# Bombs and Ballots: Estimating the Effect of the Madrid Bombings on the March 2004 General Elections in Spain

by

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ABSTRACT

Whether or not the Madrid March 11th 2004 terrorist attacks affected the outcome of the Spanish general elections three days later has been the source of great controversy in the last years. This paper analyzes Spanish electoral data for the 2000 and 2004 Congressional elections, comparing the marginal effects of the proportion of voters who voted before the elections (and therefore, before the bombings in 2004) on the voting pattern in both years. A linear approach finds mild evidence that bombs undermined support for the incumbent conservative party and increased the share of the vote for the opposition socialists, similar to previous findings by Montalvo (2006) using a natural experiment design. A non-linear approach using binomial and multinomial logit models is not successful and yields no conclusive indications on how the attacks affected the outcome of the elections.

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## I. INTRODUCTION

The use of violence for political purposes is one of the most recurrent events in human history. From tribal disputes to world wars, there are plenty of examples of individuals or collectives that have tried to change the flow of politics by means of killing[1]. Jones and Olken (2007) collected data on 298 assassination attempts of national leaders since 1875, of which 59 were successful. That's perhaps not very effective, but the analysis shows that when the killers got it right they did affect the history of the country in question, and raised the intensity of otherwise small-scale conflicts.

As it might be expected, the interest in this area of research has increased after the September 2001 terrorist attacks on New York. Abadie (2004) has found that terrorist risk is not significantly higher for poorer countries, but political freedom has a significant effect, albeit in a non-monotonic way[2]. However, terrorism does matter to the economy: Abadie (2006) analyzes the market for office real state in downtown Chicago and shows that following the New York attacks vacancy rates experienced a much more pronounced increase in the distinctive landmark buildings and their vicinities than in other areas of the city. Many other examples could be mentioned, but the pattern is similar: given the intrinsic complexity of measuring the direct effect of a terrorist attack on any given election, the research has focused on other areas.

However, the Madrid bombings on March 11$^{th}$ 2004 provided a sad opportunity to measure this impact. Montalvo (2006) takes advantage of the fact that Spanish residents abroad were required to have submitted their ballot papers for the Congressional elections before the bombs exploded, and that their votes were counted apart. Using detailed data on the last three Congressional elections, the paper designs a natural experiment approach that allows to evaluate how the attacks influenced the outcome of the vote, and finds that the blasts did affect the electoral result, which before was favorable to the incumbent conservative party (PP), and facilitated the victory of the socialists (PSOE).

[1] For a detailed account of the 20$^{th}$ century ones see Lentz (2002).

[2] Countries in some intermediate range of political freedom are shown to be more prone to terrorism than countries with high levels of political freedom or countries with highly authoritarian regimes.

In this paper a second-best approach is used to answer the same question, by comparing the effect of the proportion of voters by mail in each province on the outcome of the last two Congressional elections in Spain, using not only data from residents abroad, but from voters by mail that reside in the country and are not counted apart. Although this method shares some of the weaknesses of the first-best approach, and has many more of its own that will be detailed below, its greater robustness to certain aspects of the data and use of more information about voters by mail can help to shed more light on the matter. Specially, if using this method evidence pointing to the same conclusions is found, this would greatly strengthen Montalvo's (2006) case, although if that is not the case, it is convenient to keep in mind that the latter is a technically superior approach to the one discussed in this paper.

The paper is organized as follows. Section II provides a brief introduction to the facts surrounding the 2004 Madrid bombings and Congressional elections. Section III describes the data used in the analysis. Section IV is dedicated to the linear analysis of the data, while section V expounds the non-linear approach. Finally, section VI summarizes the findings and expounds the basic conclusions.

## II. MOTIVATION

Before March 11th, 2004, the incumbent conservative party, PP, was regarded as the clear winner of the March 14th Congressional elections. On the 10th, polls by Sigma Dos[3] gave them a 3-point lead over the socialist party, PSOE. However, three days before the vote several bombs exploded on four commuter trains in Madrid, killing 199 people and injuring almost 1,500. This was the worst terrorist attack in the history of the country, and the government immediately blamed ETA, the separatist Basque terrorist organization which had already killed more than 800 people in its 30 years of existence[4]. Given the incumbent government's relatively harder stance on ETA, everything pointed towards an even bigger victory on their part, and The Economist read that the bombings were "coming just three days before a general election which the ruling conservatives now seem even more likely to win[5]".

However, "as polling began [...] on Sunday March 14th, there were growing doubts about the government's repeated assertion that Basque terrorists had carried out Thursday's massive terrorist attacks in Madrid". Mounting evidence pointed towards an Al-Qaeda connected group already since Thursday, although "the outgoing prime minister [...] continued to insist that [...] ETA was the chief suspect until shortly before announcing the (Al Qaeda related) arrests on Saturday[6]." The socialist party ended up winning the elections with a 5-point lead over the incumbent, PP. Given that "before the attacks, the PP had looked set to cruise to its third successive election win" the turnaround was immediately attributed to that "the realization by polling day that the bombings were probably the work of Islamist terrorists led some voters to blame Mr. Aznar for making Spain a target for international terrorism[7]." This has become the common but controversial wisdom in the country until this day, especially among conservative circles, and "internet chatter, speculative journalism and political skulduggery, aided by a police investigation that could not answer all the questions, have combined to produce multiple conspiracy theories[8]."

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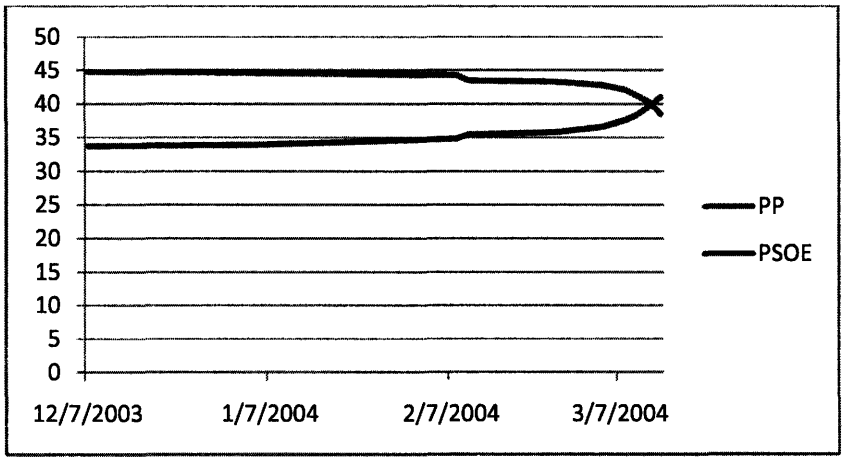
[3] See references. or www.sigmados.com
[4] The Economist, March 12th 2004.
[5] The Economist, March 11th, 2004.
[6] The Economist, March 14th, 2004.
[7] The Economist, March 16th, 2004.
[8] The Economist. November 1st, 2007.

It is then not surprising that researchers in Spain have raced to try to prove or disprove the fact that the bombings changed the outcome of the elections, with more or less subjectivity in the way. Much has been said in other occasions about unreliable forecasting techniques[9], media influence[10] and other usual suspects, but this case had it all and there are theories aplenty. On one hand, Moreno (2004) argues that "it is more than plausible to believe that sectors of young voters and left-wing abstainers mobilized against what was perceived as an informative manipulation of the (incumbent) Aznar's Government", while Blakeley (2006) thinks that "it is axiomatic that the Madrid bombings affected the election results", and that "the bombings acted as a catalyst for change by shining the spotlight on past episodes which, had the bombings not occurred, may have remained at the edge of public consciousness". However, Lago and Montero (2005) use post-electoral survey data to construct a counterfactual simulation and argue that the incidence of the terrorist attack was very limited[11]. Their results are supported by the converging path of both parties' share of the vote since early December 2003, portrayed in figure 1, and that begins accelerating some time before the terrorist attacks.

**Figure 1**




Among all the brouhaha Montalvo (2006) stands out as the most technical and convincing attempt at trying to answer this question. The paper uses the fact that a segment of the population, the residents abroad, had to cast their votes before the bombings, and that they were counted apart, to construct a natural experiment setting using them as a control group, and using a three-time (three last Congressional elections) differences-in-differences approach finds that the attacks did indeed affect

[9] For an illustrative introduction into the matter, see Leight and Wolfers (2006).
[10] DellaVigna and Kaplan (2006) study the impact of Fox News on Presidential elections in the U.S.
[11] For a critique of Lago and Montero's approach, see Montalvo (2006), pp. 8-9.

the outcome of the election and contributed to the socialist victory. This control group is obviously not randomly selected, but the paper argues that there is no sample selection, since the decision to live abroad was not influenced by the terrorist attack. However, individuals who chose to live abroad will most likely differ from those whose stay, so this approach is only valid if we assume that the idiosyncratic component can be aggregated, and that it is constant over time during the three election period. Moreover, the technique is subject to standard critiques of the differences-in-differences approach[12].

Also, there is another group of voters who had to cast their ballot papers before the bombings, the resident voters by mail. However, their votes are not counted apart, but pooled together with those of the voters who cast their ballot papers in person on election day. Because of that, they cannot be used in the control group, and since they cannot be told apart either, they have to form part of the treatment group, i.e. not all individuals in the treatment group have been treated.

So the approach is not perfect, but it is a proxy for the first best and as such, it is difficult to improve on it. However, if by using an overall inferior approach that has different strengths and weaknesses we find results that point in the same direction, the robustness of Montalvo (2006) would be greatly increased. If on the contrary results are inconclusive or point in the opposite direction, there would be scope to think about ways in which Montalvo (2006) could be flawed, always keeping in mind that it is an overall superior approach.

This paper will then aim to estimate and compare the effects of the proportion of voters by mail, both residents and non-residents, on the results for the Congressional elections in 2000 and 2004, using first a linear and then a non-linear approach, discussed in section III. By doing so it will use information about all the individuals that voted before the bombings took place, although sacrificing the more powerful identification of the natural experiment. It will also avoid using differences-in-differences (although fixed effects are included in some of the linear regressions) and just test whether the parameters in both elections are statistically equal, and be able to use non-lineal multiple response models. Finally, since we will only be checking whether the effect is statistically significant and if so see which is its sign, but not actually quantifying it, albeit at a cost we gain simplicity and clarity.

[12] See Bertrand, Duflo and Mullainathan (2004)

## III. DATA

The dataset used in this paper has been elaborated by collecting data from the Spanish Ministry of the Interior (Home Affairs) and the Instituto Nacional de Estadística (INE, National Statistics Institute). It covers the 50 Spanish provinces plus Ceuta and Melilla, the two autonomous cities in Africa, and contains data about the two Congressional elections in March 2000 and March 2004, as well as about demographics and other variables of potential interest. In the linear approach two different dependent variables are used, for robustness purposes:

*PROP1* Ratio of the percentage of total valid votes for PSOE and PP

*PROP2* Ratio of the percentage of total valid votes for PSOE and other parties.

For the non-linear approach another two dependent variables have been constructed from the data:

*PSOE* Binary variable equal to 1 if PSOE won more valid votes than PP, 0 otherwise.

*WIN* Variable takes value 1 if PSOE obtained the majority of valid votes, value 2 if PP did, and value 3 if other party did.

Finally, the set of independent variables contains every aspect that is deemed to be potentially relevant in the electoral process and about which reliable data is available.

*MAIL1* Percentage of votes casted before the March 11$^{th}$ terrorist attacks by residents (CER) and non-residents (CERA), including votes by mail and received in consulates.

*MAIL2*[13] Percentage of votes casted before the March 11$^{th}$ terrorist attacks by residents (CER) voting by mail.

*POP* Number of registered voters.

*ABS* Abstention rate.

[13] MAIL2 is deemed to be of potential interest and is included for robustness purposes as an alternative to MAIL1.

*UNP* Unemployment rate.

*INFL* Inflation rate.

*COST* Average annual labor (salary and other) cost per worker, in euro.

*EXP* Average expenditure by households, in euro.

*HIP* Number of new mortgages per inhabitant, rural and urban properties.

*EXT* Percentage of foreign population, other than Western Europe[14] and USA.

*CHILD* Percentage of population aged 0-19.

*SUI* Annual number of suicides per inhabitant.

DIV Annual number of nullities, separations and divorces per inhabitant.

*PRESS* Percentage of population over 14 reading papers daily.

"PRESS", "COST" and "EXP" data are only available at an autonomous community level, so observations for all the provinces in the same autonomous community are assigned the same value. Values for Ceuta and Melilla were not available for all the variables, and data for the two cities are relatively less reliable, so they have been excluded from the analysis. Detailed data on exit polls on election days would have been useful, but they are elaborated by private firms and none was willing or able to provide them for this analysis. There are no multicollinearity problems among the regressors, and a complete description of the variables used and their sources can be found in the appendix.

Our parameter of interest is the marginal effect of MAIL1 and MAIL2 on PROP1 and PROP2 in the linear case, and on PSOE and WIN in the non-linear case, and particularly, whether it has been the same for both the 2000 and 2004 elections. If a significant difference is founded, then that would point towards an effect of the bombings on the outcome of the elections. For example, if the difference between the marginal effect of a greater proportion of early voters on the ratio of PSOE/PP in 2004 than in 2000 is negative, this would suggest that ceteris paribus the voters by mail in 2004 were supporting the socialists comparatively less (or the conservatives comparatively more) than in 2000, or conversely, that voters in person were supporting the socialist comparatively more, pointing in the

[14] Western Europe includes Germany, Austria, Belgium, Denmark, Finland, France, Greece, Netherlands, Ireland, Luxemburg, Portugal, United Kingdom, Sweden and Norway.

same direction as Montalvo (2006). Of course, a constant composition in aggregate terms for the group of early voters between 2000 and 2004 must be implicitly assumed here as well, since without it any changes in the parameter could be just due to changes in the composition. It is as well important to remark that this approach is only looking for changes in the decision of which party to vote, but another channel that could allow the terrorist attacks to influence the election is through increased or reduced participation, i.e. the abstention rate. This is not captured in our analysis, and moreover, we must allow the marginal effect of the abstention rate to vary between the two elections in our comparisons.

In general, this paper follows standard techniques for linear and non-linear analysis[15]. Unless otherwise stated, given the small number of observations, the standard errors for the coefficients have been bootstrapped, and the reported coefficient is already corrected for small sample bias. For robustness purposes many different specifications have been tried, but only the most relevant are reported. In the non-linear case, since the logit and probit approaches consistently yield similar results, for simplicity purposes only the logit results are reported.

Finally, to help understand the different choices involved in the construction of the analysis, it is helpful to briefly describe the electoral system in Spain[16]. In elections to the Congress the vote takes place on a party basis, and then the representatives are picked from the ordered party candidate lists that must be published before the elections. Each province is allocated a number of seats depending mainly on their population, and they are then allocated to the different parties using the D'Hont system, which is not directly proportional. Therefore, the natural way to evaluate support for a party is to focus on the share of the vote, since the number of seats would provide a distorted measure.

The election system for the Senate is substantially different, as it is intended to be more equally representative of all the Spanish regions. Each province elects 4 senators, except the autonomous cities of Ceuta and Melilla which elect 2 each, and the insular provinces which elect 5 or 6 each. A voter can endorse a number of candidates equal to the total for the province minus one (i.e. usually 3), except for Ceuta and Melilla voters, who can elect the total number, i.e. 2. Not all candidates elected need to be affiliated with the same party, but since a voter will usually choose on a party basis, the pattern 3-1 (3 candidates for the most voted party, 1 for the second one) is very common. The system makes it impossible to count separately votes for each party, and the average of votes for all the party candidates or for the elected candidates must be computed. This, together with the fact that non-resident voters are not allowed to participate, makes it a much less attractive subject of study than the Congressional elections.

[15] See, for example, Wooldridge (2002).
[16] For more detailed information, visit www.mir.com, the website of the Spanish Ministry of the Interior.

In the Congressional elections, resident voters can vote either by mail, with a sooner deadline, or on the election day, but irrespective of the method used, the votes are pooled together in the same ballot boxes. However, non-resident voters have to cast their votes compulsory by a sooner date than the election day, either directly by mail, or at a Spanish consular office, and their votes are counted separately by province. This is why only they can be separately studied as a control group.

## IV. LINEAR-APPROACH

In this first approach, a linear regression model is fitted to the data to analyze the marginal effect of the proportion of early voters, first total (*mail1*) and then resident only (*mail2*), on the logarithm of the ratio of the share of the vote for PSOE and PP (*prop1*), and alternatively, on the logarithm of the ratio of the share of the vote for PSOE and other parties (*prop2*). The basic model is then

$$y_{it} = x_{it}\beta + u_{it}$$

with $i=\{1,2,..,50\}$, since the autonomous cities of Ceuta and Melilla are excluded from the analysis, and $t=\{00,04\}$, for the last two Congressional elections in Spain. As mentioned above the independent variables are (one at a time) $y=\{lnprop1,lnprop2\}$, and the set of regressors is $x=\{mail1, mail2, pop, abs, unp, infl, cost, exp, hip, ext, child, sui, div, press\}$. Note that *mail1* and *mail2* are included one at time as well, which in combination with *prop1* and *prop2* as independent variables yield four possible combinations, corresponding to the four different columns in Tables 1.1, 1.2 and 1.3. Note also that the result for two different specifications are reported, one that includes all the set of regressors (above) and one that includes only a subset with the a priori most relevant variables. A posteriori different departures from those two specifications have been explored for robustness purposes, but since the results are comparable on a case-by-case basis they are not reported for simplicity.

Table 1.1 corresponds to the case $t=00$, i.e. contains the results for the separate analysis of the 2000 elections. Analogously, table 1.2 corresponds to the case $t=04$, i.e. contains the results for the separate analysis of the 2004 elections. The standard errors are bootstrapped (1000 repetitions), since the small number of observations suggest avoiding asymptotic simplifications (especially with a relatively high number of independent variables), i.e. the p-values reported in italics by the coefficients are already corrected for small sample bias.

In the full specification case it can be seen that only once the marginal effect of *mail1* is statistically significant at a 95% confidence level, in 2000 over *lnprop2*, and although of course this is very weak evidence, it is worth to note that the negative sign suggest a conservative bias in the early voters that is in line with empirical evidence from the database. In the reduced specification case the significance of the coefficients for *mail1* and *mail2* greatly improves, albeit in an asymmetric manner (*mail1* has a significant effect in 2000, but not in 2004, and vice-versa). A Hausman comparison of the full and

reduced models cannot reject the null hypothesis of the common coefficients not being systematically different, so this increase in significance could be due to a reduction in noise by extra regressors that are not explanatory but inflate the standard errors. However, it must be remarked that in this conditions the Hausman test is not very powerful. Therefore, on a mono-temporal basis, some indications of the proportion of early voters having an effect on the elections outcome are founded, but this result is far from robust.

Table 1.3 reports the results for the joint case in which the elections in 2000 and 2004 are compared. Fixed effects are included to remove unobserved heterogeneity constant over time, since they come at a reasonable cost in terms of efficiency, and there are arguably constant patterns in voting by province. Also, the marginal effect of abstention rates is allowed to vary between 2000 and 2004. The estimated model is then

$$y_{it} = x_{it}\beta + mail_{it}2004_{it}\delta + abs_{it}2004_{it}\mu + \alpha_i + u_{it},$$

where 2004 is a dummy variable for the year, and $\alpha_i$ is the time fixed effect by province. It is clear that the parameter of interest is $\delta$, since it measures the difference in the marginal effect of the proportion of early voters on the independent variable, i.e. the election outcome. For example, if $\delta$ is positive, since the independent variable is the log of the ratio of the share of the vote for PSOE over that of PP or other parties in general, this would suggest that ceteris paribus the voters by mail in 2004 were supporting the socialists comparatively more (or the conservatives comparatively less) than in 2000, or conversely, that voters in person were supporting the socialist comparatively less, and vice-versa. Of course, a constant composition in aggregate terms for the group of early voters between 2000 and 2004 is implicitly assumed, since without it any changes in the parameter could be just due to changes in the composition.

It can be seen that although in the full specification $\delta$ is highly non-significant, again it improves quite notably in the reduced specification, although only in the first case it is actually significant at a 95% confidence interval. A Hausman test for the full and reduced models cannot reject the null hypothesis of the common coefficients not being systematically different, so as before this increase in significance could be due to a reduction in noise by extra regressors that are not explanatory but inflate the standard errors. However, again, it must be remarked that in this conditions the Hausman test is not very powerful. That $\delta$ is negative suggests that ceteris paribus the voters by mail in 2004 were supporting the socialists comparatively less (or the conservatives comparatively more) than in 2000, or conversely, that voters in person were supporting the socialist comparatively more, thus pointing towards the same effect of the Madrid bombings found by Montalvo (2006), i.e. that they increased support for the socialist party, PSOE, and reduced support for the conservative party, PP.

Note that the increase in significance for most of the parameters in the reduced specification could also be possibly due to a total classification effect when bootstrapping with a few observations and many regressors, or that simply the data are being stretched too much in the full specification. After all, there are only 52 observations per period, and there is no way around that, bootstrapping has its limits.

Finally, it is worth to point out that *press*, *exp* and *cost* are only by available at an autonomous community level, and therefore observations for all the provinces in the same autonomous community are assigned the same value. This means that when fixed effects are not added they could be picking up some intrinsic differences between autonomous communities.

## V. NON-LINEAR APPROACH

In this second approach, a non-linear regression model is fitted to the data to analyze the marginal effect of the proportion of early voters, first total (*mail1*) and then resident only (*mail2*), on the expected probability that the socialist party receives more votes than the conservative party in any given province, fitting a binomial logit model with a binary variable that is equal to one if the socialists won more votes (*psoe*), and alternatively, on the expected probability that the socialist party or other party wins with respect to the expected probability that the conservative party wins, fitting a multinomial logit model with a variable that is equal to one if the socialist win in a province, to two if the conservatives do, and to three if any other party does (*win*). The basic two models are then

$$Pr(psoe_{it}=1/x_{it}) = \Lambda(x_{it}\beta) + u_{it}$$

$$Pr(win_{it}=h/x_{it}) = \Lambda(x_{it}\beta_h) + u_{it}$$

where $\Lambda$ is the standard logistic distribution function and $h=\{1,2,3\}=\{PSOE,PP,OTHER\}$. Note that due to the non-linearity of these models the estimates for the coefficients are different from the estimates of the marginal effects. However, the sign of the coefficient will be the sign of the marginal effect, so it is enough to report the estimates for the coefficients in order to sign the marginal effects.

As in section IV, $i=\{1,2,..,50\}$, since the autonomous cities of Ceuta and Melilla are excluded from the analysis, and $t=\{00,04\}$, for the last two Congressional elections in Spain. The set of regressors is also the same, $x=\{mail1, mail2, pop, abs, unp, infl, cost, exp, hip, ext, child, sui, div, press\}$, and *mail1* and *mail2* are included one at time as before, yielding again four possible combinations, corresponding to the four different columns in Tables 2.1, 2.2, 2.3, 3.1, 3.2 and 3.3. Note also that as before the coefficients for a full specification that includes all the set of regressors (above) and a reduced one that includes only a subset with the a priori most relevant variables, but now in the multinomial logit case there will be two set of estimates for each specification, one for each category PSOE and OTHER with respect to the base category, PP.

As in section IV, tables 2.1 and 3.1 report the results for $t$=00 and tables 2.2 and 3.2 report the results for $t$=*04*. Tables 2.3 and 3.3 are for the joint specification of the 2000 and 2004 elections, and include an interaction between *abs* and the year dummy variable, *2004*, and between *mail* and *2004*. Also as in the previous section, the parameter of interest is $\delta$, and has an analogous interpretation.

In general the non-linear approach has been a failure. As seen in the tables in the appendix, and after examining similar specifications, there is absolutely no robustness in any of the results. When bootstrapping in most cases the corrected p-values turn to be either zero or one, most likely due to a total classification problem, and Hausman tests cannot generally be performed because the underlying asymptotic assumptions are violated. When bootstrap is not performed, the results are more reasonable, but of course, given the size of the sample, no estimates can be trusted not to be biased. Of course less regressors can be used, but the results become uninteresting. In general, it looks like the data are just overstretched, and the number of observations is simply not enough to allow for a correct non-linear analysis of this characteristics.

## VI. CONCLUSION

A linear analysis of Spanish electoral data in 2000 and 2004 finds some evidence of a significant effect of the Madrid March 11th 2004 terrorist attacks on that year's Congressional elections a few days later. After adding several controls, when looking at the marginal effects of the proportion of voters who voted before the elections (and therefore before the bombings in 2004) on the ratio of the share of the vote for the socialist and the conservative parties, the data points to a negative difference in those effects between 2004 and 2000, suggesting that the bombs undermined support for the incumbent conservative party and increased the share of the vote for the opposition socialists. However, a non-linear approach using binomial and multinomial logit models is not successful and yields no conclusive indications on how the attacks affected the outcome of the elections.

The results are not excessively robust, but they point in the direction of earlier results by Montalvo (2006), who using data on residents abroad who had to cast their votes before the bombings and that are counted apart, constructs a natural experiment using them as a control group and finds that the attacks did indeed affect the outcome of the election and contributed to the socialist victory.

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## APPENDIX I: TABLES

| TABLE 1.1 (2000) | lnprop1 | | lnprop2 | | lnprop1 | | lnprop2 | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | 12.5 | *0.23* | -18.9 | *0.06* | | | | |
| **mail2** | | | | | 11.5 | *0.26* | -8.9 | *0.50* |
| **pop** | 0.0 | *0.33* | 0.0 | *0.47* | 0.0 | *0.33* | 0.0 | *0.58* |
| **abs** | -4.3 | *0.04* | 1.5 | *0.52* | -2.9 | *0.06* | -0.5 | *0.80* |
| **unp** | -2.9 | *0.18* | 2.3 | *0.25* | -2.0 | *0.35* | 1.6 | *0.42* |
| **infl** | -26.0 | *0.06* | -6.5 | *0.69* | -25.0 | *0.07* | -9.2 | *0.61* |
| **cost** | 0.0 | *0.00* | 0.0 | *0.09* | 0.0 | *0.00* | 0.0 | *0.03* |
| **exp** | 0.0 | *0.48* | 0.0 | *0.32* | 0.0 | *0.28* | 0.0 | *0.17* |
| **hip** | -4.6 | *0.74* | 5.6 | *0.78* | -11.8 | *0.41* | 19.8 | *0.29* |
| **ext** | -6.2 | *0.69* | 0.0 | *1.00* | -1.6 | *0.92* | -5.0 | *0.71* |
| **child** | 0.5 | *0.90* | 2.8 | *0.53* | -3.2 | *0.37* | 7.6 | *0.07* |
| **sui** | 580.1 | *0.80* | 2,448.3 | *0.37* | 383.0 | *0.86* | 2,159.0 | *0.42* |
| **div** | -37.8 | *0.83* | -166.3 | *0.47* | -91.8 | *0.57* | -59.3 | *0.79* |
| **press** | 2.4 | *0.04* | -2.7 | *0.10* | 2.2 | *0.07* | -2.5 | *0.16* |
| **_cons** | 4.2 | *0.01* | -1.3 | *0.46* | 5.5 | *0.00* | -3.1 | *0.04* |
| | | | | | | | | |
| **mail1** | 16.7 | 0.01 | -21.5 | *0.00* | | | | |
| **mail2** | | | | | 13.3 | *0.16* | -7.2 | *0.56* |
| **pop** | 0.0 | 0.28 | 0.0 | *0.18* | 0.0 | *0.46* | 0.0 | *0.57* |
| **abs** | -5.2 | 0.00 | 1.5 | *0.29* | -3.8 | *0.00* | 0.2 | *0.91* |
| **infl** | -22.4 | 0.08 | -13.7 | *0.38* | -12.6 | *0.33* | -26.6 | *0.11* |
| **cost** | 0.0 | 0.00 | 0.0 | *0.02* | 0.0 | *0.00* | 0.0 | *0.04* |
| **hip** | 1.2 | 0.92 | -1.3 | *0.93* | -16.9 | *0.16* | 25.7 | *0.14* |
| **ext** | 1.2 | 0.92 | -10.9 | *0.39* | 3.6 | *0.76* | -12.6 | *0.36* |
| **press** | 3.0 | 0.00 | -4.4 | *0.00* | 3.0 | *0.00* | -4.3 | *0.00* |
| **_cons** | 3.8 | 0.00 | -0.3 | *0.76* | 4.1 | *0.00* | -0.7 | *0.51* |

| TABLE 1.2 (2004) | lnprop1 | | lnprop2 | | lnprop1 | | lnprop2 | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | -2.5 | *0.70* | -0.7 | *0.89* | | | | |
| **mail2** | | | | | -10.7 | *0.19* | 6.6 | *0.32* |
| **pop** | 0.0 | *0.97* | 0.0 | *0.01* | 0.0 | *0.89* | 0.0 | *0.01* |
| **abs** | 1.2 | *0.49* | -1.2 | *0.44* | 0.7 | *0.60* | -1.4 | *0.16* |
| **unp** | 0.9 | *0.58* | -0.9 | *0.52* | 0.1 | *0.94* | -0.4 | *0.78* |
| **infl** | 6.6 | *0.73* | -4.4 | *0.72* | 1.2 | *0.95* | -0.2 | *0.99* |
| **cost** | 0.0 | *0.00* | 0.0 | *0.12* | 0.0 | *0.00* | 0.0 | *0.08* |
| **exp** | 0.0 | *0.38* | 0.0 | *0.86* | 0.0 | *0.32* | 0.0 | *0.85* |
| **hip** | 17.4 | *0.03* | 20.5 | *0.00* | 18.5 | *0.02* | 20.0 | *0.00* |
| **ext** | -5.0 | *0.06* | -6.2 | *0.01* | -5.6 | *0.03* | -5.9 | *0.01* |
| **child** | 0.5 | *0.89* | 2.0 | *0.52* | 1.6 | *0.62* | 2.1 | *0.48* |
| **sui** | 1,028.5 | *0.45* | -1,399.3 | *0.16* | 884.8 | *0.49* | -1,362.2 | *0.16* |
| **div** | 132.0 | *0.27* | -145.4 | *0.16* | 95.6 | *0.40* | -97.4 | *0.32* |
| **press** | -1.9 | *0.05* | -0.9 | *0.27* | -1.8 | *0.07* | -1.0 | *0.24* |
| **_cons** | -3.2 | *0.01* | 1.5 | *0.10* | -3.0 | *0.00* | 1.1 | *0.17* |
| | | | | | | | | |
| **mail1** | -5.2 | *0.20* | 0.5 | *0.88* | | | | |
| **mail2** | | | | | -12.6 | *0.03* | 7.8 | *0.09* |
| **pop** | 0.0 | *0.63* | 0.0 | *0.04* | 0.0 | *0.89* | 0.0 | *0.01* |
| **abs** | 2.2 | *0.05* | -2.3 | *0.03* | 1.0 | *0.33* | -1.7 | *0.04* |
| **infl** | 0.9 | *0.96* | -3.8 | *0.71* | -6.3 | *0.68* | 1.3 | *0.89* |
| **cost** | 0.0 | *0.00* | 0.0 | *0.21* | 0.0 | *0.00* | 0.0 | *0.10* |
| **hip** | 21.2 | *0.00* | 18.2 | *0.00* | 22.9 | *0.00* | 19.0 | *0.00* |
| **ext** | -6.0 | *0.00* | -5.6 | *0.00* | -5.8 | *0.00* | -5.6 | *0.00* |
| **press** | -1.9 | *0.01* | -1.5 | *0.00* | -2.2 | *0.00* | -1.6 | *0.00* |
| **_cons** | -2.3 | *0.00* | 1.4 | *0.01* | -2.1 | *0.00* | 1.1 | *0.04* |

| TABLE 1.3 (JOINT) | lnprop1 | | lnprop2 | | lnprop1 | | lnprop2 | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | 48.7 | *0.82* | 33.7 | *0.86* | | | | |
| **mail1_2004** | -40.3 | *0.65* | 5.7 | *0.97* | | | | |
| **mail2** | | | | | 81.9 | *0.99* | 10.5 | *1.00* |
| **mail2_2004** | | | | | -35.4 | *0.99* | 1.6 | *1.00* |
| **pop** | 0.0 | *0.93* | 0.0 | *0.97* | 0.0 | *1.00* | 0.0 | *0.99* |
| **abs** | -18.1 | *0.63* | -0.6 | *0.99* | -22.3 | *0.99* | 3.0 | *1.00* |
| **abs_2004** | 2.2 | *0.95* | -4.8 | *0.94* | -2.1 | *1.00* | -1.5 | *0.99* |
| **unp** | -2.2 | *0.94* | 2.6 | *0.93* | -6.0 | *0.99* | 3.9 | *0.99* |
| **infl** | -23.8 | *0.88* | 6.4 | *0.95* | -14.7 | *1.00* | -10.5 | *1.00* |
| **cost** | 0.0 | *0.85* | 0.0 | *0.85* | 0.0 | *1.00* | 0.0 | *0.99* |
| **exp** | 0.0 | *0.97* | 0.0 | *0.89* | 0.0 | *1.00* | 0.0 | *0.99* |
| **hip** | 35.6 | *0.88* | 4.1 | *0.99* | 46.2 | *0.99* | -5.7 | *1.00* |
| **ext** | -21.4 | *0.75* | 1.0 | *0.98* | -19.8 | *0.97* | 2.1 | *0.99* |
| **child** | 15.6 | *0.93* | -2.9 | *0.99* | 10.3 | *1.00* | -2.7 | *1.00* |
| **sui** | -809.7 | *0.97* | 2,620.1 | *0.84* | -531.3 | *1.00* | 1,217.5 | *1.00* |
| **div** | -252.9 | *0.94* | -65.7 | *0.97* | -289.7 | *1.00* | -95.6 | *1.00* |
| **press** | 3.5 | *0.90* | -0.9 | *0.99* | -2.4 | *1.00* | 1.9 | *0.99* |
| **_cons** | -7.8 | *0.90* | 0.5 | *0.99* | -9.7 | *0.99* | 3.6 | *0.99* |
| | | | | | | | | |
| **mail1** | 42.9 | *0.45* | 24.7 | *0.60* | | | | |
| **mail1_2004** | -37.9 | *0.04* | 12.7 | *0.41* | | | | |
| **mail2** | | | | | 70.5 | *0.421* | 9.7 | *0.89* |
| **mail2_2004** | | | | | -34.9 | *0.139* | 7.5 | *0.64* |
| **pop** | 0.0 | *0.68* | 0.0 | *0.53* | 0.0 | *0.831* | 0.0 | *0.60* |
| **abs** | -19.5 | *0.11* | 0.1 | *0.99* | -23.6 | *0.041* | 3.6 | *0.66* |
| **abs_2004** | 0.3 | *0.96* | -3.9 | *0.41* | -4.3 | *0.282* | 0.1 | *0.99* |
| **infl** | -26.5 | *0.57* | 3.9 | *0.91* | -17.8 | *0.695* | -12.5 | *0.69* |
| **cost** | 0.0 | *0.36* | 0.0 | *0.73* | 0.0 | *0.132* | 0.0 | *0.36* |
| **hip** | 26.9 | *0.59* | 1.8 | *0.96* | 41.1 | *0.481* | -9.2 | *0.82* |
| **ext** | -17.0 | *0.10* | 0.7 | *0.91* | -16.5 | *0.106* | 1.0 | *0.88* |
| **press** | 3.2 | *0.57* | -2.4 | *0.63* | -1.8 | *0.764* | 0.6 | *0.89* |
| **_cons** | -1.8 | *0.88* | -2.1 | *0.82* | -5.8 | *0.598* | 1.4 | *0.87* |

**NOTE: FIXED EFFECTS (BY PROVINCE) ARE INCLUDED**

| TABLE 2.1 (2000) | psoe | | psoe | | psoe* | | psoe* | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | 11,223.9 | *0.00* | | | 11,223.9 | *0.00* | | |
| **mail2** | | | -3,404.1 | *0.25* | | | -3,404.1 | *0.98* |
| **pop** | 0.0 | *0.29* | 0.0 | *0.26* | 0.0 | *0.00* | 0.0 | *0.61* |
| **abs** | -1,345.7 | *0.00* | -2,476.9 | *0.00* | -1,345.7 | *0.00* | -2,476.9 | *0.16* |
| **unp** | -127.7 | *0.78* | 39.2 | *0.93* | -127.7 | *0.00* | 39.2 | *1.00* |
| **infl** | 18,507.3 | *0.00* | 12,088.5 | *0.01* | 18,507.3 | *0.00* | 12,088.5 | *0.92* |
| **cost** | 0.1 | *0.00* | 0.2 | *0.00* | 0.1 | *0.00* | 0.2 | *0.94* |
| **exp** | -0.1 | *0.00* | 0.0 | *0.51* | -0.1 | *0.00* | 0.0 | *1.00* |
| **hip** | 32,099.2 | *0.00* | 50,502.7 | *0.00* | 32,099.2 | *0.00* | 50,502.7 | *0.07* |
| **ext** | -19,804.2 | *0.00* | -43,540.2 | *0.00* | -19,804.2 | *0.00* | -43,540.2 | *0.04* |
| **Child** | 9,036.6 | *0.00* | 5,129.1 | *0.00* | 9,036.6 | *0.00* | 5,129.1 | *0.93* |
| **sui** | 3,411,842.0 | *0.00* | 3,033,855.0 | *0.00* | 3,411,842.0 | *0.00* | 3,033,855.0 | . |
| **div** | 237,313.4 | *0.00* | 602,312.8 | *0.00* | 237,313.4 | *0.00* | 602,312.8 | . |
| **press** | -616.9 | *0.04* | -2,757.4 | *0.00* | -616.9 | *0.00* | -2,757.4 | *0.83* |
| **_cons** | -5,139.8 | *0.00* | -5,049.2 | *0.00* | -5,139.8 | *0.00* | -5,049.2 | *0.79* |
| | | | | | | | | |
| **mail1** | -104.8 | *1.00* | | | -104.8 | *0.34* | | |
| **mail2** | | | -167.0 | *0.99* | | | -167.0 | *0.26* |
| **pop** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.92* | 0.0 | *0.75* |
| **abs** | 14.4 | *0.99* | 9.6 | *1.00* | 14.4 | *0.38* | 9.6 | *0.56* |
| **infl** | 50.5 | *1.00* | 33.7 | *1.00* | 50.5 | *0.70* | 33.7 | *0.77* |
| **cost** | 0.0 | *1.00* | 0.0 | *0.99* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 373.6 | *1.00* | 402.7 | *0.99* | 373.6 | *0.01* | 402.7 | *0.00* |
| **ext** | -244.0 | *1.00* | -275.8 | *0.99* | -244.0 | *0.01* | -275.8 | *0.00* |
| **press** | -25.0 | *1.00* | -27.1 | *0.99* | -25.0 | *0.00* | -27.1 | *0.00* |
| **_cons** | -24.7 | *1.00* | -25.7 | *0.99* | -24.7 | *0.00* | -25.7 | *0.00* |

***(No bootstrap)**

| TABLE 2.2 (2004) | psoe | | psoe | | psoe* | | psoe* | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | -160.6 | *1.00* | | | -160.6 | *0.12* | | |
| **mail2** | | | -24.9 | *1.00* | | | -24.9 | *0.78* |
| **pop** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.95* | 0.0 | *0.61* |
| **abs** | 127.7 | *1.00* | 75.2 | *1.00* | 127.7 | *0.03* | 75.2 | *0.01* |
| **unp** | -1.7 | *1.00* | -10.5 | *1.00* | -1.7 | *0.95* | -10.5 | *0.67* |
| **infl** | 42.9 | *1.00* | 139.8 | *1.00* | 42.9 | *0.82* | 139.8 | *0.45* |
| **cost** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.00* | 0.0 | *0.00* |
| **exp** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.76* | 0.0 | *0.40* |
| **hip** | 102.3 | *1.00* | 95.3 | *1.00* | 102.3 | *0.34* | 95.3 | *0.34* |
| **ext** | -92.2 | *1.00* | -86.0 | *1.00* | -92.2 | *0.09* | -86.0 | *0.07* |
| **child** | -19.8 | *1.00* | 29.3 | *1.00* | -19.8 | *0.70* | 29.3 | *0.35* |
| **sui** | -26,565.2 | *1.00* | -30,639.2 | *1.00* | -26,565.2 | *0.33* | -30,639.2 | *0.28* |
| **div** | -3,400.4 | *1.00* | -1,455.6 | *1.00* | -3,400.4 | *0.14* | -1,455.6 | *0.30* |
| **press** | -47.0 | *1.00* | -38.5 | *1.00* | -47.0 | *0.02* | -38.5 | *0.01* |
| **_cons** | -32.7 | *1.00* | -42.7 | *1.00* | -32.7 | *0.01* | -42.7 | *0.00* |
| **mail1** | -58.4 | *1.00* | | | -58.4 | *0.14* | | |
| **mail2** | | | -20.2 | *1.00* | | | -20.2 | *0.78* |
| **pop** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.25* | 0.0 | *0.35* |
| **abs** | 55.3 | *1.00* | 46.4 | *1.00* | 55.3 | *0.00* | 46.4 | *0.00* |
| **infl** | -27.1 | *1.00* | -6.0 | *1.00* | -27.1 | *0.84* | -6.0 | *0.97* |
| **cost** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 49.0 | *1.00* | 70.2 | *1.00* | 49.0 | *0.57* | 70.2 | *0.33* |
| **ext** | -74.1 | *1.00* | -64.3 | *1.00* | -74.1 | *0.01* | -64.3 | *0.01* |
| **press** | -34.8 | *1.00* | -36.5 | *1.00* | -34.8 | *0.00* | -36.5 | *0.00* |
| **_cons** | -31.5 | *1.00* | -31.7 | *1.00* | -31.5 | *0.00* | -31.7 | *0.00* |

***(No bootstrap)**

| TABLE 2.3 (JOINT) | psoe | | psoe | | psoe* | | psoe* | |
|---|---|---|---|---|---|---|---|---|
| **mail1** | -89.4 | *1.00* | | | -89.4 | *0.34* | | |
| **mail1_2004** | 20.8 | *1.00* | | | 20.8 | *0.79* | | |
| **mail2** | | | -101.8 | *1.00* | | | -101.8 | *0.32* |
| **mail2_2004** | | | 64.9 | *1.00* | | | 64.9 | *0.49* |
| **pop** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.87* | 0.0 | *0.64* |
| **abs** | 21.7 | *1.00* | 14.8 | *1.00* | 21.7 | *0.19* | 14.8 | *0.23* |
| **abs_2004** | 25.4 | *1.00* | 17.9 | *1.00* | 25.4 | *0.02* | 17.9 | *0.05* |
| **unp** | 3.5 | *1.00* | 1.1 | *1.00* | 3.5 | *0.84* | 1.1 | *0.95* |
| **infl** | -15.8 | *1.00* | 7.3 | *1.00* | -15.8 | *0.87* | 7.3 | *0.93* |
| **cost** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.00* | 0.0 | *0.00* |
| **exp** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.77* | 0.0 | *0.56* |
| **hip** | 148.4 | *1.00* | 147.5 | *1.00* | 148.4 | *0.07* | 147.5 | *0.06* |
| **ext** | -73.0 | *1.00* | -70.0 | *1.00* | -73.0 | *0.01* | -70.0 | *0.01* |
| **child** | 23.9 | *1.00* | 41.4 | *1.00* | 23.9 | *0.48* | 41.4 | *0.11* |
| **sui** | 2,949.9 | *1.00* | 2,100.5 | *1.00* | 2,949.9 | *0.82* | 2,100.5 | *0.88* |
| **div** | -1,051.9 | *1.00* | -601.2 | *1.00* | -1,051.9 | *0.43* | -601.2 | *0.54* |
| **press** | -17.7 | *1.00* | -16.3 | *1.00* | -17.7 | *0.04* | -16.3 | *0.05* |
| **_cons** | -28.4 | *1.00* | -33.8 | *1.00* | -28.4 | *0.01* | -33.8 | *0.00* |
| | | | | | | | | |
| **mail1** | -96.7 | *1.00* | | | -96.7 | *0.23* | | |
| **mail1_2004** | 35.4 | *1.00* | | | 35.4 | *0.67* | | |
| **mail2** | | | -109.5 | *0.98* | | | -109.5 | *0.25* |
| **mail2_2004** | | | 61.2 | *0.99* | | | 61.2 | *0.53* |
| **pop** | 0.0 | *1.00* | 0.0 | *0.98* | 0.0 | *0.25* | 0.0 | *0.26* |
| **abs** | 20.8 | *1.00* | 17.1 | *0.96* | 20.8 | *0.04* | 17.1 | *0.06* |
| **abs_2004** | 19.1 | *1.00* | 13.8 | *0.94* | 19.1 | *0.06* | 13.8 | *0.08* |
| **infl** | -28.2 | *1.00* | -32.6 | *0.98* | -28.2 | *0.75* | -32.6 | *0.69* |
| **cost** | 0.0 | *0.99* | 0.0 | *0.96* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 95.2 | *0.99* | 104.3 | *0.92* | 95.2 | *0.16* | 104.3 | *0.07* |
| **ext** | -69.6 | *0.99* | -60.8 | *0.95* | -69.6 | *0.00* | -60.8 | *0.00* |
| **press** | -25.4 | *0.98* | -27.4 | *0.95* | -25.4 | *0.00* | -27.4 | *0.00* |
| **_cons** | -22.1 | *0.99* | -22.6 | *0.96* | -22.1 | *0.00* | -22.6 | *0.00* |

***(No bootstrap)**

| TABLE 3.1 (2000) | | win | | win | | win* | | win* |
|---|---|---|---|---|---|---|---|---|
| **PSOE** | | | | | | | | |
| **mail1** | 11046.4 | *0.00* | | | 11046.4 | . | | |
| **mail2** | | | 7506.4 | *0.09* | | | 7506.4 | . |
| **pop** | 0.0 | *0.19* | 0.0 | *0.25* | 0.0 | *0.00* | 0.0 | *0.00* |
| **abs** | -778.8 | *0.17* | -1373.0 | *0.07* | -778.8 | *0.00* | -1373.0 | *0.00* |
| **unp** | -923.4 | *0.13* | -194.1 | *0.77* | -923.4 | *0.00* | -194.1 | *0.00* |
| **infl** | -3166.3 | *0.51* | -17228.2 | *0.01* | -3166.3 | . | -17228.2 | . |
| **cost** | 0.0 | *0.17* | 0.0 | *0.36* | 0.0 | *0.00* | 0.0 | *0.00* |
| **exp** | 0.0 | *0.48* | 0.0 | *0.70* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 9450.1 | *0.06* | 13478.2 | *0.03* | 9450.1 | . | 13478.2 | . |
| **ext** | -16232.5 | *0.00* | -18355.1 | *0.00* | -16232.5 | . | -18355.1 | . |
| **child** | 6034.3 | *0.00* | 3614.3 | *0.02* | 6034.3 | *0.00* | 3614.3 | *0.00* |
| **sui** | -257830.7 | *0.63* | 87380.1 | *0.90* | -257830.7 | . | 87380.1 | . |
| **div** | 133971.5 | *0.01* | 195555.1 | *0.01* | 133971.5 | . | 195555.1 | . |
| **press** | 414.0 | *0.24* | 389.5 | *0.39* | 414.0 | *0.00* | 389.5 | *0.00* |
| **_cons** | -2144.5 | *0.00* | -1326.8 | *0.01* | -2144.5 | *0.00* | -1326.8 | *0.00* |
| **OTHER** | | | | | | | | |
| **mail1** | -1628.7 | *0.37* | | | -1628.7 | . | | |
| **mail2** | | | -24.7 | *0.99* | | | -24.7 | . |
| **pop** | 0.0 | *0.34* | 0.0 | *0.54* | 0.0 | *0.00* | 0.0 | *0.88* |
| **abs** | 1088.1 | *0.01* | 1290.3 | *0.00* | 1088.1 | . | 1290.3 | . |
| **unp** | 441.2 | *0.33* | 399.9 | *0.45* | 441.2 | *0.00* | 399.9 | . |
| **infl** | 7958.5 | *0.01* | 8644.8 | *0.01* | 7958.5 | . | 8644.8 | . |
| **cost** | 0.0 | *0.16* | 0.0 | *0.07* | 0.0 | *0.00* | 0.0 | *0.18* |
| **exp** | 0.0 | *0.78* | 0.0 | *0.46* | 0.0 | *0.00* | 0.0 | *0.20* |
| **hip** | -3047.2 | *0.31* | 854.3 | *0.77* | -3047.2 | . | 854.3 | . |
| **ext** | 6719.5 | *0.03* | 4824.1 | *0.11* | 6719.5 | . | 4824.1 | . |
| **child** | -1978.6 | *0.05* | -1183.7 | *0.16* | -1978.6 | . | -1183.7 | . |
| **sui** | -283757.9 | *0.33* | -262256.7 | *0.39* | -283757.9 | . | -262256.7 | . |
| **div** | 16913.9 | *0.60* | -8610.6 | *0.80* | 16913.9 | . | -8610.6 | . |
| **press** | -359.6 | *0.13* | -367.9 | *0.22* | -359.6 | *0.00* | -367.9 | *0.18* |
| **_cons** | -392.3 | *0.21* | -751.6 | *0.00* | -392.3 | *0.00* | -751.6 | *0.00* |
| **PSOE** | | | | | | | | |
| **mail1** | 2882.1 | *0.46* | | | 2882.1 | *0.00* | | |
| **mail2** | | | 7144.6 | *0.30* | | | 7144.6 | *0.00* |
| **pop** | 0.0 | *0.01* | 0.0 | *0.00* | 0.0 | *0.00* | 0.0 | *0.00* |
| **abs** | -676.5 | *0.34* | -682.2 | *0.39* | -676.5 | *0.00* | -682.2 | *0.00* |
| **infl** | -31542.7 | *0.01* | -34008.8 | *0.01* | -31542.7 | . | -34008.8 | . |
| **cost** | 0.0 | *0.42* | 0.0 | *0.45* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 21357.1 | *0.01* | 24658.9 | *0.00* | 21357.1 | *0.00* | 24658.9 | . |
| **ext** | -43589.4 | *0.00* | -50792.8 | *0.00* | -43589.4 | . | -50792.8 | . |
| **press** | 183.6 | *0.79* | 282.8 | *0.65* | 183.6 | *0.00* | 282.8 | *0.00* |
| **_cons** | -271.9 | *0.66* | -366.7 | *0.51* | -271.9 | *0.00* | -366.7 | *0.00* |
| **OTHER** | | | | | | | | |
| **mail1** | 1177.1 | *0.65* | | | 1177.1 | . | | |
| **mail2** | | | 1072.4 | *0.65* | | | 1072.4 | . |
| **pop** | 0.0 | *0.87* | 0.0 | *0.79* | 0.0 | *0.00* | 0.0 | *0.66* |
| **abs** | 1944.8 | *0.00* | 1611.8 | *0.00* | 1944.8 | . | 1611.8 | . |
| **infl** | 8702.6 | *0.07* | 11523.6 | *0.01* | 8702.6 | . | 11523.6 | . |
| **cost** | 0.0 | *0.04* | 0.0 | *0.06* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 2527.6 | *0.63* | 4504.0 | *0.22* | 2527.6 | . | 4504.0 | . |
| **ext** | 68.0 | *0.98* | -1847.0 | *0.52* | 68.0 | . | -1847.0 | . |
| **press** | -537.7 | *0.08* | -547.8 | *0.05* | -537.7 | . | -547.8 | *0.00* |
| **_cons** | -1506.0 | *0.00* | -1342.6 | *0.00* | -1506.0 | *0.00* | -1342.6 | *0.00* |

***(No bootstrap) / BASE CATEGORIE IS PP**

| TABLE 3.2 (2004) | | win | | win | | win* | | win* |
|---|---|---|---|---|---|---|---|---|
| **PSOE** | | | | | | | | |
| **mail1** | -140.5 | *0.98* | | | -140.5 | *0.26* | | |
| **mail2** | | | 512.8 | *0.95* | | | 512.8 | *0.04* |
| **pop** | 0.0 | *0.99* | 0.0 | *0.94* | 0.0 | *0.68* | 0.0 | *0.06* |
| **abs** | 155.6 | *0.95* | 273.5 | *0.88* | 155.6 | *0.01* | 273.5 | *0.02* |
| **unp** | -98.7 | *0.96* | -221.0 | *0.91* | -98.7 | *0.08* | -221.0 | *0.04* |
| **infl** | 458.9 | *0.98* | 1254.2 | *0.95* | 458.9 | *0.40* | 1254.2 | *0.05* |
| **cost** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.70* | 0.0 | *0.76* |
| **exp** | 0.0 | *0.99* | 0.0 | *0.97* | 0.0 | *0.49* | 0.0 | *0.15* |
| **hip** | 142.5 | *0.99* | 517.4 | *0.95* | 142.5 | *0.32* | 517.4 | *0.05* |
| **ext** | -321.8 | *0.94* | -699.0 | *0.85* | -321.8 | *0.05* | -699.0 | *0.02* |
| **child** | 46.7 | *0.99* | 225.2 | *0.95* | 46.7 | *0.32* | 225.2 | *0.02* |
| **sui** | -156694.6 | *0.94* | -384347.7 | *0.83* | -156694.6 | *0.04* | -384347.7 | *0.02* |
| **div** | -7166.6 | *0.95* | -12452.9 | *0.91* | -7166.6 | *0.01* | -12452.9 | *0.02* |
| **press** | -64.4 | *0.96* | -136.8 | *0.90* | -64.4 | *0.15* | -136.8 | *0.04* |
| **_cons** | -6.1 | *1.00* | -42.8 | *0.97* | -6.1 | *0.82* | -42.8 | *0.20* |
| **OTHER** | | | | | | | | |
| **mail1** | -6275.2 | *0.19* | | | -6275.2 | *0.00* | | |
| **mail2** | | | -14157.6 | *0.03* | | | -14157.6 | . |
| **pop** | 0.0 | *0.94* | 0.0 | *0.60* | 0.0 | *0.03* | 0.0 | *0.00* |
| **abs** | 1155.7 | *0.55* | 2375.8 | *0.10* | 1155.7 | *0.00* | 2375.8 | . |
| **unp** | 340.6 | *0.82* | 2935.0 | *0.03* | 340.6 | *0.04* | 2935.0 | *0.00* |
| **infl** | -39308.9 | *0.00* | -19984.2 | *0.14* | -39308.9 | . | -19984.2 | . |
| **cost** | 0.1 | *0.02* | 0.1 | *0.02* | 0.1 | *0.00* | 0.1 | *0.00* |
| **exp** | 0.0 | *0.68* | 0.0 | *0.91* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 15983.5 | *0.01* | 6906.2 | *0.24* | 15983.5 | . | 6906.2 | . |
| **ext** | -1871.2 | *0.49* | 1742.0 | *0.50* | -1871.2 | *0.00* | 1742.0 | . |
| **child** | -3593.8 | *0.17* | -823.4 | *0.78* | -3593.8 | . | -823.4 | . |
| **sui** | 2071267.0 | *0.00* | 2440910.0 | *0.00* | 2071267.0 | . | 2440910.0 | . |
| **div** | 197424.7 | *0.01* | 88856.7 | *0.20* | 197424.7 | . | 88856.7 | . |
| **press** | -1194.7 | *0.20* | 329.3 | *0.75* | -1194.7 | *0.00* | 329.3 | *0.00* |
| **_cons** | -836.6 | *0.34* | -3044.6 | *0.00* | -836.6 | *0.00* | -3044.6 | *0.00* |
| **PSOE** | | | | | | | | |
| **mail1** | -87.7 | *0.98* | . | . | -87.7 | *0.05* | . | . |
| **mail2** | | | . | . | | | . | . |
| **pop** | 0.0 | *0.98* | . | . | 0.0 | *0.15* | . | . |
| **abs** | 56.2 | *0.97* | . | . | 56.2 | *0.00* | . | . |
| **infl** | 98.8 | *0.99* | . | . | 98.8 | *0.60* | . | . |
| **cost** | 0.0 | *0.97* | . | . | 0.0 | *0.00* | . | . |
| **hip** | 28.2 | *1.00* | . | . | 28.2 | *0.79* | . | . |
| **ext** | -91.2 | *0.97* | . | . | -91.2 | *0.00* | . | . |
| **press** | -31.3 | *0.97* | . | . | -31.3 | *0.00* | . | . |
| **_cons** | -25.2 | *0.97* | . | . | -25.2 | *0.01* | . | . |
| **OTHER** | | | | | | | | |
| **mail1** | -133.0 | *0.99* | . | . | -133.0 | *0.08* | . | . |
| **mail2** | | | . | . | | | . | . |
| **pop** | 0.0 | *1.00* | . | . | 0.0 | *0.91* | . | . |
| **abs** | 124.1 | *0.97* | . | . | 124.1 | *0.00* | . | . |
| **infl** | -419.6 | *0.98* | . | . | -419.6 | *0.11* | . | . |
| **cost** | 0.0 | *0.97* | . | . | 0.0 | *0.00* | . | . |
| **hip** | 319.4 | *0.98* | . | . | 319.4 | *0.01* | . | . |
| **ext** | -96.4 | *0.98* | . | . | -96.4 | *0.00* | . | . |
| **press** | -29.6 | *0.98* | . | . | -29.6 | *0.02* | . | . |
| **_cons** | -78.7 | *0.98* | . | . | -78.7 | *0.00* | . | . |

***(No bootstrap) / BASE CATEGORIE IS PP**

| TABLE 3.3 (JOINT) | win | | win | | win* | | win* | |
|---|---|---|---|---|---|---|---|---|
| **PSOE** | | | | | | | | |
| **mail1** | 23.6 | *1.00* | | | 23.6 | *0.80* | | |
| **mail1_2004** | -102.0 | *0.99* | | | -102.0 | *0.24* | | |
| **mail2** | | | 146.9 | *0.99* | | | 146.9 | *0.30* |
| **mail2_2004** | | | 6.0 | *1.00* | | | 6.0 | *0.95* |
| **pop** | 0.0 | *1.00* | 0.0 | *1.00* | 0.0 | *0.96* | 0.0 | *0.99* |
| **abs** | 9.4 | *1.00* | 7.9 | *1.00* | 9.4 | *0.51* | 7.9 | *0.52* |
| **abs_2004** | 51.8 | *0.98* | 32.2 | *0.98* | 51.8 | *0.01* | 32.2 | *0.02* |
| **unp** | -0.2 | *1.00* | -3.1 | *1.00* | -0.2 | *0.99* | -3.1 | *0.83* |
| **infl** | -146.3 | *0.99* | -21.5 | *1.00* | -146.3 | *0.35* | -21.5 | *0.91* |
| **cost** | 0.0 | *0.99* | 0.0 | *0.99* | 0.0 | *0.28* | 0.0 | *0.46* |
| **exp** | 0.0 | *0.99* | 0.0 | *0.99* | 0.0 | *0.31* | 0.0 | *0.20* |
| **hip** | 127.0 | *0.99* | 121.8 | *0.99* | 127.0 | *0.17* | 121.8 | *0.16* |
| **ext** | -102.4 | *0.98* | -119.7 | *0.98* | -102.4 | *0.00* | -119.7 | *0.03* |
| **child** | 51.1 | *0.99* | 76.5 | *0.98* | 51.1 | *0.16* | 76.5 | *0.06* |
| **sui** | -14210.5 | *0.99* | -24020.6 | *0.99* | -14210.5 | *0.38* | -24020.6 | *0.18* |
| **div** | -2876.3 | *0.98* | -1448.7 | *0.99* | -2876.3 | *0.11* | -1448.7 | *0.28* |
| **press** | -16.6 | *0.98* | -23.3 | *0.98* | -16.6 | *0.10* | -23.3 | *0.03* |
| **_cons** | -25.2 | *0.98* | -36.5 | *0.97* | -25.2 | *0.07* | -36.5 | *0.01* |
| **OTHER** | | | | | | | | |
| **mail1** | 5280.0 | *0.34* | | | 5280.0 | *0.00* | | |
| **mail1_2004** | 1060.4 | *0.83* | | | 1060.4 | . | | |
| **mail2** | | | -11157.1 | *0.08* | | | -11157.1 | . |
| **mail2_2004** | | | -5710.8 | *0.40* | | | -5710.8 | . |
| **pop** | 0.0 | *0.28* | 0.0 | *0.13* | 0.0 | *0.00* | 0.0 | *0.00* |
| **abs** | 4560.0 | *0.00* | 4013.8 | *0.00* | 4560.0 | *0.00* | 4013.8 | . |
| **abs_2004** | 445.3 | *0.67* | -102.5 | *0.89* | 445.3 | *0.00* | -102.5 | *0.00* |
| **unp** | 1175.2 | *0.35* | 1726.5 | *0.15* | 1175.2 | *0.00* | 1726.5 | *0.00* |
| **infl** | 13105.8 | *0.12* | -1974.7 | *0.81* | 13105.8 | . | -1974.7 | . |
| **cost** | 0.2 | *0.00* | 0.1 | *0.14* | 0.2 | *0.00* | 0.1 | *0.00* |
| **exp** | -0.1 | *0.18* | 0.0 | *0.19* | -0.1 | *0.00* | 0.0 | *0.00* |
| **hip** | -2804.2 | *0.69* | 672.3 | *0.91* | -2804.2 | *0.00* | 672.3 | . |
| **ext** | -995.7 | *0.70* | 2868.6 | *0.24* | -995.7 | *0.00* | 2868.6 | . |
| **child** | 3023.0 | *0.26* | -5366.7 | *0.01* | 3023.0 | *0.00* | -5366.7 | *0.00* |
| **sui** | 2543109.0 | *0.00* | -105069.6 | *0.89* | 2543109.0 | . | -105069.6 | . |
| **div** | 344546.4 | *0.00* | 109509.6 | *0.08* | 344546.4 | . | 109509.6 | . |
| **press** | -1482.3 | *0.09* | -1049.9 | *0.17* | -1482.3 | *0.00* | -1049.9 | *0.00* |
| **_cons** | -7203.7 | *0.00* | -2226.4 | *0.01* | -7203.7 | *0.00* | -2226.4 | *0.00* |
| **...** | ... | ... | ... | ... | ... | ... | ... | ... |

*(continues)*

*(continues)*

| ... | ... | ... | ... | ... | ... | ... | ... | ... |
|---|---|---|---|---|---|---|---|---|
| **PSOE** | | | | | | | | |
| **mail1** | -30.0 | *0.99* | | | -30.0 | *0.68* | | |
| **mail1_2004** | -28.9 | *1.00* | | | -28.9 | *0.70* | | |
| **mail2** | | | 0.3 | *1.00* | | | 0.3 | *1.00* |
| **mail2_2004** | | | 12.4 | *1.00* | | | 12.4 | *0.90* |
| **pop** | 0.0 | *0.96* | 0.0 | *0.97* | 0.0 | *0.07* | 0.0 | *0.17* |
| **abs** | 17.6 | *0.96* | 16.9 | *0.97* | 17.6 | *0.11* | 16.9 | *0.14* |
| **abs_2004** | 27.1 | *0.96* | 20.1 | *0.96* | 27.1 | *0.02* | 20.1 | *0.04* |
| **infl** | 12.4 | *1.00* | -22.3 | *0.99* | 12.4 | *0.90* | -22.3 | *0.85* |
| **cost** | 0.0 | *0.89* | 0.0 | *0.94* | 0.0 | *0.00* | 0.0 | *0.00* |
| **hip** | 46.7 | *0.98* | 80.3 | *0.97* | 46.7 | *0.57* | 80.3 | *0.25* |
| **ext** | -80.5 | *0.93* | -71.3 | *0.97* | -80.5 | *0.00* | -71.3 | *0.01* |
| **press** | -29.0 | *0.89* | -31.3 | *0.95* | -29.0 | *0.00* | -31.3 | *0.00* |
| **_cons** | -18.5 | *0.89* | -19.4 | *0.95* | -18.5 | *0.00* | -19.4 | *0.00* |
| **OTHER** | | | | | | | | |
| **mail1** | -85.4 | *0.99* | | | -85.4 | *0.40* | | |
| **mail1_2004** | 33.5 | *1.00* | | | 33.5 | *0.72* | | |
| **mail2** | | | -1327.5 | *0.90* | | | -1327.5 | *0.01* |
| **mail2_2004** | | | 335.0 | *0.97* | | | 335.0 | *0.05* |
| **pop** | 0.0 | *0.99* | 0.0 | *0.97* | 0.0 | *0.27* | 0.0 | *0.05* |
| **abs** | 152.5 | *0.96* | 485.7 | *0.84* | 152.5 | *0.01* | 485.7 | *0.01* |
| **abs_2004** | 28.8 | *0.98* | 51.2 | *0.96* | 28.8 | *0.05* | 51.2 | *0.00* |
| **infl** | 317.0 | *0.98* | 164.6 | *0.99* | 317.0 | *0.06* | 164.6 | *0.21* |
| **cost** | 0.0 | *0.96* | 0.0 | *0.83* | 0.0 | *0.00* | 0.0 | *0.01* |
| **hip** | -6.1 | *1.00* | 179.1 | *0.98* | -6.1 | *0.96* | 179.1 | *0.32* |
| **ext** | -29.9 | *0.99* | -45.7 | *0.98* | -29.9 | *0.30* | -45.7 | *0.20* |
| **press** | -30.5 | *0.97* | -36.6 | *0.96* | -30.5 | *0.00* | -36.6 | *0.02* |
| **_cons** | -110.2 | *0.96* | -346.0 | *0.82* | -110.2 | *0.00* | -346.0 | *0.01* |

***(No bootstrap)**

**NOTE: BASE CATEGORIE IS PP**

## APPENDIX II: DATA SOURCES

Note that all ratios, rates and percentages are denoted in a centesimal basis (i.e. 1% is denoted as 0.01)

i) DEPENDENT VARIABLES

*PROP1* Ratio of the percentage of total valid votes for PSOE and PP. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004)

*PROP2* Ratio of the percentage of total valid votes for PSOE and other parties. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004)

*PSOE* Binary variable equal to 1 if PSOE won more valid votes than PP, 0 otherwise. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004)

*WIN* Variable takes value 1 if PSOE obtained the majority of valid votes, value 2 if PP did, and value 3 if other party did. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004)

ii) INDEPENDENT VARIABLES

*MAIL1* Percentage of votes casted before the March $11^{th}$ terrorist attacks by residents (CER) and non-residents (CERA), including votes by mail and received in consulates. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004) and INE (Society, Electoral Processes, General Courts 2000 and 2004, Detail, Tables 1.10 and 1.12)

*MAIL2* Percentage of votes casted before the March $11^{th}$ terrorist attacks by residents (CER) voting by mail. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004) and INE (Society, Electoral Processes, General Courts 2000 and 2004, Detail, Table 1.12)

*POP* Number of registered voters. Congress, by province, 2000 and 2004. Source: INE (Society, Electoral Processes, General Courts 2000, Detail, Table 4.2 and General Courts 2004, Detail, Table 4.3)

*ABS* Abstention rate. Congress, by province, 2000 and 2004. Source: Ministry of the Interior (Elections and Parties, Electoral Processes, Congress 2000 and Congress 2004)

*UNP* Unemployment rate. By province, 2001 and 2004. Source: INE (Active Population Survey (EPA), Annual Tables, 2001 and 2004, Table 7.41)

*INFL* Inflation rate. By province, 1999 and 2003. Source: INE (Consumer Price Index, Base 1992, 1999 ; Consumer Price Index, Base 2001, 2003)

*COST* Average annual labor (salary and other) cost per worker, in euro. By autonomous community[17], 2000 and 2004. Source: INE (Society, Labor market, Annual Survey on Labor Cost, 2000 and 2004, Table 2.1)

*EXP* Average expenditure by households, in euro, base 1998. By autonomous community, 1999 and 2003. Source: INE (Society, Living Standards, Continuous Survey of Family Budgets, Base 1997, 1999 and 2003, Table 2.5)

*HIP* Number of new mortgages per inhabitant, rural and urban properties, old base. By province, 1999 and 2003. Source: INE (Economics, Financial and Monetary Statistics, Mortgages, Old Base, Table 2.7)

*EXT* Percentage of foreign population (other than Western Europe[18] and USA). By province, 2000 and 2004. Source: INE (Municipal Census, National and regional data, 2000, Table 64.2 ; Municipal Census, National and regional data, 2004, Table 2.2)

*CHILD* Percentage of population aged 0-19. By province, 2000 and 2004. Source: INE (Municipal Census, National and regional data, 2000, Table 64.3 ; Municipal Census, National and regional data, 2004, Table 2.3)

*SUI* Annual number of suicides per inhabitant. By province, 1999 and 2003. Source: INE (Justice, Suicide Statistics, 1999 and 2003, Table 3.1)

DIV Annual number of nullities, separations and divorces per inhabitant. By province, 1999 and 2003. Source: INE (Justice, Nullity, Separation and Divorce Statistics, 1999 and 2003, Table 14.1)

*PRESS* Percentage of population over 14 reading papers daily. By autonomous community, 2000 and 2004. Source: INE (Society, Culture and Leisure, Media, Annual results, Table 1.3)

[17] When a variable is only available at an autonomous community level, observations for all the provinces in the same autonomous community are assigned the same value.

[18] Western Europe includes Germany, Austria, Belgium, Denmark, Finland, France, Greece, Netherlands, Ireland, Luxemburg, Portugal, United Kingdom, Sweden and Norway.