that, once we control for the domestic economy, GET has no effect on presidents’ popularity.

13. In the supplemental information we also present a separate analysis of the role of domestic variables in explaining the variation in presidents’ popularity that cannot be accounted for by international factors. As expected, the explanatory power of domestic variables proves quite limited in comparison.

Table 1. Effects of GET on Selected Domestic Indicators for LSCE and Comparison Group

	GDP Growth	Log Inflation	Unemployment	Economic Discomfort	
				Okun	Hanke
GET LSCE	.712	−2.492	−4.773	−.429	−3.815
(SE)	(.196)	(.683)	(1.351)	(.095)	(1.104)
<i>p</i> -value	<.001	<.001	<.001	<.001	.001
GET comparison group	.170	−.575	.841	−.070	−1.351
	(.201)	(.683)	(1.409)	(.098)	(1.092)
	.398	.400	.551	.479	.217
Difference <i>p</i> -value	.052	.045	.004	.008	.113
N	544	544	505	505	448

Note. The table reports OLS estimates on pooled data for all country years in the period 1980–2012 following the onset of democracy in each country (standard errors in parentheses and *p*-values in italics). Dependent variables are listed in the column headers, and all models include country fixed effects and a lag of the dependent variable. LSCE countries are defined per figure 2. N varies due to missing data for unemployment and domestic interest rates. The *p*-value of the difference is measured between the coefficients of GET for each group. We used the log of inflation rates because of extreme variation due to periods of hyperinflation. Inflation and unemployment were transformed so that 1980 = 100. The Okun economic discomfort index is the sum of inflation and unemployment, while the Hanke index adds domestic interest and subtracts the growth rate. Data are from the World Bank. GDP = Gross domestic product; GET = Good economic times; LSCE = Low-savings–commodity-exporting; OLS = Ordinary least squares.

presidential elections in 18 Latin American countries between 1980 and 2012, of which 107 were deemed free of electoral process and/or franchise violations (Mainwaring and Pérez-Liñán 2014). Of these, 75 elections were held in the 10 countries in the LSCE sample, and 42 elections were held in the 8 countries in the comparison group.¹⁴ We coded each of these elections as a “reelection” if the candidate supported by the (elected or the de facto) incumbent was the winner.¹⁵ In most cases, this means that either the incumbent president or a candidate of the president’s party won the election, but some less clear-cut examples are discussed in the supplemental information.

Figure 4 shows reelection rates in the two subsamples of countries by decade.¹⁶ Recall that GET (see fig. 1) was substantially lower in the first decade than in the last decade. Figure 4 shows that reelection rates increased mark-

edly from 22.2% in the worst period to 60% in the best period in the LSCE samples, but rates remained stable at around 40% in the comparison group countries, whose economies are not determined by GET.

In order to further assess the relationship between international factors and presidential reelection in the region, we estimated logit regressions of the effects of the average value of GET (in the 12 months prior to the election date) on the probability of reelection. We included an interaction between GET and a binary indicator of whether the country was in the LSCE group to estimate the differential impact of our indicator of interest in each subsample. We also fit several versions of the basic model that vary the approach to the clustered structure of our data and include controls for whether the incumbent president was a candidate and for the ideology of government. Both controls merit careful consideration.¹⁷

Incumbent presidents running for reelection in Latin America rarely lose an election. Several countries in the region have shifted from barring to permitting immediate reelection. It is therefore plausible that the association between GET and reelection could be driven, in part, by this

14. There are actually 74 elections in the LSCE sample in this period. However, one election (Guatemala 2012) is coded as missing on the reelection variable due to particularities of the case and is not included in the analysis. See supplemental materials for details.

15. We chose not to focus on the vote-share obtained by the incumbent-supported candidate because in many cases in which prospects were feeble, the incumbent did not support any candidate. Our definition of reelection simplifies the treatment of these cases as they become simply another case of failure to elect a successor.

16. Although we refer to the three periods as the 1980s, 1990s, and 2000s, we partitioned our data so that we would have a similar number of elections in each period. As such, the 1980s cover 1980–1994, the 1990s cover 1994–2004, and the 2000s cover 2005–2012.

17. We considered a third alternative, namely, that some governments (especially later in the period analyzed) might simply be “more competent” than others. We do not object to this idea in principle, but we believe that competence is unrelated to GET and therefore need not be accounted for. In the supplemental information we report results controlling for an indicator of competence. As expected, substantive results do not change.

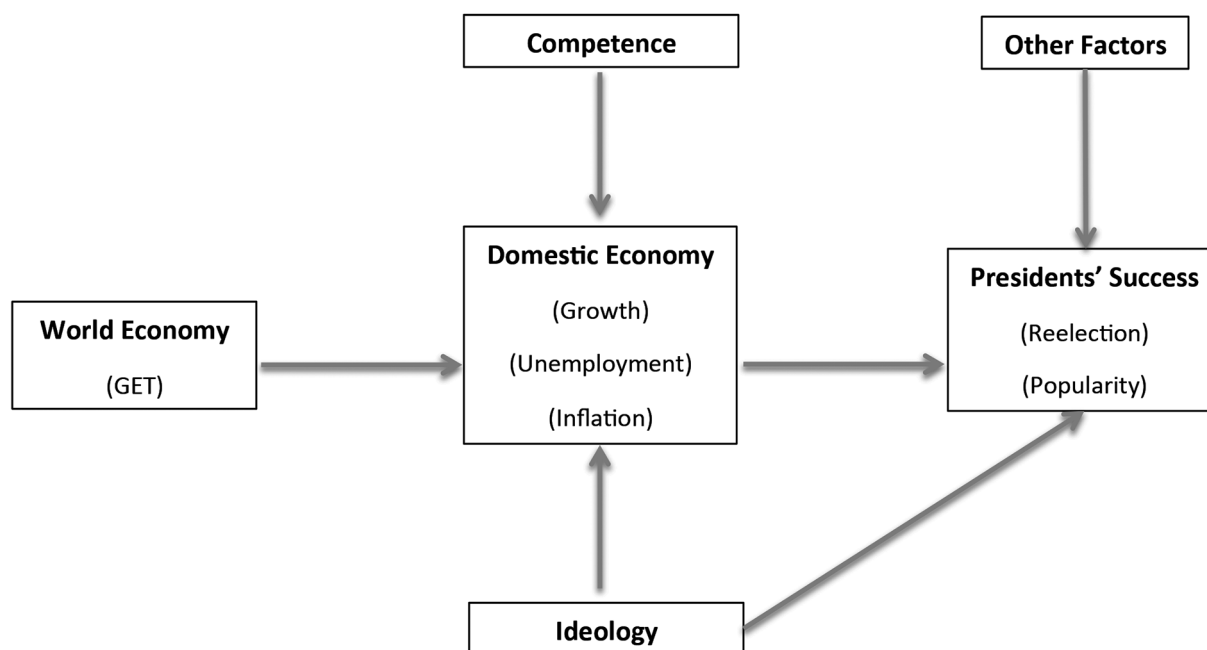


Figure 3. Effects of international economy on presidents' electoral success

change in rules.¹⁸ For this reason, model 4 includes a dummy indicator of whether the president was herself a candidate. We are not particularly concerned with endogeneity in this case (i.e., that presidents likely to lose decide not to contest elections) because almost all presidents legally allowed to run for office did so.¹⁹

We justify the inclusion of ideology as a control by the fact that Latin American countries have extremely high levels of income inequality, and redistributive policies have a significant effect on the well-being of the poor who amount to a large share of the population. Governments that engage in redistribution should therefore enjoy an electoral advantage, overperforming relative to what would be predicted by the world economy. If redistribution were completely unrelated to international economic conditions, it would not be necessary to control for it, as it would not interfere in the relationship between GET and probability of reelection. But if world economic conditions affect the probability of electing a more redistributive government, we might want to account for it, as this would imply a second path in figure 3, linking interna-

tional conditions to voters' assessments via ideology. Because GET is exogenous to policy making, if we ignore the hypothetical association between redistributive policies and GET, our estimates would capture both alternative paths. This omission would not affect the test of our basic hypothesis, which is based on the total effects of GET on reelection. Nonetheless, we argue that this "redistribution path" has theoretical implications that are distinct from our core argument. In an effort to rule out this alternative path, we present a model specification in which we include an indicator of the ideology of the president as an (indirect) measure of her propensity to redistribute. For this variable, we build on Campello (2014) and code all governments in our sample as either left or right wing (0 or 1, respectively).

Table 2 reports the different model specifications, and results are consistent with our expectations: GET always has a positive effect on the probability of reelections in the LSCE sample²⁰ but never in the comparison group, and the effects of GET in one group of countries are always statistically different than the effect in the other.²¹ Among the three simplest specifications, the random effects model (model 3) performs slightly better in terms of fit but also makes more taxing assumptions than fixed effects models or the OLS

18. This would imply that there exists an omitted variable "time" that is associated with GET (recent years exhibited higher GET) and with reelection (recent years allowed for more reelection).

19. The two deviating presidents—both from Argentina—chose to not run for opposite reasons: Eduardo Duhalde (2003) governed in the midst of political and economic chaos, but Nestor Kirchner (2007) was so popular he easily elected his hand-picked successor. In the supplemental information we discuss alternative indicators and present additional specifications of the reelection variable that fully corroborate the results reported below.

20. The effects of GET in the LSCE countries are computed by combining the coefficients on GET and on the interaction between GET and the indicator for belonging to the LSCE sample.

21. Results shown in the supplemental information reveal that commodity prices have a positive effect, and US interest rates have a negative effect on the probability of reelection and are always jointly significant in the LSCE sample but never in the comparison group.

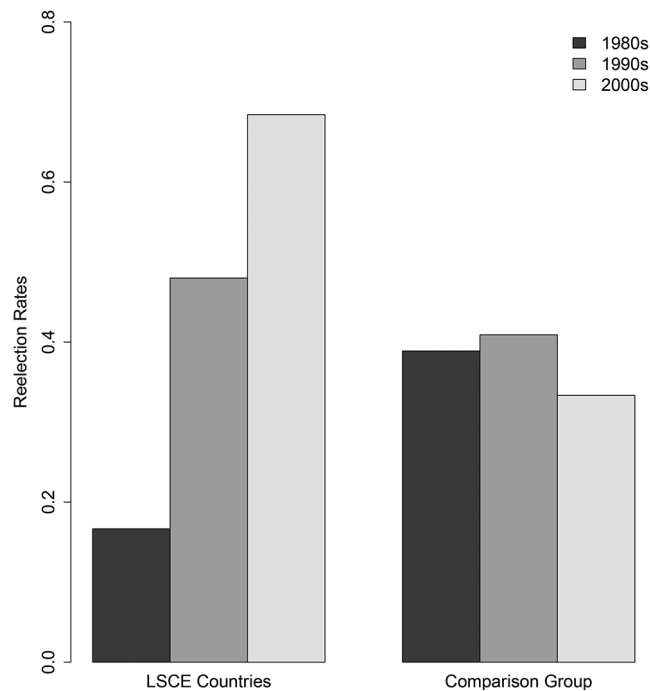


Figure 4. Reelection rates in LSCE countries and in the comparison group. The figure shows that reelection rates increased by decade in LSCE countries whose economies are determined by GET but remained fairly stable in countries in the comparison group. Groups are defined as in figure 2. GET = Good economic times; LSCE = Low-savings-commodity-exporting.

model with standard error clustered by country, especially given the relatively small number of elections per country.

Model 4 corroborates the notion that presidents running for office are far more likely to win than president-supported candidates, but this does not erase the effect of GET, which is only slightly smaller than in the previous models. Model 5 shows that the coefficient on GET is essentially unaltered relative to the simpler specifications when the dichotomous indicator for ideology is included. The coefficient on ideology is not significant, though its sign suggests that presidents from leftist parties may perform worse (on average) than those on the right.

The main conclusion is that GET has a statistically significant and very stable effect across all model specifications. The magnitude of these effects are clearer in the first differences reported in the last rows of table 2. These are estimates of the changes in probability of reelection as the international economic outlook shifts from “bad” to “good,” defined as a move from one standard deviation below to one standard deviation above the mean value of GET over the entire period. Such a change is equivalent to moving from the situation in the late 1980s to that of the mid-2000s. In the LSCE sample, these effects range from 0.41 in the model that controls for the incumbent running to 0.51 in the model with country fixed effects. In contrast, effects in the comparison

group are never larger than 0.06 and not statistically significant. These results reveal that the extremely favorable international economic scenario of the 2000s could be an important explanatory factor for the change in the probabilities of reelection of incumbents in South America.²²

Yet even though these are robust and substantial results, presidential elections are relatively rare events that may be determined by many factors beyond the state of the economy. Not surprisingly, most empirical work on economic voting does a better job predicting popularity than actual voting behavior (Lewis-Beck and Paldam 2000). Moreover, formal models of electoral accountability highlight the fact that retrospective evaluations of incumbents are the basis through which voters make prospective evaluations of candidates. Voting decisions, in this view, are based on a comparison of the prospects offered by all the candidates and not simply on retrospective evaluations of incumbents (Ashworth 2012); this makes the link between the economy and elections a relatively noisy one.

The Chilean case illustrates this difficulty very well. Governments in Chile were reelected three times throughout the 1990s but failed to elect a successor in the 2000s, which is precisely when our model predicted a higher probability of reelection. Notwithstanding these results, all elections in Chile, particularly the last two, were very close and very likely determined by less structural issues than those discussed here. Moreover, Michelle Bachelet, the incumbent president who failed to reelect her successor, left office with approval ratings above 80%. As such, the ultimate test of our argument should not rely on reelection rates but rather on a more direct indicator of voters’ assessment of presidents.

THE WORLD ECONOMY AND PRESIDENTIAL POPULARITY

In order to further test the relationship between international factors and presidential success, we examine monthly presidential popularity and approval rates in Brazil and Mexico to determine the extent to which they can be predicted by fluctuations in the GET index.²³ Brazil is a commodity-exporting country highly dependent on flows of international capital. Mexico, on the other hand, is one of the Latin American countries least dependent on commodity exports. Because of its intimate ties to the US consumer market, financial capital is more prone to flow to Mexico during good times in the

22. In the supplemental information we also show that differences between the effects of GET in the two samples are significant for a substantial range of the possible values of the GET index.

23. For a recent comprehensive study of the impact of economic and noneconomic domestic variables on president’s popularity, see Carlin, Love, and Martínez-Gallardo (2015).

Table 2. Predicting Incumbent Candidate Reelection (1980–2012)

	Model 1 Cl. SE	Model 2 FE	Model 3 RE	Model 4 Cl. SE	Model 5 Cl. SE
GET index	.152	.025	.136	.103	.158
(SE)	(.181)	(.385)	(.346)	(.161)	(.183)
<i>p</i> -value	.401	.949	.695	.522	.388
GET index × LSCE	1.000	1.384	1.058	.893	1.009
	(.397)	(.597)	(.521)	(.383)	(.413)
	.012	.020	.042	.020	.014
Incumbent ran				2.453	
				(.793)	
				.002	
Ideology = right					.104
					(.510)
					.838
Intercept	−.806		−.852	−.981	−.904
	(.408)		(.411)	(.412)	(.636)
	.048		.038	.017	.155
LSCE	.159		.185	−.027	.175
	(.521)		(.528)	(.533)	(.533)
	.761		.727	.959	.743
Baseline error	.368	.368	.368	.368	.368
Model error	.311	.302	.283	.245	.311
Prop. red. in error	.154	.179	.231	.333	.154
Countries	18	18	18	18	18
N	106	106	106	106	106
First differences (GET)					
ΔProb. LSCE	.47	.51	.48	.41	.48
Conf. interval	[.23, .69]	[.17, .78]	[.18, .71]	[.18, .66]	[.25, .71]
ΔProb. comparison group	.06	.01	.05	.04	.06
Conf. interval	[−.07, .19]	[−.30, .33]	[−.21, .30]	[−.07, .16]	[−.06, .20]

Note. Coefficients are logit estimates. Standard errors are shown in parentheses and *p*-values in *italics*. The table header indicates whether clustered standard errors, fixed effects, or random effects were used to account for the hierarchical structure of the data. The dependent variable is a binary indicator of whether the incumbent-supported candidate was reelected. The GET index was operationalized as the average value of the index in the 12 months prior to each election. First Differences are the change in probability of reelection associated with moving from a “bad” international economy to a “good” international economy (i.e., from one standard deviation below to one above the mean of the GET index), with the respective 95% confidence intervals, for each subsample. Cl. SE = Clustered standard errors; FE = Fixed effects; GET = Good economic times; LSCE = Low-savings commodity-exporting; RE = random effects.

United States, when interest rates are in an upward trend reflecting a heated economy. GET, in other words, captures international economic conditions that affect LSCE countries such as Brazil but not necessarily Mexico. It follows that GET should have no effect on the popularity of Mexican presidents.

In order to empirically assess our hypothesis, we collected as much data as possible on approval ratings of the presidents as we could find. For Brazil, we obtained 375 observations taken by four polling firms, spanning the period between March 1987 and December 2012. All firms used similarly worded questions. For Mexico, we collected a total of 578 observations of the popularity of presidents since the late 1980s taken by three different pollsters. We encountered

three basic types of questions assessing presidents’ performance, and we chose the question with the greatest availability over the time span. The Mexico question is different from the one used in Brazil, so rates should not be directly compared across countries.²⁴

We converted the “raw” observations into monthly observations by averaging multiple observations per calendar month. This led us to 222 monthly observations spanning 310 months in Brazil and 240 observations spanning

24. In both cases we used only nationally representative surveys or surveys that covered the major metropolitan areas. Precise question wording and details about the data can be found in the supplemental information.

287 months in Mexico. We imputed the missing monthly observations (88 in Brazil and 47 in Mexico) using Amelia II (Honaker, King, and Blackwell 2011), which allowed us to make use of lead and lag values in the imputation.²⁵ All independent variables were fully observed on a monthly basis.

As a first approach to these data, we examined the “predictive” power of a simple OLS model including only the monthly GET index as the independent variable. It is immediately apparent that GET and popularity covary strongly in Brazil ($R^2 = 0.63$) but very weakly in Mexico ($R^2 = 0.12$). It is also worth noting that, in the case of Brazil, a model including several domestic economic variables (i.e., average income index, GDP, inflation in the preceding six months, and unemployment) yields an R^2 of 0.64. The fact that a model relying on only one index that summarizes two international economic variables can predict popularity almost as well as a model with several domestic economic variables is striking. For the sake of comparison, a similar domestic model in Mexico performs much better than the GET model ($R^2 = 0.5$).

While these figures illustrate the relationship between GET and popularity, they do not take into consideration the time structure in the data. In this respect, diagnostics show that both the Mexican and Brazilian series are stationary but that serial autocorrelation is present. We dealt with the serial correlation initially through the use of a lagged dependent variable (lagDV) model.²⁶ However, in the Mexican case residual serial autocorrelation remained in the lagDV models. One alternative would be to correct for the residual structure in the data by fitting a lagDV model with AR-1 errors, but this would require the use of instrumental variables (Baltagi 2011, 140), an approach that would make the analysis much more opaque. Detailed analysis of the residual autocorrelation in the Mexican case suggests that it followed an autoregressive-moving-averages (ARMA) (1,1) process, which was the most parsimonious model to generate white noise residuals.

Table 3 reports time series estimates for the impact of GET on popularity for Brazil and Mexico. The main results are the positive and significant coefficient on GET in the case of Brazil and the null result for Mexico.²⁷ In short, GET has an important impact in predicting fluctuations in pres-

Table 3. Time Series Analysis for the Effect of GET on Popularity

	Model 8: Brazil	Model 9: Mexico
GET Index	1.76	−2.65
(SE)	(.56)	(2.68)
<i>p</i> -value	<.01	.32
Lag popularity	.87	
	(.03)	
	<.01	
MA1		−.52
		(.06)
		<.01
AR1		.96
		(.02)
		<.01
Intercept	3.65	60.75
	(1.18)	(4.18)
	<.01	<.01
Pollsters Indicators	Yes	Yes
R2	.93	.74
N (months)	310	287
Diagnostics		
Augmented Dickey-Fuller	−12.64	−11.91
<i>t</i>	<.01	<.01
<i>n</i>	.01	.02
Box-Pierce	.89	.13
	.34	.72
Breusch-Godfrey	1.65	.33
	.57	.86

Note. The table reports estimates, standard errors in parentheses, *p*-values, and other results of significance tests, where appropriate, in italics. Independent variables include GET and dummy indicators for pollsters, which were omitted for parsimony (see web-appendix for all estimates). For Brazil, results are from a lagDV model while for Mexico they refer to an ARMA(1,1) model—the most parsimonious time series model that produces white-noise residuals. The null hypothesis in the Dickey-Fuller test is the presence of a unit root. The null hypothesis in the Box-Pierce and Breusch-Godfrey Lagrange multiplier tests is the absence of residual serial autocorrelation. GET = Good economic times.

idents’ popularity in an economy that is strongly determined by US interest rates and commodity prices. Conversely, in a country where the economy is not determined by these two external variables, GET has no impact on presidential popularity.

25. We worked with five imputed sets in the analysis. All results presented combine the analysis in the five sets and correct standard errors accordingly. See the online appendix for details and analysis without imputation.

26. The lagDV model is a restricted version of the autoregressive distributed lag (ADL) model, which only includes lags of the dependent variable. It is theoretically well suited for the present analysis because current presidential approval is a function of past presidential approval, modified by new information on the performance of the economy (Keele and Kelly 2006).

27. See the supplemental information for additional time-series specifications for Brazil, all of which confirm this result. We also show that the effect of GET in Brazil disappears if we control for the domestic economy, which is consistent with the assumption that voters do not directly observe and consider international variables.

The substantive impacts of GET on popularity can be better grasped by examining the impulse and unit response functions computed from model 8.²⁸ The impulse response function is the change in popularity if a positive unit shock in GET were observed in a single period followed by a return to the original preshock level. Although theoretically unlikely in the present case, such a shock would produce an immediate increase in popularity of 1.76 (the coefficient on GET in model 8), followed by a slow return to its original level over approximately 12 months.

The unit response function is more substantively interesting, as it reflects the change in popularity observed when there is a “permanent” increase of one unit in GET. The effects of such a shock begin as an increase in presidential popularity of 1.76 percentage points and rise at a declining rate over time. After 12 months, popularity would be roughly 11 percentage points higher, and this effect would eventually converge to 13.8.²⁹

In sum, the time series analysis shows that changes in GET bring about substantial shifts in the popularity of presidents in Brazil—a typical LSCE country—but not in Mexico—a country in the comparison group. In the former, a change from a bad to a good international economic scenario leads to an increase in popularity of up to 27 percentage points. This is a substantial change, and one that is compatible with the large electoral effects reported earlier.

CONCLUSIONS AND IMPLICATIONS

Recent models of retrospective voting posit that voters’ capacity to assess and discount the impact of exogenous factors enables them to punish and reward incumbents exclusively for outcomes of their own making. Authors have suggested that this capacity develops as citizens observe the global economy and benchmark their country’s performance. Whereas there has been reasonable empirical support for this claim in studies of advanced democracies, particularly in Europe, the understanding of whether and how voters discount exogenous shocks in regions where this benchmarking is less likely to occur is still incomplete.

In this article, we argued that a tradition of inward-looking models of development, citizens’ relatively low media consumption, and relatively low levels of political and economic integration should make Latin American voters less aware of global economic trends and less inclined to bench-

mark their country’s economy. We then hypothesized that voters under these conditions should not discount the impact of exogenous factors when assessing governments’ competence in the management of the economy. Our data analyses confirmed our expectations.

Results from both cross-national analyses of presidential elections and time-series analyses of presidential popularity revealed that in economies that are highly dependent on commodity prices and US interest rates, voters’ assessments of incumbents’ performance were largely determined by these factors.³⁰ Considering that neither is under executives’ control, these results are evidence that voters do not separate chance from competence when evaluating their presidents. We demonstrate that this is as true for systematic, observable, and somewhat predictable factors as it is for shark attacks and droughts (Achen and Bartels 2006), results of college football games (Healy, Malhotra, and Mo 2010), as well as for randomly determined events in experimental settings (Huber, Hill, and Lenz 2012).

An analogy using a firm helps to grasp the significance of our findings. Imagine that shareholders have to decide how to reward the chief executive officer (CEO) of an oil company, observing only the company’s performance and not the CEO’s actions (Bertrand and Mullainathan 2001). In this context, shareholders want to devise a payment scheme that will attempt to make sure the executive acts in their best interest. Considering that oil prices are not determined by the CEO’s decisions but have strong effect on profits, should shareholders simply punish a CEO that ruled under declining oil prices and reward one that presided over rising prices? Most would agree that simply tying payment to performance of the firm is not the best solution to encourage effort and select the best executives in companies where results are largely dependent on exogenous factors. The task instead requires discounting the impact of these factors, as accurately as possible, so as to evaluate CEOs strictly on the bases of their own contribution to firms’ performance.

The evidence presented in this article poses important implications for the study of democracy. As summarized by Ashworth (2012, 184), the building blocks of electoral accountability are “an electorate that decides whether or not to retain an incumbent, at least potentially *on the basis of her performance*, and an incumbent who has the opportunity to respond to her anticipation of the electorate’s deci-

28. See Greene (2003, 560) for a characterization of these functions as the analog to marginal effects in cross-sectional analysis. See the supplemental information for a graphical depiction of these functions.

29. The equilibrium levels of popularity are given by the expression $\frac{\beta_0}{1-\rho}$, where β_0 is the coefficient on GET and ρ is the coefficient on lagged popularity.

30. The absence of impact of commodity prices and international interest rates on presidential success in countries not dependent on commodity prices and interest rates does not necessarily mean that voters in these countries are able to discount exogenous factors. The result is probably simply driven by the fact that we lack the appropriate indicator to capture the impact of exogenous factors on these economies.

sions” (emphasis added). Our results show the first of these requirements is not met in Latin America, which has consequences for the second.

Much like oil executives, presidents’ behavior will likely be shaped by the knowledge that performance evaluations for the most part do not depend on their own actions and choices. Although we leave the study of incumbents’ responses to voter behavior for future research, we conjecture that whenever the connection between electoral success and “good” policy making is broken, the incentives for incumbents to maximize voters’ material conditions should be weaker. Whereas leaders during good times might realize they can extract rents from office and still be reelected, incumbents who find themselves doomed by the international scenario might prefer spending their efforts obtaining rents from office instead of attempting to marginally improve the state of a failing economy.³¹ Anecdotal evidence from South America exemplifying both extreme situations abound.

Finally, this article also speaks to debates about democratic accountability specifically in Latin America. Our findings challenge the established notion of “accountability ex-post” (Stokes 2001), which claims that incumbents’ frequent breaking of electoral promises is compatible with democratic accountability, provided that voters ultimately concerned with material well-being are able to reward and punish incumbents based on economic outcomes. As explained above, the effectiveness of retrospective economic voting as a mechanism of accountability is disputable in a scenario in which incumbents are rewarded for events that are beyond their control. With regard to the more recent wave of studies on noneconomic drivers of presidential popularity, and corruption in particular (Blake and Morris 2009; Power and Taylor 2011), our work reinforces the idea that economic conditions take precedence over other considerations. This is consistent, for instance, with work by Carlin et al. (2015), which finds that the public tends to punish governments for corruption scandals only when the economy is weak.

Additional research is still needed to understand the full implications of our results. What factors explain systematic variation on voters’ capacity and willingness to benchmark their country’s economy? Do incumbents facing a threatening international environment attempt to inform voters about the state of the world economy? How do challengers behave? Can countercyclical economic policies break the transmission mechanism and reduce the effect of international factors? Irrespective of the answers we eventually

encounter, the main finding in this article should prompt scholars to reassess the conditions under which democracy actually provides incentives for the best economic policy making.

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31. See Przeworski (1999) for a simple formalized theoretical depiction of similar incentives.

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