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Autoría ditelliana: Schargrodsky, Ernesto

Otras autorías: Di Tella, Rafael (*Harvard Business School, CIfAR, NBER),* Galiani, Sebastián (*University of Maryland and NBER*)

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Persuasive Propaganda during the 2015 Argentine Ballotage

Rafael Di Tella
Harvard Business School, CIfAR and NBER

Sebastian Galiani
University of Maryland and NBER

Ernesto Schargrodsky
UTDT, CAF and CONICET

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Abstract

We study a propaganda campaign sponsored by the Argentine government against the main political challenger in the days preceding the 2015 runoff presidential election. Subjects in the treatment group watched an "ad" that had been aired during soccer transmissions as part of this campaign. They were then asked about their vote intentions. Relative to subjects in the control group, their declared preference for the challenger drops by 6.5 percentage points for a persuasion rate of 11.2%. We find no effects of the three types of defenses employed by the challenger (a positive message unrelated to the "ad", a reply to the accusations in the "ad", and a counter-attack). The propaganda effect is driven by women.

Keywords: Propaganda, Persuasion, Voting, Soccer Broadcasting.
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1. Introduction

An important question in politics concerns the ability of governments to affect voter preferences through State-sponsored advertising or 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 advertisement can avoid it. In developing countries these constraints are often weaker, so State-sponsored propaganda is more frequent and presumed to be more effective. However, it is also possible that in these settings people are more aware of the possibility of media bias and hence more likely to discount its influence on their views.[1] Of course, the "fake news" phenomenon and the relevance of populist candidates in rich countries suggest that learning about the effectiveness of propaganda efforts is relevant more broadly.

In this paper, we study one attempt to influence voter preferences during the weeks prior to the 2015 Argentine presidential ballotage, a setting characterized by widespread use of State-sponsored propaganda. We exploit two main aspects of the use of the media during the Kirchners' administrations (2003-2015): the likely awareness of potential bias by consumers, and a significant difficulty in avoiding these messages. Gradually, since the beginning of the administration, media companies either owned by the State or by private allies, or those heavily dependent on public advertisement, biased reports in favor of the government, and attacked critics and opposition politicians. There was widespread perception of bias in the messages released by media outlets that were heavily influenced by the government (Gervasoni and Tagina, 2019). Such pro-government inclination was frequently denounced by critics, but openly defended as legitimate by some journalists and members of the government, citing a pro-business bias in traditional media. In other words, the bias in the State-sponsored media was accepted and defended publicly by the Kirchner supporters. Moreover, President Cristina Kirchner often made speeches that were simultaneously broadcasted through all TV and radio networks in the country (these were mandatory so even independent media had to take part). This combination of public media, private media owned by government proxies, public advertisement in private media, and mandatory broadcasting limited the ability of consumers to exit and follow their natural tendency to read and watch like-minded outlets.

[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 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 United Nations Security Council (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.

Avoiding these political messages became particularly difficult for soccer viewers once the government undertook the monopolistic broadcasting of Argentine games in 2009. The previous business model, with transmission of soccer games on paid cable TV with private advertising, was replaced that year by Soccer for All (or, in Spanish, *Futbol para Todos*). This TV show enjoyed the monopoly of Argentine soccer transmission (the 1st and 2nd division, the Argentina Cup, and the national team), broadcasting for free in open TV the main soccer matches of the country. The show audience was considerable, as soccer is very popular in Argentina. Advertisement in *Futbol para Todos* became almost exclusively public. Political ads were regularly aired at halftime together with highlights from the first-half and from other games, and also during the games (through banners and announcer commentary). In this way, propaganda messages reached captive soccer fans regardless of their political inclinations.[2]

In particular, we study the use of official propaganda in the period just prior to the 2015 Argentine presidential runoff 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 first-round presidential election of October 25th. According to the initial polls, Macri was expected to secure a comfortable victory, when the government's propaganda campaign was set in full motion. Twelve days later Scioli had almost closed the gap, with Macri finally winning the presidency by only 2.68 percentage points.[3]

Our study uses data obtained between the two election rounds in a survey experiment from participants regularly engaged online by a public opinion and marketing firm. While a control group was exposed to a neutral video describing the voting procedures, a treatment group watched an "ad" that was one of the key pieces of propaganda employed by the government campaign. This ad, first aired during halftime of an important soccer game that defined the season championship, "explained" the similarities between the economic program of the Argentine military dictatorship of 1976-83 and that of Macri's. The ad presented statements of Jose Alfredo Martinez de Hoz, a former Minister of Economy and a central figure of the dictatorship, and compared them with old statements by Macri and members of his team. It explicitly claimed that Macri had a similar economic program to that of the dictatorship, and wanted to "adjust" and open the economy, lower government spending, and reduce export taxes to bring about a drastic wage adjustment. For example, one of the excerpts showed a clip of a young Macri being interviewed several years before he entered politics (when he was a businessman) explaining that "costs are too high, and wages are a source of costs." This was denounced as out of context by critics of the government and defended as relevant by supporters. In addition, a subsample watched the "ad" followed by one of the "antidotes" used

[2] Since the "bread and circuses" of Ancient Rome, governments have exploited sports to convey political messages. Perhaps the most extreme examples of this practice include the 1936 Olympic Games, or, in the Argentine context, the 1978 World Cup.

[3] For example, a poll published on November 11th in a main Argentine newspaper predicted a victory of Macri over Scioli by almost 10 percentage points (54.8% vs. 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 (see https://www.electoral.gov.ar/pdf/escrutinio_definitivo_2da_vuelta.pdf). Interestingly, polls had underestimated Macri's share of votes in the first round.

at the time to respond to the government campaign. These three alternative responses were: a video of Macri presenting a set of positive policy proposals, a video of Macri denying the accusations made to him in the propaganda ad, or a counter-attack on Scioli. Subjects were then asked to answer a follow-up opinion survey including their 2nd round vote intentions.

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 runoff election by 6.5 percentage points. This is paired with an increase of 2 percentage points in the intention to vote for Scioli and a 4.5 percentage point increase in the group that is undecided. The decrease in the intentions to vote for Macri implies a persuasion rate of 11.2%, which is in the mid-range of the persuasion rates reported in della Vigna and Gentzkow (2010). Second, we find no effect of the "antidotes," consistent with the suspicions of Macri's electoral team (as described in Iglesias Illa, 2016). Third, the results are 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 also some evidence that women, in contrast to men, believe the ad message that Macri would lower wages. These heterogeneous gender results could be capturing differences in prior exposure to the campaign during soccer matches (Poliarquia, 2013). Another potential explanation for the gender difference is women being more sensitive to the social concerns raised by the propaganda campaign (see Edlund and Pande, 2002, Alesina and La Ferrara, 2005, and the review by Niederle, 2016).

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).[4] 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.[5] 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

[4] As summarized 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)."

[5] There is a large literature on negative political advertising. A standard conclusion is that "the research literature does not bear out the idea that negative campaigning is an effective means of winning votes" (Lau, et al., 2007). For a review of the evidence available on persuasion, see della Vigna and Gentzkow (2010). Ansolabehere et al. (1999) uncovers large effects on turnout and shows how the use of recall measures of ad exposure collected in surveys can be problematic and lead to biased estimates of its effects. Some of the most fascinating work in political economy involves the effects of persuasion on beliefs during conflicts (see, Gentzkow and Shapiro, 2004; Adena et al., 2015; Yanagizawa-Drott, 2014; Paluck, 2009; and della Vigna et al., 2014).

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).[6]

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 context.[7] For example, Enikolopov et al. (2011) 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 complementing their study, both because of the institutional setting, and because it highlights the possibility of significant effects of political campaigns when citizens lack the alternative of switching to alternative media, in spite of their awareness of potential biases.

Our paper is also connected to studies focused on misleading statements, or where consumers are actively trying to avoid propaganda. One example of the former is Di Tella et al. (2012) which studies false statements during the Kirchner's propaganda campaign prior to the nationalization of the water services. Surprisingly, the article finds 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. Consistent with our new results, that paper failed to find significant effects of the firm's defense against these accusations.[8] 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.[9] A second example is Knight

[6] Studies on political canvassing have found strong effects on voter turnout (see, for example Green and Gerber, 2015). Pons (2018) studies door-to-door canvassing in the 2012 French presidential election and finds substantial and persistent effects on voting.

[7] For a review of the political economy of mass media, see Prat and Stromberg (2013). 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.

[8] A recent paper by Barrera et al. (2020) finds that, although fact checking can correct biases in factual knowledge introduced by politically-charged alternative facts, these corrections do not translate into an impact on voting intentions. They conclude that, with and without fact checking, alternative facts are equally effective in convincing voters to support the politician who utilizes them.

[9] Chiang and Knight (2011) study the influence of newspaper endorsements during the 2000 and 2004 US presidential elections. Their comparisons of voter intentions before and after the endorsements suggest that voters account for the credibility of the source. Endorsements for the Democratic candidate from neutral or

and Tribin (2019a, 2019b), who show how the effects of Hugo Chavez's propaganda varied across TV channels depending on the viewers' ideological inclinations and on the availability of a remaining independent television channel. More importantly, they are able to demonstrate that Chavez's electoral support and approval ratings were higher in areas were State censorship was more successful and TV viewers did not have access to opposition sources of information.

Finally, our paper is connected to Galasso and Nannicini (2016)'s detailed study of propaganda messages during two mayoral campaigns in Italy. As in our study, they find sharp gender differences. There are, however, several differences with our setting, including that they can study variation in the gender of the candidate going negative.[10]

Section 2 describes State-sponsored propaganda in Argentina during the three Kirchners' 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 studies heterogeneous effects, mechanisms and robustness. Section 6 concludes.

2. Politics, Media and the 2015 Propaganda Campaign

The episode we study took place in November 2015, at the end of twelve 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. His wife, Cristina Fernández de Kirchner, succeeded him for the 2007-2011 and 2011-2015 periods. Initially, their relationship with the media was good, and the government allowed a large merger of the cable TV industry in December 2007 that greatly benefited *Clarin*, the main media company. Soon, a bitter conflict emerged, and "*Clarin* lies" became the slogan of an intense government 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.

Several features of Argentina's media landscape under the Kirchners are important for our study. The government directly controlled a few media outlets that were State-owned. It indirectly came to control several other outlets through its private sector allies (even if some of them did not have any previous experience in the media industry). Moreover, the Kirchner government obtained favorable coverage from many outlets, regardless of their ideology,

right-leaning newspapers are more influential than from left-leaning newspapers, and likewise for endorsements for the Republican candidate.

[10] 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.

through a system of transfers under the disguise of "public advertising" (see Di Tella and Franceschelli, 2011; and Gervasoni and Tagina, 2019).[11] The most extreme estimates put the fraction of controlled audiovisual outlets at 80% (see, for example, De Carlos, 2012), although their market share was certainly lower as some large independent companies (like *Clarin* and *La Nacion*) retained 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 individual public figures (e.g., economists, journalists), firms (e.g., Shell, Suez) and members of the opposition (including Mauricio Macri). Unannounced mandatory broadcasts of President Cristina Kirchner's speeches on all the TV and radio networks in the country simultaneously ("*cadena nacional*") became extremely frequent.[12] Importantly for our purposes, 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. The conflict over the new media law was a central element of the political agenda and was soon labeled "the mother of all battles."[13] Some of the media messages used by the government contained false statements about its critics. One example is the Kirchners' propaganda campaign prior to the nationalization of the water services documented in Di Tella et al. (2012). These attacks were frequently denounced in the remaining independent media, and victims often attempted to limit them legally, but lies and inaccuracies continued to be used by the government's propaganda machine at crucial electoral moments.[14] This suggests

[11] Also see http://blogdelmedio.com/shots/mapa-de-medios-oficialistas-aliados-al-gobierno-kirchnerista-argentina-2013/, and https://www.lanacion.com.ar/sociedad/pauta-oficial-2009-2015-todos-los-nombres-y-los-montos-cobrados-nid1841286/.

[12] Similar to Chavez's *cadenas* studied by Knight and Tribin (2019a). Cristina Fernández de Kirchner spoke on "*cadena nacional*" 54 times during her 2007-2011 administration, and 107 times during her 2011-2015 period (the data do not include the last 2 months of her second administration). For comparison, Néstor Kirchner (2003-2007) used it only two times, and Mauricio Macri (2015-2019) five times. See https://chequeado.com/el-explicador/cadena-nacional-usos-y-abusos-de-cfk-y-otros-presidentes-de-america-latina/, https://www.infobae.com/2015/05/22/1730276-cristina-kirchner-hablo-mas-4600-minutos-las-121-cadenas-nacionales-que-protagonizo/, and https://www.cronista.com/economiapolitica/Macri-estrena-la-cadena-nacional-para-dar-su-version-de-la-herencia-M-20191202-0010.html.

[13] See, for example, the interview of one of its main sponsors in https://www.lanacion.com.ar/cultura/la-madre-de-todas-las-batallas-es-una-nueva-ley-de-radiodifusion-nid1003957/, or

https://www.clarin.com/opinion/madre-todas-batallas-final_0_BkhzcY1jPXe.html.

[14] 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/politica/se-retracto-el-autor-de-la-falsa-denuncia-contra-olivera-en-2005-nid930962/, https://www.lanacion.com.ar/politica/denuncias-y-escandalos-que-estallaron-antes-de-otras-elecciones-nid1128028/, and https://www.lanacion.com.ar/politica/las-huellas-de-una-campana-sucia-nid1127915/. It is difficult, of course, to establish that a particular statement is a "lie". In some of these cases the accusation was later retracted in legal proceedings. Di Tella et al. (2012)'s strategy to study people's reaction to "lies" is to expose subjects that had recently gained access to water and sewage services following investments by the water company with Kirchner's claim that there had been no investments. For our current purposes the important feature is that the possibility of media bias was being frequently raised in public by *all* political parties.

there was widespread understanding of the biased nature of some of the messages released by an industry that was deeply influenced by the government.

A main element of the government's strategy of using State-sponsored media for political purposes was the nationalization of the transmission of soccer matches in August 2009, eliminating pay-per-view fees under a TV show called Soccer for All (in Spanish, *Futbol para Todos*). The government's new agreement with the soccer federation gave *Futbol para Todos* the monopoly over soccer transmissions including matches of the first and second division, the Argentina Cup, and the national team. Games were made available over broadcast channels (both public and private) as well as cable networks with the stated purpose that "none of the more than 40 million Argentines be excluded".[15] 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 twice that amount for matches involving the most popular teams, and more than 30 rating points for crucial championship games (see Grinberg, 2015).[16]

Initially, the intention appears to have been to cover the transmission fees with private ads. Soon, however, only one private company remained (a truck company) with the rest being "official ads" funded by the government or public companies.[17] Political and informative government ads were inserted during half-time together with highlights of the first half of the game and with the goals from other matches, so they received considerable attention. Government propaganda was also introduced during the games through banners and announcer commentary. In a qualitative study on *Futbol para Todos* audience, Grinberg (2015) finds that viewers were aware of (and quite upset at) the partisan content of government ads, but appear to have regarded them as something they had to tolerate as part of a trade-off that allowed them to watch soccer games.[18] Similarly, in a large public opinion study about *Futbol para Todos*, 59.3% of the surveyed participants (and 56.7% of the soccer-watcher participants) disagree with the government advertising monopoly during the program (Poliarquia, 2013).[19] Given soccer

[15] At the announcement of free soccer transmission, with Diego Maradona by her side, Cristina Kirchner stated that "the goals will no longer be kidnapped" in an analogy to the kidnappings and disappearances committed by the military dictatorship (see https://www.lapoliticaonline.com/nota/nota-59537/).

[16] 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).

[17] There were several corruption allegations regarding the funding of *Futbol para Todos*. See, for example, https://www.lanacion.com.ar/politica/futbol-para-todos-gasto-1200-millones-de-dolares-sin-control-nid2206697.

[18] "It is so important for me to watch soccer, that I couldn't care less about official propaganda" vulgarly declares one of the study participants (Grinberg, 2015, p. 43). The same qualitative study reports that half of the participants continue watching TV at half-time, while another half does other things, but all of the individuals come back to watch the summary of goals from other matches during half-time.

[19] The other available questionnaire answers were to agree with the government advertising monopoly (26.3% of all opinion study participants, and 31.2% of soccer viewers), and do not answer/do not know (14.4% of all

popularity across Argentine socioeconomic groups and regions, *Futbol para Todos* allowed government propaganda to reach captive (and aware) soccer fans regardless of their political inclinations.

Another TV show used for political purposes was *6,7,8*. It was aired almost daily at prime time by the public TV channel and fervently defended the policies of the government, often launching personal attacks on government critics. Several incidents on the show were extensively reported in the media, and it was frequently described as wildly biased in favor of the government.[20] *Futbol para Todos* and *6,7,8* in many occasions acted together, as advances of *6,7,8* with its unique and easily identifiable aesthetic were aired during the halftime of the soccer games, and the Sunday edition of the show was broadcasted right after the games, exploiting audience inertia.

The propaganda campaign we study took place during the 2015 Argentine presidential election. 81.07% of the 32,130,853 citizens listed in the electoral registry voted for six presidential candidates in the first-round election of October 25th, 2015.[21] 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, Cristina Kirchner's former chief of cabinet, 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%.[22] With no candidate obtaining 45% of the votes (nor 40% with a 10% difference on the runner-up), a runoff between Daniel Scioli and Mauricio Macri was called for November 22nd.

The first opinion polls immediately after the first round showed an advantage for Macri of about 13 percentage points.[23] Soon, a "dirty campaign" accusing Macri of similarities 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* on November 1st during halftime of Boca-Tigre, a game which had very high ratings as it allowed Boca, the most popular team, to win the season championship.[24] The ad and other

participants, and 12.1% of soccer viewers). Moreover, 59% of all study participants, and 52.3% of soccer viewers, criticize the government administration of the *Futbol para Todos* funding.

[20] For one example that describes some of these incidents see Tenembaum (2015).

[21] In Argentina, voting is allowed since age 16, but mandatory between ages 18 to 70. However, enforcement is weak.

[22] They were followed by three additional candidates: Nicolás del Caño (3.23%), Margarita Stolbizer (2.51%), and Adolfo Rodriguez Saá (1.64%).

[23] 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.

[24] The whole game transmission (including half-time interval) is available at https://www.youtube.com/watch?v=L6HBFRAXf08. Cristina Kirchner's chief of cabinet openly defended the

pieces of the campaign were expanded and reproduced in subsequent days in other TV shows and media.

The propaganda campaign focused on the idea that Macri's government would "adjust" the economy by reducing spending and increasing taxes. This was portrayed as anti-labor and resembling the policies of the military dictatorship, a period when the labor share fell by more than ten percentage points and real wages fell dramatically (Galiani and Porto, 2010; Klor et al., 2020) after collective bargaining was suppressed, and thousands of political opponents were incarcerated, tortured, disappeared, and murdered.[25] The "ad" for the *6,7,8* show used as the starting point of the campaign for the 2nd round election had the heading "Enlightening Similarities." This referred to its main theme: that there were many similarities between the economic policies that Macri was allegedly planning to implement and those in the economic "plan" of Jose Alfredo Martinez de Hoz, the Minister of Economy of the military dictatorship.[26]

Once the propaganda campaign started, those in charge of the Macri electoral team debated how to respond. 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 recommended: "It doesn't make any sense to reply anything…", although some campaign managers started to worry about the propaganda impact.[27] Thus, Macri continued his "positive agenda," although one mild specific response was a TV ad describing what Macri would not do. Moreover, a short clip showing a young Scioli supporting Menem's neoliberal policies of the 1990's circulated on the social networks, 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%).

3. Data and Empirical Strategy

3.1. Data

use of *Futbol para Todos* to attack Macri during that soccer match. See https://www.lapoliticaonline.com/nota/93647-el-gobierno-defendio-el-uso-del-futbol-para-todos-para-atacar-a-macri/

[25] For the investigation of violations of human rights during the military dictatorship commissioned by the first democratic government, see CONADEP (1984).

[26] On the central role of Martinez de Hoz during the military dictatorship, see Klor et al. (2020). Indeed, their main variable to measure firms' connections to the military regime is "Martinez de Hoz distance."

[27] 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 reactivo, dice Marcos, no tenemos que hablar de nada de lo que ellos quieren*." See also pages 314, 318, and 321.

The data were obtained from Wonder, a consulting firm focusing on marketing and public opinion. Since 2008, it engages a panel of subjects (called Wonderpanel) across the country who fill out short surveys online in exchange for cash prizes and other rewards.[28] After the first-round election, and once the negative 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 in real time has the advantage of being close to the actual experience of someone subject to an attempt at electoral 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 (see, for example, El Cronista, 2015, and iProfesional, 2015). We were acquainted with the owners of the firm, provided them with some suggestions, and were able to buy the unidentified data from them right after the ballotage.

1,202 Wonderpanel participants fully completed the firm's survey experiment, which was carried out during ten days from November 11th to November 20th, within the interim period between the first-round election of October 25th and the runoff election of November 22nd. It was an online survey without a human surveyor involved. Wonderpanel questionnaire is presented in the Online Appendix. Participants were first asked a short number of questions regarding their age, gender, education level, household head status, household head's education level, and place of residence. Although the general election of October 25th had already occurred, Wonder preferred not to prime the participants asking about their 1st round electoral choice before the treatment. Instead, they measured proxies for the participants' ideology prior to the treatment through a set of indirect questions (on sources of poverty, on crime punitiveness, and on whether Lionel Messi is a better soccer player than Diego Maradona).[29]

It was standard for the firm to interact with panel members online, so it was able to naturally introduce a set of videos midway during the administration of the survey. Randomly, one third of subjects (the control group) was asked to watch an institutional video on the voting procedures used as a placebo; another third (the treatment group) was asked to watch only the negative campaign ad from the show *6,7,8* which was first advanced in *Futbol para Todos*, and the last third (the treatment + antidote group) was split into three and asked to watch the *6,7,8 / Futbol para Todos* negative campaign ad followed by one of three different "antidote" videos. The three videos randomly used as antidotes for this last group were: Macri's positive response (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 to the points raised in the "ad"), and a "counterattack" video that circulated on social media at that time of an old interview of Daniel Scioli where he defended

[28] For details, see http://wonderconsultora.com.ar/wonderpanel/ and http://www.wonderpanel.com/.

[29] It is possible 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, the variable *Messi is Better* is positively correlated with intention to vote for Macri in the control group.

the neoliberal policies of the Menem administration of the 1990's.[30] The order of exposure for this last third (first the negative ad, and then the antidotes) reproduced the order observed in reality during the campaign. See the Online Appendix for a full description and transcript of the videos.

A questionnaire was completed after subjects watched the videos asking them how they intended to vote in the runoff 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 two different soup kitchens (one sponsored by Macri and the other by Scioli). Participants were not asked whether they had already seen the videos before the experiment.

In addition to the 1,202 participants who fully completed the survey, 69 participants interrupted their participation in the experiment after the beginning of the videos but before the end of the survey, without providing an explanation. 61 of them interrupted before declaring their intention to vote in the ballotage, whereas 8 participants declared their ballotage vote intention, but interrupted the survey before answering about their first-round vote. The frequency of interruption is higher for the treatment group (6.08%) than for the control group (4.07%), although the t-test does not reject the null hypothesis of equality of means at conventional levels (the p-value equals 0.1374).[31]

Table 1 presents the pre-treatment characteristics of the experiment participants for the total sample of 1,271 participants (the 1,202 who completed the survey and the 69 who interrupted it). The first column shows the means and standard deviations of the pre-treatment characteristics of the control group. The other columns provide the coefficients and standard errors of regressing the characteristics on treatment status, first for all the treated arms together, and then disaggregating the treatment into propaganda only and propaganda plus each antidote dummies. There are no significant differences in observable characteristics across the samples suggesting that the randomization was successful and, therefore, it is reasonable to assume that unobservables are also balanced across groups.

Table 2 compares the pre-treatment characteristics by treatment status only for the 1,202 participants who fully completed the survey. Again, the first column shows the means and standard deviations of the pre-treatment characteristics of the control group, and the other columns provide the coefficients and standard errors of regressing the characteristics on

[30] This video circulated on social media before the runoff, either spontaneously or as a part of an informal campaign developed by Macri.

[31] Other 71 participants declared they were not able to watch and/or listen to the videos for technical reasons. The reasons provided were: bad connectivity/the video did not download/the video did not open (38 cases), they were not allowed to open/listen videos at work (15 cases), audio problems/no headphones (14 cases), or other reasons (4 cases). The probability of reporting these technical problems is highly uncorrelated with treatment status. These technical attrition rates are 5.44% in the control group and 5.22% in the treatment group, and the p-value associated to the t-test of no differences of means is 0.8624.

treatment status. Again, there are no significant differences in observable characteristics across the samples suggesting that the randomization was successful.

The online experiment sample did not intend to be representative of the overall Argentine population. The average years of education for the Argentine urban population was 11.99 years for adults, and 11.78 years for household heads, whereas these figures are 16.29 and 16.15, respectively, in our main sample. But about 70% of the Argentine urban households declare having some form of internet access at the time, whereas all the participants had it (at home or at work) in this experiment.[32] Once we restrict to households with internet connection (and for a similar geographic distribution), the urban Argentine average years of education was 13.31 years for adults, and 13.37 years for household heads. Regarding average age, the experiment participants (with 43.48 years of average age) are similar to the Argentine urban population (45.92 for the overall, and 43.99 for internet-connected households with similar geographic distribution). In addition, the proportion of male household heads is also similar in the experiment main sample (63.55%) and the Argentine urban population (58.74% for the overall, and 61.47% for the internet connected households). Moreover, a telephone survey on *Futbol para Todos* audience finds that viewers had an average of 13.27 years of education and 45.2 years of age (Poliarquia, 2013). Thus, the experiment participants are more educated, and, thus, probably richer, than the average Argentine (and still more educated than Argentines with internet access), but similar in other comparable characteristics. TV soccer viewers seem similar to the urban population with internet connection.

3.2. Empirical Strategy

In our main analysis, we estimate regressions of the form:

$$Vote_i = a + b\ Propaganda_i + c\ Antidote_i + d\ Controls_i + \mu_i$$

where: $Vote_i$ 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 effects on post-treatment vote intentions for the three alternatives separately, 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). $Propaganda_i$ 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 arms (i.e., alone and also in combination with each one of three antidotes). $Antidote_i$ is a set of three dummy variables indicating whether person *i* also viewed any of the three antidotes aimed to neutralize the

[32] For these comparisons, we use the official household survey (Encuesta Permanente de Hogares of INDEC) of the fourth quarter of 2016, the closest to the election date with available information on internet access.

negative effect of political propaganda: *Antidote 1*$_i$ (the positive ad from the Macri campaign), *Antidote 2*$_i$ (the ad developed by the Macri campaign as a reply to the negative campaign launched by the government), and *Antidote 3*$_i$ (the video clip of an old interview of Scioli in the 1990's where he defended neoliberal policies, including privatizations). Identification of the average causal effect of propaganda is based on the random assignment of subjects to treatment arms by the marketing firm.

4. Main Results

Tables 3 and 4 present the main results of our paper. In Table 3, we analyze the effect of the propaganda video, regardless of whether participants were also exposed to the antidotes. In columns 1-3, intentions to vote for Macri dropped by 7.5 percentage points when participants are exposed to the negative campaign video, while the proportion voting for Scioli increased 2.9 percentage points, and the proportion of undecided/blank increased by 4.6 percentage points.

In columns 4-6, we control for pre-treatment variables. As explained above, participants were not asked before the videos about the presidential candidate they voted for in the first round in order to avoid priming them with electoral questions. However, the pre-treatment controls include three variables that could proxy for ideological preferences of the survey participants: *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); *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); and *Messi is Better* (a dummy variable that equals one if the respondent thinks that Messi is a better soccer player than Maradona).[33]

When we control for all pre-treatment variables in columns 4-6 of Table 3, results are very similar. Watching the negative campaign video decreases intentions to vote for Macri by 6.5 percentage points, increases vote intention for Scioli by 2 percentage points, and increases the proportion of undecided/blank by 4.5 percentage points. The reduction in Macri's vote intention represents 11.2 percent of the preference for his candidacy in the control group. 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 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, e_i the share of group i receiving the message, and y_i the share of group i adopting the desired beliefs, the persuasion rate f captures the effect of the persuasion treatment on beliefs (y_T-y_C, with y_T=0.515 and y_C=0.58

[33] Note that, although all p-values are above conventional values in the second column of Table 2, the coefficient on the variable *Messi is Better* is relatively large (4.5 percentage points).

in our sample) adjusting for exposure to the message (e_T-e_C) and for the size of the population that is not yet convinced (1-y_C):

$$f = 100 * \frac{y_T - y_C}{e_T - e_C} \frac{1}{1 - y_C} = 100 * \frac{0.515 - 0.58}{100 - 0} \frac{1}{0.58} = -0.112$$

Assuming zero exposure in the control group, the estimated persuasion rate is approximately 11.2%, which is in the mid-range of the persuasion rates reported in della Vigna and Gentzkow (2010). This assumption is unlikely to be valid as some survey participants could certainly have had prior exposure to the propaganda campaign, but it may be more reasonable for groups that in Argentina are traditionally less interested in soccer (such as women), watch less open TV, or are 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 4 studies the effects of the three different types of defenses or "antidotes" considered by the Macri campaign on the individuals exposed to the propaganda. The first three columns consider the three antidotes together, while the last three columns disaggregate the positive response, the defensive response, and the counterattack. All regressions control for pre-treatment characteristics. 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, watching the antidotes does not have an impact on vote intentions for the runoff. 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 statistical power behind these comparisons is lower. The Macri campaign managers seemed to have been right when pondering that replies to the propaganda campaign would be ineffective. Some of them were also rightly worried about the damaging effect of the campaign.[34] In summary, Tables 3 and 4 show that subjects who watched the propaganda campaign were less likely to report that they would vote for Macri in the ballotage.

5. Further Results: Heterogeneous Effects, Mechanisms, and Robustness

We next explore the presence of heterogeneous effects by gender. Galasso and Nannicini (2016) find significant gender differences in reactions to negative campaigns. The Online Appendix Tables A1 through A4 report some differences in pre-treatment characteristics between the two gender sub-samples -for example, women are younger than men and less likely to be the household head-, but treatment and control groups are similar across observables

[34] See Iglesias Illa (2016), p. 321, and footnote 27 above.

within each gender sample, suggesting that the randomization was also successful at that level, both with and without including the attrited observations.

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 sub-sample, and therefore the persuasion rate for men is zero, there are large and precisely estimated effects in the women sub-sample. Women are almost 12 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 women is 20.3% (y_T=0.4638, y_C=0.5818, and assuming again zero exposure in the control group), which is within the upper-range of the voters' persuasion rates reported in della Vigna and Gentzkow (2010).

These heterogeneous gender results could be capturing differences in prior exposure to the campaign, although the "ads" were also circulated outside the transmission of soccer matches. Unfortunately, participants were not asked whether they had already seen the videos before the experiment. There is, however, some evidence of substantial gender differences in prior exposure. For example, the public opinion survey on *Futbol para Todos* reveals that 66.73% of the men interviewed report watching soccer games, whereas this figure is 36.46% for women (Poliarquia, 2013).[35] An alternative explanation to the gender differences is that women are more sensitive to the social consequences of economic adjustments suggested by the propaganda -see the political gender gap documented in Alesina and La Ferrara (2005) and Edlund and Pande (2002), and Niederle (2016) for a review-.[36, 37]

Table 6 explores the mechanism of persuasion and, in particular, the concern about Macri's intention to lower wages. The first three columns study if subjects believed one of the main arguments of the ad, which showed 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 on Macri is pertinent. This supports the idea that the propaganda campaign was effective in persuading subjects to change their views about Macri in the women subsample.[38] The last three columns

[35] According to data from the rating company IBOPE, the men-to-women proportion for audience of soccer games for 2015-16 is about 60:40 for open TV, but 89:11 for cable TV audience.

[36] Studying electoral accountability in Mexico at the release of municipal audit information, Arias et al. (2019) and Larreguy et al. (2020) underline the importance of priors in both levels and precision. In our study, the comparison of means and variances of vote intentions in the control group shows no significant differences between women and men. However, the slightly higher intention to vote for Scioli of men relative to women in our control group seems more consistent with more male prior exposure to the campaign, than with women being (previously) more left leaning.

[37] The propaganda effect also seems somewhat stronger for younger participants (and not just because women are younger in our sample).

[38] There are several channels through which persuasion might take place. See Chong et al. (2012) for the effect of soap operas on fertility in Brazil, and Durante et al. (2017) for evidence that individuals with earlier access to Berlusconi's all entertainment channel were more likely to vote for him in the 1994 Italian election.

consider the respondents' *Opinion on Macri* (in a 1 to 10 cardinal scale) as an alternative dependent variable. Again, the propaganda shows an effect in the women subsample.[39]

We next consider alternative strategies to deal with the fact that a group of participants interrupted their participation in the experiment after the beginning of the videos but before the end of the survey. As explained above, 61 participants left the online survey for no technical reasons before declaring their intention to vote in the ballotage, whereas 8 participants declared their ballotage vote intention, but interrupted the survey before answering their first-round vote. As noted above, there is more attrition in the treatment than in the control group, although the difference is not significant at conventional levels. But it is useful to consider the possibility that all of the difference is caused by the treatment, perhaps because the attrited are Macri supporters who found the ad upsetting. One strategy is imputing as Macri voters all 45 participants in the treatment group who did not declare their runoff vote intention. For the control group, we can predict the votes of the 16 subjects that interrupted the survey using the coefficients from a multinomial Logit model (given that those that did not declare to vote for Macri had two options: Scioli or undecided/blank) estimated on the control group. This strategy exploits the fact that the control group was exposed to a neutral video, so the attrition rate in this group can arguably be ignored conditional on observable covariates, which is what the implemented methodology exploits. The results in Table 7 show, again, a negative effect of the propaganda campaign on Macri's ballotage support, and that the effect comes from the women subsample.[40]

Another possible strategy is to include further controls for ideological differences. A demanding approach is to add a set of dummy variables controlling for the respondent's vote in the first-round election. Remember, however, that the survey question regarding first-round vote was included after the videos (in order to avoid priming subjects with the election). Thus, the estimated coefficients on the first-round declared votes could be capturing part of the effect of the treatment itself, so this approach is also conservative.[41] When we perform this exercise in the first three columns of Table 8, the coefficient on watching the propaganda video declines in absolute value to 3.9 percentage points, but it is still statistically significant at standard levels. The rest of Table 8 shows that the strong gender differences are robust to controlling for first-round declared vote.

Finally, in Table 9 we explore treatment and first-round vote interactions. As expected, the effect of propaganda on second-round vote intentions is driven by first-round Massa voters,

[39] A weakness of the survey is that it collects only opinions rather than actions, and the former 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 (see Online Appendix Table 5).

[40] Similar results are obtained under other imputation rules such as assigning all the attrited participants (in both treatment and control groups) to Macri votes, or using the multinomial Logit model for imputing all the attrited observations.

[41] If first-round reported vote is considered a dependent variable, the propaganda coefficients on "Voted Macri" are never statistically significant (in the pooled, the women, and the men samples), but negative and sizable.

who, as explained above, were in the ideological center between Macri and Scioli. Propaganda also seems to affect first-round Macri voters in the women subsample. There is, again, an important caveat to this result: first-round vote was asked in the experiment after the treatment. Note, also, that the number of observations for each interaction is small, particularly in the subsamples by gender.

6. Conclusions

In this paper we study data generated during the weeks prior to the 2015 Argentine runoff presidential election, when a propaganda campaign was launched by the incumbent government to attack the opposition candidate and influence voter preferences. Two aspects of this setting are noteworthy. First, there was transparency about the existence of a heavy bias in the government use of the media, as it was defended as necessary in the presence of a conservative bias in the traditional media by 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, the propaganda messages reached citizens regardless of their political interest or inclination. Specifically, the government propaganda influenced a large number of media outlets, through ownership by the State or by government insiders, "*cadenas nacionales*" (unannounced takeovers of TV broadcasting by the government), and the discretional distribution of subsidies to some media outlets. Moreover, the Cristina Kirchner's administration nationalized the transmission of soccer matches in 2009, eliminating pay-per-view fees under a State-sponsored TV show called *Futbol para Todos* (Soccer for All), and replacing commercial ads by government "ads", including those at halftime. Since soccer is extremely popular in Argentina, this allowed the government's propaganda to reach most citizens and not just those that were already ideologically close. These features provide a setting where 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 (for a persuasion rate of 11.2%), two percentage points more likely to vote for the incumbent party's candidate, and 4.5 percentage points more likely to report to be undecided. Moreover, there is some evidence that subjects believed the main accusation contained in the propaganda campaign (that Macri would lower wages). The results are 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 and their internal validity are reasonably supported by the characteristics of the data. They were produced by a marketing firm that performed a randomized control trial to learn about the effect of the propaganda campaign on vote intentions just prior to the 2015 presidential runoff election. A group of subjects was treated

with one of the key pieces of propaganda employed in the campaign: an ad first aired in *Futbol para Todos* that "explained" the similarities between Macri's plans and the economic program of the Argentine military dictatorship. Some of them were also asked to watch the responses of the Macri campaign. The pre-treatment characteristics are balanced across groups so the randomization appears to have been successful.

The experiment setting replicates several features of the government's use of political propaganda in *Futbol para Todos*. The videos were real, the experiment was performed in the field during the interim period between the 1st and 2nd electoral rounds, and subjects self-selected to participate for non-ideological reasons (soccer preferences in one case, and participation in a marketing panel in exchange for cash prizes and other rewards in our sample). Moreover, the estimated effects are consistent with the evolution of opinion polls at that time. Immediately after the 1st round, the challenger Macri was expected to secure a comfortable victory. But once the government's propaganda campaign was set in full motion, the incumbent Peronist candidate 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.

However, we are unable to make strong claims about the way these results generalize to other populations (external validity). We can speculate that the propaganda effect could be milder on marketing-panel participants than on soccer viewers (for example, because the former are somewhat richer and, therefore, could be closer to Macri), or stronger (if, perhaps, the former are more open-minded and persuadable). In both settings, participants had the option to exit, but at a cost. In terms of external validity, our results could be more likely to apply to voters that are not too ideological (and hence are able to bear watching biased political videos), or those that cannot control their exposure to political propaganda (because they are captive or inattentive).

In addition, our study has two clear limitations. First, the outcome variable is a report on vote intentions, rather than actual votes. While there is value in studying self-reported votes, it would be preferable to base our conclusions on revealed preferences. The second problem is that it is difficult to know what mechanism gives rise to the observed gender differences. While this is also true in previous studies, it would be more satisfactory if we had more information on the exact source of gender differences in the effect of the propaganda treatment. On the positive side, our study has a reasonable combination of internal validity and data obtained in the field, so we can be relatively confident that the forces at play truly involve propaganda as observed in political settings. Thus, if combined with other unbiased local experiments, our study could contribute to construct externally valid estimates of the effects of political propaganda under weak institutional conditions.

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Table 1: Pre-treatment Characteristics – Original Sample
(including participants with incomplete answers)

Variables	(1) Control	(2) Propaganda	(3) Propaganda only	(4) Propaganda + Antidote1	(5) Propaganda + Antidote2	(6) Propaganda + Antidote3
Age	43.871	-0.587	-1.097	0.527	-1.506	0.734
	(11.990)	(0.704)	(0.797)	(1.168)	(1.081)	(1.149)
Gender	0.448	0.004	-0.036	0.045	0.041	0.048
	(0.498)	(0.030)	(0.034)	(0.048)	(0.049)	(0.049)
Household Head	0.626	0.010	0.015	-0.003	0.009	0.007
	(0.484)	(0.029)	(0.033)	(0.047)	(0.048)	(0.047)
Years of Education	16.398	-0.129	-0.183	-0.220	0.025	-0.017
	(2.158)	(0.130)	(0.153)	(0.210)	(0.204)	(0.217)
HH - Years of Education	16.252	-0.144	-0.293	-0.087	0.164	-0.043
	(2.456)	(0.149)	(0.179)	(0.240)	(0.217)	(0.254)
Buenos Aires City	0.422	-0.030	-0.026	-0.059	-0.028	-0.012
	(0.494)	(0.029)	(0.034)	(0.047)	(0.048)	(0.048)
Greater Buenos Aires	0.314	0.020	0.026	0.021	0.007	0.010
	(0.465)	(0.028)	(0.032)	(0.045)	(0.046)	(0.046)
Messi is Better	0.525	-0.035	-0.051	0.002	-0.007	-0.050
	(0.500)	(0.030)	(0.034)	(0.048)	(0.049)	(0.049)
Poor Don't Make Effort	0.216	0.009	0.011	0.024	-0.019	0.014
	(0.412)	(0.025)	(0.029)	(0.041)	(0.040)	(0.041)
Penalty	27.971	-1.674	-1.395	-0.499	-2.066	-3.388*
	(21.453)	(1.264)	(1.452)	(2.047)	(1.993)	(1.985)
Number of Observations in each group	417	854	432	146	137	139

Notes: Column (1) reports the means (and, in parentheses, their standard deviations) for the pre-treatment characteristics in the control group. The following columns provide the coefficients and robust standard errors of regressing the characteristics on a treatment dummy, considering all treatment branches together in Column (2), and then disaggregating the treatment into propaganda only and propaganda plus antidote dummies (*Propaganda* only, *Propaganda* + *Antidote* 1, *Propaganda* + *Antidote 2*, and *Propaganda* + *Antidote 3*) in columns (3) to (6). *Age* is the age of the respondent. *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. *Years of Education* is the education level of the respondent. *HH - Years of Education* is the education level of 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. The last row indicates the number of observations considered in each group, but all the regressions are run with the 1271 observations. * Significant at 10%.

Table 2: Pre-treatment Characteristics – Main Sample

Variables	(1) Control	(2) Propaganda	(3) Propaganda only	(4) Propaganda + Antidote1	(5) Propaganda + Antidote2	(6) Propaganda + Antidote3
Age	43.988	-0.757	-1.133	-0.226	-1.555	0.632
	(12.051)	(0.724)	(0.826)	(1.190)	(1.104)	(1.177)
Gender	0.450	0.006	-0.033	0.050	0.050	0.035
	(0.498)	(0.030)	(0.035)	(0.050)	(0.050)	(0.050)
Household Head	0.628	0.007	0.020	-0.016	0.007	-0.008
	(0.484)	(0.030)	(0.034)	(0.049)	(0.048)	(0.049)
Years of Education	16.370	-0.114	-0.188	-0.176	0.033	0.018
	(2.171)	(0.133)	(0.156)	(0.219)	(0.207)	(0.222)
HH - Years of Education	16.218	-0.105	-0.240	-0.061	0.156	-0.009
	(2.481)	(0.154)	(0.183)	(0.253)	(0.221)	(0.261)
Buenos Aires City	0.425	-0.027	-0.025	-0.052	-0.037	0.000
	(0.495)	(0.030)	(0.035)	(0.049)	(0.049)	(0.049)
Greater Buenos Aires	0.315	0.007	0.015	0.006	0.006	-0.016
	(0.465)	(0.029)	(0.033)	(0.047)	(0.047)	(0.046)
Messi is Better	0.533	-0.045	-0.063*	-0.003	-0.010	-0.070
	(0.500)	(0.031)	(0.035)	(0.050)	(0.050)	(0.050)
Poor Don't Make Effort	0.215	0.013	0.018	0.024	-0.014	0.016
	(0.411)	(0.025)	(0.030)	(0.042)	(0.040)	(0.042)
Penalty	27.758	-1.513	-1.215	-0.690	-2.078	-2.660
	(21.465)	(1.297)	(1.501)	(2.122)	(2.033)	(2.025)
Number of Observations in each group	400	802	400	134	134	134

Notes: Column (1) reports the means (and, in parentheses, their standard deviations) for the pre-treatment characteristics in the control group. The following columns provide the coefficients and robust standard errors of regressing the characteristics on a treatment dummy, considering all treatment branches together in Column (2), and then disaggregating the treatment into propaganda only and propaganda plus antidote dummies (*Propaganda* only, *Propaganda* + *Antidote* 1, *Propaganda* + *Antidote 2*, and *Propaganda* + *Antidote 3*) in columns (3) to (6). *Age* is the age of the respondent. *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. *Years of Education* is the education level of the respondent. *HH - Years of Education* is the education level of 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. The last row indicates the number of observations considered in each group, but all the regressions are run with the 1202 observations with complete answers. * Significant at 10%.

Table 3: Effects of Propaganda

Variables	(1) Will Vote Macri	(2) Will Vote Scioli	(3) Doesn't Know / Will Vote Blank	(4) Will Vote Macri	(5) Will Vote Scioli	(6) 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

Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. *Will Vote Macri* is a dummy variable that equals 1 if the respondent declares she/he will vote for Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent declares she/he will vote for 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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, and zero otherwise. In columns (4), (5) and (6) *Age, Gender, Household Head, 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. * Significant at 10%; ** significant at 5%.

Table 4: Effects of Propaganda and Antidotes

Variables	(1) Will Vote Macri	(2) Will Vote Scioli	(3) Doesn't Know / Will Vote Blank	(4) Will Vote Macri	(5) Will Vote Scioli	(6) 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)
Antidotes	-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

Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. *Will Vote Macri* is a dummy variable that equals 1 if the respondent declares she/he will vote for Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent declares she/he will vote for 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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, and zero otherwise. *Antidotes* is a dummy variable that equals 1 if the respondent was shown any 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 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. All regressions include *Age, Gender, Household Head, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor Don't Make Effort* and *Penalty* as controls. * Significant at 10%.

Table 5: Effects of Propaganda on Women and Men

	Effects of Propaganda on Women						Effects of Propaganda on Men					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**
Variables	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	0.077*	-0.005	-0.008	0.013	-0.012	0.024	-0.012
	(0.040)	(0.032)	(0.037)	(0.045)	(0.036)	(0.043)	(0.044)	(0.036)	(0.038)	(0.052)	(0.043)	(0.045)
Antidotes				-0.037	0.038	-0.001				0.012	-0.058	0.045
				(0.047)	(0.037)	(0.044)				(0.050)	(0.041)	(0.043)
Constant	0.007	0.411	0.582	-0.000	0.419	0.581	0.118	0.680	0.202	0.118	0.681	0.201
	(0.170)	(0.135)	(0.159)	(0.170)	(0.135)	(0.159)	(0.192)	(0.157)	(0.165)	(0.192)	(0.157)	(0.164)
Observations	656	656	656	656	656	656	546	546	546	546	546	546

Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. *Will Vote Macri* is a dummy variable that equals 1 if the respondent declares she/he will vote for Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent declares she/he will vote for 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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, and zero otherwise. *Antidotes* is a dummy variable that equals 1 if the respondent was shown any type of counter video, and zero otherwise. All regressions include *Age, Household Head, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor Don't Make Effort* and *Penalty* as controls. * Significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6: Agreement on whether "Macri wants to lower wages" and Opinion on Macri

Variables	Macri wants to lower wages			Opinion on Macri		
	(1)	(2)	(3)	(4)	(5)	(6)
	Total	Women	Men	Total	Women	Men
Propaganda	0.015	0.062*	-0.044	-0.089	-0.385*	0.225
	(0.027)	(0.036)	(0.042)	(0.158)	(0.211)	(0.237)
Constant	0.661	0.492	0.911	4.238	4.271	3.962
	(0.114)	(0.151)	(0.177)	(0.690)	(0.929)	(1.066)
Observations	1,202	656	546	1,202	656	546

Notes: OLS estimates. Robust standard errors in parentheses. *Macri wants to lower wages* is a dummy variable that equals 1 if the respondent believes Macri wants to lower wages, and zero otherwise. *Opinion on Macri* is the respondent's grade from 1 to 10 of her/his opinion of Macri as a politician. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, and zero otherwise. *Age, Household Head, 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 (4), *Gender* is also included as control. * Significant at 10%.

Table 7: Effects of Propaganda – Original Sample (inputting attrited participants)

	Total			Women			Men		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	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	-0.054*	0.015	0.038	-0.093**	0.032	0.061*	0.000	-0.011	0.010
	(0.029)	(0.024)	(0.025)	(0.039)	(0.031)	(0.035)	(0.044)	(0.036)	(0.035)
Constant	0.036	0.494	0.470	-0.030	0.439	0.590	0.063	0.659	0.278
	(0.120)	(0.100)	(0.108)	(0.171)	(0.140)	(0.158)	(0.182)	(0.154)	(0.166)
Observations	1,271	1,271	1,271	698	698	698	573	573	573

Notes: Seemingly unrelated regression (SUR) estimates. *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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. The 45 participants (28 women and 17 men) in the treatment group who did not declare their ballotage vote intention are imputed to Macri. The ballotage vote intentions of the 16 attrited participants (9 women and 7 men) in the control group are forecasted using the coefficients obtained from a multinomial Logit model estimated on all the control group observations (columns 1 to 3), the female control observations (columns 4 to 6), and the male control observations (columns 7 to 9). Bootstrapped standard errors using 1000 replications in parentheses. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, and zero otherwise. *Age, Household Head, 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 all columns. *Gender* is included as control in columns (1) to (3). * Significant at 10%; ** significant at 5%.

Table 8: Effects of Propaganda Controlling for First-Round Vote

	Total			Women			Men		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	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	-0.039*	0.019	0.020	-0.079***	0.031	0.048	0.011	-0.000	-0.011
	(0.020)	(0.016)	(0.022)	(0.027)	(0.021)	(0.030)	(0.031)	(0.024)	(0.032)
Voted Macri	0.563***	-0.098**	-0.465***	0.595***	-0.060	-0.535***	0.519***	-0.185***	-0.334***
	(0.049)	(0.039)	(0.053)	(0.061)	(0.047)	(0.068)	(0.083)	(0.065)	(0.085)
Voted Scioli	-0.304***	0.740***	-0.437***	-0.275***	0.777***	-0.502***	-0.338***	0.650***	-0.312***
	(0.053)	(0.041)	(0.057)	(0.065)	(0.050)	(0.072)	(0.089)	(0.069)	(0.091)
Voted Massa	0.166***	0.032	-0.198***	0.212***	0.106**	-0.318***	0.109	-0.080	-0.029
	(0.054)	(0.043)	(0.059)	(0.068)	(0.053)	(0.076)	(0.090)	(0.070)	(0.092)
Voted others	-0.154***	0.021	0.134**	-0.150**	0.034	0.117*	-0.168*	-0.034	0.202**
	(0.051)	(0.040)	(0.055)	(0.063)	(0.049)	(0.071)	(0.086)	(0.067)	(0.088)
Constant	0.277	-0.007	0.730	0.264	-0.174	0.910	0.297	0.289	0.414
	(0.097)	(0.076)	(0.105)	(0.125)	(0.097)	(0.140)	(0.160)	(0.125)	(0.163)
Observations	1,202	1,202	1,202	656	656	656	546	546	546

Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. *Will Vote Macri* is a dummy variable that equals 1 if the respondent declares she/he will vote for Macri in the ballotage of November 22nd, and zero otherwise. *Will Vote Scioli* is a dummy variable that equals 1 if the respondent declares she/he will vote for 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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, 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 for any other candidate in the general election of October 25th, and zero otherwise. *Age*, *Household Head, 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. *Gender* is included as control in columns (1) to (3). * Significant at 10%; ** significant at 5%; *** significant at 1%.

Table 9: Interaction of Propaganda and First-Round Vote

	Total			Women			Men		
Variables	**(1)** Will Vote Macri	**(2)** Will Vote Scioli	**(3)** Doesn't Know / Will Vote Blank	**(1)** Will Vote Macri	**(2)** Will Vote Scioli	**(3)** Doesn't Know / Will Vote Blank	**(1)** Will Vote Macri	**(2)** Will Vote Scioli	**(3)** Doesn't Know / Will Vote Blank
Propaganda*	-0.044	-0.002	0.046	-0.083**	-0.014	0.096**	0.005	0.007	-0.012
Voted Macri	(0.031)	(0.024)	(0.033)	(0.040)	(0.031)	(0.045)	(0.046)	(0.036)	(0.047)
Propaganda*	-0.044	0.003	0.041	-0.026	0.007	0.018	-0.066	-0.011	0.078
Voted Scioli	(0.048)	(0.037)	(0.052)	(0.064)	(0.049)	(0.071)	(0.072)	(0.056)	(0.073)
Propaganda*	-0.068	0.181***	-0.114*	-0.227***	0.231***	-0.004	0.151	0.129*	-0.280***
Voted Massa	(0.060)	(0.047)	(0.065)	(0.078)	(0.060)	(0.088)	(0.093)	(0.072)	(0.094)
Propaganda*	-0.004	-0.018	0.021	-0.037	0.024	0.014	0.032	-0.070	0.037
Voted others	(0.044)	(0.034)	(0.047)	(0.057)	(0.044)	(0.064)	(0.066)	(0.052)	(0.067)
Observations	1,202	1,202	1,202	656	656	656	546	546	546
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.557	0.595	0.339	0.586	0.621	0.378	0.537	0.586	0.318

Notes: Seemingly unrelated regression (SUR) estimates. Standard errors in parentheses. *Will Vote Macri* is a dummy variable that equals 1 if the respondent declares she/he 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 declares she/he will vote for 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 declares she/he will vote blank or does not know whom will vote for in the ballotage of November 22nd, and zero otherwise. *Propaganda* is a dummy variable that equals 1 if the respondent was shown the ad of *6,7,8* first aired in *Futbol para Todos*, 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 for any other candidate in the general election of October 25th, and zero otherwise. *Age, Household Head, Years of Education, HH - Years of Education, Buenos Aires City, Greater Buenos Aires, Messi is Better, Poor Don't Make Effort, Penalty, Voted Macri, Voted Scioli, Voted Massa,* and *Voted others* are included as controls. *Gender* is included as control in columns (1) to (3).* Significant at 10%; ** significant at 5%; *** significant at 1%.