**Persuasion by Populist Propaganda:**

**Evidence from the 2015 Argentine Ballotage**

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| Rafael Di Tella*Harvard Business School, CIfAR* and *NBER* | Sebastian Galiani*University of Maryland and NBER* | Ernesto Schargrodsky*UTDT and CONICET* |

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Very Preliminary. Comments Welcome.

**Abstract**

We study a propaganda campaign sponsored by the government against the main political challenger in the days preceding the 2015 Argentine presidential ballotage. Subjects in the treatment group watched an “ad” initially aired during soccer transmissions that was part of this campaign and were then asked about their political views. Relative to subjects in the control group, their declared preference for the challenger drops by 6.5 percentage points. We find no effects of the three types of defenses employed by the challenger (a positive message unrelated to the “ad”, an answer to the accusations in the “ad”, and a counter-attack). The propaganda effect is mainly driven by women.

**Keywords**: Propaganda, Persuasion, Voting.

**JEL**: D72, P48.

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\* Contact information: Rafael Di Tella (rditella@hbs.edu); Sebastian Galiani (galiani@econ.umd.edu); Ernesto Schargrodsky (eschargr@utdt.edu). We are grateful to Lucia Freira and Martin Caruso Bloeck for excellent research assistance and to Vincent Pons, Julio Rotemberg and seminar participants at the CIfAR meetings at Toronto 2016, Universidad de Montevideo, and LACEA-PEG 2019 for helpful suggestions and discussions. None of the authors participated in the 2015 political campaign. Sebastian Galiani was Secretary of Economic Policy (deputy-minister) of the Treasury in the Macri administration during 2017-2018.

1. **Introduction**

An important question in politics concerns the ability of politicians to affect voter preferences through propaganda. In advanced democracies, political campaigns have traditionally been constrained by norms and institutions; for example, by limiting the extent to which candidates can lie or make misleading statements about their competitors or by restricting the financial influence of the State on media companies. Democratic institutions complement a free press, for example, ensuring competition so that people who do not want to consume political advertisements can avoid them. In poor countries these constraints are often absent, so State-sponsored propaganda is more frequent and presumed to be more effective. However, it is also possible that people used to live under these institutional settings are more aware of the possibility of media bias and hence more likely to discount its influence on their views.[[1]](#footnote-1) In this paper, we study one attempt to influence voter preferences during the weeks prior to the Argentine presidential ballotage of 2015, a setting characterized by widespread use of state-sponsored propaganda. Of course, the “fake news” phenomenon and the success of populist candidates in rich countries suggest that learning about the effectiveness of propaganda efforts is relevant more broadly.

 We exploit several characteristics of the Argentine media industry during the Kirchner administration and leading up to the 2015 elections. In particular, we exploit two distinctive aspects of the setting: the likely awareness of potential bias by consumers and a significant difficulty in avoiding these messages. Indeed, there was widespread understanding of the biased nature of the messages released by an industry that was deeply influenced by the government. For example, during this period (2003-15), journalists employed by media companies heavily dependent on government transfers regularly biased reports in favor of the government and attacked critics and opposition politicians. This was openly defended as legitimate by members of the government, citing a pro-business bias in traditional media. In other words, the bias in the State-sponsored media was admitted and defended publicly by Kirchner supporters. Second, the efforts of the government included influence over a large number of media outlets, either directly through ownership (by the State or regime insiders), or indirectly through the discretional distribution of government subsidies. Mandatory broadcasts of President Cristina Kirchner through all the TV and radio networks in the country simultaneously were also frequent. This drastically limited the ability of consumers to exit and follow their natural tendency to read and watch like-minded outlets.

 The data we use were obtained by a marketing firm in the period just prior to the 2015 2nd round presidential election between Nestor Kirchner’s former vice-president, Daniel Scioli, of the incumbent Peronist party and the challenger, Mauricio Macri. The runoff was scheduled four weeks after the 1st round presidential election of October 25th and, initially, Macri was expected to obtain a comfortable victory.[[2]](#footnote-2) The government’s propaganda machine was set in full motion, with several outlets spreading that Macri had a similar economic program to that of the 1976-83 military dictatorship, and wanted to “adjust” the economy, lower government spending, and increase regressive taxes to bring about a drastic wage adjustment. Twelve days later Scioli had almost closed the gap, with Macri winning the presidency by only 2.68 percentage points. Our study uses data provided by a marketing firm active during this period. Starting on November 11th and for the following 9 days, a group of subjects that was regularly engaged online by this firm watched one of the key pieces of propaganda employed in the campaign. This was an ad for “*6, 7, 8,*” a controversial State-sponsored TV show that “explained” the similarities between the economic program of the Argentine military dictatorship of 1976-83 and that of Macri’s. It contained old statements by Macri and members of his team, and it compared them with statements of Jose Alfredo Martinez de Hoz, the Minister of Economy of the dictatorship who remains wildly unpopular in Argentina to this day. One of the excerpts was particularly out of context: a clip of a young businessman Macri before he had entered politics explaining to a journalist that “costs are too high., and wages are a source of costs.” Subjects were then asked to answer a follow-up opinion survey and their 2nd round vote intentions. A sub-group was also asked to watch three alternative responses to the government campaign (the “antidotes”): a set of positive Macri’s policy proposals, a denial by Macri of the accusations made to him in the propaganda ad, and an attack on Scioli A control group watched a neutral video describing the electoral rules.

 The data reveal several interesting patterns. First, watching the government’s propaganda caused subjects to reduce their intention to vote for Macri in the coming ballotage by 6.5 percentage points, or 11.2 percent of the preference for Macri in the control group. This is paired with an increase of 2 percentage points increase in the intention to vote for Scioli and a 4.5 percentage point increase in the group that is undecided. The decrease on Macri’s intention to vote implies a persuasion rate of 17.8%, which is in the upper range of the persuasion rates reported in della Vigna and Gentzkow (2010). The “antidotes” do not have an effect, consistent with the conclusions drawn by Macri’s team described in informal accounts of the campaign. The results appear to be mainly driven by women: whereas the estimated coefficient on the propaganda campaign in the men subsample is zero, the propaganda campaign reduces the women’s preference for Macri by almost 12 percentage points. There is some evidence that women, in contrast to men, believe the campaign’s message: that Macri would lower wages.

 Social scientists have been interested in propaganda at least since Lasswell (1927), although much of the early research often uncovered effects described as “minimal” (see, for example, Klapper, 1960).[[3]](#footnote-3) Later studies documented a correlation between measures of exposure to political advertising and voter preferences (e.g., Baum, 2002). An early paper to study the causal effect of political advertising is della Vigna and Kaplan (2007), who exploit the staggered availability of the Fox News channel on voting in the US. They find Fox availability in otherwise similar towns increased the Republican share of votes in the 2000 presidential election by half a percentage point. A related study by Gerber et al. (2011) provides experimental evidence on the effects of political advertising during a gubernatorial campaign in Texas in 2006. Exploiting the random assignment of the launch date and volume of television advertising to each experimental media market, they find strong but short-lived effects on voter preferences captured with a large daily tracking poll (see, also, Huber and Arceneaux, 2007).[[4]](#footnote-4)

Studies of the effect of the media outside of the US uncover bigger effects and are closer in spirit to the setting we study given the weaker institutional setting.[[5]](#footnote-5) For example, Enikolopov, Petrova and Zhuravskaya (2009) study the government-controlled media market in Russia. They show how access to the one independent TV station was largely idiosyncratic conditional on observables and correlated with a decrease in the vote of the government party of almost 9 percentage points and a decrease in turnout of under 4 points. We see our paper as directly complementing their study, both because of the institutional setting and because it uncovers a central role for consumers actively switching to watch alternative shows.

Also related to our study is a recent paper by Galasso and Nannicini (2016), which studies the differential reaction to political advertising across genders. They estimate the differential response of male and female voters to two mayoral campaigns in Italy considering a variety of settings that alter most of the relevant dimensions of political campaigns in a modern democracy, including the gender of the person going negative. They find that females vote more for the opponent and less for the incumbent when they are exposed to the opponent's positive campaign, while males have the opposite reaction.[[6]](#footnote-6) Although there are obviously several differences with our setting, including the possibility that males in our study had higher prior exposure to the propaganda campaign when they regularly watched soccer, we note that this is the opposite to what we find. An alternative explanation of the gender differences is that women could be more sensitive to the social concerns raised by the propaganda campaign, as there is some evidence that they tend to be more left wing (see Edlund and Pande (2002), Alesina and La Ferrara (2005), and the review by Niederle (2016)).

Our paper is also connected to papers focused on events studying misleading statements or where consumers are actively trying to avoid propaganda. One example of the former is Di Tella, Galiani and Schargrodsky (2012) which studies false statements during the Kirchner’s propaganda campaign prior to the nationalization of the water services. Given the importance of gaining water for well-being, this is a good setting to contrast the effects of propaganda vs. reality in shaping beliefs about important government policies. Surprisingly, we find that groups that had gained access to water following the privatization and subsequently enjoyed large welfare gains, were only marginally less likely to believe Nestor Kirchner’s false claims that there had been no investment during privatization. Interestingly and similar to our new results, that paper found little effects of the firm’s defense against these accusations. An example of the latter is Durante and Knight (2012), who provide a clean demonstration of how the consumption of the media changes with the perception of partisan bias. Using data for Italy under Silvio Berlusconi, they show that when news content on public television shifted to the right, right-leaning viewers increased their propensity to watch public channels, while left-leaning viewers reacted by switching to another channel controlled by the left. Importantly, this behavioral response did not fully offset the changes in public news content to the right. See also Knight and Tribin (2016), who show how Hugo Chavez’s propaganda efforts generated different changes in viewership across channels depending on the latter’s ideological inclination. Our paper is also connected to work on negative political advertising (see Ansolabehere, et al., 1999), which often uncovers large effects on turnout, and on persuasion on beliefs in the Arab world by Gentzkow and Shapiro (2004), during the Nazi period by Adena, et al., (2015) or during or after recent genocides by Yanagizawa-Drott (2015), Paluck (2009) and DellaVigna et al. (2014). For a review of the evidence available on persuasion, see della Vigna and Gentzkow (2010).

Section 2 describes State-sponsored propaganda during the Kirchner’s administrations. Section 3 describes our data and empirical strategy. Section 4 reports our main results of the effect of propaganda on voter preferences, as well as the effects of the “antidotes” employed by Macri’s campaign. Section 5 discusses heterogeneous effects as well as additional results that help to interpret our findings. Section 6 concludes.

1. **Politics, Media and the 2015 Propaganda Campaign**

The episode we study took place in November 2015, at the end of 12 years of three Kirchner presidencies. Nestor Kirchner became president of Argentina in 2003 as the country was coming out of the deepest recession in its history. There are several features of the media landscape under the Kirchners that are particularly important for our study. Initially, his relationship with the media was good and he allowed a large merger of the cable industry in December 2007 that greatly benefited *Clarin*, the main media company. Soon, a bitter conflict emerged, with his successor (his wife Cristina) publicly stating “*Clarin* Lies.” This became the slogan of an intense campaign that eventually led to the passing of a media law in October 2009 aiming to curtail the market power of existing media firms. Sponsored by the Kirchner government and replacing a law passed by the military dictatorship in 1980, the new media law was bitterly opposed by the main media companies.

The government directly controlled a few media outlets that were State-owned. It indirectly came to control several outlets through regime insiders (although some of them did not have previous experience in the media industry). Moreover, the Kirchner government obtained favorable coverage from many outlets, regardless of their ideology, through a system of transfers under the disguise of “public advertising” (see, for example, Di Tella and Franceschelli, 2011).[[7]](#footnote-7) The most extreme estimates put the fraction of controlled audiovisual outlets at 80%,[[8]](#footnote-8) although their market share was certainly lower as some large media companies (like *Clarin* and *La Nacion*) remained independent and maintained a significant share of the audience. Journalists employed by media companies heavily dependent on government transfers regularly biased reports in favor of the government and attacked critics and opposition politicians. Some of these attacks were carried out by the Kirchners themselves, against public figures (e.g., economists, journalists), firms (e.g., Shell, Suez) and members of the opposition (including Mauricio Macri), in many occasions mandatorily using all the TV and radio networks in the country (“*cadena nacional*”). The bias in the State sponsored media was explicitly defended by members of the government as a legitimate defense of “the people” against lobbying and pressure by interest groups, while the conflict over the new media law was labeled “the mother of all battles.”[[9]](#footnote-9) Some of the media messages used by the government contained lies and/or misleading statements about its critics. One example is the Kirchner’s propaganda campaign prior to the nationalization of the water services documented in Di Tella, Galiani and Schargrodsky (2012). These attacks were frequently denounced in the remaining independent media, and victims often attempted to limit them legally, but lies and wild inaccuracies continued to be used by the government’s propaganda machine at crucial electoral moments.[[10]](#footnote-10) This suggests there was widespread understanding of the biased nature of the messages released by an industry that was deeply influenced by the government. Figure 1 offers one simple illustration: it counts the times the word “propaganda” appeared in two newspapers, suggesting a differential evolution of the concern about this topic between *La Nacion*, a main center-right independent newspaper, and *Pagina 12*, which heavily supported the Kirchners.

An important component of the use of State-sponsored media for political purposes was Cristina Kirchner’s nationalization of the transmission of soccer matches in August 2009, eliminating pay-per-view fees under a program called Soccer for All, or, in Spanish, *Futbol para Todos*. The agreement of the government with the soccer federation covered soccer matches of the first and second division, and the national team. Games were broadcasted on Public TV and made available for free to private open TV and cable networks with the stated purpose that “none of the more than 40 million Argentines be excluded”. The Facebook page of *Futbol para Todos* had 1.8 million followers, besides an exclusive app and a YouTube channel. The audience was considerable, with an average of 10 rating points for an average match, with more than twice that amount for matches involving the two most important teams, Boca Juniors and Racing Club (see Grinberg, 2015).[[11]](#footnote-11) Initially, the announced intention was to guarantee the contracted income to the soccer federation, and to cover transmission fees with private ads. However, the vast majority of the advertising soon became State-sponsored “official ads”.[[12]](#footnote-12) This allowed the government to insert political messages during half-time together with the highlights of the first half of the match, so they received considerable attention. Since soccer is wildly popular, and there were many matches each week strategically scheduled, the program ensured that these messages reached most socioeconomic and regional groups.

Another example of the use of the public media for political purposes was the TV show *6, 7, 8*, aired almost daily at the public TV channel. This show rabidly defended the policies of the government, and often included personal attacks on government critics. It had a unique and easily identifiable aesthetic and was often singled out as a unique example of the government’s propaganda machine. Many incidents on the show had been extensively reported in the media and it was widely seen as biased in favor of the government.[[13]](#footnote-13) *Futbol para Todos* and *6, 7, 8* in many occasions acted together, as advances of *6, 7, 8* were aired on Sundays during the halftime of the soccer games, and the show was broadcasted right after the games.

The propaganda campaign we study took place during the 2015 Argentine presidential election. The 1st round of the 2015 presidential election took place on October 25th with the participation of six candidates. 81.07% of the 32 130 853 citizens listed in the electoral register voted in the election.[[14]](#footnote-14) There were 96.68% positive votes, and 3.32% blank/null votes. The Peronist candidate, former vice-president to Nestor Kirchner and incumbent governor of Buenos Aires, the largest province in the country, Daniel Scioli, obtained 37.08% of the positive votes, followed by businessman-turned-politician Mauricio Macri (34.15%). Sergio Massa, the former chief of staff of the Cristina Kirchner administration, running on a platform that promised continuity with several of Kirchner’s policies except for a tougher stand against crime and corruption, obtained 21.39%.[[15]](#footnote-15) With no candidate obtaining 45% of the votes (nor 40% with a 10% difference on the runner-up), a ballotage between Daniel Scioli and Mauricio Macri was called for November 22nd.

The first opinion polls right after the 1st round showed a strong advantage for Macri of 13 percentage points.[[16]](#footnote-16) Soon, a “dirty campaign” accusing Macri of continuity with the 1976-83 cruel military dictatorship and of being in favor of neoliberal policies was launched. The propaganda campaign started with an ad for the political show *6,7,8* that was first aired in *Futbol para Todos*, and it was then reproduced in other TV shows and media. A summary was aired on November 1st during halftime of Boca-Tigre which had very high ratings as it was the game that allowed Boca to win again the season Championship.[[17]](#footnote-17)

The propaganda campaign focused on the idea that a Macri government would “adjust” the economy by reducing spending and increasing taxes. This was portrayed as anti-labor and connected to the military dictatorship when the labor share had fallen dramatically (more than ten percentage points) during the first year alone (Galiani and Porto, 2010). The initial ad of the show *6, 7, 8* that started the campaign had the heading “Enlightening Similarities.” This referred to the similarities between the economic policies that Macri was allegedly planning to implement and the economic “plan” of Jose Alfredo Martinez de Hoz, the Minister of Economy of the military dictatorship and one of the most reviled men in Argentina’s history.[[18]](#footnote-18)

Once the propaganda campaign started, those in charge of the Macri electoral team concluded that replies would be ineffective and limited their response. Iglesias Illa (2016), a member of Macri’s team, in the November 2nd entry of his campaign diary cites Marcos Peña, Macri’s campaign lead manager, referring explicitly to the propaganda campaign: “The best, it is clear, is to do nothing. Or do almost nothing. Not being reactive, we do not have to talk about what they want us to.” The same day, Peña insisted: “Let’s not go into the fear campaign, let’s not answer lies”. Two days later, Jaime Durán Barba, Macri’s campaign guru, also recommends: “It doesn’t make any sense to reply anything…”, although some campaign managers started to worry about the propaganda impact.[[19]](#footnote-19) Thus, Macri continued his “positive agenda,” although one mild specific response was a TV ad describing what Macri wouldn’t do. Moreover, a short clip showing a young Scioli supporting Menem’s neoliberal policies of the 1990’s circulated on social media, probably aired by Macri’s supporters. Eventually, Macri won the ballotage on November 22nd, 2015, by only 2.68 points (51.34% to 48.66%).

1. **Data and Empirical Strategy**

*3.1. Data*

The data was obtained from Wonder, a marketing and public opinion consulting firm that, since 2008, engages a panel of subjects (called Wonderpanel) across the country who voluntarily fill out short surveys online in exchange for cash prizes and other rewards.[[20]](#footnote-20) After the general election of October 25th, 2015, and once the dirty campaign started, the firm attempted to learn about its effects (and the best way to counteract it) by performing a randomized control trial on their panel population. Using data generated in the field has the advantage of being close to the actual experience of someone subject to an attempt at persuasion by propaganda. We do not know if the firm sold the results of this study to any of the political parties, but we do know that they were involved in other ways with the Macri campaign.[[21]](#footnote-21) We were acquainted with one of the owners of the firm and were able to buy the data from them not long after the ballotage.

1202 Wonderpanel members participated in the online firm’s survey, which was carried out during ten days from November 11th to November 20th, within the interim period between the general election of October 25th and the ballotage of November 22nd. The survey questionnaire is presented in the Online Appendix. Participants were first asked a short number of questions regarding their gender, age, educational level, household head status, household head’s educational level, and place of residence. Although the general election of October 25th had already occurred, Wonder preferred not to prime the participants asking them the electoral choice they had already made days ago. Instead, before treatment they measured participants’ ideology through a set of indirect questions on whether the poor exerted effort, the desired penalty for a crime, and whether a person favors Lionel Messi vs Diego Maradona.

The firm regularly interacted with panel members online and was able to introduce a set of videos midway during the administration of the survey. One third of subjects (400) was asked to watch an institutional video on the electoral procedure used as a placebo (the control group), another third (400) was asked to watch the dirty-campaign ad from the show *6, 7, 8* (the treatment group), and the last third (402) was asked to watch the *6, 7, 8* dirty-campaign ad followed by an “antidote” video (the treatment+antidote group). Three different videos were randomly used as antidotes for this last group: Macri’s positive defense (a video produced by the Macri campaign of him positively explaining his proposals), Macri’s defensive response (a video produced by the Macri campaign of him explaining what he would not do, with a rebuttal of the points raised in the attack video), and a “counterattack” video that circulated in the social media at that time in which Daniel Scioli defended the neoliberal policies of the Menem administration of the 1990’s. See the Online Appendix for a full description and transcript of the videos.

A questionnaire was completed after the video exposure asking subjects how they intended to vote on the ballotage round. Participants were also asked about their vote in the first election round, whether they thought Macri believed that lowering wages was necessary, their opinion of Macri, and whether they would rather make a donation to a soup kitchen sponsored by Macri or Scioli. Naturally, all the responses surveyed after the videos are potentially affected by the exposure to them.

*3.2. Empirical Strategy*

In our main analysis, we estimate regressions of the form

$$Vote\_{i}=a+b Propaganda\_{i}+c Antidote\_{i}+d Controls\_{i}+ μ\_{i}$$

where: *Votei* is person’s *i* answer to the question “Who will you vote for in the ballotage of November 22nd?”, which has four possible answers (*Daniel Scioli*, *Mauricio Macri*, *Blank* or *I don’t know*). We group *Blank* and *I don’t know* into one category and report the results for the three alternatives separately so as to study the distribution of vote intentions post treatment, as it is interesting to learn if propaganda may lead to more Scioli votes or simply to more uncertain voters. The errors in the three equations are (by construction) statistically dependent, so we estimate the parameters by means of Seemingly Unrelated Regressions (SUR). *Propagandai* is a dummy variable indicating whether person *i* viewed the ad against Macri extracted from the government sponsored TV show. This video was presented to the participants in the four treatment groups (i.e., alone and also in combination with one of three “antidotes”). *Antidotei* is a dummy variable indicating whether person *i* also viewed any of the three “antidotes” aimed to neutralize the negative effect of political propaganda. They are also disaggregated into three dummies: *Antidote 1i* (the positive ad from the Macri campaign), *Antidote 2i* (the ad developed by the Macri campaign as an answer to the dirty campaign launched by the government), and *Antidote 3i* (the video clip of an old interview of Daniel Scioli in the 1990’s when he was defending neoliberal policies, including privatizations).[[22]](#footnote-22)

Identification of the average causal effect of propaganda is based on the random assignment of subjects to treatment arms by the marketing firm. Table 1 presents the pre-treatment characteristics of the participants by treatment status. First, Table 1A compares the pre-treatment characteristics of the controls vs. all the treated participants. Then, Table 1B compares the pre-treatment characteristics of the control vs. (only) propaganda samples. In Tables 1C to 1E, we compare separately the pre-treatment characteristics of the control vs. each propaganda+antidote samples. There do not seem to be significant differences in observable characteristics across the samples, so it is reasonable to assume that unobservables are also balanced across groups (but see the discussion on proxies for ideology below).

1. **Main Results**

Tables 2 and 3 present the main results of our paper. In Table 2, we analyze the effect of the propaganda video, regardless of whether participants were also exposed to the antidotes. In columns 1-3, Macri’s declared vote intention dropped by 7.5 percentage points when participants are exposed to the dirty campaign video, while the proportion voting for Cristina Kirchner’s candidate, Daniel Scioli, increased 2.9 percentage points and the proportion undecided/blank increased by 4.6 percentage points.

In columns 4-6, we control for pre-treatment variables. In particular, the pre-treatment controls include three variables that could proxy for ideological preferences of the survey participants: *Messi is Better* (a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona); *Poor don't make Effort* (a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort); and *Penalty* (the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time). As explained above, participants were not asked before the videos about the presidential candidate they voted in the first round in order to avoid priming them with electoral questions. In particular, note that we include as a control the variable *Messi is Better* because, while all p-values were above conventional values in Table 1A, the one for *Messi is Better* is relatively low (0.142) and the difference in the average for this variable is relatively large (4.5 percentage points), potentially implying the presence of a potential confound. It is not impossible to imagine Macri’s voters to favor Lionel Messi over Diego Maradona given his introverted nature, the time he spent in his formative years in Europe and Maradona’s public support for Fidel Castro and Hugo Chavez. Indeed, in the Online Appendix we study whether Macri’s first round vote is correlated with *Messi is Better* in the control group (not exposed to the dirty campaign treatment), and find that the coefficient is positive and significant suggesting the importance of controlling for this potential confound.

When we control for all pre-treatment variables in columns 4-6 of Table 2, results are extremely similar. Exposure to the dirty campaign video decreases Macri’s vote intention by 6.5 percentage points, increases Scioli’s votes by 2 percentage points and the proportion of undecided/blank increased by 4.5 percentage points. Our conclusion is that the propaganda campaign seems effective in persuading a large group of subjects to reduce their declared support for Macri.

It is useful to calculate the persuasion rate for comparison with the other estimates in the literature presented in della Vigna and Gentzkow (2010). This rate reports the percentage of receivers that change their views within the group of receivers not already persuaded. In other words, considering the intention to vote for Macri as a binary outcome, *ei* the share of group *i* receiving the message, and *yi* the share of group *i* adopting the desired beliefs, the persuasion rate *f* captures the effect of the persuasion treatment on beliefs (*yT-yC*, with *yT*=0.505 and *yC*=0.58 in our sample) adjusting for exposure to the message (*eT-eC*) and for the size of the population that is not yet convinced (1-*yC*).

$$f=100\*\frac{y\_{T}-y\_{C}}{e\_{T}-e\_{C}}\frac{1}{1-y\_{C}};f=100\*\frac{0.505-0.58}{100-0}\frac{1}{0.58}=-0.178$$

Assuming zero exposure in the control group, the (anti-Macri) persuasion rate is approximately 17.8%. which is in the upper range of the persuasion rates reported in della Vigna and Gentzkow (2010). This assumption is unlikely as some survey participants could have been exposed to the propaganda campaign through other media (for example, those subjects interested in soccer), but it may be more reasonable for groups that have traditionally been less interested in soccer in Argentina (women for example), or less interested in politics in general. Note that the more people have been exposed in the control group, the higher the persuasion rate for a given estimate of the treatment effect.

Table 3 studies the effects of the three different types of defenses considered by the Macri campaign, or “antidotes” for short, on the individuals exposed to the propaganda campaign. The results suggest that the antidotes are unable to counterbalance the negative effect of the propaganda campaign. While the estimated effect of the negative propaganda campaign remains virtually unchanged, exposure to the antidotes does not have an impact on vote intentions for the ballotage. This is true both when the antidotes are considered in combination or separately, although the groups of subjects exposed to each antidote are smaller in number so the power behind these comparisons is lower. The Macri campaign managers seemed to have been right that replies to the propaganda campaign would be ineffective. Some of them were also rightly worried about the campaign effects.[[23]](#footnote-23) In summary, Tables 2 and 3 show that subjects who watched the propaganda campaign were less likely to report that they would vote for Macri in the ballotage.

1. **Further Results: Heterogeneous Effects and Mechanisms**

As explained above, participants were not asked before the videos about the presidential candidate they had voted in the first round in order to avoid priming them with electoral questions. The question about first-round vote was included after the videos. Thus, their after-treatment responses about which candidate they had voted in the first round could have been contaminated by the treatment videos. For example, individuals could feel ashamed to declare they had voted for Macri after being exposed to the propaganda videos (remember, though, that it was an online survey without a human surveyor involved). Although we are aware that first-round vote is measured post treatment and, therefore, potentially endogenous, a strong approach to control for ideological preferences is to include a set of dummy variables controlling for vote in the first-round. When we perform this exercise in columns 1 through 3 of Table 4, the coefficient on the exposure to the propaganda campaign declines in absolute value to 3.9 percentage points, but it is still statistically significant at standard levels. Again, note that, given the structure of the survey, the estimated coefficients on the first-round declared votes could be capturing the effect of the treatment itself.[[24]](#footnote-24)

In columns 4 through 6 of Table 4 we explore which first-round voters are most affected by treatment. As expected, given their political characteristics and being the largest group that is not taking part in the ballotage, the effect of treatment is strongest on Sergio Massa voters. Massa, a center candidate, Peronist and former Chief of Cabinet of Cristina Kirchner, was ideologically “between” the center-right Macri and the center-left, supported by Cristina Kirchner, Daniel Scioli.[[25]](#footnote-25) When *Propaganda* is interacted with first-round vote, for the participants who declared having voted to Sergio Massa, Macri loses 6.8 percentage points, the undecided decline by 11.4 percentage points, and Scioli’s support grows very strongly by 18.1 percentage points. Instead, first-round Macri and Scioli voters are less sensitive to treatment. Again, these results have to be taken with caution as first-round vote is potentially an endogenous variable affected by treatment. Moreover, sample sizes get smaller as we try to estimate heterogeneous effects. Under these caveats, these results suggest the effect of propaganda might be expected to differ depending on the predisposition of viewers (see, for example, Durante and Knight, 2012).[[26]](#footnote-26) The strongest effects seem to come from subjects that might be expected to be uncommitted to either Macri or Scioli in the first round.

We next explore the presence of heterogeneous effects by gender and report results separately for men and women. The Online Appendix reports some differences in pre-treatment characteristics across the two samples -for example, women are younger than men and less likely to be the household head-, but suggests that within each sub-sample, treatment and control groups are reasonably similar across observables. Table 5 shows that the propaganda effects are quite different across genders. While there are no detectable effects of the propaganda campaign in the men subsample, there are large and precisely estimated effects in the women sub-sample. The size is large: women are approximately 11 percentage points less likely to support Macri when exposed to the ad. Most of the increase appears on the undecided/blank category. The persuasion rate for men is zero due to insignificant estimated treatment effects, while that for women is 22.3% (*yT*=0.4587, and *yC*=0.5818), assuming again 100% exposure to the message. These heterogeneous gender results could be capturing differences in prior exposure to the campaign. Men in our sample could be less sensitive to treatment as they are more interested in soccer, and the online survey could be not the first time they were exposed to the propaganda videos. One reason to believe the strong propaganda effects in the female sub-sample are due to lower prior exposure to the campaign is the work of Galasso and Nannicini (2016), who study a campaign with similar characteristics and find that females react negatively to a negative campaign.  In particular, they study an episode in Italy where a female incumbent “violently attacked” the male opponent, apparently accusing him of ties to communist terrorists in his youth. They find that males lean more toward the (female) sender of the negative attack, and females align with the (male) candidate targeted by the attack. The setting is extremely similar to the one we study, with the exception of the ideology of the opponent (in our case, the incumbents attacked the opposition candidate of ties to a right-wing government). An alternative explanation to lower prior exposure to the campaign by females is that women could be more sensitive to the social concerns raised by the propaganda as there is some evidence that they tend to be more left wing (see the political gender gap documented in Alesina and La Ferrara (2005) and Edlund and Pande (2002), and Niederle, 2016, for a review).

Table 7 explores the mechanism of persuasion. In particular, it studies if subjects believed one of the main parts of the ad, showing a very young Macri being interviewed in his role of businessperson and explaining that it was important to lower costs and that wages were a part of costs. It appears that there is no effect on the overall sample, but again there is some evidence that women are about 6 percentage points more likely to report that the criticism of Macri is valid and that he thinks lowering wages is a valid option. This supports the idea that the propaganda campaign was effective in persuading subjects to change their views about Macri in the women subsample.[[27]](#footnote-27)

A weakness of the survey is that it collects only opinions rather than actions, and these could be considered a weaker indication of actual preferences. The closest it comes to collect an action is a hypothetical question regarding the desire to donate to an NGO connected to Macri or to one connected to Scioli. The results using this question are weaker statistically, but consistent qualitatively with our main results. We also obtain similar results using the participant’s opinion on Macri (measured from 1 to 10) as an alternative cardinal outcome variable, instead of willingness to vote (see the Online Appendix).

1. **Conclusions**

In this paper we study data generated during the weeks prior to the 2015 Argentine presidential ballotage, when the propaganda machine set up by the governments of Nestor and Cristina Kirchner over the period 2003-15 was used to attack the opposition candidate and influence voter preferences.  Two aspects of this setting are noteworthy. First, the consensus about the heavy pro-government bias in the media, which was defended by most politicians, intellectuals and journalists that supported the government as well as denounced by those in the opposition. Thus, most people were aware of media bias when they consumed government propaganda. Second, and in the same spirit, the propaganda messages reached most voters, regardless of political inclination. Specifically, the propaganda machine influenced a large number of media outlets, either directly through ownership by the State or regime insiders, or indirectly through the discretional distribution of subsidies. Moreover, the Cristina Kirchner administration nationalized the transmission of soccer matches in 2009, eliminating pay-per-view fees under a TV show called “Soccer for All”, and replacing commercial ads by government “ads”, including those at halftime. This ensured that the government’s propaganda messages reached most consumers and not just to those that were already close ideologically. This provides a setting were the effectiveness of propaganda is unlikely to be observed because consumers ought to be able to discount biased messages.

In spite of this, the data reveal strong persuasion effects of propaganda: treated subjects are 6.5 percentage points less likely to report they will vote for the challenger, two percentage points more likely to vote for the incumbent party’s candidate, and 4.5 more likely to report to be undecided. These effects are consistent with the evolution of opinion polls at that time. Immediately after the 1st round election, the challenger Mauricio Macri was expected to obtain a comfortable victory. Once the government’s propaganda machine was set in full motion, Daniel Scioli of the incumbent Peronist party almost closed the gap, and Macri finally won the presidency by a small margin. The results are also consistent with the “do nothing” recommendation of Macri’s political analysts at the time: the three strategies considered to fend off the attack are ineffective. Moreover, there is some evidence that subjects believed the main accusation contained in the propaganda campaign (that Macri would lower wages). The results appear to be driven by women: the estimated coefficient in the women sub-sample is twice the size as in the full sample and precisely estimated, whereas in the men sub-sample it is small and statistically insignificant.

The causal interpretation of these estimates is reasonably supported by the characteristics of the data: it was produced by a marketing firm who performed a randomized control trial to learn about the propaganda campaign just prior to the 2015 presidential runoff election. A group of subjects that had regular contact with the firm was treated with one of the key pieces of propaganda employed in the campaign: an ad for *6, 7, 8*, a controversial state-sponsored TV show that “explained” the similarities between Macri and the economic program of the military dictatorship. Subjects then answered a follow-up survey on their vote intentions. Some of them were also asked to watch the responses of the Macri campaign. While not as clean as data generated in a lab experiment, the pre-treatment characteristics are balanced across groups so the randomization appears to have been successful.

An important advantage of these estimates is that they involve data obtained in the field, so we can be relatively confident that the forces at play truly involve propaganda as observed in political settings. But it also has two clear limitations. The first is that the outcome variable is vote intentions, rather than actual votes. The second and more serious limitation is that we do not have data on prior exposure to the campaign. Thus, we do not know if the differences across gender that we estimate are due to the fact that women tend to watch less soccer (and had not seen the “ad” before the marketing firm showed it to them) or because of some other impact of gender. The work of Galasso and Nannicini (2016), who study a campaign with similar characteristics and find that females react negatively to a negative campaign, suggests the differences in prior exposure could be the main explanation, but further work in this area could be necessary.

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Figure 1: The number of times the word Propaganda appeared in two newspapers in Argentina

Table 1A: Pre-treatment Characteristics – Control vs Treatment Groups

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Control** | **Treatment** | **Difference** | **SE** | **p-value** |
| Mean | SD | N | Mean | SD | N |
| **Gender** | 0.450 | 0.498 | 400 | 0.456 | 0.498 | 802 | -0.006 | 0.031 | 0.835 |
| **Household Head** | 0.628 | 0.484 | 400 | 0.635 | 0.482 | 802 | -0.007 | 0.030 | 0.808 |
| **Age** | 43.988 | 12.051 | 400 | 43.231 | 11.371 | 802 | 0.757 | 0.710 | 0.287 |
| **Years of Education** | 16.370 | 2.171 | 400 | 16.256 | 2.201 | 802 | 0.114 | 0.134 | 0.394 |
| **HH - Years of Education** | 16.218 | 2.481 | 400 | 16.112 | 2.579 | 802 | 0.105 | 0.156 | 0.500 |
| **Buenos Aires City** | 0.425 | 0.495 | 400 | 0.398 | 0.490 | 802 | 0.027 | 0.030 | 0.365 |
| **Greater Buenos Aires** | 0.315 | 0.465 | 400 | 0.322 | 0.467 | 802 | -0.007 | 0.029 | 0.815 |
| **Messi is Better** | 0.533 | 0.500 | 400 | 0.488 | 0.500 | 802 | 0.045 | 0.031 | 0.142 |
| **Poor don't make Effort** | 0.215 | 0.411 | 400 | 0.228 | 0.420 | 802 | -0.013 | 0.026 | 0.606 |
| **Penalty** | 27.758 | 21.465 | 400 | 26.244 | 20.639 | 802 | 1.513 | 1.280 | 0.238 |
| Notes: *Gender* is a dummy variable that equals one if the respondent is male, and zero if the respondent is female. *Household Head* is a dummy variable that equals one if the respondent self-defines as the head of the household, and zero otherwise. *Age* is the age declared by the respondent. *Years of Education* is the education level declared by the respondent. *HH - Years of Education* is the education level declared by the respondent referring to the household head. *Buenos Aires City* is a dummy variable that equals one if the respondent lives in Buenos Aires City. *Greater Buenos Aires* is a dummy variable that equals one if the respondent lives in Greater Buenos Aires. *Messi is Better* is a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona. *Poor don't make Effort* is a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort. *Penalty* is the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time.  |

Table 1B: Pre-treatment Characteristics – Control vs Only Propaganda Groups

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Control** | **Propaganda** | **Difference** | **SE** | **p-value** |
| Mean | SD | N | Mean | SD | N |
| **Gender** | 0.450 | 0.498 | 400 | 0.418 | 0.494 | 400 | 0.033 | 0.035 | 0.354 |
| **Household Head** | 0.628 | 0.484 | 400 | 0.648 | 0.478 | 400 | -0.020 | 0.034 | 0.557 |
| **Age** | 43.988 | 12.051 | 400 | 42.855 | 11.283 | 400 | 1.133 | 0.825 | 0.170 |
| **Years of Education** | 16.370 | 2.171 | 400 | 16.183 | 2.235 | 400 | 0.188 | 0.156 | 0.229 |
| **HH - Years of Education** | 16.218 | 2.481 | 400 | 15.978 | 2.698 | 400 | 0.240 | 0.183 | 0.191 |
| **Buenos Aires City** | 0.425 | 0.495 | 400 | 0.400 | 0.491 | 400 | 0.025 | 0.035 | 0.473 |
| **Greater Buenos Aires** | 0.315 | 0.465 | 400 | 0.330 | 0.471 | 400 | -0.015 | 0.033 | 0.650 |
| **Messi is Better** | 0.533 | 0.500 | 400 | 0.470 | 0.500 | 400 | 0.063 | 0.035 | 0.077 |
| **Poor don't make Effort** | 0.215 | 0.411 | 400 | 0.233 | 0.423 | 400 | -0.018 | 0.029 | 0.553 |
| **Penalty** | 27.758 | 21.465 | 400 | 26.543 | 20.941 | 400 | 1.215 | 1.499 | 0.418 |
| Notes: *Gender* is a dummy variable that equals one if the respondent is male, and zero if the respondent is female. *Household Head* is a dummy variable that equals one if the respondent self-defines as the head of the household, and zero otherwise. *Age* is the age declared by the respondent. *Years of Education* is the education level declared by the respondent. *HH - Years of Education* is the education level declared by the respondent referring to the household head. *Buenos Aires City* is a dummy variable that equals one if the respondent lives in Buenos Aires City. *Greater Buenos Aires* is a dummy variable that equals one if the respondent lives in Greater Buenos Aires. *Messi is Better* is a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona. *Poor don't make Effort* is a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort. *Penalty* is the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time.  |

Table 1C: Pre-treatment Characteristics – Control vs Antidote 1 Groups

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Control** | **Propaganda + A1** | **Difference** | **SE** | **p-value** |
| Mean | SD | N | Mean | SD | N |
| **Gender** | 0.450 | 0.498 | 400 | 0.500 | 0.502 | 134 | -0.050 | 0.050 | 0.316 |
| **Household Head** | 0.628 | 0.484 | 400 | 0.612 | 0.489 | 134 | 0.016 | 0.048 | 0.748 |
| **Age** | 43.988 | 12.051 | 400 | 43.761 | 11.889 | 134 | 0.226 | 1.199 | 0.850 |
| **Years of Education** | 16.370 | 2.171 | 400 | 16.194 | 2.209 | 134 | 0.176 | 0.218 | 0.419 |
| **HH - Years of Education** | 16.218 | 2.481 | 400 | 16.157 | 2.551 | 134 | 0.061 | 0.249 | 0.808 |
| **Buenos Aires City** | 0.425 | 0.495 | 400 | 0.373 | 0.485 | 134 | 0.052 | 0.049 | 0.292 |
| **Greater Buenos Aires** | 0.315 | 0.465 | 400 | 0.321 | 0.469 | 134 | -0.006 | 0.047 | 0.899 |
| **Messi is Better** | 0.533 | 0.500 | 400 | 0.530 | 0.501 | 134 | 0.003 | 0.050 | 0.958 |
| **Poor don't make Effort** | 0.215 | 0.411 | 400 | 0.239 | 0.428 | 134 | -0.024 | 0.041 | 0.566 |
| **Penalty** | 27.758 | 21.465 | 400 | 27.067 | 21.221 | 134 | 0.690 | 2.136 | 0.747 |
| Notes: *Gender* is a dummy variable that equals one if the respondent is male, and zero if the respondent is female. *Household Head* is a dummy variable that equals one if the respondent self-defines as the head of the household, and zero otherwise. *Age* is the age declared by the respondent. *Years of Education* is the education level declared by the respondent. *HH - Years of Education* is the education level declared by the respondent referring to the household head. *Buenos Aires City* is a dummy variable that equals one if the respondent lives in Buenos Aires City. *Greater Buenos Aires* is a dummy variable that equals one if the respondent lives in Greater Buenos Aires. *Messi is Better* is a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona. *Poor don't make Effort* is a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort. *Penalty* is the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time.  |

Table 1D: Pre-treatment Characteristics – Control vs Antidote 2 Groups

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Control** | **Propaganda + A2** | **Difference** | **SE** | **p-value** |
| Mean | SD | N | Mean | SD | N |
| **Gender** | 0.450 | 0.498 | 400 | 0.500 | 0.502 | 134 | -0.050 | 0.050 | 0.316 |
| **Household Head** | 0.628 | 0.484 | 400 | 0.634 | 0.483 | 134 | -0.007 | 0.048 | 0.888 |
| **Age** | 43.988 | 12.051 | 400 | 42.433 | 10.716 | 134 | 1.555 | 1.171 | 0.185 |
| **Years of Education** | 16.370 | 2.171 | 400 | 16.403 | 2.049 | 134 | -0.033 | 0.214 | 0.877 |
| **HH - Years of Education** | 16.218 | 2.481 | 400 | 16.373 | 2.123 | 134 | -0.156 | 0.239 | 0.516 |
| **Buenos Aires City** | 0.425 | 0.495 | 400 | 0.388 | 0.489 | 134 | 0.037 | 0.049 | 0.454 |
| **Greater Buenos Aires** | 0.315 | 0.465 | 400 | 0.321 | 0.469 | 134 | -0.006 | 0.047 | 0.899 |
| **Messi is Better** | 0.533 | 0.500 | 400 | 0.522 | 0.501 | 134 | 0.010 | 0.050 | 0.840 |
| **Poor don't make Effort** | 0.215 | 0.411 | 400 | 0.201 | 0.403 | 134 | 0.014 | 0.041 | 0.741 |
| **Penalty** | 27.758 | 21.465 | 400 | 25.679 | 20.017 | 134 | 2.078 | 2.107 | 0.324 |
| Notes: *Gender* is a dummy variable that equals one if the respondent is male, and zero if the respondent is female. *Household Head* is a dummy variable that equals one if the respondent self-defines as the head of the household, and zero otherwise. *Age* is the age declared by the respondent. *Years of Education* is the education level declared by the respondent. *HH - Years of Education* is the education level declared by the respondent referring to the household head. *Buenos Aires City* is a dummy variable that equals one if the respondent lives in Buenos Aires City. *Greater Buenos Aires* is a dummy variable that equals one if the respondent lives in Greater Buenos Aires. *Messi is Better* is a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona. *Poor don't make Effort* is a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort. *Penalty* is the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time. |

Table 1E: Pre-treatment Characteristics – Control vs Antidote 3 Groups

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Control** | **Propaganda + A3** | **Difference** | **SE** | **p-value** |
| Mean | SD | N | Mean | SD | N |
| **Gender** | 0.450 | 0.498 | 400 | 0.485 | 0.502 | 134 | -0.035 | 0.050 | 0.482 |
| **Household Head** | 0.628 | 0.484 | 400 | 0.619 | 0.487 | 134 | 0.008 | 0.048 | 0.867 |
| **Age** | 43.988 | 12.051 | 400 | 44.619 | 11.718 | 134 | -0.632 | 1.195 | 0.597 |
| **Years of Education** | 16.370 | 2.171 | 400 | 16.388 | 2.248 | 134 | -0.018 | 0.219 | 0.934 |
| **HH - Years of Education** | 16.218 | 2.481 | 400 | 16.209 | 2.659 | 134 | 0.009 | 0.252 | 0.973 |
| **Buenos Aires City** | 0.425 | 0.495 | 400 | 0.425 | 0.496 | 134 | 0.000 | 0.049 | 0.994 |
| **Greater Buenos Aires** | 0.315 | 0.465 | 400 | 0.299 | 0.459 | 134 | 0.016 | 0.046 | 0.722 |
| **Messi is Better** | 0.533 | 0.500 | 400 | 0.463 | 0.500 | 134 | 0.070 | 0.050 | 0.162 |
| **Poor don't make Effort** | 0.215 | 0.411 | 400 | 0.231 | 0.423 | 134 | -0.016 | 0.041 | 0.693 |
| **Penalty** | 27.758 | 21.465 | 400 | 25.097 | 19.905 | 134 | 2.660 | 2.105 | 0.207 |
| Notes: *Gender* is a dummy variable that equals one if the respondent is male, and zero if the respondent is female. *Household Head* is a dummy variable that equals one if the respondent self-defines as the head of the household, and zero otherwise. *Age* is the age declared by the respondent. *Years of Education* is the education level declared by the respondent. *HH - Years of Education* is the education level declared by the respondent referring to the household head. *Buenos Aires City* is a dummy variable that equals one if the respondent lives in Buenos Aires City. *Greater Buenos Aires* is a dummy variable that equals one if the respondent lives in Greater Buenos Aires. *Messi is Better* is a dummy variable that equals one if the respondent thinks that Lionel Messi is a better soccer player than Diego Maradona. *Poor don't make Effort* is a dummy variable that equals one if the respondent thinks that poor people are poor because they do not make effort. *Penalty* is the number of months that the respondent considers that a 20-year-old man should be in prison if he is found guilty of robbery for the second time.  |

Table 2: Effects of Propaganda

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank |
| **Propaganda** | -0.075\*\* | 0.029 | 0.046\* | -0.065\*\* | 0.020 | 0.045\* |
|  | (0.030) | (0.025) | (0.027) | (0.030) | (0.024) | (0.027) |
| **Constant** | 0.580\*\*\* | 0.187\*\*\* | 0.233\*\*\* | 0.061 | 0.495\*\*\* | 0.444\*\*\* |
|  | (0.025) | (0.020) | (0.022) | (0.125) | (0.101) | (0.113) |
|  |  |  |  |  |  |  |
| **Observations** | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 |
| **Controls** | No | No | No | Yes | Yes | Yes |
| **R-squared** | 0.005 | 0.001 | 0.002 | 0.059 | 0.065 | 0.018 |
| Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Will Vote Macri* is a dummy variable that equals 1 if the respondent will vote Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent will vote Scioli in the ballotage of November 22nd, and zero otherwise. *Doesn't Know / Will Vote Blank* is a dummy variable that equals 1 if the respondent does not know who will vote or will vote blank in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of *6, 7, 8*, and zero otherwise. In columns (4), (5) and (6) *Gender,* *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls.  |

Table 3: Effects of Propaganda and Antidotes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank |
| **Propaganda** | -0.062\* | 0.025 | 0.037 | -0.062\* | 0.025 | 0.037 |
|  | (0.034) | (0.028) | (0.031) | (0.034) | (0.028) | (0.031) |
| **Any Antidote** | -0.005 | -0.011 | 0.016 |  |  |  |
|  | (0.034) | (0.028) | (0.031) |   |   |   |
| **Antidote 1** |  |  |  | 0.024 | -0.042 | 0.018 |
|  |   |   |   | (0.048) | (0.039) | (0.044) |
| **Antidote 2** |  |  |  | -0.035 | -0.021 | 0.056 |
|  |   |   |   | (0.048) | (0.039) | (0.044) |
| **Antidote 3** |  |  |  | -0.004 | 0.029 | -0.025 |
|  |   |   |   | (0.048) | (0.039) | (0.044) |
| **Constant** | 0.060 | 0.494\*\*\* | 0.446\*\*\* | 0.060 | 0.496\*\*\* | 0.444\*\*\* |
|  | (0.125) | (0.101) | (0.113) | (0.125) | (0.101) | (0.112) |
|  |   |   |   |   |   |   |
| **Observations** | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 |
| **Controls** | Yes | Yes | Yes | Yes | Yes | Yes |
| **R-squared** | 0.059 | 0.065 | 0.018 | 0.060 | 0.067 | 0.020 |
| Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Will Vote Macri* is a dummy variable that equals 1 if the respondent will vote Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent will vote Scioli in the ballotage of November 22nd, and zero otherwise. *Doesn't Know / Will Vote Blank* is a dummy variable that equals 1 if the respondent does not know who will vote or will vote blank in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of *6, 7, 8*, and zero otherwise. *Any Antidote* is a dummy variable that equals 1 if the respondent was shown some type of counter video, and zero otherwise. *Antidote 1* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing his economic proposals, and zero otherwise. *Antidote 2* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing the measures that he was not willing to undertake, and zero otherwise. *Antidote 3* is a dummy variable that equals 1 if the respondent was shown an interview of candidate Scioli defending the candidacy of then-president Carlos Menem and the privatization of state-owned oil company YPF in the late 90’s, and zero otherwise. *Gender,* *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls.  |

Table 4: Effects of Propaganda and First-Round Vote

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank |
| **Propaganda** | -0.039\* | 0.019 | 0.020 |  |  |  |
|  | (0.020) | (0.016) | (0.022) |  |  |  |
| **Propaganda\*** |  |  |  | -0.044 | -0.002 | 0.046 |
| **Voted Macri** |  |  |  | (0.031) | (0.024) | (0.033) |
| **Propaganda\*** |  |  |  | -0.044 | 0.003 | 0.041 |
| **Voted Scioli** |  |  |  | (0.048) | (0.037) | (0.052) |
| **Propaganda\*** |  |  |  | -0.068 | 0.181\*\*\* | -0.114\* |
| **Voted Massa** |  |  |  | (0.060) | (0.047) | (0.065) |
| **Propaganda\*** |  |  |  | -0.004 | -0.018 | 0.021 |
| **Voted others** |  |  |  | (0.044) | (0.034) | (0.047) |
| **Voted Macri** | 0.563\*\*\* | -0.098\*\* | -0.465\*\*\* | 0.592\*\*\* | -0.097\*\* | -0.495\*\*\* |
|  | (0.049) | (0.039) | (0.053) | (0.053) | (0.041) | (0.057) |
| **Voted Scioli** | -0.304\*\*\* | 0.740\*\*\* | -0.437\*\*\* | -0.274\*\*\* | 0.739\*\*\* | -0.464\*\*\* |
|  | (0.053) | (0.041) | (0.057) | (0.062) | (0.048) | (0.067) |
| **Voted Massa** | 0.166\*\*\* | 0.032 | -0.198\*\*\* | 0.212\*\*\* | -0.095\* | -0.117 |
|  | (0.054) | (0.043) | (0.059) | (0.069) | (0.054) | (0.075) |
| **Voted others** | -0.154\*\*\* | 0.021 | 0.134\*\* | -0.153\*\* | 0.034 | 0.120\* |
|  | (0.051) | (0.040) | (0.055) | (0.060) | (0.046) | (0.064) |
| **Constant** | 0.277\*\*\* | -0.007 | 0.730\*\*\* | 0.248\*\*\* | 0.012 | 0.740\*\*\* |
|  | (0.097) | (0.076) | (0.105) | (0.096) | (0.074) | (0.103) |
| **Observations** | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 | 1,202 |
| **Controls** | Yes | Yes | Yes | Yes | Yes | Yes |
| **R-squared** | 0.557 | 0.590 | 0.337 | 0.557 | 0.595 | 0.339 |
| Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Will Vote Macri* is a dummy variable that equals 1 if the respondent will vote Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent will vote Scioli in the ballotage of November 22nd, and zero otherwise. *Doesn't Know / Will Vote Blank* is a dummy variable that equals 1 if the respondent does not know who will vote or will vote blank in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of *6, 7, 8*, and zero otherwise. *Voted Macri* is a dummy variable that equals 1 if the respondent voted for Macri in the general election of October 25th, and zero otherwise. *Voted Scioli* is a dummy variable that equals 1 if the respondent voted for Scioli in the general election of October 25th, and zero otherwise. *Voted Massa* is a dummy variable that equals 1 if the respondent voted for Massa in the general election of October 25th, and zero otherwise. *Voted others* is a dummy variable that equals 1 if the respondent voted any other candidate in the general election of October 25th, and zero otherwise. *Gender,* *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls.  |

Table 5: Effects of Propaganda on Women and on Men

|  |  |  |
| --- | --- | --- |
|  | **Effects of Propaganda on Women** | **Effects of Propaganda on Men** |
| **Variables** | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** | **(9)** | **(10)** | **(11)** | **(12)** |
| Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank |
| **Propaganda** | -0.118\*\*\* | 0.042 | 0.076\*\* | -0.101\*\* | 0.024 | 0.076\* | -0.005 | -0.008 | 0.013 | -0.011 | 0.024 | -0.012 |
|  | (0.040) | (0.032) | (0.037) | (0.045) | (0.036) | (0.043) | (0.044) | (0.036) | (0.038) | (0.052) | (0.042) | (0.045) |
| **Antidote 1** |  |  |  | -0.030 | 0.017 | 0.013 |  |  |  | 0.057 | -0.097\* | 0.040 |
|  |   |   |   | (0.067) | (0.054) | (0.063) |   |   |   | (0.070) | (0.057) | (0.060) |
| **Antidote 2** |  |  |  | -0.055 | -0.016 | 0.070 |  |  |  | -0.035 | -0.024 | 0.059 |
|  |   |   |   | (0.067) | (0.053) | (0.063) |   |   |   | (0.070) | (0.057) | (0.060) |
| **Antidote 3** |  |  |  | -0.025 | 0.110\*\* | -0.085 |  |  |  | 0.015 | -0.052 | 0.037 |
|  |   |   |   | (0.066) | (0.053) | (0.062) |   |   |   | (0.070) | (0.058) | (0.060) |
| **Constant** | 0.007 | 0.411\*\*\* | 0.582\*\*\* | 0.001 | 0.420\*\*\* | 0.579\*\*\* | 0.118 | 0.680\*\*\* | 0.202 | 0.111 | 0.687\*\*\* | 0.202 |
|  | (0.170) | (0.135) | (0.159) | (0.170) | (0.135) | (0.159) | (0.192) | (0.157) | (0.165) | (0.192) | (0.157) | (0.165) |
| **Observations** | 656 | 656 | 656 | 656 | 656 | 656 | 546 | 546 | 546 | 546 | 546 | 546 |
| **Controls** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **R-squared** | 0.070 | 0.086 | 0.022 | 0.071 | 0.093 | 0.028 | 0.062 | 0.077 | 0.020 | 0.065 | 0.082 | 0.022 |
| Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Will Vote Macri* is a dummy variable that equals 1 if the respondent will vote Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent will vote Scioli in the ballotage of November 22nd, and zero otherwise. *Doesn't Know / Will Vote Blank* is a dummy variable that equals 1 if the respondent does not know who will vote or will vote blank in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of *6, 7, 8*, and zero otherwise. *Antidote 1* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing his economic proposals, and zero otherwise. *Antidote 2* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing the measures that he was not willing to undertake, and zero otherwise. *Antidote 3* is a dummy variable that equals 1 if the respondent was shown an interview of candidate Scioli defending the candidacy of then-president Carlos Menem and the privatization of state-owned oil company YPF in the late 90’s, and zero otherwise. *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls.  |

|  |  |  |
| --- | --- | --- |
|  | Effects of Propaganda on Women | Effects of Propaganda on Men |
| Variables | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** | **(8)** | **(9)** | **(10)** | **(11)** | **(12)** |
| Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank | Will Vote Macri | Will Vote Scioli | Doesn't Know / Will Vote Blank |
| Propaganda | -0.079\*\*\* | 0.031 | 0.048 | -0.072\*\* | 0.022 | 0.050 | 0.011 | -0.000 | -0.011 | 0.010 | 0.023 | -0.033 |
|   | (0.027) | (0.021) | (0.030) | (0.030) | (0.024) | (0.034) | (0.031) | (0.024) | (0.032) | (0.037) | (0.029) | (0.038) |
| Antidote 1 |  |  |  | 0.021 | 0.019 | -0.040 |  |  |  | 0.016 | -0.038 | 0.021 |
|   |  |  |  | (0.045) | (0.035) | (0.051) |  |  |  | (0.049) | (0.039) | (0.050) |
| Antidote 2 |  |  |  | -0.059 | -0.008 | 0.067 |  |  |  | 0.000 | -0.035 | 0.034 |
|   |  |  |  | (0.045) | (0.035) | (0.050) |  |  |  | (0.049) | (0.039) | (0.051) |
| Antidote 3 |  |  |  | -0.006 | 0.043 | -0.037 |  |  |  | -0.009 | -0.056 | 0.065 |
|   |  |  |  | (0.044) | (0.034) | (0.050) |  |  |  | (0.050) | (0.039) | (0.051) |
| Voted Macri | 0.595\*\*\* | -0.060 | -0.535\*\*\* | 0.594\*\*\* | -0.062 | -0.533\*\*\* | 0.519\*\*\* | -0.185\*\*\* | -0.334\*\*\* | 0.517\*\*\* | -0.181\*\*\* | -0.336\*\*\* |
|  | (0.061) | (0.047) | (0.068) | (0.061) | (0.047) | (0.068) | (0.083) | (0.065) | (0.085) | (0.084) | (0.065) | (0.086) |
| Voted Scioli | -0.275\*\*\* | 0.777\*\*\* | -0.502\*\*\* | -0.276\*\*\* | 0.773\*\*\* | -0.497\*\*\* | -0.338\*\*\* | 0.650\*\*\* | -0.312\*\*\* | -0.339\*\*\* | 0.653\*\*\* | -0.314\*\*\* |
|  | (0.065) | (0.050) | (0.072) | (0.065) | (0.050) | (0.073) | (0.089) | (0.069) | (0.091) | (0.089) | (0.069) | (0.091) |
| Voted Massa | 0.212\*\*\* | 0.106\*\* | -0.318\*\*\* | 0.214\*\*\* | 0.106\*\* | -0.320\*\*\* | 0.109 | -0.080 | -0.029 | 0.108 | -0.076 | -0.032 |
|  | (0.068) | (0.053) | (0.076) | (0.068) | (0.053) | (0.076) | (0.090) | (0.070) | (0.092) | (0.090) | (0.071) | (0.092) |
| Voted others | -0.150\*\* | 0.034 | 0.117\* | -0.153\*\* | 0.032 | 0.121\* | -0.168\* | -0.034 | 0.202\*\* | -0.171\*\* | -0.030 | 0.201\*\* |
|  | (0.063) | (0.049) | (0.071) | (0.063) | (0.049) | (0.071) | (0.086) | (0.067) | (0.088) | (0.087) | (0.067) | (0.088) |
| Constant | 0.264\*\* | -0.174\* | 0.910\*\*\* | 0.267\*\* | -0.166\* | 0.899\*\*\* | 0.297\* | 0.289\*\* | 0.414\*\* | 0.296\* | 0.285\*\* | 0.419\*\* |
|   | (0.125) | (0.097) | (0.140) | (0.125) | (0.097) | (0.140) | (0.160) | (0.125) | (0.163) | (0.160) | (0.125) | (0.163) |
| Observations | 656 | 656 | 656 | 656 | 656 | 656 | 546 | 546 | 546 | 546 | 546 | 546 |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.583 | 0.613 | 0.376 | 0.585 | 0.614 | 0.380 | 0.534 | 0.582 | 0.305 | 0.534 | 0.584 | 0.307 |
| Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Will Vote Macri* is a dummy variable that equals 1 if the respondent will vote Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent will vote Scioli in the ballotage of November 22nd, and zero otherwise. *Doesn't Know / Will Vote Blank* is a dummy variable that equals 1 if the respondent does not know who will vote or will vote blank in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of 678, and zero otherwise. *Antidote 1* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing his economic proposals, and zero otherwise. *Antidote 2* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing the measures that he is not willing to undertake, and zero otherwise. *Antidote 3* is a dummy variable that equals 1 if the respondent was shown an interview of candidate Scioli defending the candidacy of then-president Carlos Menem and the privatization of state-owned oil company YPF in the late 90’s, and zero otherwise. Voted Macri is a dummy variable that equals 1 if the respondent voted for Macri in the General Election of October 25th, and zero otherwise. Voted Scioli is a dummy variable that equals 1 if the respondent voted for Scioli in the General Election of October 25th, and zero otherwise. Voted Massa is a dummy variable that equals 1 if the respondent voted for Massa in the General Election of October 25th, and zero otherwise. Voted others is a dummy variable that equals 1 if the respondent voted any other candidate in the General Election of October 25th, and zero otherwise. *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls.  |

Table 6: Effects of Propaganda on Women and on Men Controlling for Past Vote

Table 7: Macri wants to lower wages

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Total** | **Women** | **Men** |
| **Variables** | (1) | (2) | (**3**) | (**4**) | (**5**) | (**6**) |
| Macri wants to lower wages | Macri wants to lower wages | Macri wants to lower wages | Macri wants to lower wages | Macri wants to lower wages | Macri wants to lower wages |
| **Propaganda** | 0.015 | 0.027 | 0.062\* | 0.053 | -0.044 | -0.005 |
|  | (0.027) | (0.032) | (0.036) | (0.041) | (0.042) | (0.050) |
| **Antidote 1** |  | 0.000 |  | 0.083 |  | -0.094 |
|  |   | (0.046) |  | (0.067) |  | (0.065) |
| **Antidote 2** |  | -0.060 |  | -0.064 |  | -0.053 |
|  |   | (0.045) |  | (0.060) |  | (0.068) |
| **Antidote 3** |  | -0.013 |  | 0.036 |  | -0.067 |
|  |   | (0.045) |  | (0.063) |  | (0.066) |
| **Constant** | 0.661\*\*\* | 0.658\*\*\* | 0.492\*\*\* | 0.503\*\*\* | 0.911\*\*\* | 0.917\*\*\* |
|  | (0.114) | (0.115) | (0.151) | (0.153) | (0.177) | (0.177) |
|  |   |   |  |  |  |  |
| **Observations** | 1,202 | 1,202 | 656 | 656 | 546 | 546 |
| **Controls** | Yes  | Yes  | Yes | Yes | Yes  | Yes  |
| **R-squared** | 0.067 | 0.068 | 0.089 | 0.095 | 0.062 | 0.066 |
| Notes: OLS estimates. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. *Macri wants to lower wages* is a dummy variable that equals 1 if the respondent believes Macri wants to lower wages, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown a part of an episode of *6, 7, 8*, and zero otherwise. *Antidote 1* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing his economic proposals, and zero otherwise. *Antidote 2* is a dummy variable that equals 1 if the respondent was shown a video of Macri describing the measures that he was not willing to undertake, and zero otherwise. *Antidote 3* is a dummy variable that equals 1 if the respondent was shown an interview of candidate Scioli defending the candidacy of then-president Carlos Menem and the privatization of state-owned oil company YPF in the late 90’s, and zero otherwise. *Household Head, Age, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor don't make Effort* and *Penalty* are included as controls. In columns (1) and (2), *Gender* is also included as control.  |

1. For evidence that State ownership of the media is lower in richer or less autocratic countries, see Djankov et al. (2003). For theoretical work explaining how the mass media can be used by interest groups to achieve political goals see Glaeser, (2005) and Besley and Prat, (2006). Gentzkow et al. (2015) show little evidence of incumbent party influence on the press in the US in the period 1869-1928, with the exception of the Reconstruction South. In contrast, for the Cold War period, Qian and Yanagizawa-Drott (2017) show that the US media increases the coverage of human rights abuses in countries that are not aligned with the US when they rotate into the UN (and reduces the coverage for aligned countries). Egorov et al., (2009) provide theory and evidence suggesting that a free media is less likely to emerge in resource-rich economies. [↑](#footnote-ref-1)
2. For example, a poll from November 10th predicted a Macri victory by almost 10 percentage points. Macri was predicted to get 54.8% of the vote versus Scioli’s 45.2%. See “Macri consolida su ventaja sobre Scioli en la recta final hacia el ballotage,” *La Nacion*, November 11th, 2015. The final outcome of the 2nd round was 51.34% for Macri vs 48.66% for Scioli. Interestingly, polls had underestimated Macri’s share of votes in the first round. See <https://www.electoral.gov.ar/pdf/escrutinio_definitivo_2da_vuelta.pdf> [↑](#footnote-ref-2)
3. As described in Iyengar, et al., (1982), “Four decades ago, spurred by the cancer of fascism abroad and the wide reach of radio at home, American social scientists inaugurated the study of what was expected to be the sinister workings of propaganda in a free society. What they found surprised them. Instead of a people easily led astray, they discovered a people that seemed quite immune to political persuasion. Later research on persuasion drove home the point repeatedly: propaganda reinforces the public's preferences; seldom does it alter them (e.g., Katz and Feldman, 1962; Patterson and McClure, 1976; Sears and Chaffee, 1979).” [↑](#footnote-ref-3)
4. Studies on political canvassing have found strong effects on voter turnout (see, for example Green and Gerber, 2015). A recent paper by Pons (2018) studies door-to-door canvassing in the 2012 French presidential election and finds substantial and persistent effects on voting. [↑](#footnote-ref-4)
5. For a review of the political economy of mass media, see Prat and Stromberg (2013). Even absent differences in the quality of institutions, there appear to be interesting idiosyncratic variations. For example, Da Silveira and de Mello (2011) exploit the fact that during the second round of Brazilian gubernatorial elections, TV time is split equally between first-round winner and runner-up. Using differences between rounds as a source of variation, they find a large causal effect of TV advertising on electoral outcomes. [↑](#footnote-ref-5)
6. One of the episodes they study involves a female incumbent who “violently attacks” the male challenger, accusing him of communist ties in his youth. They find that males lean more toward the (female) sender of the negative attack, and females align with the (male) candidate targeted by the attack. [↑](#footnote-ref-6)
7. See, also, <http://blogdelmedio.com/shots/mapa-de-medios-oficialistas-aliados-al-gobierno-kirchnerista-argentina-2013/>, and https://www.lanacion.com.ar/1841286-pauta-oficial-2009-2015-todos-los-nombres-y-los-montos-cobrados. [↑](#footnote-ref-7)
8. See, for example, <https://www.abc.es/internacional/20121209/abci-argentina-entrevista-clarin-201212081725.html>,. [↑](#footnote-ref-8)
9. See, for example, the interview of one of its main sponsors in “La Madre de Todas las Batallas es una Nueva Ley de Radiodifusion”, *La Nacion*, April 13, 2008 (accessed on September 29, 2018 at

<https://www.lanacion.com.ar/1003957-la-madre-de-todas-las-batallas-es-una-nueva-ley-de-radiodifusion>), or “La Madre de Todas las Batallas Tuvo Otro Final”, *Clarin*, February 18th, 2014. <https://www.clarin.com/opinion/madre-todas-batallas-final_0_BkhzcY1jPXe.html> [↑](#footnote-ref-9)
10. Negative propaganda towards the end of political campaigns had been used previously by the Kirchners and their allies prior to several elections. See, for example, <https://www.lanacion.com.ar/930962-se-retracto-el-autor-de-la-falsa-denuncia-contra-olivera-en-2005>, <https://www.lanacion.com.ar/1128028-denuncias-y-escandalos-que-estallaron-antes-de-otras-elecciones>, and https://www.lanacion.com.ar/1127915-las-huellas-de-una-campana-sucia. [↑](#footnote-ref-10)
11. Each rating point is estimated to represent about 100,000 viewers only in the Greater Buenos Aires Area, but total national coverage could more than triple that amount. (see <https://chequeado.com/el-explicador/icomo-se-mide-el-rating-en-el-mundo/> and http://www.ibope.com.ar) [↑](#footnote-ref-11)
12. Moreover, there were several corruption allegations regarding the funding of the “Soccer for All” program. See, for example, “Fútbol para Todos gastó 1200 millones de dólares sin control”, *La Nación*, December 30, 2018. [↑](#footnote-ref-12)
13. One example that describes some of these incidents is the article “Apologia de la Crueldad,” by Ernesto Tenembaum, *El Cronista*, December 22, 2015. Accessed on September 28, 2018 at

<https://www.cronista.com/columnistas/Apologia-de-la-crueldad-20151222-0028.html>. [↑](#footnote-ref-13)
14. Voting is mandatory in Argentina for those between 18 and 70 years old. However, enforcement of this obligation is weak. [↑](#footnote-ref-14)
15. They were followed by three less successful candidates: Nicolás del Caño (3.23%), Margarita Stolbizer (2.51%), and Adolfo Rodriguez Saá (1.64%). [↑](#footnote-ref-15)
16. See, for example, <https://www.lapoliticaonline.com/nota/93556-primeros-numeros-del-ballotage-macri-se-impondria-por-casi-13-puntos/>, and https://www.perfil.com/noticias/politica/la-primera-encuesta-da-ganador-a-macri-sobre-scioli-1027-0057.phtml [↑](#footnote-ref-16)
17. See, <https://www.youtube.com/watch?v=L6HBFRAXf08>. Also, “El Gobierno defendió el uso de Futbol para Todos para atacar a Macri,” in La Politica Online, November 2, 2015. [↑](#footnote-ref-17)
18. The labor share had reached 50% in 1974 but during the dictatorship’s first year (1976), it fell to a third of GDP. The labor share had followed the opposite trajectory during the Kirchner administration, rising from 34.3% in 2003 to 43.6% in 2008. See, for example, Silvia Stang, “La esquiva meta del fifty fifty: mitos y verdades de la distribución del ingreso,” *La Nación*, January 27, 2013, <https://www.lanacion.com.ar/1549178-la-esquiva-meta-del-fifty-fifty-mitos-y-verdades-de-la-distribucion-del-ingreso>, accessed September 2018. [↑](#footnote-ref-18)
19. See Iglesias Illa (2016), p. 312, “*Lo mejor, queda claro enseguida, es no hacer nada. O no hacer casi nada. El eje es no ser reactive, dice Marcos, no tenemos que hablar de nada de lo que ellos quieren*.” Also see, pages 314, 318, and 321. [↑](#footnote-ref-19)
20. For details, see <http://wonderconsultora.com.ar/wonderpanel/> and http://www.wonderpanel.com/ [↑](#footnote-ref-20)
21. See, for example, <https://www.cronista.com/elecciones2015/La-firma-que-acerto-en-la-Ciudad-dice-que-gana-Macri-20150728-0015.html>, and https://www.iprofesional.com/notas/216613-La-encuestadora-que-acerto-el-resultado-porteno-afirma-que-Macri-ganaria-en-balotaje [↑](#footnote-ref-21)
22. This video circulated in the social networks before the ballotage, either spontaneously or as a part of an informal campaign developed by Macri. [↑](#footnote-ref-22)
23. See Iglesias Illa (2016), p. 321 and footnote 19 above. [↑](#footnote-ref-23)
24. Moreover, these regressions also address potential concerns about ideological differences in pre-treatment characteristics discussed above. If the group that received the treatment was already anti-Macri, then one would expect that the estimate for the coefficient on *Propaganda* in regressions that include prior vote is close to zero (and insignificant). Table 4 shows that this is not the case. [↑](#footnote-ref-24)
25. Macri and Scioli were, of course, battling over Massa’s voters, the 21.39% of the first-round electorate. See, for example, Iglesias Illa (2016), p. 314. [↑](#footnote-ref-25)
26. A more extreme version of this hypothesis is contained in Adena, et al., (2015), who find evidence of dissuasion: radio listeners that were the least anti-semitic reduced their support for the Nazis as a result of exposure to radio. [↑](#footnote-ref-26)
27. There are several channels through which persuasion might take place. See Chong, Duryea and La Ferrara (2012) for the effect of soap operas on fertility and Durante, Pinotti and Tesei (2017) for evidence that individuals with earlier access to Berlusconi’s all entertainment channel were more likely to vote for him in the 1994 election. [↑](#footnote-ref-27)