

Do protests reach the ballots?

The electoral dividend of the Brazilian Spring*

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Abstract: What are the electoral consequences of major protests? This paper presents empirical evidence that the Brazilian cities that hosted demonstrations in the so called 2013 Brazilian Spring displayed different electoral outcomes the following year. Using a diff-in-diff approach, we were able to conduct an empirical study of panel data measuring the impact of those demonstrations in the 2014 elections. We observe that protests were related to political renewal, an increase in the electoral competitiveness, and an increased use of the institutional mechanisms for contesting an election. Also, we observe an increased rejection of candidates already known by the electorate, especially those attached to the Executive Branch, and those affiliated with the incumbent president's party.

Keywords: Protests, Elections, Democracy, Politics, Brazil.

JEL Codes: C23, D72, D74.

Resumo: É possível esperar resultados eleitorais diferentes após o acontecimento de grandes protestos? Este trabalho apresenta evidências empíricas de que as cidades brasileiras que presenciaram as manifestações de 2013 tiveram respostas eleitorais diferentes no ano seguinte. Usando uma abordagem de diff-in-diff, pudemos realizar um estudo empírico de dados em painel mensurando os impactos desses protestos nas eleições de 2014. De uma forma geral, as respostas empíricas sugeriram que os protestos tiveram relação com os resultados eleitorais. Encontramos uma tendência à renovação política, um aumento da competitividade eleitoral, e um crescimento no uso dos mecanismos institucionais de contestação eleitoral. Ainda, também observamos um aumento na rejeição de candidatos já conhecidos pelo eleitorado, especialmente aqueles ligados ao Poder Executivo, e um repúdio crescente aos candidatos filiados ao partido político do presidente da República em exercício durante a época das manifestações.

Palavras-chave: Protestos, Eleições, Democracia, Política, Brasil.

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1 Introduction

Protests remain an important mean of political influence around the world. Being used as a mechanism for participating in the political process, instead of just voting, citizens are demonstrating their preferences going to the street and screaming their will. Whereas the political protest is a global phenomenon of the 21st century (Ortiz et al., 2014)¹, we will analyze whether the wishes expressed on the streets are also displayed on the ballot box during the upcoming elections.

To do so, we study the 2013 Brazilian protests' wave, referred to as the Brazilian Spring. The June 2013 Protests profoundly marked Brazil's historiography (Scherer-Warren, 2014). They spread through all states, and occurred regularly throughout that specific month. Since 1992, where massive popular protests in support of President Collor's impeachment, Brazil had not faced such important public demonstrations of discontent with the political, social and economic situation.

Following the typical patterns of recent protests that was decentralized and relied on social media as an organizing tool (Avritzer, 2016), the protests stood out not only for their geographical coverage but also for their size. Organized by civil society, without the direct support of any formal political institution, such as unions or political parties, the spontaneous acts were interesting events that elucidated the most distinct concerns present in Brazilian society at the time.

In order to identify whether the wishes expressed on the streets were displayed on the ballot box during the upcoming elections, we conduct an empirical study of panel data using a diff-in-diff approach. We admit the occurrence of a protest as an event that signals different electoral preferences in the city in which it was displayed. Then, we compare the results of the 2010 elections (pre protests) with the results of the 2014 election (post protests). To be more accurate, there will be used as the cross-sectional units needed for this work the electoral zones located in the cities observed.

The protest may impact the elections in many different ways. So we focus on four classes of dependent variables. The first class is electoral competitiveness. We use the Effective Number of Parties (ENP) and the Effective Number of Candidates (ENC) following the usual political science literature (Laakso and Taagepera, 1979). Second, we look at the use of institutional mechanisms available for protesting by the voter. These include the rates of abstention, blank and null votes. Third, we look at the distribution of votes among different types of candidates and political parties. We observe the shares of the valid votes for candidates who are known and candidates who are unknown by the electorate, such as the shares of the valid votes for the known and unknown political parties. Lastly, we analyze the electoral performance of the Government and the Opposition through the share of the valid votes for the presidential party, as well as the shares of the valid votes received by its coalition and the Opposition coalitions.

The main results suggest that the dissatisfaction of the Brazilian population with the political system was observed in the most different results of the 2014 elections. Some of these outcomes were the increased number of candidates and parties with a chance of winning, the growth of aggregate blank and null votes, and the decrease in the percentage of the votes for candidates and parties known by the electorate. The results are also different according to the position in stake. Those of the Executive Branch found a greater relationship with the demonstrations than those of the Legislative. In addition, the candidates affiliated with the incumbent federal executive party faced greater voter discontent. Regardless of what angle we look at, the conjuncture indicates discontent with the electoral scene and a clear tendency towards political renewal.

The present paper shows the impact of the 2013 demonstrations over the Brazilian political configuration.

¹Despite its heterogeneity for being present in many different societies around the globe, the new wave of unrest has characteristics consistent with the globalized times. These peaceful demonstrations are organized by civil society, without an institution to supervise or guide, and use social media to give internal cohesion to the movements and propagate their concerns internationally. The protests of the new times not only follow a specific form but also call for a common demand: real democracy - a situation in which people are allowed to participate in the decisions that affect their lives.

It is striking that with the exception of Rocha (2015), there are few studies on this important event. Although there are seminal works that show the impact of the 21st century demonstrations in nations under undemocratic regimes (Acemoglu et al., 2017; Kricheli et al., 2011; Campante and Chor, 2012), when it comes to countries under democratic regimes there is a lack in the literature that measures how manifestations affect the change of political configuration (Mendonça and Ercan, 2015; Machado et al., 2011; Aidt and Franck, 2015). Having as support seminal works such as Passarelli and Tabellini (2017) that models the protest's behavior and the government response to the riots, and Madestam et al. (2013) that investigates whether protests cause political change or they are merely symptoms of underlying shifts in policy preferences, this article aims to highlight the influence that protests have on democratic regimes.

The paper is organized as follows. Section 2 discusses the Protest of June 2013. Section 3 elucidates the electoral process of the 2010 and 2014 elections. Section 4 describes the data and Section 5 discuss our empirical strategy. The results are presented in Section 6 and Section 7 concludes the paper.

2 The protests of June 2013 in Brazil

The 2013 protests that occurred in Brazil² were a set of civil protests that began in response to an increase in bus and metro fares. Beginning in the state capitals and spreading throughout the country's inner, the protests initially had the support of small activists groups for free public transportation and ended approved by 84% of the Brazilian population³.

The demonstrations began as small acts for the reduction in public transportation fares and obtained great popular adhesion after severe police repression during the middle of June. While the first phase of the manifestations was dedicated especially to urban mobility affairs, the second was conducted by thousands of people who were not engaged solely in combating the increase in bus and metro fares. New guidelines that bothered Brazilian society were appearing on the streets.

While social media were widely used in both moments to organize the daily acts (Campante et al., 2017), the first phase had the largest presence of social movements organizing the events, such as the "Movimento Passe Livre" (Free Fare Movement) in São Paulo. Focusing on solving the increasing public transportation fares, the initial phase had reduced popular participation, not all of its acts were broadcast by the media, and constantly violent conflicts between demonstrators and police. On the other hand, the second phase had great media support, massive popular participation, very low police repression, and politicians willing to solve the protesters' demands.

São Paulo was the city in which the June protests began. Having been readjusted on June 2 by the city hall of São Paulo, bus, urban trains, and subways fares increased from R\$ 3.00 to R\$ 3.20, triggering a series of protests that were growing along on June 6, 7, and 11. Clashes with the police resulted in the wounding of demonstrators and police officers. On June 13, the protests occurred again in São Paulo and spread to other cities, such as Natal, Porto Alegre, Teresina, Rio de Janeiro, and Fortaleza. In São Paulo, the police response was excessive, resulting in protesters and journalists injured, and more than 300 people detained.

Four days later, on June 17, the new phase begins after a brief pause. On Monday, approximately 300,000 people were protesting in the 12 Brazil's largest cities according to the Military Police. Despite small police reprisals and some outbreaks of vandalism⁴, the demonstrations were peaceful in general. Occurring daily between the June 17 and 21 in several cities in Brazil, the motto for reducing the public transportation fare began to lose focus for other demands. Due to the revocation of the increasing fares in cities like São Paulo and

²The protests are known as the Brazilian Spring, the 2013 Demonstrations, the 2013 Protests, or even the 20 cents Manifestations.

³Survey conducted by IBOPE on August 6, 2013. Source: <https://noticias.r7.com/brasil/manifestacoes-agradam-a-84-dos-brasileiros-diz-pesquisa-ibope-06082013> (accessed January 3, 2019).

⁴The outbreaks of vandalism were led by groups that became known as Black Blocs.

Rio de Janeiro⁵ on June 19, the demonstrations reach their peak the next day. On June 20, 1.4 million people went to the streets in more than 100 Brazilian cities according to the Military Police⁶.

Turning now to issues less tied to public transportation, very diffuse and wide-ranging guidelines are emerging in the acts. There was a very explicit discontentment with the PEC 37⁷, the "Gay Cure"⁸, the public spendings on the 2013 FIFA Confederations Cup, the 2014 FIFA World Cup, and the Rio 2016 Olympic Games. However, the discontent with the ruling class and the entire political configuration (Scherer-Warren, 2014) appeared to be similar among the demonstrators. Within this common dissatisfaction were the calls to put an end on corruption, the criticism on the quality of public services, the repudiation of the party flags presence in the protests, the generalization of politicians occupying elective offices and requests for their resignation⁹. In addition, slogans in favor of the political system reform were widely spread¹⁰ (Singer, 2013).

From June 21 to the end of the month, the protests begin to fragment and weaken. After the Brazilian Spring had ended, its only results left were the revocation of the increase in public transportation fares and promises from the politicians to attend the other demands of the demonstrators. From political reform to eradicating corruption and mismanagement of public services, everything else but the fares had become 2014 campaign promise.

3 The Elections of 2010 and 2014

The elections in Brazil occur every two years on the first Sunday of October. If there is a need of a second round, it is held on the last Sunday of October. The federal elections and the state elections are carried out together, and the voter chooses at the same time president, senator¹¹, governor, federal deputies, and state deputies. After two years, the municipal elections are held, electing mayor and city councils.

The Brazilian electoral system is divided into two categories depending on the positions available to the election: proportional system or majority system. The use of the proportional system is restricted only to the federal deputies, state deputies, and city councilors. The system works through an open list, in which voters directly choose their candidates.

As determined by the Federal Constitution, the majority system shall be applied to elect senators, as well as to all members of the Executive Branch (president, governor, and mayor¹²). For president, governors, and mayors of municipalities with more than two hundred thousand voters, it is required that the candidate obtains an absolute majority of the votes¹³ in order to be elected. If the candidate with the largest number of votes

⁵A total of 104 cities located in 17 states had an increase in public transportation fare canceled according to the news from G1. Source: <http://g1.globo.com/brasil/noticia/2013/07/veja-em-quais-cidades-houve-reducao-da-tarifa-do-transporte-em-2013.html> (accessed January 3, 2019).

⁶Source: <http://g1.globo.com/brasil/protestos-2013/infografico/platb/> (accessed January 30, 2019).

⁷Proposed Constitutional Amendment (Proposta de Emenda Constitucional) 37/2011, or shortly PEC 37, was a Brazilian legislative project that sought to amend the Brazilian Constitution to include the criminal investigations as a private activity of the judicial police. It became known as the "PEC of Impunity" among its opponents.

⁸Known as the "Gay Cure", the draft Legislative Decree 234/2011 approved by the Human Rights Commission of the Chamber of Deputies on June 18, 2013, supported the effects of the 1999 resolution of the Federal Council of Psychology prohibiting psychologists from collaborating with services aimed at the treatment and cure of homosexuality.

⁹Similar to "¡Que se vayan todos!" (Let everyone go!) seen in the Crises of December 2001 in Argentina.

¹⁰Due to the protest, Datafolha conducted a survey that pointed to a 27% fall in the Government's positive assessment after the third week of protests in June. Source: <http://www1.folha.uol.com.br/poder/2013/06/1303541-popularidade-de-dilma-cai-27-pontos-apos-protestos.shtml> (accessed January 3, 2019).

¹¹The only elective position with an eight-year term, while all others are four-year term elective positions.

¹²Source: <http://www.tse.jus.br/o-tse/escola-judiciaria-eleitoral/publicacoes/revistas-da-eje/artigos/revista-eletronica-eje-n.-4-ano-4/sistemas-eleitorais-brasileiros> (accessed January 3, 2019).

¹³More than half of the votes cast, excluding the blank and the null votes.

does not obtain an absolute majority, a second round must be held between the two most voted candidates. For senators and for mayors of municipalities whose electorate is equal to or less than two hundred thousand voters¹⁴, the candidate who has reached the simple majority of the votes is elected¹⁵.

The voting process occurs through the use of the electronic voting machine, a microcomputer that records voters' votes without their identification. And logistically, the elections are organized in electoral zones. They are geographically defined regions within a state, not necessarily corresponding to the limits of a municipality. The electoral zones can be composed of more than one municipality, or of the municipalities' parts. It is managed by an electoral registry, which centralizes and coordinates voters who have their homes in the locality, and usually follows the division of Electoral Justice Counties^{16 17}.

It is noteworthy that in the elections of 2010 and 2014 analyzed in this work, the only elective position that had a number of vacancies available not equal from one election to another was the senator. The Senate renews its House alternately: in 2010, the election of 2/3 of its seats opened new vacancies for 54 senators; and in 2014, only 1/3 of its seats was available for 27 new senators. All other positions had the same number of seats in each election analyzed: 513 federal deputies, 27 governors, 1 president. The position of state deputy has different amounts of vacancies according to the state, but they are always the same in each election.

In Brazil, electoral enlistment and voting are mandatory for voters over the age of 18, being optional for illiterates, those over 70, and those over 16 and under the age of 18¹⁸. Although the voters are required to be at the polling place or to justify their absence, they are free to choose their candidate or not to choose any candidate by voting blank or null. The blank vote is the type of vote that the voters do not express a preference for any of the candidates¹⁹. The null vote is the type of vote that the voters manifest their will to annul the vote^{20 21}.

If the voters do not justify their absence, they will have to pay a R\$ 3.51 fine for each round they did not vote and did not present justification, and it can be increased by up to 10 times if the electoral judge considers the value ineffective by virtue of the economic situation of the offender. If the fine is not paid, the voter is prevented from applying for civil service examination, obtaining loans from government financial institutions, receiving remuneration from a public function or job, obtaining a passport or identity card, renewing enrollment in an educational establishment or practice any act for which discharge of military service or Income Tax is required. If the voter does not justify the absence in three consecutive elections, he or she will have the electoral title canceled²².

¹⁴Source:<http://www.tse.jus.br/o-tse/escola-judiciaria-eleitoral/publicacoes/revistas-da-eje/artigos/revista-eletronica-eje-n.-1-ano-3/a-legitimidade-das-eleicoes-majoritarias-no-brasil> (accessed January 3, 2019).

¹⁵Source: <http://www.tre-sc.jus.br/site/eleicoes/eleicoes-majoritarias-e-proporcionais/index.html> (accessed January 3, 2019).

¹⁶Source: <http://www.tse.jus.br/eleitor/servicos/cartorios-e-zonas-eleitorais> (accessed January 3, 2019).

¹⁷Source:<http://www.tre-sc.jus.br/site/institucional/justica-eleitoral/divisao-administrativa/index.html> (accessed January 3, 2019).

¹⁸Source:<http://www.tse.jus.br/imprensa/noticias-tse/2018/Abril/eleicoes-2018-saiba-para-quem-o-voto-e-facultativo-e-obrigatorio> (accessed January 3, 2019).

¹⁹To carry out this type of vote, simply press the "blank" key in the electronic voting machine and then the "confirm" key.

²⁰To carry it out, they must enter a nonexistent candidate number and then press the "confirm" key.

²¹Source: <http://www.tre-es.jus.br/imprensa/noticias-tre-es/2014/Outubro/voto-branco-x-voto-nulo-saiba-a-diferenca> (accessed January 3, 2019).

²²Source:<https://noticias.bol.uol.com.br/ultimas-noticias/eleicoes/2018/10/03/eleicoes-2018-o-que-acontece-se-eu-nao-votar.htm> (accessed January 3, 2019).

4 Data

We used data provided by 4 different sources. The electoral information comes from the Superior Electoral Court (TSE, Tribunal Superior Eleitoral)²³, which stores data about the electorate characteristics and the results of the 2010 and 2014 elections per electoral zone. We also have data from the Brazilian Telecommunications Agency (ANATEL, Agência Nacional de Telecomunicações)²⁴. This agency provides the followings telecommunications parameters per month: the number of accesses of the concessionaires of Fixed Telephony Service (fixed telephony) per municipality; the number of accesses in service of the providers of the Multimedia Communication Service (fixed broadband) per municipality; and the number of accesses in operation of the Personal Mobile Service providers (mobile telephony and mobile broadband) per state.

To identify the municipalities that did or did not host protests, according to the criterion that will be explained in detail in Section 5, we used the information available on the news website G1²⁵. Being aware of the failures to measure the number of demonstrators present in the protests, we will not take into account the size of the demonstrations in our analysis.

Finally, the last source of data was the Brazilian Institute of Geography and Statistics (IBGE, Instituto Brasileiro de Geografia e Estatística), to obtain the information of the other controls used in our analysis: the municipality's GDP for the years in which the elections took place²⁶, as well as the population in each municipality^{27 28}.

5 Empirical Framework

In order to identify whether the wishes expressed on the streets were displayed on the ballot box during the upcoming elections, we conduct an empirical study of panel data using a diff-in-diff approach. We admit the occurrence of a protest as an event that signals different electoral preferences in the city in which it was displayed. Then, we compare the results of the 2010 elections (pre protests) with the results of the 2014 election (post protests).

At first, our identification strategy begins understanding the behavior of demonstrations. Realizing that voter dissatisfaction might be prior to the events of the protests, we understand that the protests analyzed behaved as an endogenous event. The Brazilians were dissatisfied with the efficiency of the Government, the high level of corruption, the poor quality of public services. The increasing public transportation fares and the police violence against the first demonstrators worked like a trigger encouraging the population to go to the streets. As a consequence, the June 2013 Protest signaled the discontentment with the current rulers that would be seen in the next elections of 2014.

We cannot say that the Brazilian spring caused new electoral patterns, but we verified that there is a correlation between them. If protests occur in circumstances similar to those observed in Brazil, some consequences can already be expected.

According to data from opinion polls conducted by the Datafolha Research Institute²⁹, the assessment of the Dilma Rousseff's administration, the current president of Brazil during the period of the protests, underwent significant changes during the weeks in which the demonstrations took place.

²³Source:<http://www.tse.jus.br/eleitor-e-eleicoes/estatisticas/repositorio-de-dados-eleitorais-1/repositorio-de-dados-eleitorais> (accessed January 3, 2019).

²⁴Source: <http://www.anatel.gov.br/dados/> (accessed January 3, 2019).

²⁵Source: <http://g1.globo.com/brasil/protestos-2013/infografico/platb/> (accessed January 3, 2019).

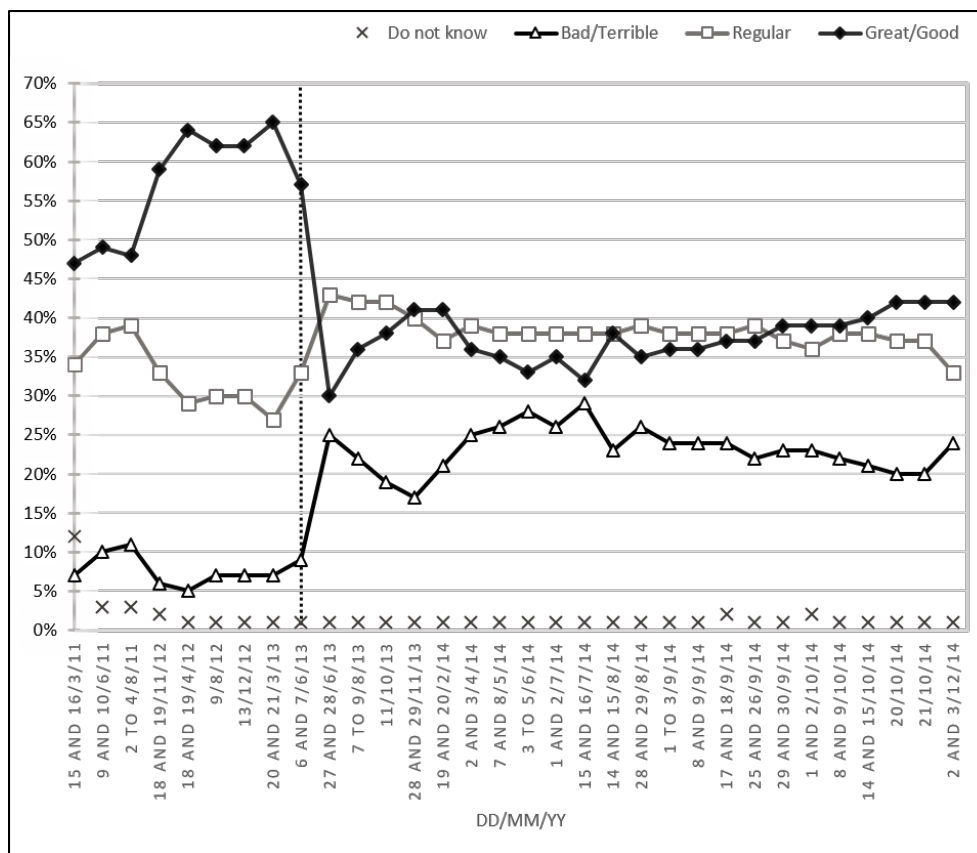
²⁶Source: <https://sidra.ibge.gov.br/pesquisa/pib-munic/tabelas> (accessed January 3, 2019).

²⁷Source: <https://ww2.ibge.gov.br/home/estatistica/populacao/censo2010/default.shtm> (accessed January 3, 2019).

²⁸Source: https://ww2.ibge.gov.br/home/estatistica/populacao/estimativa2014/estimativa_dou.shtm (accessed January 3, 2019).

²⁹Source: <http://media.folha.uol.com.br/datafolha/2014/12/08/avaliacao-dilma.pdf> (accessed January 3, 2019).

Figure 1: Evolution of the evaluation of Dilma Rousseff's administration (%)



Notes: Question: "In your opinion is President Dilma making a great, good, regular, bad or terrible government?". Graph built by the authors based on Datafolha polls. The date representation is the all-numeric format DAY/MONTH/YEAR.

Figure 1 suggests that from the beginning of 2012 until the first week of the demonstrations (6 and 7/6/13), the evaluation of the Rousseff's administration as Great/Good was stable, as well as Bad/Terrible. After the weeks of demonstrations (27 and 28/6/13), the Government's positive assessment fell by 27 percentage points, while the negative assessment rose by 16 percentage points. After the protests, the positive assessment of the Rousseff's administration fell to an unprecedented level and remained there until the elections; as well as the negative evaluation, which rose to a level never seen in the current management and remained there until the 2014 elections.

As a result, Figure 1 suggest that the population's perception of her administration changed noticeably during the weeks of demonstrations, and remained stable until the 2014 elections held in October. According to the opinion polls, the Brazilian Spring was an event that would have influenced the perception of the people about the quality of the current rulers.

Having available from the TSE Electoral Data Repository³⁰ the results of the 2010 elections (pre protests) and the 2014 election (post protests), and admitting the occurrence of a protest as an event that signals different electoral preferences in the city in which it was displayed (Winters and Weitz-Shapiro, 2014), we will use the electoral zones as the cross-sectional units needed for the work. They will be in the treatment group if the city in which they are located hosted demonstrations on June 2013, and they will be in the control group otherwise.

³⁰Source: <http://www.tse.jus.br/eleitor-e-eleicoes/estatisticas/repositorio-de-dados-eleitorais-1/repositorio-de-dados-eleitorais> (accessed January 3, 2019).

Before we continue, an observation deserves to be made. Although the electoral zones are geographically delimited within a state, they do not necessarily correspond to the boundaries of a municipality. However, the data of the electoral zones provided by the TSE distinguishes them by each municipality in which they are located. Thus, if more than one municipality is part of the same electoral zone, the Repository separates by each municipality the electoral data from that zone.

To identify the municipalities that did or did not host protests, we use as a criterion that there must be at least one news on the news website G1³¹ reporting some protest on June 2013 in that city and an official institute³² estimating the number of demonstrators in that riot³³. Also, being aware of the failures to measure the number of demonstrators present in the protests, we will not take into account the size of the demonstrations in our analysis. To represent the existence of protest in the electoral zone, we used a dummy variable to indicate if there was a demonstration in the city where the zone is located.

In order to minimize the effects of other variables different than the protests on the changes in the Brazilian political configuration, a range of control variables with specific characteristics that could also contribute to the electoral changes were made. Along with the demonstrations themselves, changes in the political scene may have occurred because of changes in the social and economic characteristics of the municipalities in which the electoral zones are located. Consequently, we used as controls: the real GDP of the municipality³⁴ and its population; the telecommunication indexes of the city and state³⁵; and the characteristics of the voters registered to vote in each zone³⁶.

We will elucidate in detail the 13 dependent variables used in this paper. It is worthwhile to highlight that our analysis is made according to the elective positions and electoral rounds available in the Brazilian elections. All the indexes were calculated separately according to these two mentioned guidelines.

5.1 Dependent Variables

5.1.1 Effective Number of Parties (ENP) and Effective Number of Candidates (ENC)

In order to measure the level of electoral competitiveness in the two analyzed periods, assessing if more or less political actors entered the game because of the 2013 demonstrations existence, we will use two indexes created by Laakso and Taagepera (1979). Guided by one of the main demands of the protests, political renewal, popular dissatisfaction may have caused a greater fragmentation of votes.

As a symbol of this possible greater electoral competitiveness, the ENP and the ENC behave as good indexes to measure the effective number of parties and candidates with chances of being elected in the elections analyzed. These are calculated as follows:

$$ENP_{it} = \frac{1}{\sum_{k=1}^K p_{kt}^2} \quad (1)$$

³¹Source: <http://g1.globo.com/brasil/protestos-2013/infografico/platb/> (accessed January 3, 2019).

³²Such as the Military Police, Military Brigade, DATAFOLHA, COPPE-UFRJ.

³³This strategy was used to provide a double check on the existence of protest per city.

³⁴The year 2010 was used as the base year, and the data for 2014 were deflated to maintain the comparison of the economic performance, given the possible changes in price levels during the period. The GDP deflator is available in: <https://seriesestatisticas.ibge.gov.br/series.aspx?t=pibvcodigo=scn54> (accessed February 6, 2019).

³⁵The annual mean of the number accesses of the concessionaires of Fixed Telephony Service (fixed telephony) per municipality; the annual mean of the number of accesses in service of the providers of the Multimedia Communication Service (fixed broadband) per municipality; and the annual mean of the number of accesses in operation of the Personal Mobile Service providers (telephony and mobile broadband) per state.

³⁶The number of voters who are eligible to vote in each electoral zone according to their sex, age, marital status, and schooling level.

$$ENC_{it} = \frac{1}{\sum_{j=1}^J s_{jt}^2} \quad (2)$$

where p_{kt} and s_{jt} are respectively the share of the votes for each political party k and for each candidate j in relation to the total nominal votes in the electoral zone i in the year t ; and K and J are respectively the total number of parties and candidates in the electoral zone i in the year t . In order to identify the votes for the political party k , we sum all the votes received by the candidates affiliated with that institution in the analyzed electoral zone i in the year t .

5.1.2 Rates of Abstention, Blank Votes and Null Votes

In addition to the level of competitiveness of each election by electoral zone, it is also valid to analyze the actions of the voter at the time that voting can be translated as an act of protest or discontent. The options established institutionally by the Brazilian electoral system to supply the will of those who do not want to vote for a candidate are the abstention, the blank vote, and the null vote.

Both blank vote and null vote are not counted to elect a candidate. The principle of an absolute majority of valid votes is enforced in the Brazilian system. Considering for the electoral calculations only as valid those votes that are nominal or for the party (in case of elective positions to the Legislative Branch), the blank and the null votes are not counted in the accounting of the electoral results³⁷.

Despite having different theoretical objectives, in practice, the three mechanisms consist of electors' choice to exclude themselves from the political game. However, they can not be equated. While abstention promotes post-voter consequences for not voting, the blank vote and the null vote do not bring legal problems to the voter. It will not be surprising that the protests promote different responses to them.

For the rate of abstention in the electoral zone:

$$A_{it} = \frac{a_{it}}{q_{it}} \quad (3)$$

where a_{it} is the number of people who did not attend the electoral zone i in the year t , and q_{it} is the total number of people eligible to vote in the electoral zone i in the year t .

The rate of null votes is given by the equation:

$$N_{it} = \frac{n_{it}}{q_{it} - a_{it}} \quad (4)$$

where n_{it} is the number of null votes in the electoral zone i in the year t , and $q_{it} - a_{it}$ represents the total number of people who came to the electoral zone i in the year t to vote.

For the rate of blank votes in the electoral zone:

$$B_{it} = \frac{b_{it}}{q_{it} - a_{it}} \quad (5)$$

where b_{it} is the number of blank votes in the electoral zone i in the year t .

Also, we aggregate the blank and null votes.

$$BN_{it} = \frac{b_{it} + n_{it}}{q_{it} - a_{it}} \quad (6)$$

³⁷Source: <http://www.tre-es.jus.br/imprensa/noticias-tre-es/2014/Outubro/voto-branco-x-voto-nulo-saiba-a-diferenca> (accessed January 4, 2019).

where $b_{it} + n_{it}$ is the number of blank and null votes in the electoral zone i in the year t .

5.1.3 The share of valid votes for the types of candidates and political parties.

In addition to the mechanisms provided institutionally by the Brazilian electoral system, citizens may protest even when they vote for a particular candidate. According to the pattern of their choice, and taking into consideration that the June demonstrations aimed their discontent at the political class already established in the electoral scene, it would be natural to suppose that the electorate rejected the candidates already known by them.

In this paper, the candidate who will be considered a known candidate will be that competitor that is running in the 2010 elections and in the 2014 elections for the same elective position. Any candidate who does not fit into this category will be considered an unknown candidate. For a political party, given the elective position under analysis, the known political party by the electorate will be the institution that has a candidate affiliated with it running in the 2010 and 2014 elections. Any political party that does not fit into this category will be considered an unknown party for that elective position.

Knowing which candidates and political parties fit the definition explained before, we count the share of valid votes for each type before and after the protests. Hence, if the discontent shown in June with the actors already known by the population was translated into the pattern of voting, there would be plausible to assume that the share of the valid votes for the known candidates and for the known political parties would be reduced from one election to another.

The shares cited so far in this topic are calculated as follows:

$$VoteShare_{hit} = \frac{\sum_{z=1}^Z v_{zit}}{q_{it} - a_{it} - b_{it} - n_{it}} \quad (7)$$

where v_{zit} is the amount of votes received by the individual z (being a candidate j or party k , according to the category h) in the electoral zone i in the year t ; $q_{it} - a_{it} - b_{it} - n_{it}$ represents the total valid votes in the electoral zone i in the year t for the elective position under consideration; and Z is the total of individuals z in the electoral zone i in the year t according to the category h . The h index represents what kind of share we want to measure. Ranging from 1 to 4, h indicates, respectively, the share of valid votes received by unknown candidates, known candidates, unknown political parties, and known political parties. To identify the votes for the party, we sum all the votes received by the candidates affiliated with that institution in the analyzed electoral zone i in the year t . Last but not least, the electoral zones used for the calculation of the $VoteShare_{hit}$ are the electoral zones that have at least one individual of each type of interest. That is, if we are interested in the categories $h = 1$ or $h = 2$, we will include only the electoral zone i that has unknown and known candidates. If we are interested in the categories $h = 3$ or $h = 4$, we will include only the electoral zone i that has unknown and known parties.

5.1.4 The share of valid votes for candidates affiliated with PT, candidates from the PT presidential coalition, and candidates from the Opposition coalitions.

As already elucidated before, it is a viable hypothesis to conjecture that the discontent of the protests towards the political class has addressed the candidates or political parties present in the two elections. However, it would not be absurd to assume also that voter dissatisfaction could address those candidates who were part of the Government at the time that the demonstrations occurred.

Thus, it was also calculated, in the same way as expressed by [Equation 7](#), the share of the valid votes for the candidates belonging to the political party of the president in office during the two elections analyzed. Since it was the same institution in 2010 and 2014, the Workers' Party (PT, Partido dos Trabalhadores), we investigated

the mass of the votes for the various candidates affiliated with this institution. We also did the same analysis for the candidates affiliated with the political parties belonging to the electoral coalition that supported the PT president candidate, as well as the same analysis for those candidates affiliated with the Opposition coalitions.

As those coalitions that supported or opposed PT are different in the 2010 elections and the 2014 elections, we consider a candidate member of these coalitions according to the election that was being disputed. For example, in 2010, the votes for the PT coalition will be those directed to the candidates affiliated with the political parties belonging to the PT presidential coalition in the year 2010. In 2014, the votes for the PT coalition will be those directed to the candidates affiliated with the political parties belonging to the PT presidential coalition in the year 2014.

The shares cited so far in this topic are calculated as follows:

$$VoteShareInstitution_{wit} = \frac{\sum_{j=1}^J v_{jit}}{q_{it} - a_{it} - b_{it} - n_{it}} \quad (8)$$

where v_{jit} is the amount of the votes received by the candidate j in the electoral zone i in the year t according to the category w ; $q_{it} - a_{it} - b_{it} - n_{it}$ represents the total valid votes in the electoral zone i in the year t for the elective position under consideration; and J is the total of candidates j in the electoral zone i in the year t according to the category w . The w index represents what kind of share we want to measure. Ranging from 1 to 3, w indicates, respectively, the share of the valid votes received by candidates affiliated with PT, the candidates affiliated with the PT presidential coalition, and those affiliated with the Opposition coalitions. Last but not least, the electoral zones used for the calculation of the $VoteShareInstitution_{wit}$ are the electoral zones that have at least one candidate of each type of interest. That is, if we are interested in the category $w = 1$, we will include only the electoral zone i that has candidates from PT and other parties. If we are interested in the categories $w = 2$ or $w = 3$, we will include only the electoral zone i that has the PT coalition's and the Opposition coalitions' candidates.

5.2 Econometric Model

Having explained the control variables and the dependent variables, we will look at the equations that will be used to identify whether protests can be related to the results of the elections. We will base ourselves on the model developed by Rocha (2015).

We estimated regressions of the dependent variables mentioned before at the electoral zone level and controlled by the independent variables previously cited. As seen in Table 5, the electoral zones that hosted protests are different from those that did not host. It can be observed that the electoral zones that hosted protests are in more populous municipalities, with larger real GDP, more telecommunication accesses, as well as a greater number of voters in all categories analyzed. Thus, it is probable that the characteristics in which they differ affect the probability of having a protest in the municipality and the variable of interest that we analyze in this paper. Also, because the protests occurred in municipalities quite distinct from those that did not host demonstrations, we will try to reduce this problem by adding fixed effects to the electoral zone in the estimations of the panel data (this panel consists of 2 periods, the elections of 2010 and the elections of 2014).

Thus, we test whether protests are related to the results of an election by the following equation:

$$y_{it} = \gamma Post_t + \beta Post_t \times Protest_i + \theta Pop_{it} + \omega GDP_{it} + \sum_{d=1}^D \delta_d C_{dit} + \alpha_i + \varepsilon_{it} \quad (9)$$

where y_{it} is one of the dependent variables mentioned before for the electoral zone i in the election t ; $Post_t$ is the dummy for the elections; $Protest_i$ is the dummy that indicates if there was protest in the municipality where the electoral zone i is located; $Post_t \times Protest_i$ is the variable of interest that indicates the relationship

between the Protests and the elections; Pop_{it} is the logarithm of the Population in year t of the municipality in which the electoral zone i is located; GDP_{it} is the logarithm of real GDP in the year t of the municipality in which the electoral zone i is located; C_{dit} represents the control variable d within the D control variables for the telecommunication accesses and the characteristics of the electorate, in the electoral zone i in the period t . The term α_i indicates the fixed effect for the electoral zone i , and the term ε_{it} represents the error term.

In sum, Equation 9 will be estimated for the 7 types of elective positions and electoral rounds available in the Brazilian elections (State Deputy, Federal Deputy, Senator, Governor 1st Round, Governor 2nd Round, President 1st Round, President 2nd Round) according to the dependent variables mentioned before.

6 Results

The results will be introduced in the next tables. According to our criteria stabilized along this paper, we find that 344 cities hosted a demonstration on June 2013. They are distributed in all states and concentrated more intensely in the South and Southeast Brazil. The cities that testified protests are represented in Figure 2.

Figure 2: Distribution of the 2013 Protest throughout the Brazilian territory



Notes: Given the criteria established in Section 5, the dark spots correspond to the municipalities that hosted a demonstration on June 2013. In total, these correspond to 344 of the 5,570 Brazilian municipalities, distributed in all states, and concentrated more intensely in the South and Southeast Brazil.

An observation deserves to be made about one of the elective positions analyzed. As elucidated in Section 3, the senator position was the only elective position that had a different number of vacancies available in each election. It is not surprising that the influence of the demonstrations on the electoral results of this position is badly identified. So, we find more convenient not to detail the results for the senator position, and we decided to not consider them in the observations to be made below.

6.1 The Electoral Competitiveness

The columns 1 and 2 in [Table 1](#) contain the results of [Equation 9](#) for the Effective Number of Candidates (ENC) and the Effective Number of Parties (ENP).

Table 1: Electoral Influence of Protests - The Electoral Competitiveness

	Dependent Variables	
	ENC	ENP
	(1)	(2)
State Deputy	0.753*** (0.256)	0.230** (0.093)
Federal Deputy	0.856*** (0.184)	-0.193** (0.085)
Governor (1 st Round)	0.159*** (0.026)	0.159*** (0.026)
Governor (2 nd Round)	-0.0105 (0.028)	-0.0105 (0.028)
President (1 st Round)	0.0447*** (0.013)	0.0447*** (0.013)
President (2 nd Round)	0.0132* (0.007)	0.0132* (0.007)

Notes: The table above presents, in its main values, the disposition of the answers obtained from the estimation of the parameter β - responsible for indicating the influence of the interacted term $Post_t \times Protest_i$ on [Equation 9](#) - for two of the dependent variables analyzed in this work. The responses collected were also separated according to the Elective Position. The columns represent the following dependent variables: (1) ENC represents the Effective Number of Candidates existing in the electoral zone; (2) ENP represents the Effective Number of Parties existing in the electoral zone. All observations belong to the electoral zones used as units monitored in our panel data analysis. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Excepting the 2nd Round for Governor and the ENP for Federal Deputy, the estimation of the parameter β - responsible for indicating the influence of the interacted term $Post_t \times Protest_i$ in [Equation 9](#) - presents a positive relationship for the others possibilities of elective positions and electoral rounds. Providing an increase in the number of candidates and parties with any chance of getting elected, the discontent on the streets in June 2013 was displayed on the upcoming election. Looking for new alternatives, whether in the candidate or in the political party, the people who protested during the Brazilian Spring chose for a greater renewal of the political configuration. Shredding the votes in a greater number of players, the demonstrations provided the 2014 elections with a panorama of greater electoral competition than the 2010 elections.

6.2 The use of institutional mechanisms

Columns 3, 4, 5 and 6 in [Table 2](#) indicate the results of [Equation 9](#) for the rate of abstention, the rate of null votes, the rate of blank votes, and the aggregate rate of blank and null votes.

Observing the first institutional mechanism to demonstrate voter dissatisfaction at the time of the elections, abstention rates were shown to be uncorrelated with the event of the protests. In none of the situations studied, including the positions and rounds observed, protests and voter abstention appear to be related. However, as noted in [Section 3](#), this behavior is not surprising. Because it promotes post-voter consequences for not voting,

Table 2: Electoral Influence of Protests - The use of institutional mechanisms

	Dependent Variables			
	Rate of			
	Abstention	Null Votes	Blank Votes	Blank and Null Votes
	(3)	(4)	(5)	(6)
State Deputy	-0.00175 (0.002)	0.00754*** (0.002)	0.00189*** (0.001)	0.00943*** (0.002)
Federal Deputy	-0.0011 (0.002)	-0.00230* (0.001)	0.00365*** (0.001)	0.00135 (0.002)
Governor (1 st Round)	-0.0011 (0.002)	0.00880*** (0.002)	-0.00188** (0.001)	0.00692*** (0.002)
Governor (2 nd Round)	-0.00213 (0.007)	0.000374 (0.003)	0.00834*** (0.001)	0.00871** (0.004)
President (1 st Round)	-0.0011 (0.002)	0.00848*** (0.001)	0.000901** (0.000)	0.00938*** (0.001)
President (2 nd Round)	-0.00213 (0.002)	0.00359*** (0.001)	-0.000439* (0.000)	0.00315*** (0.001)

Notes: The table above presents, in its main values, the disposition of the answers obtained from the estimation of the parameter β - responsible for indicating the influence of the interacted term $Post_t \times Protest_t$ on Equation 9 - for four of the dependent variables analyzed in this work. The responses collected were also separated according to the Elective Position. The columns represent the following dependent variables: (3) the rate of abstention in the electoral zone; (4) the rate of null votes in the electoral zone; (5) the rate of blank votes in the electoral zone; (6) the aggregate rate of blank and null votes in the electoral zone. All observations belong to the electoral zones used as units monitored in our panel data analysis. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

citizens have fewer incentives to demonstrate their discontent with the political scene in this way. In order to avoid the legal consequences linked to their non-attendance, the voter seeks to protest in a way other than his or her absence.

For the other two mechanisms available, the blank vote and the null vote, there is a very diffuse behavior between them according to the position or the round. Null votes are shown to be positively related in all scenarios, with the exception of the position of Federal Deputy and the 2nd Round for Governors. For all other cases, from State Deputies until the 2nd Round for President, the null votes were shown to be positively related to the demonstrations. Standing out among Executive positions, we highlight the increase of 0.880 percentage points³⁸ in the 1st Round for Governors and 0.848 p.p. for the 1st Round for President.

The demonstrations are significantly related to the blank votes in all positions and rounds. However, they do not relate in a homogeneous way to all scenarios. For the Governor in the 1st Round (-0.188 p.p.) and the 2nd Round for President (-0.0439 p.p.) the protests are shown to be negatively related to the blank votes. The demonstrations positively related to the blank votes when it comes to the State Deputy (0.189 p.p.), Federal Deputy (0.365 p.p.), the 2nd Round for Governor (0.834 p.p.), and the 1st Round for President (0.0901 p.p.).

When we analyze the blank and the null votes in an aggregate form, it can be observed that the demonstrations were positively related to all positions and rounds, with the only exception for Federal Deputy, which was

³⁸From now on, the abbreviation "p.p." for the expression "percentage points" will be used.

insignificant. In other words, the protests are related to the increase of those voting options that indicate voter dissatisfaction with the political configuration.

6.3 The distribution of votes among types of candidates and political parties

In addition to the mechanisms provided institutionally by the Brazilian electoral system, such as the possibility of abstaining or voting blank or null, citizens could be protesting even when they voted for a particular candidate. According to the pattern of their choice, and taking into consideration that the June demonstrations aimed their discontent at the political class already established in the electoral scene, it would be natural to suppose that the candidates and parties that were known by the electorate received fewer valid votes³⁹ in the post protest elections.

We expected that the percentage of valid votes for candidates already known from the 2010 elections would be reduced due to the Brazilian Spring and the percentage for candidates who were not part of that group would be increased. Nevertheless, this did not happen clearly. What was perceived was that depending on the type of Branch the position is attached, Legislative or Executive, the results were less or more significant.

From columns 7, 8, 9 and 10 in [Table 3](#), it is noticed that there is a timid relationship between the protests and the votes for the positions of Deputies. For Federal Deputy, there is no relation between the demonstrations and the votes for the different types of candidates present in the election, as well as for the known political parties. For the State Deputies, the behavior is diffuse. While known candidates lost 1.87 p.p. of the votes, the newcomers did not prove to be benefited by such displacement. For the political parties, the unknown parties lost 1.91 p.p., and the known ones won 1.68 p.p. One justification for this is that there is the party's vote for City Council, State Deputies, and Federal Deputies in the Brazilian electoral system.

For those positions, the valid votes⁴⁰, obtained by subtracting the blank and the null votes from the total votes in the election, are composed of two categories: nominal votes and party's votes. The first is when the voter votes by name, typing in the electronic voting machine the specific numbering of a candidate. The second and the reason for all this explanation is when the voter opts for the political party number, entering only the numbers that symbolize the party of his or her preference.

Due to the existence of the party's vote, it is not surprising that for the positions of State Deputy and Federal Deputy the percentage of valid votes for the known candidates has not been impacted in the same proportion⁴¹ than that of the unknown candidates. The same observations are made for the political parties. Since [Equation 7](#) only captures the nominal votes, it is easy to understand the no complementarity between the opposing indexes calculated in this section due to the possibility of the party's votes been receiving these displaced votes.

The protests also do not seem to be important to the 2nd Round for Governor. Being insignificant to the votes for the candidates and parties, the behavior in this situation appears to corroborate with what was seen in [The Electoral Competitiveness](#).

For the other situations, especially for the candidate disputing the 1st Round for Executive positions, there is an important relationship between the demonstrations and the what was previously theorized. For the 1st Round for Governors, the protests promoted a reduction of 4.75 p.p. of votes for those candidates already known by the electorate, while for the President the votes fell 3.59 p.p. in the 1st Round and 1.91 p.p. in the 2nd Round.

The statistical results showed that the demonstrations played an important role in the redistribution of the mass of votes, especially among the positions attached to the Executive Branch. Whether for the Governors or the President, the protests are mainly related to those positions that the personification of the political agent is

³⁹Those votes that are used to elect a candidate.

⁴⁰Source:<http://www.tse.jus.br/o-tse/escola-judiciaria-eleitoral/publicacoes/revistas-da-eje/artigos/revista-eletronica-eje-n.-3-ano-4/aumento-de-remuneracao-no-funcionalismo-publico-em-ano-eleitoral> (accessed January 4, 2019).

⁴¹In absolute value, seen that the signs would have to be different.

Table 3: Electoral Influence of Protests - The distribution of votes among types of candidates and parties

	Dependent Variables			
	Share of the Valid Votes for			
	Unknown Candidates (7)	Known Candidates (8)	Unknown Parties (9)	Known Parties (10)
State Deputy	0.0163 (0.010)	-0.0187* (0.010)	-0.0191** (0.008)	0.0168** (0.008)
Federal Deputy	0.00699 (0.009)	-0.0112 (0.009)	-0.0145* (0.007)	0.0103 (0.007)
Governor (1 st Round)	0.0475*** (0.011)	-0.0475*** (0.011)	0.0198 (0.015)	-0.0198 (0.015)
Governor (2 nd Round)	-0.0392 (0.080)	0.0392 (0.080)	-0.0392 (0.080)	0.0392 (0.080)
President (1 st Round)	0.0359*** (0.004)	-0.0359*** (0.004)	0.0269*** (0.004)	-0.0269*** (0.004)
President (2 nd Round)	0.0191*** (0.004)	-0.0191*** (0.004)		

Notes: The table above presents, in its main values, the disposition of the answers obtained from the estimation of the parameter β - responsible for indicating the influence of the interacted term $Post_t \times Protest_t$ on Equation 9 - for four of the dependent variables analyzed in this work. The responses collected were also separated according to the Elective Position. The columns represent the following dependent variables: (7) the share of the valid votes for the unknown candidates in the electoral zone; (8) the share of the valid votes for the known candidates in the electoral zone; (9) the share of the valid votes for the unknown parties in the electoral zone; (10) the share of valid votes for known parties in the electoral zone. All observations belong to the electoral zones used as units monitored in our panel data analysis. For the President (2nd Round), the dependent variables (9) and (10) did not show a response in the electoral zones observed because there were only known parties disputing the elections of 2010 and 2014. The standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

necessary. These are functions that demand a more individualistic character, so the Executive elective positions suffered more intensely with the discontent of the streets. This frustration was directed at those who are most easily remembered among politicians, especially for exercising their functions alone rather than with a peer group.

6.4 The performance of the Government and the Opposition

While the behavior of the valid votes for the types of political parties and candidates showed to be more sensitive according to the political Branch to which the position in stake was tied, the valid votes for the party of the president in office during the demonstrations seems to follow this trend.

In columns 11, 12 and 13 in Table 4, there are the responses of the protests to the share of the valid votes for the presidential party, as well as those for its coalition and the Opposition coalitions. It is valid to point out that in both 2010 and 2014 elections the winner of the presidential race, Dilma Rousseff, was affiliated with PT⁴², which makes it easier for us to understand how the votes for the incumbent president's party may have

⁴²The same party of Lula da Silva, the president in office before the 2010 elections.

changed due to the June demonstrations.

Table 4: Electoral Influence of Protests - The performance of the Government and the Opposition

	Dependent Variables		
	Share of the Valid Votes for		
	PT (11)	PT Coalition (12)	Opposition Coalitions (13)
State Deputy	0.00398 (0.004)	0.0106 (0.012)	-0.0145 (0.012)
Federal Deputy	-0.0035 (0.005)	0.00572 (0.012)	-0.00997 (0.012)
Governor (1 st Round)	-0.0477*** (0.008)	0.0459*** (0.017)	-0.0459*** (0.017)
Governor (2 nd Round)		-0.0406 (0.030)	0.0406 (0.030)
President (1 st Round)	-0.00874** (0.004)	-0.00874** (0.004)	0.00874** (0.004)
President (2 nd Round)	-0.0191*** (0.004)	-0.0191*** (0.004)	0.0191*** (0.004)

Notes: The table above presents, in its main values, the disposition of the answers obtained from the estimation of the parameter β - responsible for indicating the influence of the interacted term $Post_t \times Protest_i$ on Equation 9 - for three of the dependent variables analyzed in this work. The responses collected were also separated according to the Elective Position. The columns represent the following dependent variables: (11) the share of the valid votes for PT in the electoral zone; (12) the share of valid votes for the PT coalition in the electoral zone; (13) the share of the valid votes for the Opposition coalitions in the electoral zone. All observations belong to the electoral zones used as units monitored in our panel data analysis. For the Governor (2nd Round), the dependent variable (11) did not respond in the zones observed because there was no candidate from PT running both elections of 2010 and 2014. The standard errors are between parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

For all the positions of the Legislative Branch analyzed, the demonstrations proved to be insignificant to the disposition of the votes for the presidential party, as well as for its coalition and the Oppositions'. However, in what refers to the positions of the Executive Branch the demonstrations contributed significantly to the reduction of votes for PT. Whether for the president position, with a reduction of 0.874 p.p. in the first round and 1.91 p.p. in the second, or for the 1st Round for Governors, reducing 4.77 p.p., the demonstrations are directly related to the electoral performance of the presidential party.

However, it is noted for the 1st Round for Governors that the responses to the candidates affiliated with the parties belonging to the PT presidential coalition were positively related to the demonstrations. As strange as it may sound, the 4.59 p.p. increase for the candidates in this group can be justified because the PT coalition had a very ideologically diffused range, in addition to the presence of the largest Brazilian party, the Party of the Brazilian Democratic Movement (PMDB, Partido do Movimento Democrático Brasileiro) (Lameira and Peres, 2015). Moreover, even though they are part of the same presidential coalition at the national level, the parties of the same coalition may be adversaries when they dispute the position of governor in a state, which promotes difficulties of interpretation of this index for the position analyzed.

In sum, it does not seem absurd to assume that voter dissatisfaction was also intense for those candidates who were part of the Government at the time that the demonstrations occurred. In tune with the personalistic

character of executive positions, and the inextricable relationship between the presidential party, PT, and the Brazilian State as a whole, the candidates for governors and president from that institution were prejudiced in the 2014 elections according to the June demonstrations.

7 Conclusion

The wishes expressed on the streets during the Brazilian Spring were displayed on the ballot box during the 2014 elections. According to our analysis, there is in fact relative persistence of the concerns of the protest for moments that go beyond the acts themselves. When it comes to societies that are under democratic regimes, the typical demonstrations of the 21st century reflects the street discontent at the elections.

The dissatisfaction of the Brazilian population with the political system, the main feature in all phases of the 2013 protests, was observed in the most different results of the 2014 elections. Some of these outcomes were the increase in the number of candidates and parties with a chance of winning, the growth of aggregate blank and null votes, and the decrease in the percentage of the votes for candidates and parties known by them. Regardless of what angle we look at, the conjuncture indicates discontent with the electoral scene and a clear tendency towards political renewal. The course of the renewal could not be restricted only to the novices in the political game. The candidates affiliated with the incumbent federal executive party faced greater voter discontent, while those who were part of the Opposition were benefited from the voter's sympathy.

Another aspect that also entered the game was the type of elective position in stake. Those of the Executive Branch found a greater relationship with the demonstrations than those of the Legislative. Whether for their personalistic character or for the greater importance that is given by the voter for being responsible for executing public policies; governor and president position faced the concerns of the demonstrations at the elections more intensively.

The main findings of this work shed light on the questions about the events of June 2013 in Brazil and its correlation to national elections. This paper collaborates with the literature that try to understand the importance of protests in modern societies.

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Table 5: Summary Statistics for the Electoral Zones in 2010

	Electoral Zones that did not host protests			Electoral Zones that did host protests		
	N	mean	sd	N	mean	sd
<i>Social and Economic Characteristics</i>						
Population	5300	26563.88	68036.44	905	1920185	3087164
Real GDP (R\$)	5300	445477.8	2347323	905	6.52x10 ⁷	1.19x10 ⁸
Fixed Telephony Accesses	5300	3358.277	14917.43	905	603691.7	1122135
Fixed Broadband Accesses	5300	1065.658	6124.539	905	316900.2	627783.4
Mobile Telephony and Broadband Accesses	5300	1.31x10 ⁷	1.34x10 ⁷	905	1.90x10 ⁷	1.56x10 ⁷
<i>Electoral Characteristics</i>						
Single	5300	9052.387	11475.27	905	44156.19	25964.24
Married	5300	4241.623	5239.216	905	21572.12	12170.7
Widowed	5300	185.81	275.1157	905	1182.96	716.0952
Judicially Separated	5300	114.9466	222.5096	905	982.1978	762.1303
Divorced	5300	116.8666	222.5818	905	1004.052	728.1115
16 year old	5300	123.974	121.4286	905	265.3492	204.8648
17 year old	5300	187.48	202.528	905	543.3635	395.7828
From 18 to 20 years old	5300	964.4738	1160.589	905	4094.212	2571.153
From 21 to 24 years old	5300	1428.379	1796.586	905	6492.776	4130.152
From 25 to 34 years old	5300	3315.662	4341.211	905	16669.96	10216
From 35 to 44 years old	5300	2660.869	3491.672	905	13852.1	8098.318
From 45 to 59 years old	5300	2963.921	3805.178	905	16478.92	9305.442
From 60 to 69 years old	5300	1146.925	1327.967	905	5808.461	3354.041
From 70 to 79 years old	5300	642.2992	711.9162	905	3114.79	1969.391
Over the age of 79	5300	302.8362	385.4286	905	1703.943	1409.86
Illiterate	5300	1187.967	1434.117	905	1863.014	1633.154
Read and Write	5300	2714.923	3018.783	905	5885.786	4266.09
Incomplete Elementary Education	5300	4867.137	5993.574	905	20997.15	12381.09
Complete Elementary Education	5300	856.6408	1441.674	905	6347.419	3842.691
Incomplete High School	5300	2309.843	3594.869	905	14821.59	9028.997
Complete High School	5300	1307.567	2546.376	905	12047.28	8198.314
Incomplete Higher Education	5300	201.4064	466.266	905	2931.643	3140.119
Complete Higher Education	5300	273.2358	640.8772	905	4067.929	5765.064
Male	5300	6759.313	8110.533	905	32272.91	17941.18
Female	5300	6963.944	8900.545	905	36666.77	20875.77

Notes: The unit of analysis is the electoral zone. N, mean and sd represent, respectively, the total of each type of electoral zone analyzed, the mean, and the standard deviation of each control variable by the type of electoral zone analyzed. Data on electoral zones in 2010 were taken from the databases provided by IBGE, ANATEL, TSE, and G1 (the bases were specified in Section 4).