Gains from Early Support of a New Political Party*

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Abstract

We study the benefits of political connections on firm performance by analyzing the effects of the early support to Silvio Berlusconi, a TV tycoon who in three months in 1993 founded a party, won the elections and became Italy's Prime Minister. We find that the 101 companies who supported Berlusconi from the start did better than controls in terms of sales and employment but not of productivity. Results are confirmed when we instrument the decision to support Berlusconi with electoral outcomes in the 1921 Italian elections. We also find suggestive evidence that the supporters' superior performance is stronger in sectors with high advertising intensity.

Key Words: Political connections, productivity, advertisement.

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1. Introduction

Studying the relationship between well-established political parties and privately-owned firms is difficult because the decision to support one party rather than another is likely to be determined by the party's historical performance and past interactions with the firm itself, so that it might be endogenous to the firm's performance (Fisman, 2001). To tackle this problem, the literature has mainly focused on either financial crises affecting developing countries as an exogenous shock¹ or on specific historical episodes.²

We analyze the role of political connections for firm performance by studying the effects of the firms' early support of a new political party—Forza Italia (Let's Go Italy)—which was created by Silvio Berlusconi in Italy at the beginning of the 1990s. The case of Italy offers a very interesting experiment: the founding of a new party (i.e., with no predetermined links to firms) during a turbulent political phase in a democratic industrialized country at the hands of a business tycoon with a dominant position in the TV and advertising industry. The fact that Italy is a democracy and that Berlusconi is a businessman in the media industry makes it different from the cases previously considered in the literature, and can offer new insights on recent political phenomena based on a victory of either an entrepreneur or an innovative political movement, such as in the US, where one tycoon—Donald J. Trump—became president in 2017; the recent success in France of Emmanuel Macron's brand new party La République

¹See, among others, the case studies exploiting the East Asian crisis as a shock on firm performance in accordance with political connections. Fisman (2001) analyzes the case of Suharto in Indonesia and Johnson and Mitton (2003) analyze Mahathir and Anwar in Malaysia. In these cases, the affiliations were either predetermined by family ties or had existed for a long time.

²For example, Ferguson and Voth (2008) study firms that either financed Hitler's German National Socialist Worker's Party or advised Hitler on economic issues. They find that these firms' stock prices significantly outperformed similar competitors: in 1933, the mere announcement of the new political connection results in a significant increase in the firm's value.

En Marche! (The Republic on the Move!); Italy again, where the party Movimento Cinque Stelle (Five Stars Movement) founded by a comedian won the elections in 2018. Furthermore, while in Poland the party created in the 2000s Prawo i Sprawiedliwość (Law and Justice) won the election in 2005 and 2015, in Ukraine, Volodymyr Zelensky, a successful TV producer and comedian, was elected president by landslide in 2019, heading a party named after his TV show Sluha Narodu (Servant of the People).³

In this paper we first describe how Berlusconi won the general elections in 1994 and became the precursor of several political innovations.⁴ Berlusconi exploited his vast network of clients in the business community (mainly clients of his media empire) to build support for his new party in a very short time span—the decision to run was announced shortly before the elections and the political party was set up in just three months—and entrepreneurs had very little time to decide whether or not to support him. At the time, supporting Berlusconi was considered to be a very risky bet, given what seemed at the outset his low chances of success. In contrast to the United States, in Italy supporting more than one party in a political competition is uncommon and therefore entrepreneurs could not hedge against the risk of the attempt turning out unsuccessful.

We identify the 101 firms that supported Berlusconi in 1994 by gathering information from public records and from private conversations with the former leaders of *Forza Italia*. We then apply a propensity score matching procedure

³Looking at parties at the opposition, in the last 15 years several new movements successfully entered in the national and European Parliament, such as the *UK Independence Party* in the UK, *Alternative für Deutschland* (Alternative for Germany) in Germany, and the *Partij voor de Vrijheid* (Freedom Party) in the Netherlands.

⁴The Italian general elections in 1994 ended with the victory of the conservative blocks *Il Polo delle Libertà* (*The Pole of Freedoms*). Berlusconi's political party was the most voted party with 21%, followed by the left-wing movement *Partito Democratico della Sinistra* (Democratic Party of the Left) with 20%, and Berlusconi's ally *Alleanza Nazionale* (National Alliance) with 13%.

to select the control group of firms and run a difference-in-difference estimator where the treatment is the early decision to support Berlusconi in 1994. Our identification assumption is that, conditional on the matching procedure, the treatment is orthogonal to unobserved determinants of firms' performance. We supply evidence of the validity of this assumption based on the absence of different pre-trends in performance between treated and control firms before 1994. A superior performance before 1994 would indicate that Berlusconi's supporters were already better entrepreneurs and simply identified in him (against the odds) a good profit opportunity. Instead, we argue that the decision to support Berlusconi is consistent with two possible explanations: either the supporters were part of Berlusconi's business network and were sympathetic to his political adventure for "personal" reasons, or they had a right-wing political orientation and were naturally prone to support anybody who would run on that side of the political spectrum.

Even in the absence of pre-existing differences in trends, one might still argue that selection into the treatment is not exogenous to firm performance. For example, people with personal connections to Berlusconi might have been chosen by him based on their business skills. Therefore, to address concerns about potential endogenous selection, we consider an instrumental variable strategy to deal with possible unobservable firms' characteristics (including managerial ability) that may have affected the decision to support Berlusconi. We rely on the long-run persistence of ideological traits in Italy and instrument the decision to support Berlusconi with the percentage of votes obtained by the Blocchi Nazionali (National Blocks) in the 1921 political elections, which were the last free and democratic vote before the start of the fascist dictatorship. The Blocchi Nazionali was a political cartel formed by the Italian liberals and fascists. The choice of this instrumental variable is not only supported by general findings in political science, which document the long-run intergenerational transmission of political partisan values in the family environment (Beck and Jennings, 1991; Jennings et al., 1997), but it is also motivated by striking similarities between the elections of 1921 and 1994, which we do not find in any other elections in

the twentieth century in Italy. In particular, we will show that both elections were characterized by a coalition of a liberal and an extreme right-wing party in competition not only with a left-wing coalition but also with a Catholic electoral block.

We find that Berlusconi's supporters in 1994 did better than matched controls in terms of value added and employment in the following years. However, the evidence is mixed and weaker in terms of productivity. In addition, we find no significant differences between periods in which Berlusconi was in office (1994–1996, 2001–2006, and 2008–2011) or in opposition. This does not come as unexpected because firm performance adjusts gradually and, even if not in power, Berlusconi remained the unchallenged head of the opposition and was the natural prospective candidate in the next elections. Moreover, even when not running the national government, Forza Italia was in power in many local administrations, who are in charge of many policies relevant for firms' performance. The results indicate that in the years between 1995 and 2011, employment, value added and sales are on average between 30% and 50% higher in firms that supported Berlusconi in 1994 than in the control firms. The IV results confirm the OLS ones, with larger effects.

Next, we inspect the potential mechanisms that may have determined the abnormal growth of Berlusconi's supporters. The first intuitive reason why firms endorsing Berlusconi may have recorded higher sales is because they received preferential access to advertising from Berlusconi's media companies. We find that firms who were early supporters of Berlusconi and are in sectors exposed to advertisement, measured by advertising expenditures over value added, do particularly well.⁵ We also investigate other potential mechanisms explored in the literature because politically connected firms typically derive gains from their connections in different ways: for example, Cull and Xu (2005), Johnson and

⁵This is consistent with Della Vigna et al. (2016), who find that firms' advertising expenditures follow the party in power and Berlusconi's TV companies attract a larger share of the adverting expenses when he is in power.

Mitton (2003), and Khwaja and Mian (2005) find evidence of preferential access to credit; Backman (1999) and Dinc (2005) of preferential treatment by government owned banks; Agrawal and Knoeber (2001) and Coviello and Gagliarducci (2017) of preferential treatment in the award of government contracts; Faccio (2006) in bailouts and Pellegrino and Zingales (2017) in sectors where government regulation is more pervasive. We find some evidence that the effect is stronger in sectors with high external financial dependence while no support emerges for the public procurement and regulation.

We contribute to the literature in several ways. A recent line of investigation mostly focused on the United States—has analyzed contributions to parties and political campaigns, arguing that they are similar to investments for firms. Politicians in positions that grant power over firms, such as committee chairs in Congress who deal with regulation or firm aid, receive greater contributions (Ansolabehere and Snyder, 2000; Grier and Munger, 1991). In addition, the contributions of political action committees that are run by firms and industry associations are tied to the likelihood of a politician succeeding in the bid for office, while individual contributions are not (Ansolabehere and Snyder, 2000). This paper is one of the few that looks at the firms' support for a political party and the performance of these firms in the context of a European country. Our approach is also different from the previous papers that have examined the illicit connections between firms and political parties (see Hellman et al. (2003) and Cull and Xu (2005) for a discussion of bribes, and Bertrand et al. (2005) for votebuying behavior; Bertrand et al. (2005) discuss the employment consequences of connections and their impact on voting for politicians) because we focus on the advantage of being an early supporter openly and publicly. Another strand of the literature looks at the direct involvement of firms' managers in politics. For Italy, Faccio (2006) and Cingano and Pinotti (2013) study the role of political connections defined in terms of a direct political appointment in the local government by a firm's employee, and show that they improve firm performance in terms of sales and employment but not of productivity. We only have a few cases of entrepreneurs and CEOs who were directly elected in Berlusconi's party,

therefore we do not treat them differently from the other early supporters of Berlusconi. Furthermore, Faccio (2006) and Goldman et al. (2009) consider the case of the prime minister nominating relatives into listed firms' boardrooms. This is different from our approach and we do not include Berlusconi's *Mediaset* (where Berlusconi's children have a directive role) or others firms owned by the family in the treatment group of supporting firms because we are interested in the advantage that other firms may have obtained through their early support of a winning party. Finally, we shed new light on the relationship between political parties and media: while Szeidl and Szucs (2020, forthcoming) study the recent influence of the Hungarian government on mass media through advertising investments, in our case advertisement is instead a mechanism for explaining the benefit of political connections.

The rest of this paper is organized as follows. Section 2 provides background information on the evolution of Italy's political system before and after 1994, and on Berlusconi's electoral victory. Section 3 describes the data used in the empirical analysis. Section 4 discusses the identification strategy. Section 5 presents both the OLS and IV results. Section 6 analyzes the potential channels and Section 7 concludes.

2. Italy in 1994 and Berlusconi's Entry into Politics

The Democrazia Cristiana (Christian Democracy) party governed Italy without interruption from 1948 to Berlusconi's victory in 1994, although sometimes it was forced to rule in coalition with the Socialist Party (Partito Socialista Italiano). This coalition governed with the intent of excluding the largest communist party in Western Europe (Partito Comunista Italiano) from power. Berlusconi started his entrepreneurial career in the construction business but became famous as the owner of the three most important private national TV channels (the other three being public) since the 1980s. He entertained strong ties

⁶See Barone et al. (2015) for the influence of television on voting behavior in Italy.

with the leader of the Socialist Party Bettino Craxi. Indeed, Craxi was among the first to recognize the potential impact of commercial TV, and he played a crucial role in ensuring the survival and further consolidation of Berlusconi's media empire. In 1984, Craxi, then Prime Minister, issued a decree that overruled the courts decision to block commercial broadcasting. Due to his TV business, Berlusconi had the opportunity of introducing himself directly in the political world. Concurrently, he run an advertising company—Publitalia—and had majority shares in a newspaper—Il Giornale—and the most important Italian publishing company—Mondadori. His business interests have always been vast and as of 1994 around 2000 firms were on the list of clients of Publitalia in terms of TV and newspapers advertisement. The TV system in particular was a duopoly with two players: Berlusconi's Mediaset and the public television RAI.⁷

The Italian political landscape came to an abrupt turning point in the early1990s. Following the fall of the Berlin wall, the former communist party became
the Democratic Party of the Left, embraced the values of Western democracies
and adopted a social-democratic political platform. These international and
national changes, deeply intertwined, implied the end of the de-facto exclusion
of the Democratic Party from government. Consequently, the judiciaries were
for the first time able to investigate corruption of the governing coalition and
this led to the outbreak of a series of corruption scandals (known as *Tangen-topoli*, Italian for "Bribeville") for which, between 1992 and 1993, the entire
leadership of *Democrazia Cristiana* and *Partito Socialista Italiano* was put on
trial. The governing parties paid a heavy toll for the scandals and they virtually
disappeared from the political scene. Meanwhile, the *Partito Democratico della*Sinistra, the heir of the communist party, was left virtually unscathed. When

⁷Della Vigna et al. (2016) study the allocation of advertising expenditure between the two over the years in which Berlusconi was in power rather than in opposition, finding that on average firms increased their advertising expenditures on Berlusconi's TV channels after his successful entry into politics.

early elections were set to be held in March 1994, all of the polls were predicting the victory of the only large party left on the political scene: the party of the left.

According to several of his long-time associates, and to his own account (he denied any interest in entering politics until the very last day), Berlusconi had no intention to get personally involved in politics until three months before the elections. The reasons for his candidacy were double faced: on one hand, he believed that there was a political vacuum on the center right; on the other hand, many commentators insist that his firms, in particular the television business, were having very difficult times—the group faced serious financial difficulties, had lost its political sponsors, and feared the electoral success of the *Partito Democratico della Sinistra* which had pledged to restrict the influence of private television and advocated a general reform of the media industry. Eventually, Berlusconi only decided to enter politics in December of 1993, three months before the elections, and he announced the creation of a new political party, *Forza Italia*, in a famous speech on one of his TV channels.

Due to the very short time before the elections, the search for support for the new party started among the lists of Berlusconi's business friends. The party's coordinators and many of the top candidates were selected from the ranks of his media and advertising companies, *Mediaset* and *Publitalia*. The selection and training of candidates was entirely entrusted to *Publitalia* (Hopkin and Paolucci, 1999). More relevant for this paper, the initial support and financing was explicitly sought among the clients of *Publitalia* in a series of events in early-1994. Newspaper accounts exist of entrepreneurs who were in favor of Berlusconi's political venture and of those who were against it.

Berlusconi's attempt was successful and in March 1994 Forza Italia became Italy's most voted party with 21% of the votes and the center-right coalition gained a solid majority in both branches of Parliament. On May 10th, 1994 Berlusconi became prime minister. However, his first government lasted only until January 1995 when the Lega Nord (Northern League) withdrew its parliamentary support. Berlusconi remains until today the leader of his party and

he prevailed by a large margin in general elections in 1994, 2001, and 2008, and lost by a very small margin in 1996, 2006, and 2013. According to many commentators, Berlusconi's control of commercial TV has been decisive, both for his early electoral success and for his extraordinary political longevity (Durante et al., 2019). Equally important is his network of supporters in the business community.

3. Data

We aim to estimate the long-term impact of the early support of the newly founded party in 1994. To do so, we need information on which firms were the initial supporters of Berlusconi and we also need a suitable control group.

We use two sources of information to construct a single list of firms which gave early support to Berlusconi's new party Forza Italia. We start from a series of firms who supported Berlusconi in 1994, which appeared on the web in 1994– 1995 (the web was in its infancy at the time but the names of these firms also appeared in newspaper articles). The list was produced by a group of activists who gathered around the name "Boicotta il Biscione" (i.e. Boycott the Large Grass Snake, the large grass snake is still the symbol of Berlusconi's TV empire) and created several groups around Italy with the purpose of boycotting firms that supported Berlusconi. These groups diffused very rapidly around Italy and counted several thousands of affiliates in 1994. Because the list of firms was compiled by detractors of Berlusconi, we verified the identity of the supporters of Berlusconi with the founders of the party and—to err on the side of caution we only include those firms whose support is uncontroversial in the treatment group. Although we do not know whether the firms contributed with money or how much they contributed, we do know that the firms' representatives (in the person of the CEO or the owner) expressed public appreciation for Berlusconi's entry into politics.

The second source of information is the names of contributors at the Senate who were either presidents or CEOs of firms (there is no equivalent for the Chamber of Deputies because at those times the internal rules imposed a public registry of contributions only in the Senate) in the 1994 elections. This list is short and mostly overlaps with the 41 elected politicians in Berlusconi's party in Parliament (presumably, following an Italian tacit rule, they contributed immediately before being elected). In fact, as a result of Berlusconi's initiative, many entrepreneurs entered into politics for the first time (Coviello and Gagliarducci (2017)). Therefore, we include their firms in the list of treated firms on the reasonable assumption that the firms supported Berlusconi attempt. At the end of this process, joining the two sources, we select a treatment group of 101 firms who supported Berlusconi in 1994.

Data on the firms' performance are obtained from the Company Accounts Data Service (*Centrale dei Bilanci*), which provides detailed information on a large number of balance-sheet items since the early 1980s, together with a full description of the firms' characteristics (such as location, age, sector), plus other variables of economic interest usually not included in balance sheets, such as employment and flow of funds. Company accounts are collected for more than 30,000 firms per year by the Service, which was established jointly by the Bank of Italy, the Italian Banking Association and a pool of leading banks to gather and share information on borrowers. Because banks rely heavily on these data when granting and pricing loans, they are subject to extensive quality controls by a pool of professionals.

Table 1 displays the basic descriptive statistics of the main variables that we consider for our empirical analysis. The table reports the values of the firms supporting *Forza Italia* and also the values of the entire sample for the period 1984–2011. Clearly, supporters are larger and older than the average firm in the population. As we describe in detail later on, we will apply a matching technique to select an appropriate sample of controls.

4. Estimating framework and identification

In this section, we illustrate the estimating framework and we also discuss identification.

4.1. Estimating framework

Our estimates are based on a difference-in-difference framework. We first consider the following equation:

$$\ln y_{it} = \alpha_0 + \alpha_1 D_t \times Berlusconi_i + T_t + F_i + \epsilon_{it} \tag{1}$$

where, for firm i and year t, y is an indicator of firm performance, $Berlusconi_i$ is a dummy that takes the value of 1 if the firm i was an early supporter of Berlusconi and is 0 otherwise, $D_t = 1$ if year > 1994, T_t are year fixed effects, F_i are firm fixed effects (hence $Berlusconi_i$ direct effect is absorbed) and ϵ is the error term. The coefficient α_1 quantifies the average effect of supporting Berlusconi during the period 1995–2011. We also estimate an extended difference-in-difference equation including the interaction of the variable Berlusconi with the different year dummies T_t :

$$\ln y_{it} = \alpha_0 + \sum_{\tau=1984}^{\tau=1993} \alpha_{\tau}^{PRE} T_{\tau} \times Berlusconi_i + \sum_{\tau=1995}^{\tau=2011} \alpha_{\tau}^{POST} T_{\tau} \times Berlusconi_i + F_i + \epsilon_{it}$$
(2)

In this way, the significance of the estimates of the coefficients α^{PRE} will show whether there are any anticipatory effects, while the estimates of α^{POST} will provide the temporal dynamics of having supported Berlusconi in 1994.

4.2. Matching

The key challenge for our exercise is to identify a suitable control group, that is, a set of firms whose performance is on average similar to that of the supporters, apart from the effect of the political connection itself. To do so, we do not compare the 101 supporters of Berlusconi to all the firms—more than 60,000—present in the database, which, as seen in Table 1, are on average very different. Instead, we limit the analysis to firms who are most comparable to supporters in

terms of their observable characteristics. More specifically, we use nearest neighbor matching to select those firms in the control group whose characteristics are closest to those of the 101 firms that actually supported Berlusconi. We use the propensity score method running a probit estimation of the probability of supporting Berlusconi in 1994 on "pre-treatment" characteristics. The propensity score is the probability of treatment (i.e. supporting Berlusconi), conditional on pre-treatment characteristics. The idea is to match treated and controls whose ex ante probability of receiving treatment as predicted by their pre-treatment observable characteristics is identical. By pre-treatment, we intend characteristics observed over the period 1990–1993 (for balance sheet variables we take the average).

The use of the matching procedure has the advantage that, because the control and treated firms are similar, the efficiency of the estimates increases with respect to the standard difference-in-difference (Abadie and Imbens, 2006). Table A1 in the Appendix displays the results of our probit estimates. Figure A1 in the Appendix shows the comparison between the distribution of the estimated propensity scores of the treated and the control firms showing an overlap of the distributions.

We choose the explanatory variables of the probit based on geographical location and different accounting variables shown in Table 1: age, total assets, physical capital, labour cost, and leverage. We exclude from our potential regressors the variables which are going to be used as outcome. We obtain estimated propensity scores for all 101 supporters and for about 50,000 controls. On the basis of the estimated propensity score, for each treated firm we search for the control whose propensity score is closest to that of the treated firm (nearest neighbor matching). The final matched sample is constituted of 99 treated and 99 control firms, and all control firms who do not qualify as a

⁸In order to avoid missing values, we do not include pre-treatment outcomes in the definition of the propensity score.

nearest neighbor are discarded from the further analysis.⁹

Matching gives us a better control group and reduces the bias to the extent that it manages to largely remove the pre-treatment differences between the treatment and control group. Table A2 in the Appendix reports the values of the t-test of year-by-year difference of the three main outcome variables (employment, sales and value added) between the treatment and the control group in the pre-treatment period. The F-test reported at the end of the table shows that we cannot reject the test of equality of the variables in treated and control firms over the years 1984–1993. Overall, the table shows that there are no significant differences pre-treatment. The absence of pre-trends is an identifying assumption of our strategy and confirms that firms who decided to support Berlusconi in 1994 were not already on a different trend before 1994 relative to controls.

5. Results

5.1. OLS estimates

Table 3 reports the results for the OLS estimates of equation (1).¹⁰ The estimates indicate a positive and significant effect of supporting Berlusconi for (the natural logarithm of) labour, sales and value added. Early supporters of Berlusconi in 1994 have, on average, a between 35% and 54% better performance than the control group of firms in terms of employment, value added and sales. The OLS results are also positively significant for sales per worker but this result is confirmed only in the period 2001–2005 (see Table 4 below) and it is

 $^{^9}$ Based on the estimated propensity score, we use nearest-neighbor matching (without replacement) to combine treated and control observations. We impose a caliper (i.e. radius) of 0.05 (i.e. treated firms that have no comparison unit and whose estimated propensity score is within 0.05 of their own estimated propensity score are dropped to avoid bad matches), consequently we lose 2 of the 101 treated firms.

¹⁰Table 3 reports robust standard error. Although we think that heteroskedasticity is based at firm level, as a robustness check, we provide the OLS regression estimates clustered by 45 provinces in Table A3 in the Appendix; they show very similar levels of significance.

not confirmed by the IV estimates (see Table 5 below). Moreover, the effect is zero for the other measure of productivity (value added per worker). We therefore conclude that supporting Berlusconi had a positive effect on firms' employment growth, value added and sales, while the evidence is mixed for the effect on productivity.

Over the time span covered by our data, Berlusconi had some spells in office as prime minister and others as leader of the opposition. Specifically, Berlusconi was prime minister in the periods 1994–1995, 2001–2005, and 2008–2012 and was leader of the opposition in 1996–2000 and 2006–2007. An interesting question is to what extent the effect of being a supporter changes between periods in which Berlusconi was prime minister and those in which he was not. Table 4 estimates the model separating between the different phases of Berlusconi political leadership. We find no effect in the first year in which Berlusconi was in power. For the other periods, we always find a significant effect on employment, sales and value added, and similar across periods in which Berlusconi was in power and at the opposition. Both the lack of effects in the first year and the fact that they are not different in periods in which Berlusconi was in office or not could be due to a variety of reasons. First, in contrast from the forward-looking, stock market-based performance measures used, for example by Ferguson and Voth (2008), political connections take time to show up in our accounting-based measures of performance. Second, even when not in office, Berlusconi was still the head of the opposition and was a natural prospective candidate in the next elections (which he always won after a period in opposition). Finally, even when not in power as prime minister, his party was still in power in many local administrations. For example, Forza Italia governed continuously from 1995 the important region of Lombardy, that accounts for 22% of national GDP. These results indicate that, at least in a system like Italy, where politicians have long political careers and are in and out of office recurrently, being connected to a powerful politician can be beneficial, even when he or she is not directly in office. Yet another possibility is that part of the gain comes from access to Berlusconi's advertising network, which is indendent from being in office. We come back to this possibility later.

Figure 1 reports the estimated coefficients and the 5% confidence intervals of the treatment indicator in equation (2), that is, separately for each year. This allows us to assess the time evolution of the treatment effect. It shows that the difference between treated and control firms grows after 1994 and stabilizes around 2000 for employment, sales and value added. The growing difference in sales, value added and employment between treatment and control firms proceeds in similar fashion for all three variables, so that the result is a flat profile of productivity measures. There are only two years where the sales per workers estimates are marginally significant.

Table 1: Descriptive Statistics

	Entir	e Sample	Berluscon	ui's supporters	
	Mean	Std. Dev.	Mean	Std. Dev.	
Sales	18,644	162,635	527,223	1,792,472	
Employees	78	906	1,437	6,914	
$Value\ Added$	4,212	$77,\!420$	85,384	297,928	
Firm age in 1993	17.62	14.03	28.26	24.60	
$Total\ Assets$	19,580	444,751	371,598	1,256,973	
Physical Capital	5,711	271,166	67,692	286,671	
Labour Costs	2,535	34,997	$53,\!265$	$220,\!585$	
Leverage	37.53	1,152.98	24.63	19.72	
North	0.67	0.47	0.71	0.45	
Center	0.19	0.39	0.19	0.40	
South	0.08	0.28	0.08	0.27	
Islands	0.05	0.22	0.01	0.11	
Agriculture	0.01	0.09	0.00	0.00	
Mining (energy)	0.00	0.02	0.00	0.00	
Mining (non-energy)	0.01	0.08	0.00	0.00	
Construction	0.08	0.28	0.01	0.10	
Utilities	0.00	0.06	0.00	0.00	
Manufacturing	0.51	0.50	0.76	0.43	
Business Services	0.21	0.41	0.08	0.27	
Other services	0.18	0.38	0.15	0.36	
N. of firms	65	2,848	101		
N. of observations	1,0	01,250	6	2,229	

Notes: Descriptive statistics computed from the *Centrale dei Bilanci* Dataset. Sales, value added, total assets, physical capital and labour costs are expressed in nominal euros.

Table 2: Matched Sample of Treated and Controls

	$Matched\ B$	erlusconi's supporters	Matcheo	d Controls		
	Mean	Std. Dev.	Mean	Std. Dev.		
Sales	507,538	1,803,854	476,848	1,502,103		
Employees	1,380	6,963	917	1,996		
$Value\ Added$	79,189	296,272	90,946	283,663		
Firm age in 1993	28.58	24.73	31.51	26.45		
$Total\ Assets$	359,802	1,264,205	502,734	1,670,375		
Physical capital	65,534	288,453	170,734	902,012		
Labour Costs	50,902	221,877	39,116	85,696		
Leverage	24.80	19.83	27.33	36.96		
North	0.72	0.45	0.77	0.42		
Center	0.19	0.39	0.15	0.36		
South	0.08	0.27	0.07	0.25		
Islands	0.01	0.11	0.01	0.11		
Manufacturing	0.76	0.43	0.70	0.46		
Construction	0.01	0.10	0.01	0.08		
Business Services	0.08	0.28	0.17	0.38		
Other Services	0.14	0.35	0.12	0.33		
N. of firms		99		99		
N. of observations		2,186		886		

Notes: Descriptive statistics computed from the *Centrale dei Bilanci* Dataset. Sales, value added, total assets, physical capital and labor costs are expressed in euros.

Table 3: Effect on Firms' Performance: OLS Regressions

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
$D_t \times Berlusconi$	0.42***	0.54***	0.35***	0.12**	-0.03
	(0.05)	(0.07)	(0.05)	(0.05)	(0.04)
Adjusted \mathbb{R}^2	0.85	0.76	0.83	0.61	0.47
N. of observations	4,072	4,072	3,985	4,072	3,985

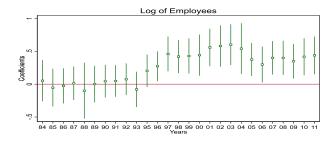
Firm and year fixed effects included in all regressions. Robust standard errors. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

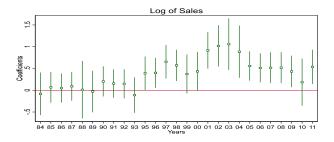
Table 4: Effect on Firms' Performance: Electoral Cycles. OLS Regressions.

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
$I(1994-1995) \times Berlusconi$	0.07	0.10	-0.04	0.03	-0.07
	(0.07)	(0.11)	(0.07)	(0.07)	(0.05)
$I(1996-2000) \times Berlusconi$	0.40***	0.42***	0.32***	0.02	-0.02
	(0.06)	(0.09)	(0.05)	(0.07)	(0.04)
$I(2001-2005) \times Berlusconi$	0.51***	0.81***	0.55***	0.30***	0.07
	(0.07)	(0.11)	(0.08)	(0.09)	(0.07)
$I(2006-2007) \times Berlusconi$	0.32***	0.43***	0.31***	0.11	0.01
	(0.08)	(0.09)	(0.08)	(0.07)	(0.06)
$I(2008-2011) \times Berlusconi$	0.37***	0.33***	0.23**	-0.04	-0.13
	(0.06)	(0.10)	(0.09)	(0.09)	(0.08)
Adjusted \mathbb{R}^2	0.85	0.77	0.83	0.61	0.47
N. of observations	4,072	4,072	3,985	4,072	3,985

Firm fixed effects included in all regressions. Robust standard errors. I(.) indicates a dummy for the period in parentheses. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

Figure 1: Year-by-year coefficients of the treatment indicator with 5% confidence interval. First part





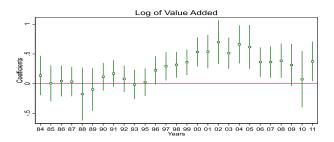
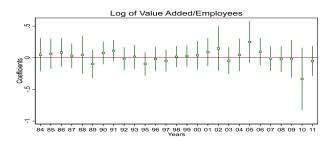


Figure 1: Year-by-year coefficients of the treatment indicator with 5% confidence interval. Second part





In terms of pre-trend, none of the coefficients is significant in the pretreatment period and no significant trend emerges: treatment and control firms were evolving the same way. The fact that there are no pre-existing trends lends support to our causal interpretation of the effects of supporting Berlusconi on firm performance.

5.2. IV estimates

The OLS results are based on the assumption of the conditional orthogonality (conditional on the matching procedure) between the decision to support Berlusconi and the error term in equation 1. Our matching procedure is based on observable firm characteristics and therefore we cannot exclude that some unobservables (to the econometrician) affect both firm performance and the decision to support Berlusconi. For example, the managerial ability of the firm's director may be a driver of both the choice to support Berlusconi and the firm's success: better entrepreneurs might have a better vision of the evolution of the economic and political landscape, which could have induced them both to become supporters and to make better decisions for their firm's growth. The absence of differences in pre-trends speaks against this hypothesis, but cannot completely rule it out.

To tackle this issue, we instrument the decision to support Berlusconi with political orientations at the local level. We use the percentage of votes obtained by the so-called *Blocchi Nazionali* (National Blocks), which was an electoral coalition formed by the liberal and the fascist movement during the elections of 1921, the last democratic elections before the fascist period (1923–1943). We obtain data on the results of the 1921 Italian elections by province from Corbetta and Piretti (2009), which report the electoral results of all Italian elections for the 1861–2008 period.¹¹

¹¹Note that, in contrast to Ferguson and Voth (2008), who consider the vote for the Communist party as instrument for support of the Nazi party in 1933 during the elections that paved the way to Hitler's power, our instrument is the election results several decades earlier.

The 1921 elections—per se—are relevant for historical reasons. In the early-1920s, Italy was going through an extremely turbulent social and political phase, which it inherited from World War I. Peace treaties among European countries generated new international tensions and political instability. In particular, the Italian government faced an increasing level of poverty, especially among war veterans and manual workers. Meanwhile, the 1917 Russian Revolution spread revolutionary ideas in Italian cities and in the countryside, especially via the Italian Socialist and Communist party (see, e.g., De Felice (1967) and Dombroski (2006)). Against this background, in 1921 Giovanni Giolitti, Italian Prime Minister and leader of *Partito Liberale Italiano* (Italian Liberal Party), proposed an electoral alliance to Benito Mussolini, the leader of the *Partito* Nazionale Fascista (National Fascist Party). According to one of the most renown experts of the history of fascism in Italy, the historian Renzo De Felice, despite completely different political views, Giolitti and Mussolini agreed on a camouflage operation to share their electorates and defeat the Bolsheviks of the socialist block with a "middle-class revolution." In this operation, the Blocchi Nazionali also appealed to the Catholics, who had previously voted the Partito Popolare Italiano (Italian People's Party) and who feared the antireligion agenda of the socialist block (De Felice, 1967).

Formally, we instrument the variable Berlusconi of equation (1) with BN_p , that is, the percentage of votes obtained by the $Blocchi\ Nazionali$ in 1921 in province p where firm i is based today:¹²

$$\ln y_{it} = \alpha_0 + \alpha_1 \widehat{SB}_{it} + T_t + F_i + \epsilon_{it}$$

$$SB_{it} = D_t \times Berlusconi_i = \beta_0 + \beta_1 D_t \times BN_p + T_t + F_i + \nu_{it}$$
(3)

There are several reasons for choosing the 1921 election results instead of more recent results. First, the exclusion restriction is less likely to hold for electoral outcomes after World War II. In fact, local development policies where

¹²In these regressions we use a slightly smaller sample since the National Block did not participate in 5 provinces in Italy.

heavily influenced by the local electoral appeal of the two main parties, that is, the Christian Democrats and the Italian Communist Party (Galli and Prandi, 2014). In addition, the Marshall Plan of the post-war years had the explicit goal of reducing the appeal of the Communist Party by fostering local growth, particularly in areas where the communist ideas were more popular. Furthermore, as Giorcelli (2019) shows, these programs had a strong impact on firms' performance. Second, the 1921 elections are also appealing in terms of the power of the instrument. As shown by sociologists and electoral analysts (Diamanti and Mannheimer, 1994), the votes of the Christian Democrats and of the Communist Party pre-1994 do not explain the propensity to vote for Forza Italia, which indicates that 1994 represented a structural break in Italian political history. ¹³ Instead, there are some striking similarities between the 1921 and 1994 elections. First, Berlusconi explicitly stated in his candidacy speech that he would run to "save the country I love from the communists". Second, as for the Blocchi Nazionali, who had a liberal and fascist component, Berlusconi's coalition too rested on two parties: Berlusconi' Forza Italia, who appealed to the moderate voters, and Gianfranco Fini's Movimento Sociale, the heir of the Fascist party. Moreover, to signal a fresh start after the corruption scandals, the Christian Democrats adopted the name of *Partito Popolare* as an explicit homage to the 1920s Catholic party. However, the party's leaders came from the ranks of the Christian Democrats and their political appeal was low, so that a large part of Catholic voters were up for grabs. In addition, as in 1921, the anti-communist rhetoric of Berlusconi was particularly appealing to the more conservative ones.

The use of voting results in elections far in the past as an instrument for today's political preferences is supported by evidence presented by political scientists (e.g. Beck and Jennings (1991) and Jennings et al. (1997)), who document the long-run intergenerational transmission of political values, especially

¹³Indeed, in the political debate, the phase that starts with the 1994 elections is commonly referred to as "Seconda Repubblica" (Second Republic).

for right-wing parties.¹⁴ These results have also been confirmed by the recent study of Cantoni et al. (2017), who found that the vote for the German party *Allianz für Deutschland* (Alliance for Germany) today is strongly correlated with the historical support of the Nazi party in the mid-1930s. In fact, the F-test of our first stage regression in Table 5 confirms the high correlation between the firms' decision to support Berlusconi and the percentage of votes for the *Blocchi Nazionali* in 1921 in the province where the firm is located.

The validity of the exclusion restriction is based on the fact that the vote at the provincial level in 1921 is unlikely to be correlated with the performance of firms in recent periods. Firm fixed effects control for time-invariant firm characteristics that may influence their performance and year fixed effects control for macroeconomic effects common to all firms. To provide some evidence in favor of our assumption that the instrument is uncorrelated with the error term in equation 1, we regress the percentage of votes for the *Blocco Nazionale* in province p in 1921 on the net firm entry rate in 2009 in the same province: the result is an insignificant -0.03.¹⁵

We report the IV estimates in Table 5, where, given the number of years and firms in our dataset, we correct the heteroschedasticity of the standard errors following the procedure introduced by Stock and Watson (2008).¹⁶ The results confirm that supporting Berlusconi had a positive effect on employment, value added and sales relative to the control group. The IV estimates are between two and three times higher than the OLS estimates. One possible explanation for the increase in the coefficient is measurement error in the supporter dummy. In the process of identifying supporters, we were very careful in making sure to avoid false positive, that is, the inclusion among the supporters of firms that in reality

¹⁴These assumptions are also related to the work of Giuliano and Nunn (2017) in which cultural traits and behaviors have long-run roots and resurface in specific circumstances.

¹⁵The data on entrepreneurial activity at province level is taken from the website of the Italian Chamber of Commerce Association, https://www.infocamere.it/en/movimprese.

 $^{^{16}}$ The first stage regression of the IV, based on a probit, provides a coefficient for the Blocchi Nazionali equal to 0.02 with a standard error equal to 0.00.

were not supporter. Consequently, we cannot exclude that some control firms were actually supporters, that is, we cannot fully rule out some false negative. A more structural interpretation is that, if anything, unobserved heterogeneity determining the decision to support Berlusconi is negatively correlated with the firm's growth prospects. This could be due to the fact that some supporters had grim prospects and took the risky bet of supporting Berlusconi to "gamble for resurrection". As before, the evidence on productivity is mixed: while the effect is not statistically significant for sales per worker, it is significant (at 5%) for value added per worker.

Table 5: Effect on Firms' Performance: IV Regressions

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
$D_t \times Berlusconi$	0.57*	1.12*	1.43***	0.55	0.87**
	(0.31)	(0.65)	(0.42)	(0.54)	(0.37)
F-test			64.91		
N. of observations	3,627	3,627	3,561	3,627	3,561

Firm and year fixed effects included in all regressions. Heteroschedasticity-robust standard errors following Stock and Watson (2008). Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

The effects estimated separately year-by-year (see appendix Table A4) confirm that the difference between the treatment and the control group is only significant after 1994 (with two exceptions for employment, where we get significant effect at 10% in 1988 and 1991). The estimates are almost never significant for the productivity measures. Overall, the IV estimates confirm and reinforce the OLS estimates.¹⁷

 $^{^{17}}$ The larger estimates related to the IV may suggest a selection bias in the treatment. However, the propensity score analysis in the Appendix rules out this hypothesis.

6. Mechanisms

Having established the results, we will now try to shed light on the possible mechanisms that drive them. We test multiple mechanisms with a common empirical strategy: we interact the indicator of the decision to support Berlusconi with an industry-level index that measures the importance of the mechanism for each sector. Suppose that the mechanism operates through the advertising industry, that is, supporters are more likely to get a better price for or a better access to advertisement on Berlusconi's newspapers and TVs (the key advertising channels at those times). If this is the case, then we should find that the difference between treated and control firms is higher in sectors in which advertisement is on average a larger share of firms budget.

Formally, we estimate the following equation:

$$\ln y_{it} = \alpha_0 + \alpha_1 D_t \times Berlusconi_i + \alpha_3 D_t \times M_j + \alpha_4 D_t \times M_j \times Berlusconi_i + T_t + F_i + \epsilon_{it}$$
(4)

where j is the sector to which firm i belongs and M_j measures the relevance of the particular mechanism for sector j. The coefficient of interest is α_4 : if it is positive, then it implies that supporters of Berlusconi did better compared to the control group, the more relevant the specific mechanism for firm performance. In fact, $\partial y_{it}/\partial Berlusconi_i = \alpha_1 D_t + \alpha_4 D_t \times M_j$.

We construct an index of the incidence of advertisement expenditure at the sectoral level using the information on American listed companies from the Compustat Annual Updates in 1993. M_j is the median value of the ratio between advertising expenses (Xad) and value added at the sectoral level (we use two digit sectors). We use US data because, as argued by Rajan and Zingales (1998) (in their case for dependence from external finance), it is important that the measure of incidence of advertising expenses captures some intrinsic sectoral aspect and is exogenous with respect to the country characteristics. In particular, a measure of advertising intensity based on Italian firms expenses would depend from the connections to Berlusconi themselves, making it endogenous. The identifying assumption is that the incidence of advertising expenditure in

US sectors is a good proxy for that in the same sectors of the Italian economy.

The results are reported in the first panel of Table 6. Supporters of Berlusconi in sectors where advertising is a large share of total value added did better than control firms in terms of sales (more than double) and in terms of sales relative to employment. This is a plausible result given that Berlusconi in the hurry of the building of the new party in 1994 looked for the first supporters among the clients of his advertising company Publitalia. Actually many of the candidates of Forza Italia in 1994 came from the Publitalia and certainly party organizers used the *Publitalia* network to advertise the new party in the whole country. 18 Furthermore, Della Vigna et al. (2016) showed that large sums of money of firms' advertising budgets move from the public television network to Berlusconi's TV network when Forza Italia is in government. The absence of pre-trend rules out the fact that this mechanism was used by Berlusconi for favoring these firms before the creation of Forza Italia. It is plausible that in this situation, firms who had a better access to advertising opportunities in Berlusconi network also had better sales results. We do not find any significant result in value added or employment, arguably because advertising has a direct effect on sales, while that on value added and employment depends on firms reliance on intermediates when facing demand changes.

The other panels in Table 6 show the results of other potential mechanisms. The second mechanism at the sectoral level that may explain the better performance of Berlusconi supporters is if they got better access to credit. The sectoral index of financial dependence is due to Rajan and Zingales (1998): we rank all sectors according to the median value of the exposure calculated across all firms in that sector using *Compustat Annual Updates* in 1993.¹⁹ We find

¹⁸If we restrict the sample of the treated to the list of supporters/politicians, we obtain a very similar results for the triple interaction of the mechanism, suggesting an effective role of advertisement.

 $^{^{19}}$ More precisely, following Philippon and Gutierrez (2017), we construct this index as capital expenditure minus cash flow from operations divided by capital expenditures: $\frac{capx - (fopt + recch + invch + apalch)}{capx}$ if the cash flow statement are in form 1, 2 or 3, and

Table 6: Effect on Firms' Performance: Channels

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
		Panel A	: Advertisin		(14001)
$D_t \times Berlusconi$	0.23	-0.24	0.45***	-0.47*	0.14
	(0.16)	(0.32)	(0.16)	(0.25)	(0.14)
$D_t \times ADS$	-0.01	-0.81*	0.27*	-0.80**	0.09
	(0.19)	(0.44)	(0.16)	(0.35)	(0.18)
$D_t \times ADS \times Berlusconi$	0.20	1.17**	-0.18	0.97***	-0.17
	(0.21)	(0.47)	(0.23)	(0.37)	(0.21)
Adjusted R^2	0.84	0.75	0.82	0.60	0.44
N. of observations	3,384	3,384	3,303	3,384	3,303
		Panel	B: Credit	Channel	
$D_t \times Berlusconi$	0.95***	0.65***	0.39**	-0.30	-0.49***
	(0.15)	(0.24)	(0.19)	(0.20)	(0.17)
$D_t \times RZ$	0.02	-0.13	0.15	-0.15	0.16
	(0.14)	(0.19)	(0.13)	(0.16)	(0.12)
$D_t \times RZ \times Berlusconi$	0.71***	0.15	0.03	-0.56**	-0.65***
	(0.20)	(0.31)	(0.25)	(0.26)	(0.21)
Adjusted R^2	0.85	0.76	0.83	0.60	0.46
N. of observations	3,996	3,996	3,909	3,996	3,909
	i	Panel C: Pu	blic Procure	ement Chann	el
$D_t \times Berlusconi$	0.44***	0.59***	0.38***	0.15*	-0.08
	(0.07)	(0.10)	(0.08)	(0.08)	(0.07)
$D_t \times Procurement$	-0.01	0.03	0.16**	0.03	0.09
	(0.08)	(0.12)	(0.07)	(0.09)	(0.06)
$D_t \times Procurement \times Berlusconi$	-0.08	-0.16	-0.07	-0.08	0.10
	(0.10)	(0.15)	(0.11)	(0.11)	(0.09)
Adjusted R^2	0.85	0.77	0.83	0.62	0.46
N. of observations	3,874	3,874	3,789	3,874	3,789
		Panel L	: Regulation	n Channel	
$D_t \times Berlusconi$	0.40***	0.44***	0.31***	0.04	-0.08
	(0.06)	(0.09)	(0.07)	(0.07)	(0.05)
$D_t \times Regulation$	-0.09	-0.04	0.12	0.05	0.14**
	(0.09)	(0.14)	(0.08)	(0.09)	(0.06)
$D_t \times Regulation \times Berlusconi$	0.04	0.20	0.02	0.16	0.08
	(0.11)	(0.17)	(0.12)	(0.12)	(0.09)
Adjusted R^2	0.85	0.77	0.83	0.62	0.46
N. of observations	3,874	3,874	3,789	3,874	3,789

Firm and year fixed effects included in all regressions. Robust standard errors. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

some weak evidence for the access to credit channel. In fact, supporters in sectors with higher financial dependence record a higher growth of employment, but not of sales or valued added. As a consequence, these firms underperformed the controls in terms of productivity growth, which implies that capital was not allocated efficiently.²⁰

Another potential mechanism is the link to the Public Administration. Politically connected firms may be favoured by a distorted use of public procurement (see David et al. (2012) for a description of Dick Cheney and Halliburton in Iraq, which is one of the most striking cases in the United States). The link can be legitimate (e.g., knowledge about how to navigate government bureaucracies) or not; in the literature, the references are to greasing the wheel vs. grabbing hands. Public procurement is an important component of demand in some sectors, while it is small or zero in others. We construct a measure of sectoral dependence from the public administration following Cingano and Pinotti (2013). We take the Input-Output table from Italy in 1992 and we build a sectoral index based on the following ratio: $\frac{Sales\ to\ public\ sector}{Total\ sales}$. The results in Panel C of Table 6 supply no support for the public procurement channel.

Finally another mechanism is the favorable regulation enjoyed in consequence of lobbying activity in some sectors (lobbies and congressmen feathering their own nest, Stigler (1971)). A government may implement some specific regulations that favor some firms over others. This is more likely to occur when the regulation is more important for the sector, such as in telecommunications, transportation and utilities. We measure the role played by regulation borrowing the so-called Italian Government Index from Pellegrino and Zingales (2017). This index is constructed as the percentage of news articles on regulation pol-

 $[\]overline{\frac{(capx-ibc+dpc+txdc+esubc+sppiv+fopo)}{capx}}$ if the cash flow statement is 7.

²⁰To further corroborate these result, we have also looked at the effect on the main financial variables at the firm level (results unreported for brevity): financial debt and leverage, bank debt and leverage and the ratio between interest payments and bank debt (a measure of abnormally low interest payments). We find that treated firms tend to have higher financial debt.

icy and government aid and contracts of the total news articles regarding each sector in Italy published by the *Dow Jones*, the *Financial Times*, *Reuters*, and the *Wall Street Journal* during the time interval 1984–2017.²¹ Panel D of Table 6 show no significant results for regulation.

7. Conclusions

The fall of the Berlin wall started an unexpected, peaceful revolution in Italian politics, with the traditional parties that had been in power since the end of World War II swept away by corruption scandals and the former communist party having for the first time the possibility of winning an election. Against this scenario, Berlusconi founded a new political party just three months before the elections, and then went on to win them. The peculiarities of the foundation of the new party (the haste of the moment, the initial request for money and support based on the network of Berlusconi's clients, the organization of the new party structure and the selection of local candidates directed to his pre-existing business network) make this a unique case to study the relationship between early support of a (successful) political party and a firm's subsequent performance.

Early support to Berlusconi was very valuable in the aftermath of the victory of 1994: supporting firms gained in terms of sales and value added with respect to the control group and they also grew larger in terms of the number of employees (by a factor of 50% over the years between 1994 and 2011), but not of productivity. In terms of the mechanisms, we find some support of a financial and an advertising channel, but the results are not as clear cut. Thus, it is unclear whether the effect we have documented originates from preferential treatment from Berlusconi's media companies or from having a "Politician CEO". However, this latter effect seems uneffective.

 $^{^{21}}$ More formally, the authors checked whether the articles have either "Government Contracts" or "Regulation, Government Policy" as topics.

The Italian "experiment" teaches us an important lesson in the current political landscape, where political leaders increasingly share important features with Berlusconi's political experience: supporting a new political party can be very beneficial for firms. This implies that new, charismatic political leaders can obtain financial support from firms, making their quest for political power more likely to succeed. Although decreasing the entry cost in the political arena in itself can be beneficial to society, when this happens through an implicit exchange between firms and politicians it might distort the market mechanisms and, in the long run, decrease the efficiency of the allocation of resources.

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Gains from Early Support of a New Political Party

byMarco Leonardi, Rossella Mossucca, Fabiano Schivardi and Battista Severgnini

 $Appendixes\ for\ online\ publication$

Appendix A1: Additional tables

Table A1: First Stage, Propensity Score Estimation

Berlusconi
-0.002
(0.002)
0.725**
(0.254)
-0.014
(0.011)
0.101***
(0.038)
0.204***
(0.060)
-0.009***
(0.003)
49,623
0.40

Notes: Region and sector fixed effects included. Robust standard errors. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

Table A2: Test of Differences in Means Before 1994 Between Treated and Controls

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$
Treated X 1984	0.18	0.08	0.40
	(0.29)	(0.32)	(0.30)
Treated X 1985	-0.01	0.07	0.13
	(0.27)	(0.28)	(0.30)
Treated X 1986	0.03	0.11	0.16
	(0.27)	(0.28)	(0.27)
Treated X 1987	0.08	0.16	0.20
	(0.26)	(0.28)	(0.27)
Treated X 1988	-0.10	-0.00	-0.08
	(0.30)	(0.40)	(0.33)
Treated X 1989	0.01	-0.03	-0.04
	(0.26)	(0.31)	(0.29)
Treated X 1990	0.11	0.41	0.26
	(0.23)	(0.26)	(0.23)
Treated X 1991	0.13	0.30	0.29
	(0.24)	(0.26)	(0.25)
Treated X 1992	0.11	0.28	0.27
	(0.22)	(0.25)	(0.23)
Treated X 1993	-0.01	0.15	0.13
	(0.23)	(0.24)	(0.25)
R-squared	0.93	0.98	0.97
Observations	1453	1453	1440
$F-Test\ [Treated*I(1984-1993)=0]$	0.14	0.62	0.72
p-value(F)	0.999	0.797	0.706

Notes: Robust standard errors. I(.) indicates a dummy for the period in parentheses. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

Table A3: Effect on Firms' Performance: OLS Regressions

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
$D_t \times Berlusconi$	0.42***	0.54***	0.35***	0.12**	-0.03
	(0.08)	(0.14)	(0.09)	(0.11)	(0.07)
Adjusted \mathbb{R}^2	0.85	0.76	0.83	0.61	0.47
N. of observations	4,072	4,072	3,985	4,072	3,985

Firm and year fixed effects included in all regressions. Standard error clustered by 45 provinces. Significance at the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

Table A4: Effect on Firms' Performance: IV Regressions (Second Part)

Dependent variable:	ln (labor)	ln (sales)	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
Year = 1984	1.20	-0.20	0.74	-1.40	0.73
	(1.32)	(2.23)	(0.95)	(1.87)	(0.76)
Year = 1985	1.58	1.03	0.56	-0.55	0.54
	(1.24)	(2.09)	(0.92)	(1.76)	(0.71)
Year = 1986	1.28	0.53	0.04	-0.74	0.29
	(1.38)	(2.33)	(1.03)	(1.96)	(0.89)
Year = 1987	1.59	0.68	0.49	-0.92	0.47
	(1.33)	(2.24)	(0.91)	(1.88)	(0.74)
Year = 1988	2.64*	1.23	-0.10	-1.41	-0.46
	(1.36)	(2.30)	(1.26)	(1.93)	(1.30)
Year = 1989	1.20	-0.32	-0.22	-1.52	0.03
	(1.35)	(2.28)	(1.15)	(1.91)	(0.85)
Year = 1990	2.10	1.78	0.09	-0.32	0.36
1 007 = 1000	(2.03)	(3.43)	(1.09)	(2.88)	(0.87)
Year = 1991	3.01*	2.84	0.51	-0.17	-0.17
1 cur = 1331	(1.73)	(2.92)	(1.01)	(2.46)	(1.15)
Year = 1992	1.95	1.18	0.80	-0.77	0.65
1 ear = 1992	(1.54)	(2.60)	(0.88)	(2.18)	(0.73)
Year = 1993	1.25	1.88	-0.08	0.63	0.41
$1 \ ear = 1995$					
Year = 1995	(1.55) 0.36	(2.61) -1.93	(1.44)	(2.20)	(1.04)
r ear = 1995	0.00		0.00		0.20
1000	(1.58) 2.31*	(2.66)	(0.94)	(2.24) -1.24	(0.78)
Year = 1996		1.07	1.19		0.12
100	(1.39)	(2.35)	(1.07)	(1.98)	(0.83)
Year = 1997	2.79**	1.29	1.67*	-1.50	0.74
	(1.35)	(2.28)	(0.98)	(1.92)	(0.65)
Year = 1998	3.03**	1.56	1.83*	-1.47	0.75
	(1.42)	(2.40)	(0.99)	(2.02)	(0.69)
Year = 1999	3.05**	1.55	2.30*	-1.50	1.33*
	(1.48)	(2.50)	(1.19)	(2.10)	(0.79)
Year = 2000	1.79	1.33	2.16*	-0.46	1.44
	(1.50)	(2.54)	(1.11)	(2.13)	(0.90)
Year = 2001	2.88*	3.30	2.06*	0.42	1.35
	(1.56)	(2.63)	(1.23)	(2.21)	(0.98)
Year = 2002	1.84	4.15*	3.85*	2.31	3.46
	(1.45)	(2.46)	(2.30)	(2.07)	(2.27)
Year = 2003	2.40*	5.47**	2.34**	3.08*	1.72*
	(1.28)	(2.16)	(1.15)	(1.81)	(0.98)
Year = 2004	1.95	4.57**	2.42*	2.63	2.05*
	(1.30)	(2.19)	(1.24)	(1.84)	(1.14)
Year = 2005	1.92	2.49	3.93*	0.57	3.63
	(1.52)	(2.57)	(2.37)	(2.16)	(2.41)
Year = 2006	1.86	2.17	1.88*	0.31	1.56
	(1.75)	(2.96)	(1.13)	(2.49)	(1.10)
Year = 2007	1.74	2.07	1.49	0.33	1.30
	(1.61)	(2.72)	(1.07)	(2.29)	(0.96)
Year = 2008	1.50	1.73	1.36	0.24	1.23
	(1.57)	(2.65)	(1.18)	(2.23)	(1.01)
Year = 2009	0.96	2.02	1.42	1.07	2.04
	(1.61)	(2.73)	(1.40)	(2.29)	(1.60)
Year = 2010	1.07	-4.57	-6.22	-5.63**	-5.79
	(1.71)	(2.89)	(9.54)	(2.43)	(8.94)
Year = 2011	1.22	2.66	1.51	1.43	1.86
	(1.66)	(2.81)	(1.32)	(2.36)	(1.30)
N. of observations	3,627	3,627	3,561	3,627	3,561

Notes: Firm fixed effects included in all regressions. Year 1994 is omitted. Heteroschedasticity-robust standard

errors following Stock and Watson (2008). Significance at the 90%, 95%, and 99% confidence levels are indicated

by *, **, and ***, respectively. Coefficients indicate the interaction for the treatment effect with each year.

Appendix A2: Analysis of the propensity scores

Figure A1 displays the kernel densities of the propensity scores related to Berlusconi's supporters compared to the non-supporters, showing that the two distributions overlap with an upper tail in the interval with low scores (i.e. lower than 10%).

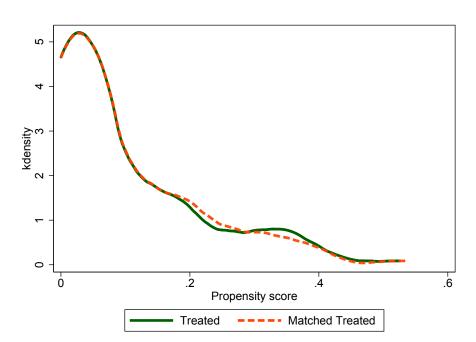


Figure A1: Density of the propensity score of treated and control

Notes: Propensity scores of the treatment and control group estimated on the basis of the results reported in Table A1.

Furthermore, the estimation obtained by the probit can be exploited for studying whether the decision of supporting *Forza Italia* is affected by a selection bias. Consequently, we follow the procedure suggested by Wooldridge (2001), who proposes the estimation of the ATE following equation

$$ln y_i = \gamma_0 + \gamma_1 \widehat{Berlusconi}_i + \gamma_2 \widehat{Berlusconi}_i + e_i$$
(5)

where, for firm i, y is one of the indicators of performance we considered in

Table A5: Testing Selection: OLS

Dependent variable:	$\ln{(labor)}$	$\ln{(sales)}$	$\ln{(va)}$	$\ln\left(\frac{sales}{labor}\right)$	$\ln\left(\frac{va}{labor}\right)$
Berlusconi	-0.05	-0.26*	-0.11	-0.05	-0.28**
	(0.21)	(0.14)	(0.16)	(0.20)	(0.14)
$\widehat{Berlusconi}$	34.44***	28.10***	32.30***	33.65***	27.97***
	(0.68)	(0.47)	(0.53)	(0.64)	(0.46)
Constant	7.95***	2.87***	6.63***	8.01***	2.88***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Adjusted \mathbb{R}^2	0.06	0.08	0.08	0.06	0.08
N. of observations	48,769	46,540	45,969	48,769	46,540

Firm and year fixed effects included in all regressions. Standard error clustered by 45 provinces. Significance at

the 90%, 95%, and 99% confidence levels are indicated by *, **, and ***, respectively.

the main text, \widehat{SB} is the propensity score obtained by A1 and Berlusconi is a dummy that defines whether the firm is a Berlusconi supporter and e_i is the error term. Table A5 reports the estimates based on the average over the period 1991-1993: the level of significance of the coefficient Berlusconi overall suggest that firms do not autoselect into the treatment group.