# Media Barons and Electoral Politics: Politically-Controlled Broadcasting in Brazil

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#### Abstract

Does the rise of commercial mass media threaten or enhance the power of traditional political bosses in developing democracies? While access to outside information might increase political competition or prompt voters to reject corrupt politicians, bosses who can dominate local broadcasters may see an electoral benefit. I test the latter hypothesis by exploiting geographical variation in the coverage of radio and television stations with ties to Brazilian candidates for state and federal deputy. Using a spatial differences-in-differences estimator combined with matching, I compare the electoral boost that media-controlling candidates receive within range of their stations to any boost or deficit for similar candidates without media control. Ties to broadcast media bring substantial benefits—around 12 percentage points of the vote—within municipalities where signals can be received. The effect is driven almost entirely by FM radio stations, which are easier than television for individual politicians to dominate.

## **1** Introduction

In developing countries such as Brazil, traditional boss politics thrived in an environment of limited information about the outside world. With the elimination of property requirements for suffrage in the late 1800s, Brazilian landlords took on a new role as electoral brokers. In exchange for preferential access to state services for their community, such as police, schools, and local infrastructural improvements, landlords would ensure that peasants who lived on their property voted for powerful incumbents running for reelection (Leal, 1977). Thanks to peasants' rural isolation, the system continued to thrive even after the introduction of the secret ballot in 1932. With few alternative sources of political information, peasants were unlikely to have independent preferences or exposure to an electoral campaign and would readily vote for whomever they were instructed.

How does the rise of commercial mass media affect the electoral fortunes of political bosses in a developing democracy? One body of research suggests that contemporary officeholders (or their parties) in countries such as Brazil, India, and Ghana are actually *disadvantaged* in their bids for reelection (Brambor and Ceneviva, 2011; Linden, 2004; Miguel and Zaidi, 2003; Moreira, 2012; Titiunik, 2009; Uppal, 2009). Though numerous mechanisms could explain this finding, a strong contender is that voters punish incumbent politicians when they learn about corruption in office—and that instances of corruption and media exposure of official wrongdoing are both common enough to outweigh any of the more general advantages, such as name recognition or an ability to deliver government benefits to supporters, that derive from being in power.

A second possibility is that many traditional political bosses are able to maintain their positions of influence—and any advantage they might have when running for office—by gaining control over local mass media and directly shaping voters' information environment. "Political boss," after all, is a more restricted category than "incumbent," implying not only influence within local government but also an ability to maneuver successfully within political networks and exchange benefits for favors. A boss who can ensure support for his own candidacy by manipulating constituents' access to local government services is also well positioned to extract benefits from higher levels of government—including broadcasting concessions—by delivering votes for the officials who can

grant them. Even if incumbents are generally disadvantaged, those who can gain control over the airwaves may experience a boost in their electoral fortunes, as Boas and Hidalgo (2011) found for the case of municipal politicians and community radio in Brazil.

In this paper, I exploit geographical variation in the receptability of radio and television broadcasts to estimate the causal effect of media control on electoral performance in Brazil. Based on data on the shareholders and directors of all commercial broadcasters in Brazil, I identify those candidates for state and federal deputy that had media concessions prior to the 2010 election. I then use the geographical location and broadcast range of each station's transmitters to determine which municipalities in each state are within the range of politically-controlled broadcasts and which lie beyond it. Using a spatial differences-in-differences estimator combined with matching, I compare the electoral boost that media-controlling candidates receive within range of their stations to any boost or deficit for similar candidates without media control. The analysis shows that media control brings huge electoral benefits: an additional 11.9 percent of the vote in those municipalities where signals can be received. The effect derives almost entirely from control of FM radio stations rather than television. Radio stations are subject to less oversight, and they have many fewer directors or owners, so candidates who control them can more readily manipulate their coverage.

## 2 Background and Theory

As commercial broadcasting expanded in Brazil, under both military and democratic rule, many traditional political bosses moved to establish dominant positions within local and regional media markets. Prior to 1988, broadcasting concessions were the exclusive privilege of the executive branch, which often used them as a valuable currency for ensuring the support of local power brokers. In the waning days of the 1964–1985 military regime, President João Figueiredo awarded a number of licenses to political allies, even altering the planned allocation of broadcast frequencies to different cities so that space on the radio spectrum would be available where it was politically ex-

pedient (Lima, 1987). During the first three years of the new democracy, President José Sarney and Communications Minister Antônio Carlos Magalhães—both powerful political bosses with media holdings themselves—authorized broadcasting concessions for 91 representatives to Brazil's Constituent Assembly. Evidence suggests substantial back-room dealmaking: many concessions were granted during the most intense months of deliberation on the new constitution, and legislators who received licenses went on to vote overwhelmingly in favor of several key amendments supported by Sarney (Motter, 1994).

As a result of this history of using political criteria to issue broadcast licenses, politicians are well established among the ranks of media moguls in Brazil. Several watchdog organizations, despite using somewhat different samples of politicians and criteria to measure media ties, arrived at nearly identical estimates: 270 or 271 Brazilian politicians were partners or directors of commercial broadcast media as of 2008 (Stevanim and dos Santos, 2011). Among them are Fernando Collor, a senator and former president, and Roseana Sarney, a governor, former senator, and daughter of former president Jos Sarney. The Collor and Sarney family conglomerates dominate broadcasting in their home states of Alagoas and Maranhão, respectively, controlling radio stations and the local affiliates of Brazil's major television network, TV Globo. In recognition of the media presence of these and other major politicians, "electronic boss politics," or *coronelismo eletrônico*, has become a popular concept among Brazilian communication scholars and journalists (Bayma, 2001; Capparelli and Santos, 2002; Costa and Brener, 1997; Góes, 2012; Lima and Lopes, 2007; Motter, 1994; Pieranti, 2008; Santos and Capparelli, 2005; Santos, 2006; Stadnik, 1991; Stevanim and dos Santos, 2011; Vasconcelos, 2010).

Existing research and data sources on *coronelismo eletrônico* in Brazil are more oriented toward demonstrating politicians' control of the media than the electoral benefits they might extract from it. Scholars have focused on successful incumbent (or retired) politicians with ties to broadcast media; we know little about any challengers with media ties that might have lost elections or performed poorly. Using existing datasets to analyze the effect of media control on electoral results would invariably mean selecting on the dependent variable. Studies of the phenomenon have gen-

erally eschewed causal claims about electoral effects—noting, for example, that most politicians with media ties took office before gaining their concessions (Stevanim and dos Santos, 2011).

Yet the hypothesis that media control confers electoral benefits is certainly plausible, in part because politicians routinely use their broadcasting concessions to manipulate political coverage in their favor. In 2001, TV Globo's main journalism office had to intervene in the newsrooms of regional affiliates in Alagoas, Sergipe, and Ceará—controlled, respectively, by ex-president Fernando Collor, governor Albano Franco, and federal deputy Edson Queiroz—because they were blatantly promoting the career of their political sponsor or attacking his major adversary (Bruno, 2001). In 2009, Brazilian police recorded a conversation between José Sarney and his son in which they discussed using their television network to attack one of Roseana Sarney's political opponents (Souza and Seligman, 2009). Brazilian politicians themselves are often quite open about the electoral benefits of media control. In an interview with Mainwaring (1999, 150) in the 1980s, then-Senator Fernando Henrique Cardoso remarked that "a TV channel is worth more than a party" in furthering a political career. Or as Antônio Carlos Magalhães—arguably Brazil's most famous political and media boss—put it in 1975: "He who has television, radio, and newspapers will always be in power."

Judging from the limited existing research on the effects of politically-controlled broadcasting in Brazil, the potential electoral benefits of commercial radio and television concessions are vast. In a study focused on lower-power community radio stations and candidates for city council, Boas and Hidalgo (2011) found that the existence of a station with ties to a candidate increased his or her vote share by 17% and probability of winning by 28%. This finding is all the more striking when one considers the inherent limitations of these broadcasters, which are restricted to a single transmitter and a signal radius of one kilometer. By contrast, commercial FM radio stations have guaranteed non-interference ranges of up to 78 kilometers from each transmitter, and they routinely broadcast from multiple locations. The regulations governing broadcast television are similar. By controlling one or more commercial broadcasters, politicians have the ability to alter the information environment for thousands or even millions of voters within their states. Geographical variation in the reach of politically controlled broadcasting offers a strategy for quantifying its effects on electoral performance. Few politicians have sufficiently extensive media holdings to affect the information environment of *all* of their constituents. Brazil covers a vast territory, and most of its 5568 municipalities (the equivalent of U.S. counties) are rural rather than urban. Even in geographically small states, there are gaps in the coverage of major radio and television stations. As a result, one can almost always identify certain municipalities that are beyond the reach of a political boss's media control, and exploit this variation to examine its electoral effects. This spatial approach is similar to that of Kern (2011), who uses geographical variation in the reception of West German television signals within East Germany to test the hypothesis that access to foreign media facilitates protest diffusion. However, since the outcome examined here—electoral performance—varies across politicians as well as localities, I am able to employ a research design that allows for stronger causal inference.

### **3** Research Design

To estimate the effect of media control on electoral performance in Brazil, I use a spatial differencein-differences estimator combined with matching to ensure equivalence between treatment and control groups. Difference-in-differences is a technique for dealing with unobserved fixed effects that might otherwise serve as confounders (Angrist and Pischke, 2008, 227–233). The traditional difference-in-difference analysis exploits temporal variation in treatment status: the outcome of interest for a treatment and control group is observed both before and after the treatment is received. In the present analysis, this approach would be viable if broadcasting concession were granted to some politicians, but not others, in between two elections for which we have outcome data. Comparing the electoral performance of the treatment and control groups only after the treatment has been applied risks bias because they might differ from one another in unobservable ways. Likewise, a simple pre-post comparison of the treatment group is problematic because the two elections might differ in unobservable ways that could affect vote share. Difference-in-differences offers a solution, provided that group fixed effects are time-invariant (i.e., any inherent electoral advantages of the treatment group were the same in both elections) and time fixed effects are group invariant (i.e., if some event lowered vote share for the treatment group at time 0, it had the same effect on the control group).

A spatial approach to difference-in-difference analysis, while less common, has a parallel interpretation to the temporal approach. Electoral results for politicians in the "media control" treatment group can be observed both in municipalities that are beyond the broadcast range of their stations (the analog to the pretreatment election) and in those that are within that range (akin to the posttreatment election). Results for politicians in the control group can be observed in the same sets of municipalities. Spatial fixed effects are likely to influence a media mogul's electoral performance in each location. In particular, municipalities outside the broadcast range of a given politician's media holdings should tend to be more isolated and less developed, which should have independent effects on vote share. For the difference-in-differences design to provide an unbiased causal estimate, these spatial fixed effects must be group invariant—that is, they must affect politicians with media control and those without in the same way. Likewise, politicians with media control may differ, on average, from those without—they may be better campaigners, more physically attractive, and so on. The difference-in-differences design requires that these features of each group have the same effect on electoral performance within the range of politically controlled broadcast signals and outside of it.

To state the approach somewhat more formally, the estimand of interest is:

 $\mathbb{E}[$ (Vote share of media-controlling candidate *i* where *i*'s signals *can* be received –

Vote share of media-controlling candidate i where i's signals cannot be received) –

(Vote share of non-controlling candidate(s) where i's signals can be received –

Vote share of non-controlling candidate(s) where *i*'s signals *cannot* be received)]

In theory, one could compare the spatial difference in candidate *i*'s vote share to that of every nonmedia controlling candidate in the state. However, the necessary assumptions about the invariance of fixed effects are more plausible when each media-controlling candidate is paired with one or a few candidates who are most similar on observed covariates.

To identify plausible counterfactuals for each candidate in the treatment group, I use matching. As discussed in greater detail below, I first employ coarsened exact matching (Iacus, King and Porro, 2012) to prune the treatment and control groups to those candidates who are identical in terms of state, office, incumbency status, and party or coalition, and are within the same strata of campaign spending and prior electoral performance. I then use genetic matching (Sekhon, 2011) to further trim the control group so that it is, on average, similar to the treatment group in terms of other covariates like candidate age, gender, and occupation as a businessman. As a result, I can compare each politician with media control to a very similar politician with no broadcasting concessions. Unobserved differences between groups should be smaller for such politicians, so the assumption that group fixed effects do not differ across municipalities is not as severe. Likewise, spatial fixed effects are more likely to be group-invariant when these groups are similar to one another.

#### 3.1 Data

Given unsuitability of existing data sources for examining the effects of media control on electoral performance, I constructed an original dataset based on information from Brazil's Ministry of Communications, the national communication regulatory agency (Anatel), and the Supreme Electoral Court (TSE). I began with a list of all directors and partners of commercial radio and television stations in Brazil, which was published on the Ministry of Communications website on May 30, 2011.<sup>1</sup> Given the likelihood of a lag time in updating records, I assume this list is a fairly accurate reflection of who was in control of these stations during the campaign for the October 3, 2010 elections. Prior to the publication of this list, similar data were only available as of 2003.

Using the TSE's data on candidates in the 2010 election, I then matched the names of these

<sup>&</sup>lt;sup>1</sup>The list, which has since been updated, is available at http://www.mc.gov.br/images/ dados-sobre-outorgas/Relao\_de\_Scios\_e\_Diretores\_por\_Entidade.pdf. The version used in this paper is currently archived at http://media.folha.uol.com.br/poder/2011/05/28/relacao\_ de\_socios\_diretores\_entidades.pdf.

directors and partners to a list of politicians running for state and federal deputy in the same state as the station. Out of 17,489 candidates for state or federal deputy in 2010, there were 197 who matched one of the 18,205 unique names in the broadcasting database. These include 144 exact matches, as well as 53 non-exact matches that differed because of spelling errors, prepositions such as "de," suffixes such as "Junior," and the omission of a second middle name or surname (e.g., Francisco de Assis Carvalho versus Francisco de Assis Carvalho Gonçalves). The decision rule for suffixes means that, in some cases, I probably matched fathers and sons rather than the same individual. However, given that media empires are routinely used to perpetuate political dynasties, these "mistakes" are not necessarily problematic. While existing databases of politicians with media control have gone further in their search for ties, investigating concessions given to spouses, family members with different names, and business associates, I refrained from doing additional research of this sort. Data on the losers of elections is harder to come by than data on winners, so going beyond name matching would likely draw more successful candidates into the dataset that unsuccessful ones—in effect, selecting on the dependent variable.

To identify each politically controlled station's broadcast range, I merged in data from Anatel on the type of station (FM radio, AM radio, or television) and the class, frequency, channel, power, latitude, and longitude of each of the station's transmitters. For FM and television signals (UHF and VHF), which travel via line-of-sight, the Brazilian regulatory authority assigns a guaranteed non-interference range (*contorno protegido*, or service contour in the terminology of the U.S. Federal Communications Commission) based on the station's class.<sup>2</sup> For each transmitter and candidate, I then calculated the great circle distance to the downtown area of each municipality in the state.<sup>3</sup> I aggregated these data, by candidate, into a list of municipalities that are safely beyond the broadcast range of all of the candidate's transmitters in that state and another list of those that are within the range of at least one transmitter.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup>These data were obtained from http://www.teleco.com.br/radio.asp and http://www.teleco.com.br/tv.asp. In some cases, class was missing from the database but I was able to determine it based on transmitter power and, for television, channel number. Whenever there was uncertainty, I assigned the maximum possible broadcast range based on the information available.

<sup>&</sup>lt;sup>3</sup>Latitude and longitude of municipalities were obtained from Google Maps.

<sup>&</sup>lt;sup>4</sup>I define "safely beyond the broadcast range" as 1.5 times the maximum distance to the service contour, since

I define the treatment group as all candidates with ties to an FM radio and/or television station. AM radio signals are less geographically bounded than FM signals, and they travel further at night, so it is more difficult to determine which municipalities are or are not exposed. I thus exclude from both the treatment and control groups any candidate who only has ties to an AM station. I also exclude five candidates for whom the outcome is undefined because none of their transmitters reach the downtown area of any municipality. The final, pre-matching treatment group contains 118 candidates.

#### 3.2 Matching

As a first step for pairing candidates with media control to similar candidates without, I used exact matching on indicator variables and coarsened exact matching on continuous variables (Iacus, King and Porro, 2012). In contrast to other approaches such as genetic matching, which only achieve balance between treatment and control groups as a whole, exact matching ensures that each treatment observation is matched to one or more very similar control observations. This step is necessary because the value of the outcome variable for each candidate in the control group depends on the treated candidate to which they are matched—specifically, which municipalities are within versus beyond the range of that candidate's politically controlled broadcasts. I match exactly on state, office (federal versus state deputy), incumbency status, and municipal-level electoral coalition—or, for candidates of the three most common parties within the treatment group (PMDB, DEM, and PSDB), the party itself. I also match on strata of reported campaign spending in the 2010 election and, for those having run previously for the same office, statewide vote for that candidate in the 2006 election. Given the skew of both variables for candidates in the treatment group, I use progressively smaller strata: bottom 40%, next 30%, next 20%, top 10%. Forty observations are dropped from the treatment group because exact matches could not be found on all these covarates; there are 600 exact matches for the 78 that remain.

Balance between treatment and control groups on key covariates is much improved after (coarssignals may travel beyond it, subject to interference.



**Figure 1: Balance Statistics** 

ened) exact matching, as summarized in Figure 1. On office sought, incumbency status, and most of the major states and party affilications, candidates with media control look very different from those without. After exact matching, of course, the threatment and control groups are identical on these variables. Coarsened exact matching on spending and prior vote share also improves balance on the underlying continuous variables (I check balance on the log of prior vote share and on a normalized version of campaign spending: the log of spending as a percent of total spending per seat for that office in that state). However, some differences remain for spending, as indicated by the KS test. Finally, I check balance on several additional covariates that were not used in matching: gender, year of birth, and indicators for low education (high school or less) and a business occupation. Balance improves on these covariates as well, though in most cases, treatment and control groups continue to differ substantially after exact matching.

Given the large number of control observations retained after coarsened exact matching, there is

an opportunity to further improve balance by conducting additional matching within strata (Iacus, King and Porro, 2012, 14). I thus use genetic matching (Sekhon, 2011) to choose the subset of the 600 exactly-matched control observations that maximize balance on gender, year of birth, low education, business occupation, and normalized campaign spending. After genetic matching, balance improves on all these covariates, so that no p-value from a KS or t-test is below 0.1. This step reduces the control group to the same size as the treatment group. At the end of the matching process, therefore, each treated candidate is paired with a single control candidate of the same state, office, party or coalition, incumbency status, and strata of campaign spending and prior votes.<sup>5</sup> On average, these groups are also similar in terms of other key covariates.

## **4 Results**

The results of the difference-in-differences analysis indicates that there are massive electoral returns to media control. The top line of Table 1 summarizes these results. Given Brazil's open-list proportional representation system with numerous candidates for legislative office, vote share tend to be low: the average statewide vote share for all federal and state deputy candidates in 2010 was 0.3%. For the three outcomes in which the treatment was absent—voting for media-controlling candidates beyond the range of their broadcasts, and voting for similar non-controlling candidates in either location—vote shares are fairly close to this figure (albeit somewhat higher, presumably because the treatment group and matched control group should contain better-than-average politicians). Within the range of their stations' broadcasts, however, candidates with media control receive a massive 12.2% of the valid vote. The difference-in-differences estimate of the effect of media control is 11.9 percentage points, which is highly statistically significant.

Given that political bosses may have held office, and had ties to broadcast media, for years or even decades prior to the 2010 election, the causal effect of media control is not necessarily a proximate one. Rather, the benefits of self-promotion should accumulate over time, both during

<sup>&</sup>lt;sup>5</sup>Two controls are used twice.

Sample	Media Control: Within Range	Media Control: Beyond Range	No Control: Within Range	No Control: Beyond Range	DiD	SE	N
All	12.2	0.7	0.6	1.1	11.9	1.9	156
1st Time	7.5	0.4	0.2	0.5	7.5	2.2	88
FM only	15.3	0.7	0.6	0.8	14.7	2.4	116
TV only	0.5	0.8	0.4	1.2	0.5	0.5	18

Table 1: The Effect of Broadcast Media Control on Vote Share

NOTE: Entries (except for N) are percentages of valid vote.

and outside of campaign periods. However, media control also brings substantial returns to firsttime candidates for state or federal deputy office. The second line of Table 1 estimates the effect for those candidates—slightly more than half of the total—who did not run for the same office in the 2006 election.<sup>6</sup> While smaller, the difference-in-differences estimate is nonetheless a substantial and highly significant 7.5 percentages points.

How do different forms of media control vary in terms of their effect on electoral results? The full-sample treatment group contains candidates with ties to television stations, FM radio stations, or both. The final two lines of Table 1 present estimates for candidates who only have control over one type of media or the other. These results show that the effect of media control on vote share is essentially driven by FM radio, with an estimated effect of 14.7 percentage points. By contrast, having ties only to television stations has no significant effect on a candidates electoral results.

There are several possible explanations for the massive returns to politically-controlled radio and the negligible benefit to politically-controlled television. First, radio stations tend to be independent operations that can freely engage in blatant politicking, whereas television stations tend to be affiliated with national networks that provide some oversight. As noted above, TV Globo's main journalism office intervened in the newsroom of several regional affiliates when their coverage became too favorable toward the local political boss; such intervention is highly unlikely for radio stations. Second, television stations are often run by large corporations with many directors and shareholders, diluting the influence of any politicians among them. Of the nine candidates with ties

<sup>&</sup>lt;sup>6</sup>We cannot be absolutely certain that all of these candidates are first-timers, since they may have run in elections prior to 2006. Moreover, some federal deputy candidates in 2010 may have run for state deputy in 2006.

only to television stations, six of them share ownership with more than 900 partners. By contrast, FM radio stations tend to have much more concentrated ownership and management. Among those candidates with ties only to FM radio stations, none has to share directorship or ownership with more than 8 other individuals.

Results suggest that the matching strategy was successful in eliminating major differences between candidates with media control and those without. As a placebo test, we can compare the vote share of treated candidates and their counterfactuals beyond the range of politically-controlled broadcasts. The difference-in-differences approach assumes any differences in vote share in these locations are attributable to a spatially invariant group fixed effect. However, a successful matching strategy should reduce the size of this fixed effect by making the two groups similar to one another on covariates that could affect the outcome. Indeed, vote shares for each group in the beyond-range locations are statistically indistinguishable from one another. This lends support to the assumption that, if they had no media control at all, treated candidates would perform similarly to their non-treated counterparts throughout the state.

## 5 Conclusion

The results of this analysis demonstrate quite clearly that control of commercial broadcast media brings substantial electoral returns in Brazil. If they were limited to traditional means of maintaining electoral support, political bosses might see their dominance decline as subject populations gained greater access to information about the outside world. Indeed, several cases of peasants betraying their landlords at the polls in the 1940s are attributed to the influence of radio advertising, which was begining to make inroads into electoral campaigns (Leal, 1977, 12). However, as commercial broadcast media spread throughout Brazil in the ensuing decades, many political bosses were able to extend their control over land to control over the airwaves. While unlikely to enjoy complete information monopolies—there will always be competing radio and television stations—political bosses with media control can exert substantial influence over large shares of the electorate. In doing so, they may be able to counteract a more general tendency in Brazil and other developing democracies, whereby incumbents are disadvantaged in subsequent elections because of popular rejection of corruption and rent seeking. Voters aiming to "throw the bums out" are presumably motivated by having gleaned information on malfeasance from the media—something that is much less likely when the malefactor in question is also a media mogul.

Yet even the most dominant of Brazil's media mogul politicians cannot blanket their entire state with favorable coverage. The prevalance of far-flung, rural municipalities and the inherent technical and regulatory limits to the range of FM radio and television broadcasts means that voters in some locations will lie beyond their reach. For candidates for state and federal deputy, geographically limited media control is not a problem. Under open-list proportional representation, candidates can win office with relatively low vote shares, so they need not convince a majority of voters. However, spatial variation in the reception of politically-controlled broadcasts does provide an opportunity for scholars. By matching politicians with media control to similar politicians without, and comparing the electoral "boost" they get within range of their broadcasts to any boost or deficit experienced by their non-controlling counterparts, I am able to estimate the causal effect of media control on vote share. These massive treatment effects should be kept in perspective, as they apply only to specific localities. Media-controlling candidates may have experienced an average boost of 11.9 percentage points within range of their stations, but statewide they won only 0.95% of the vote. However, for some of these candidates, controlling local media may have been enough to keep them in office or win a seat for the first time.

Future versions of this paper may seek to clarify the electoral effects of temporally proximate versus temporally distant media control. While treated candidates and their counterfactuals are similar in terms of prior statewide vote share, they almost certainly did not have the same prior vote shares within the range of the treated candidates' broadcasts. In other words, the causal effect of media control on results of the 2006 election is unlikely to be zero. Rather, many politicians acquired their radio and television concessions in the 1980s or 1990s and have been reaping the benefits over multiple electoral cycles. The above analysis for first-time candidates seeks to get at

more proximate causal effects, but even these candidates may have served previously in a different elected office. Or, if entering politics for the first time, they may nonetheless have accumulated significant reknown through their previous media career—as with Silvio Berlusconi in his first electoral contest in Italy. An alternative strategy for investigating more the proximate causal effects of media control would be to match on prior vote share within the range of the treated candidates' politically controlled broadcasts. In this case, the treatment would be interpreted not as media control in general, but rather media control leading up to the most recent election. Causal effects would almost certainly be smaller, but if they are identifiable, it would show that media control pays ongoing dividends even to those politicians that have long enjoyed it.

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