Incumbents and Challengers on a Level Playing Field: Assessing the Impact of Campaign Finance in Brazil

David Samuels
University of Minnesota

This article assesses the impact of campaign spending on incumbent and challenger vote shares in elections to the Brazilian Chamber of Deputies. I argue that incumbents and challengers gain equally from campaign spending. This contrasts with the prominent argument about U.S. House elections that incumbents gain little from spending while challengers gain a great deal. In the U.S., incumbents gain little because being in office generates significant name recognition and additional spending suffers quickly from diminishing returns. In contrast, challengers gain a lot because they start the campaign from scratch. In Brazil, because incumbency provides fewer benefits than in the U.S., both incumbents and challengers must spend money to increase their name recognition and both benefit from spending. My findings imply that campaign spending limits in Brazil would encourage rather than restrict competition, and they point to the importance of assessing the relative advantages of incumbency when assessing the impact of campaign spending.

Scholars universally recognize that money shapes the contours of electoral competition and democratic representation, and they have extensively explored campaign finance in the United States. However, comparativists have scarcely begun to explore this critical issue. In fact, to my knowledge no candidate-level statistical research on campaign finance exists for any newly democratic or less-developed country. Because campaign finance has such enormous potential policy and normative implications everywhere, scholars must begin to assess its impact in comparative perspective.[1]

This article takes a step in that direction by exploring the impact of campaign spending on incumbent and challenger vote shares in elections to the Brazilian Chamber of Deputies. This issue is important because we want to know to what extent money determines who wins and loses elections and whether campaign spending promotes or hinders political competition. Scholars of U.S. House elections take sides in the debate to restrict campaign spending at least partly based on their assessment of the effectiveness of incumbents' versus challengers' campaign spending. If challengers employ money more efficiently than incumbents, then limiting campaign spending would benefit incumbents and

[1]Information on campaign finance laws in Latin America can be found in del Castillo and Zovatto G. (1998) and Ferreira Rubio (1997).

THE JOURNAL OF POLITICS, Vol. 63, No. 2, May 2001, Pp. 569–584

harm challengers, with potentially deleterious results for democracy. Strengthening political competition remains a highly salient issue in recently established democracies like Brazil. Given this prominent debate about whether unrestricted campaign spending promotes or hinders competition, comparativists ought to strive to more carefully measure money's impact.

As in the U.S., individual candidates in Brazil are responsible for raising and spending campaign funds, and candidate spending is unrestricted. Again as in the U.S., a debate exists in Brazil about the relative merits of restricting campaign finance. Would spending limits create an incumbency protection racket, as some allege for the U.S., or would it level the playing field and enhance electoral competition? I argue that Brazilian incumbents and challengers translate money into votes at equal rates. This contrasts with a prominent claim about U.S. House elections—that incumbents translate money into votes less effectively than challengers. Because U.S. House incumbents use their office to campaign while in office, by the time the next election rolls around they have reached a point of diminishing returns, where spending money does little to increase name recognition further. On the other hand, because challengers start from scratch, money provides a rapid return in terms of increased name recognition.

This story does not hold in Brazil because the key assumption from the U.S. literature is not met: the relative advantages of incumbency. Because of the relatively *low* payoff to holding a seat in the Brazilian Chamber of Deputies, incumbents gain little advantage in terms of name recognition from holding office. As I describe below, challengers in Brazil sometimes have greater name recognition than incumbents, and Brazil's electoral system offers incumbents little protection. Thus, although both incumbents and challengers benefit from spending, neither benefits relatively more. This finding has important policy implications for Brazil, as well as important theoretical ramifications for the comparative study of campaign finance.

This paper is organized as follows. In Section 2 I describe the institutional context of elections and campaign finance in Brazil and explain why we should expect a strong relationship between money and votes in that country. Section 3 contrasts the advantages of incumbency in U.S. House elections with those in Brazil and then compares the derived expectations about the relationship between campaign finance and incumbency for each country. This comparison generates my main hypothesis, that money matters equally for incumbents and challengers in Brazilian elections. In Section 4 I test and confirm this claim, and Section 5 concludes.

The Institutional Context and the Cost of Elections

Brazil uses a version of open-list proportional representation to elect members to its lower house, the Chamber of Deputies. Voters can cast their vote for either a candidate or for a party's label, and electoral constituencies conform to state boundaries. There are 27 states/districts, and the number of seats in each constituency is quite large, ranging from 8 to 70, with a total of 513 seats available. Central-party organs do not control nominations for federal deputy. Instead, state-level (i.e., district-level) party organs choose candidates for congressional office. Parties can nominate one-and-a-half candidates per seat in each district, and multiparty alliances can nominate twice as many candidates as there are seats. This meant that in 1994, an average of 5.9 candidates ran for every available seat.

The main elements of Brazil's electoral system—lack of central-party nomination control and large district magnitudes with many candidates running—promotes highly individualistic electoral campaigns. Most candidates eschew programmatic appeals and concentrate on personalistically differentiating themselves from other candidates by providing and promising particularistic benefits. Because individual candidates must raise all their own funds, Brazil's campaign finance law accentuates this individualism.[2]

Given this institutional context, scholars have suggested that Brazilian campaigns ought to be among the most expensive in the world (Mainwaring 1999, 151). Indeed, winning candidates for federal deputy spent at least $133,000 on average in 1994 (Samuels N.d.(a)). While this is not as high as what winning U.S. House candidates spent that same year—about $530,000 (FEC 1999)—given Brazil's relatively low level of per capita GDP (about $5,000/year), this is still a good deal of money.

In other work (Samuels N.d.(a)), I demonstrated that a close relationship exists between money and votes in Brazil. Given the geographic size of the constituencies (one of Brazil's medium-sized states, Minas Gerais, is the size of France), the great number of candidates in each constituency, and the necessity for even leftist candidates to differentiate themselves on individualistic bases, candidates need money to mobilize their supporters at election time to get out the vote and can help convey information about candidates to voters.

In an effort to outspend their competitors, candidates engage in a wide variety of costly campaign activities, such as throwing parties or distributing food, clothing, or shoes. Candidates advertise their candidacy through flyers, posters, buttons, and banners, and candidates with supporters in rural areas also provide transportation by truck or bus to the polls on Election Day. To mobilize the support of other politicians and their supporters, some federal deputy candidates even provide money to *state*-deputy candidates' campaigns, the so-called *dobradinhas*.[3] In short, candidates understand that the best way to increase their name recognition with voters is to spend lavishly on self-promotion.[4]

[2] See Appendix for details on the campaign finance law.

[3] However, candidates cannot purchase radio or TV ads because access to TV and radio is free and determined according to a formula based on party representation in the Chamber.

[4] See Samuels N.d.(a) and N.d.(b) for additional details about the relationship between campaign finance and candidate strategy in Brazil, as well as for information about the sources of campaign funds and the relative ability of candidates from different parties to raise funds.

Incumbents, Challengers, and Money

Do incumbents and challengers turn money into votes at different rates in Brazil? In the U.S., the advantages of incumbency are obvious and tremendous—incumbents who decide to run for reelection are likely to win almost 95% of the time. The source of this fantastic success rate lies with incumbents' better name recognition, access to congressional perks such as franking privileges and permanent staff, and opportunities to provide favors and constituency service (Fiorina 1977). While debate continues about the relative impact of these factors, the fact remains that given such high reelection rates, incumbents in U.S. House races must possess certain advantages that challengers do not.

Scholars of U.S. House elections have debated the relationship between campaign finance and incumbency. Jacobson (1978) established the view that challengers convert money into votes more efficiently than incumbents. The theory behind the relative inefficacy of incumbent spending derives somewhat ironically from the previously mentioned advantages that incumbency bestows. Attempts by both incumbents and challengers to influence voters are subject to diminishing returns. Because incumbents start the campaign with a number of organizational advantages and saturate their district with self-promoting information throughout the term, "further campaigning produces, at best, very modest additional gains in support" (Jacobson 1990, 335). On the other hand, challengers "begin the campaign in obscurity" (Jacobson 1990, 335), and so benefit greatly from campaign expenditure.

I do not wish to enter into the debate Jacobson's claims have generated (cf., Gerber 1998; Green and Krasno 1988, 1990; Jacobson 1990). Instead, I want to assess whether this hypothesis can "travel" into comparative politics independently of its merits for the U.S. case. By stripping down the argument about why House incumbents *might* benefit from money relatively less than challengers, we can understand why they might *not* in Brazil. The notion that incumbents in the U.S. benefit little from marginal increases in campaign spending relative to challengers rests on several assumptions that simply do not hold for Brazil. The key assumption is that incumbency comes with significant advantages. This is a necessary condition for the corollary hypothesis about the relative differences in the impact of campaign spending between incumbents and challengers to hold.

Incumbents in Brazil differ from their counterparts in the U.S. in that they do not derive significant advantages from holding office, especially when compared to the relative power of many challenging candidates. The most obvious indicator of the relative lack of incumbency advantage in Brazil is that incumbents lose much more often than in the U.S.: in democratic elections since 1945, only 68.6% of those who ran for reelection have managed to win (Samuels 1998, Chap. 2). Four factors contribute to the relative lack of an incumbency advantage in Brazil: holding a seat in the Chamber provides little political payoff in terms of name recognition, the best incumbents often choose not to run again, challengers are often more prominent than incumbents, and the electoral system undermines incumbents' self-promotional efforts.

Holding a seat in the Chamber does not provide Brazilian incumbents the benefits U.S. House members can obtain. Agenda-setting and decision-making power in the Chamber is concentrated in the hands of a very few party leaders (Figueiredo and Limongi 1996), and deputies do not perceive committees as a place to develop seniority and/or policy expertise (Santos 1999). Moreover, the president makes most of the important policy proposals and has institutional advantages such as decree and veto powers that reduce deputies' influence (Power 1998). Most deputies have very little input into the legislative process and cannot gain notoriety in that way.

Furthermore, although Ames (1995) argued that incumbents gain electoral advantage from the pork-barrel, elsewhere I have argued that pork-barreling provides no measurable benefit to reelection-seeking incumbents (Samuels 1998, Chap. 6).[5] This is because in contrast to the U.S., Brazil's multimember district system forces incumbents to share political credit with other incumbents as well as with politicians in state and local government. This reduces deputies' capacity to build a personal vote base by claiming credit for delivering pork.

Because they gain relatively little from serving in the Chamber, incumbents face an uphill struggle in terms of increasing—or even maintaining—their name recognition. This is critical because the argument from the U.S. assumes that incumbents benefit from significantly more name recognition than challengers. Gerber's (1998) comparison of U.S. House and Senate elections provides insight for comparative purposes: he found that—in contrast to Jacobson's argument about House elections—both Senate incumbents *and* challengers gain positive returns from spending because while Senate incumbents are well-known (as are House incumbents), Senate *challengers* are also likely to be well-known, especially when compared against House challengers.

Extending this logic, in any country's elections, incumbents' and challengers' marginal returns to campaign spending ought to be a function of the relative level of voter familiarity with each. This in turn ought to be a function of the benefits of incumbency. When incumbents are relatively more widely known, we expect their spending to have less impact. When incumbents and challengers are equally well-known, we expect either spending by neither to have an impact or spending by both to have an impact (which is what Gerber found for U.S. Senate elections).

As might be expected given the relatively low benefits attached to the office of federal deputy, the level of voter familiarity with incumbents in Brazil differs from what is commonly assumed about U.S. House elections. Incumbent deputies themselves lament that their position fails to provide benefits that translate into name recognition (Samuels 1998, 220–23), and a survey taken two

[5] This may be because many deputies do not seek reelection, but instead attempt to employ pork to seek state or municipal office. See Samuels (1998, Chap. 7).

years after a federal deputy election found that only 10.1% of those polled could recall for whom they had voted (Mainwaring 1999, 188n).

The second factor that contributes to the relative lack of an incumbency advantage in Brazil is that incumbents who run for reelection are relatively weak candidates. Because of the particular nature of political careers in Brazil, many prominent incumbents who otherwise *would* be strong candidates decide *not* to run for reelection. Instead, they run for higher office, such as municipal mayor, state governor or vice governor, or senator, or they seek appointment to a high state-government bureaucratic post. Many incumbents who do run for reelection are less experienced, less qualified legislators (Samuels 2000). This leaves a relatively weak pool of lesser known incumbents who seek reelection.

Third, incumbents seeking reelection lack security because typically they face a large number of strong challengers. Given Brazil's electoral system, in contrast to U.S. House incumbents, Brazilian incumbents have few ways to protect their turf. Incumbents cannot scare off challengers. In fact, the state-level party leaders who determine the candidate lists for federal deputy seek out as many strong candidates as possible—whether incumbents or not—because they want to increase their list's *total* vote.

Incumbents typically face ex- and sitting governors, vice-governors, senators, ministers, mayors of large cities, and state-government secretaries. These positions concentrate significantly more political power in an individual's hands than a seat in the Chamber. Thus incumbents never face a pool of relative novices. Instead, they face intense competition from challengers who may even possess significantly more political experience and power than they do, and as much or even more name recognition.

The electoral system is the final factor contributing to the relative lack of an incumbency advantage in Brazil. The open-list, at-large system allows challengers and *other* incumbents to undermine incumbents' electoral prospects. For example, incumbents compete for media attention both with other incumbents in their state as well as with challengers. Politicians who hold office in state or municipal government have significantly more control over execution of public policy and over the distribution of pork-barrel projects, which provide more opportunities to be the center of media attention.

Because incumbents do not have clearly delineated districts below the level of their state, their vote bases are also vulnerable to "attack"—from either co-partisans or candidates from other parties, and from both other incumbents and challengers. Many challeng—especially ex-governors, state secretaries, and may—are particularly good at stealing incumbents' votes because they may have recently held a more powerful political position and have a proven track record of providing particularistic services.

In sum, the conditions that might support Jacobson's (1990) conclusion in the U.S. are absent in Brazil. Incumbent deputies running for reelection have relatively poor access to politically valuable resources, are among the relatively less important incumbents, and face a pool of relatively strong challengers who may have had good access to politically valuable resources. Furthermore, incumbents cannot impede strong challengers from obtaining nomination or from attempting to "steal" their vote base. This is quite different from what typically happens in the U.S., where a strong incumbent typically faces only one relatively strong opponent in his or her district, and this one opponent may not even be very competitive.

The relative absence of an incumbency advantage in Brazilian legislative elections implies that incumbents and challengers start on a relatively level playing field once the campaign begins. The primary inference from the U.S. case is that incumbents have used the perquisites of office to consolidate significant name recognition and that this differentiates them from challengers. However, this leaves little that additional campaign finance could accomplish because they have reached the point of diminishing returns. Because incumbents in Brazil do not possess such advantages, incumbency should not affect candidates' ability to translate money into votes. All candidates in Brazil must spend money to inform voters of their candidacy. I test this hypothesis in the next section.

Empirical Tests

In this section, I test the hypothesis that money matters equally for incumbents and challengers. Before moving to the regression analysis, some discussion of case selection is necessary.

Evaluating Candidate Quality in Brazil

In the U.S., scholars never compare incumbents against *all* challengers—only the two major party candidates are included in statistical analyses. That is, the incumbency advantage is compared against only *relatively high-quality* challengers. Given that most challengers (i.e., those not running as Democrats or Republicans) in the U.S. are irrelevant for all intents and purposes, and that incumbents in the U.S. do extraordinarily well even against the best challengers from the major parties, measuring incumbents against *all* challengers would bias the results in favor of finding *additional* advantages for incumbents. Comparativists should make similar methodological choices to exclude irrelevant candidates and avoid such biases: as with studies of U.S. House elections, in Brazil we want to know whether incumbency matters relative to *quality* challengers.[6]

As in the U.S., most candidates who run for federal deputy in Brazil stand no chance whatsoever of winning. For example, in the state of São Paulo in 1994, 532 candidates ran for one of the state's 70 seats (7.6 per seat). The winning

[6] Some comparativists have done precisely this: see Palda (1994) for Canada and Palda and Palda (1998) for France.

candidates gained an average of 69,377 votes each, but the losing candidates averaged only 8,393 votes each. In fact, 132 candidates received fewer than 1,000 votes, and fully half of the candidates received fewer than 5,000 votes (Brasil. TSE. 1995.). Clearly, the quality of the competition varies a great deal. As in some ostensibly two-party systems where many third-party candidates run but have no impact on the election, many of the dozens or even hundreds of challengers in each Brazilian state matter little if at all. Instead, a smaller group of "quality" candidates—which includes incumbents—matters.

Given that *ex ante* identification of quality candidates is difficult for any country, we could subjectively select an arbitrary number of candidates for analysis (as did Palda and Palda 1998). I chose instead to adopt the most reliable and objective assessment of candidate quality available. Six months prior to the 1994 elections, the Institute for Socio-Economic Studies (INESC), an independent think-tank in Brasília, published an analysis of candidate quality (INESC 1994). INESC scored candidates on a 1–3 scale, based on candidate's previous experience and its assessment of the candidate's chances of winning. To arrive at its ranking, INESC relied on conversations with members of congress and their advisors, as well as with contacts in the media. Although INESC was highly successful in predicting winners (the correlation between its ranking and whether a candidate won or not was .66), INESC's independence from any political party eliminates potential bias problems.

It is unlikely that INESC's rating subsequently influenced either contributors' willingness to provide funds to candidates—the correlation between candidate quality and campaign contributions in the sample is .04—or voters' propensity to vote for a candidate. Although INESC released its assessment in April of the election year, before the campaign officially began (the election is held in October), its readership consists mostly of small-budget, nongovernmental organizations that wish to keep abreast of congressional politics in Brasília. In any case, because so many candidates compete and margins of victory are so slim in deputy races, neither Brazil's major television news programs nor its major newspapers take public opinion polls regarding the federal deputy election (they do so for president and governor, and sometimes for senator), so INESC's rating would not have filtered into public consciousness that way.

In short, because INESC is not at all like the Gallup organization, neither candidates' campaign funds nor their final vote tally is likely endogenously related to the INESC quality ranking.[7] Of a total sample of 1,563 candidates in the sample, when we select the "quality" candidates, we are left with a sample of 250 incumbents plus 342 challengers (see Appendix). These 592 candidates account for 71.3% of all votes that candidates in the sample received, while the other 971 candidates account for only 28.7% of the votes.

[7] INESC's ranking is also not highly correlated with incumbency (.18).

Statistical Tests

I have hypothesized that money matters equally for incumbents and challengers and provided good theoretical reasons to believe this. To provide statistical support, I present results for seven different regression models, using OLS.[8] For each equation, the dependent variable is the percentage of all votes for deputy that the candidate received in his or her district. I included the following independent variables:

- **%Money**: this is the percentage of all campaign funds contributed to the candidate in his or her district (Brasil. TSE. 1997). I expect this variable to return a positive coefficient.[9]
- **%Money^2**: this accounts for the potential that spending is subject to diminishing returns and should return a negative coefficient.
- **District Magnitude**: this variable controls for the direct mechanical effect on votes of the number of seats at stake in the candidate's district—as magnitude increases, the number of candidates running also increases, and candidates' average vote shares will necessarily decline (Brasil. TSE, 1995.).
- **District Magnitude ∗ %Money**: this variable measures the *indirect* effects of district magnitude on spending. I expect this variable to return a negative coefficient because as district magnitude increases, a candidate has to spend relatively more to reach voters because of population and the presence of more candidates.
- **Incumbent**: this dummy variable takes a value of "1" if the candidate is an incumbent and "0" if not (Brasil. TSE. 1991) and tests for the possibility that incumbents win more votes on average than challengers. Given the sample, I expect no differences between incumbents and challengers.
- **Incumbent ∗ %Money**: this is the critical independent variable. It tests for the potential that regardless of whether incumbents gain more or fewer votes generally, incumbents or challengers translate money into voters more efficiently. Given my argument, I do not expect this variable to be significant. However, if it returns a positive and significant coefficient, this implies that

[8] Simultaneity bias is far less of a problem in Brazilian elections than elsewhere, justifying straightforward OLS. In large-magnitude, open-list elections, with large numbers of candidates and where margins of victory are tiny, the notion of electoral "threat" is effectively constant across *quality* candidates. As a result, candidates should always spend whatever they can. This eliminates any endogeneity problem and justifies using OLS. Moreover, in their analysis of campaign finance in Japanese multimember districts, Cox and Thies (2000, 41) note that if one could "control for the *anticipated* closeness of the race, simple regressions of vote share on spending might work (yielding unbiased estimates of the 'true,' presumably positive, relationship)." The factors that affect the anticipated closeness of the race include district magnitude (as magnitude increases, the races necessarily get closer) and candidate quality. I include these variables in the regressions and am thus able to generate unbiased estimates with OLS.

[9] The campaign finance law does not require candidates to detail their campaign *spending*, only their contributions. I assume that spending equals contributions.

incumbents are more efficient. If the coefficient is significant and negative, it implies that challengers convert money into votes more efficiently.

- **Candidate Quality**: this variable takes a value of {0, 1, 2, 3} (0 for incumbents who were not given a 1, 2, or 3) (INESC 1994). I expect the coefficient to be positive and significant, independently of the level of campaign spending and of incumbency.
- **Election Results:** to control for party strength in each state, I also included controls for the presidential vote share and the legislative party vote share (of each candidate) in the previous elections (in 1989 and 1990, respectively). Because of high volatility in Brazil's post-transition elections, these results are not highly correlated (.03).

Table 1 presents the results, with robust standard errors corrected for heteroskedasticity (using the White method). I progressively add independent variables to each model in order to facilitate comparison of the relative effects of each variable and to confirm the robustness of my findings. The number of cases in each regression is 592 (sample statistics are included in the Appendix).

In Model 1, I only tested for the impact of money and district magnitude. This confirms that money has a strong impact: for every additional percentage of all the money in a district that a candidate spends relative to the other candidates, he or she will obtain about a half percent more of the total vote. However, magnitude also has a strong impact; candidates in larger districts are likely to receive a smaller vote.

Spending is also subject to diminishing returns. A plot of spending against votes (not shown) indicates that diminishing returns kick in when a candidate accrues about 15% of the money in a state. However, because candidates do not know how much money other candidates will raise, they do not know what amount 15% will be in real currency (and given the dramatic disparities in district size, I cannot provide a meaningful figure either). Thus, each candidate attempts to raise and spend as much as possible. Only about 1% of all candidates manage to raise over 15% of all the money in a state.

Model 2 checks for the impact of incumbency. The inclusion of this variable does not change the coefficients on the other three variables a whit. Model 3 confirms that the interaction of district magnitude and spending tends to reduce a candidate's vote, but the introduction of this variable changes the others only slightly.

Model 4 is the critical test for my hypothesis. Here, I add in the variable that tests for an interaction between incumbency and spending. I did not expect this variable to be significant, and it is not. Moreover, the introduction of this variable does not alter the results from Model 3.

Model 5 removes the variables associated with incumbency and includes the measure of candidate quality. As expected, this variable returns a strongly positive coefficient. The introduction of this variable (compared to Model 3, which had the same number of independent variables and included a variable associ-

TABLE 1

OLS Regression Results, The Effect of Money on Votes in the 1994 Brazilian Legislative Elections

	Coefficients (Standard Errors)						
Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	1.42***	1.43***	1.26***	1.20***	0.68***	.70***	.66***
	(.13)	(.14)	(.14)	(.15)	(.16)	(.16)	(.17)
%Money	.30***	.30***	.42***	.44***	.42***	.42***	.43***
	(.04)	(.04)	(.06)	(.06)	(.05)	(.05)	(.06)
$\%Money^2$	−.01**	−.01**	−.01**	−.01***	−.01***	−.01***	−.01***
	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)
District Magnitude	−.02***	−.02***	−.02***	−.02***	−.02***	−.02***	−.02***
	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)
District Magnitude *%Money	—	—	−.01***	−.01***	−.01***	−.01***	−.01***
			(.002)	(.002)	(.002)	(.002)	(.002)
Incumbent	—	−.05	−.01	.08	—	−.10	−.03
		(.08)	(.08)	(.09)		(.08)	(.09)
Incumbent * %Money	**—**	**—**	**—**	**.03**	**—**	**—**	**−.02**
				(.03)			**(.03)**
Candidate Quality	—	—	—	—	.33***	.34***	.34***
					(.05)	(.06)	(.05)
Pres89	−.002	−.002	−.003	−.003	−.002	−.002	−.002
	(.003)	(.003)	(.003)	(.003)	(.003)	(.003)	(.003)
Deputy90	.007	.007	.009*	.009*	.007	.007	.007
	(.004)	(.004)	(.004)	(.004)	(.004)	(.004)	(.004)
R-Squared	.54	.54	.56	.56	.59	.60	.60

$*p < .05$; $**p < .01$; $***p < .001$

ated with incumbency) boosts the R-squared and alters the constant term, but it hardly changes the variables associated with spending.

Model 6 confirms the robustness of the candidate quality variable measure against the incumbency dummy. Finally, Model 7 includes all the variables. Once again, the variables associated with incumbents' spending do not approach statistical significance, while the other variables in the equation remain highly significant.

These regressions provide highly robust results confirming my hypotheses. All candidates' vote totals are a function of their ability to raise and spend money. Spending is subject to diminishing returns, and money does not go as far in larger constituencies, where candidates are likely to receive a smaller percentage of the vote to begin with. Most important, incumbents and challengers translate money into votes at similar rates.

Conclusion

This article is the first statistical confirmation that campaign spending influences outcomes in Brazilian congressional races. If a candidate accrues and spends an additional 1% of all campaign finance in the state, he or she will add around half a percent to his or her vote as a percentage of all votes. In an electoral system in which 3% of the total vote in a state typically guarantees victory (in the largest district—São Paulo—the candidate with the *most* votes obtained 1.24% of the total vote), campaign finance clearly plays a critical role.

The finding that money helps win elections in Brazil equally for incumbents and challengers has important implications. In the U.S., if it is true that challengers gain from spending more than incumbents, then capping spending would limit competition (Jacobson 1978, 1990). Challengers would be less able to get their message out, and incumbents would consolidate a stranglehold on office. On the other hand, if challengers and incumbents gain equally from spending, then campaign spending limits would level the playing field and increase competition.

In Brazil, both incumbents and challengers gain from spending. This conforms to research on campaign finance in U.S. state elections. Cassie and Breaux (1998, 112) argue that the degree of "professionalism" of a state's legislature is positively related to the extent to which incumbents can benefit from campaign spending. The playing field between incumbents and challengers is more level in states with relatively unprofessionalized legislatures like Brazil's.

Given the level playing field between incumbents and challengers in Brazil, a spending limit would reduce the impact of money on elections, prejudicing neither incumbents nor challengers. Significant variation does exist in the ability of *both* incumbents and challengers to raise money: candidates from leftist parties raise far less. A campaign spending cap would therefore benefit relatively cash-poor candidates and hurt wealthier candidates, who would have to find alternative methods to win votes. Campaign spending restrictions would particularly benefit leftist parties, which gained only about 20% of the Chamber seats in 1994.

This finding has important ramifications for issues of representation in Brazil and ought to inform comparative research on elections and representation. Brazil's current campaign-finance system, with no spending restrictions, is not an "*incumbent* protection racket" but an "*elite* protection racket." Incumbents do not gain extraordinary advantages by virtue of holding office, and quality challengers are not lacking. Instead, unrestricted campaign spending tilts the playing field in favor of wealthier candidates. Because campaign spending restrictions would force most politicians to alter their individualistic campaign strategies and adopt a more collective approach and because such spending caps would benefit leftist parties, we are unlikely to see a move away from the current system.

These findings also have important implications for comparative research. While some comparativists echo Jacobson's claims and argue that campaign spending limits protect incumbents (e.g., Palda 1994; Palda and Palda 1998), my findings suggest the opposite: that campaign spending caps may *increase* electoral competitiveness. The key issue to focus on in future comparative research is the relative advantages incumbents and challengers possess. When the playing field between incumbents and challengers is level to begin with, then both incumbents and challengers are likely to benefit from campaign spending.

With a level playing field, campaign spending caps would force both incumbents and challengers to compete more on programmatic appeals rather than costly personalistic or clientelistic ties. In countries such as Brazil where a small minority can afford to invest significant sums of money in politics, campaign spending caps ought to broaden political representation and heighten political competition, both of which have strong normative appeals. Comparativists interested in more precisely specifying the impact of money on elections ought therefore to turn their attention to the relative capacities of incumbents and challengers to construct and consolidate a "personal vote" base.

Appendix:

Brazil's Campaign Finance Law and the Campaign Finance Data

In 1993, for the 1994 elections, Brazil's congress passed a law requiring all candidates to submit a *prestação de contas*, or a registry of campaign contributions, to the national electoral court, the *Tribunal Superior Eleitoral* (TSE) in Brasília. Violations of the law could result in fines, revocation of a candidacy, or even loss of one's seat after the election (Brasil. Congresso Nacional 1993). The resulting database contains about 141,000 records of campaign contributions to candidates for president, governor, senator, federal deputy, and state deputy (Brasil. Tribunal Superior Eleitoral. 1997). Each entry includes the candidate's party and electoral identification number, the date of the contribution, the contributor's name and government-issued identification number, and the amount contributed. Because of rampant inflation in Brazil in 1994, to calculate the total amount candidates received in campaign finance, I converted all entries to U.S. dollars, based on day-to-day exchange rates (NetDolar. 1999).

Can we trust these data? Skeptics might argue "no," given Brazil's reputation for corruption. This is a crucial question, for if the data lack validity, then we cannot learn much about campaign finance in Brazil from them. I have shown elsewhere (Samuels N.d.(b)) that the data conform to common-sense expectations regarding cross-candidate, cross-office, and cross-partisan differences. If the declared contributions were wholly false, we would expect no patterns to emerge. Other scholars who argued for the validity and reliability of similar data from Japan put it this way: "If these data have been fabricated, they have been fabricated so as to preserve a number of expected correlations and even to fit the theories of political scientists—which does not seem too likely" (Cox and Thies 2000, 45). The same can be said for the Brazilian data, which gives us confidence in their utility. Even in the U.S., the data are imperfect. When exploring campaign finance, scholars have to make do with what is available.

In 1994, 3,036 candidates ran for federal deputy. The TSE received data from 24 of Brazil's 27 states. I excluded from analysis all candidates from the states that sent no records (Rio de Janeiro, Alagoas, and Mato Grosso do Sul). This reduces the population of candidates to 2,596. Of these, the TSE received information from 1,563 candidates. Most of the "missing" data may be from candidates who spent nothing: the candidates who sent records (60% of the total) accounted for 81% of all votes for individual candidates.

TABLE 2

	Median	Mean	Std. Dev.	Minimum	Maximum
Vote % (all)	0.89	1.42	1.49	0.02	9.73
Vote % (incumbents)	0.91	1.46	1.43	0.03	8.64
Vote % (challengers)	0.83	1.40	1.53	0.02	9.73
Vote % (inc. winners)	1.09	1.73	1.58	0.16	8.64
Vote % (inc. losers)	0.56	0.91	0.86	0.03	3.68
Vote % (chall. winners)	1.37	1.90	1.79	0.14	9.73
Vote % (chall. losers)	0.51	0.80	0.83	0.02	4.24
Cash % (all)	1.39	2.94	4.27	0.00	38.29
Cash % (incumbents)	1.54	3.26	4.44	0.03	30.05
Cash % (challengers)	1.32	2.71	4.13	0.00	38.29
Cash % (inc. winners)	1.96	3.76	4.71	0.07	30.05
Cash % (inc. losers)	1.10	2.30	3.70	0.03	24.15
Cash % (chall. winners)	1.80	3.24	4.40	0.00	38.29
Cash % (chall. losers)	0.78	2.08	3.71	0.01	26.05

The data include records from 92% (414 of 450) of the winning candidates from the states that sent records. However, I threw out the records of four winners because of a series of uncorrectable typos—the data indicated that they had received billions of dollars in campaign contributions. Thus, I include records of 80% (410) of all winning candidates (there are 513 seats in the Chamber of Deputies).

Table 2 provides sample statistics for the main variables.

Manuscript submitted 12 January 2000
Final manuscript received 18 September 2000

References

Ames, Barry. 1995. "Electoral Strategy Under Open-List Proportional Representation." *American Journal of Political Science* 39(2): 406–33.

Brasil. Congresso Nacional. 1993. "Lei 8.713 de 30 de setembro de 1993: Estabelece normas para as eleições de outubro de 1994" [Law 8713 of September 30, 1993: establishing norms for the October 1994 elections]. Brasília: Congresso Nacional.

Brasil. Tribunal Superior Eleitoral. 1991. "Resultados das Eleições de 1990" [Results of the 1990 Elections] (Computer files). Brasília: TSE/SI.

Brasil. Tribunal Superior Eleitoral. 1995. "Resultados das Eleições de 1994" [Results of the 1994 Elections] (Computer files). Brasília: TSE/SI.

Brasil. Tribunal Superior Eleitoral. 1997. "Sistema de Controle de Recursos Arrecados [Accrued Campaign Funds Control System]." Brasília: TSE/SCI.

Cassie, William, and David Breaux. 1998. "Expenditures and Election Results." In *Campaign Finance in State Legislative Elections*, ed. Joel Thompson and Gary Moncrief. Washington, DC: Congressional Quarterly Press.

Cox, Gary W., and Michael F. Thies. 2000. "How Much Does Money Matter? 'Buying' Votes in Japan, 1967–1990." *Comparative Political Studies* 33(1): 37–57.

del Castillo, Pilar, and Daniel Zovatto G. (eds.) 1998. *La Financiación de la Política en Iberoamérica*. San José: Instituto Interamericano de Derechos Humanos.

Federal Elections Commission (FEC). 1999. "FEC Reports on Congressional Fundraising." At: http://www.fec.gov/press/canye98.htm. Accessed 12/18/99.

Ferreira Rubio, Delia (ed.). 1997. *Financiamiento de Partidos Políticos*. Buenos Aires: CIEDLA/Konrad Adenauer Stiftung.

Figueiredo, Argelina, and Fernando Limongi. 1996. "Congresso Nacional: Organização, Processo Legislativo e Produção Legal" [National Congress: Organization, Legislative Process, and Legal Production]. *Cadernos de Pesquisa CEBRAP* (5).

Fiorina, Morris. 1977. *Congress, Keystone of the Washington Establishment*. New Haven: Yale University Press.

Gerber, Alan. 1998. "Estimating the Effect of Campaign Spending on Senate Election Outcomes Using Instrumental Variables." *American Political Science Review* 92(2): 401–11.

Green, Donald, and Jonathan Krasno. 1988. "Salvation for the Spendthrift Incumbent: Reestimating the Effects of Campaign Spending in House Elections." *American Journal of Political Science* 32(4): 884–907.

INESC. 1994. "Renovação pode ficar abaixo dos 60% e será menor nas grandes bancadas [Turnover could be below 60% and will be lower in the larger parties]." *Informativo INESC* 49 (September): 4–5.

Jacobson, Gary. 1978. "The Effects of Campaign Spending in Congressional Elections." *American Political Science Review* 72(2): 469–91.

Jacobson, Gary. 1990. "The Effects of Campaign Spending in House Elections: New Evidence for Old Arguments." *American Journal of Political Science* 34(2): 334–62.

Mainwaring, Scott. 1999. *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil*. Stanford: Stanford University Press.

NetDolar. 1999. "Pesquisas por Período" [Research by Time Period]. At: http://www.netdolar.com.br/periodo.htm. Accessed 12/7/99.

Palda, Filip. 1994. "Desirability and Effects of Campaign Spending Limits." *Crime, Law, and Social Change* 21(1): 295–317.

Palda, Filip, and Kristian Palda. 1998. "The Impact of Regulated Campaign Expenditures on Political Competition in the French Legislative Elections of 1993." *Public Choice* 94(1): 157–74.

Power, Timothy. 1998. "The Pen Is Mightier than the Congress: Presidential Decree Power in Brazil." In *Executive Decree Authority*, ed. John M. Carey and Matthew S. Shugart. New York: Cambridge University Press.

Samuels, David. 1998. "Careerism and Its Consequences: Federalism, Elections, and Policy-Making in Brazil." Ph.D. diss., University of California at San Diego.

Samuels, David. 2000 "Ambition and Competition: Explaining Turnover in the Brazilian Chamber of Deputies." *Legislative Studies Quarterly* 25(3): 481–97.

Samuels, David. N.d.(a). "Does Money Matter? Campaign Finance in Newly Democratic Countries: Theory and Evidence from Brazil." Forthcoming, *Comparative Politics*.

Samuels, David. N.d.(b). "Money, Elections and Democracy in Brazil." Forthcoming, *Journal of Inter-American Studies and World Affairs*.

Santos, Fabiano. 1999. "Party Leaders and Committee Assignments in Brazil." Presented at the annual meeting of the American Political Science Association, Atlanta.

David Samuels is assistant professor of political science, University of Minnesota, Minneapolis, MN 55455.