



NOTA DI LAVORO

58.2010

Social Capital and Political Accountability

By Tommaso Nannicini,
Bocconi University, IGER & IZA
Andrea Stella, Harvard University
Guido Tabellini, Bocconi University,
IGIER, CEPR & CIFAR
Ugo Troiano, Harvard University

GLOBAL CHALLENGES Series

Editor: Gianmarco I.P. Ottaviano

Social Capital and Political Accountability

By Tommaso Nannicini, Bocconi University, IGIER & IZA

Andrea Stella, Harvard University

Guido Tabellini, Bocconi University, IGIER, CEPR & CIFAR

Ugo Troiano, Harvard University

Summary

In this paper, we empirically investigate a channel through which social capital may improve economic wellbeing and the functioning of institutions: political accountability. The main idea is that voters who share norms of generalized morality demand higher standards of behavior on their elected representatives, are more willing to bear the cost of acquiring information, and are more likely to base their vote on criteria of social welfare rather than (narrow) personal interest. We take this conjecture to the data using information on the Italian members of Parliament in the postwar period (1948–2001). The empirical evidence shows that the electoral punishment of political misbehavior is considerably larger in electoral districts with high social capital, where social capital is measured by blood donation, and political misbehavior refers to receiving a request of criminal prosecution or shirking in parliamentary activity. Accordingly, episodes of political misbehavior are less frequent in electoral districts with high social capital.

Keywords: Social Capital, Culture, Political Agency

JEL Classification: D72, D73, Z10

This paper was presented at the international conference on “Economics of Culture, Institutions and Crime”, Milan, 20-22 January 2010. The conference was supported by FP6 Priority 7 “Citizens and governance in a knowledge-based society” Project: Sustainable Development in a Diverse World“(SUS.DIV) (Contract No. CIT3-CT-2005-513438) University of Padua Research Project “Economic analysis of crime and social interactions” (grant CPDA071899) and Fondazione Eni Enrico Mattei (FEEM). It was co-organised by SUS.DIV, FEEM, University of Padua and CEPR.

Financial support by the European Research Council (Grant No. 230088) and by MIUR is gratefully acknowledged. We thank Alberto Bisin and seminar participants at the CEPR/FEEM Conference on “Economics of Culture, Institutions, and Crime,” CIFAR, IGIER-Bocconi, and LSE for helpful comments; Leonardo Borlini for legal advice; Mariaflavia Harari and Lucia Spadaccini for excellent research assistance.

Address for correspondence:

Guido Tabellini

IGIER

Università Bocconi

Via Salasco 5

20136 Milano

Italy

E-mail: guido.tabellini@unibocconi.it

The opinions expressed in this paper do not necessarily reflect the position of

Fondazione Eni Enrico Mattei

Corso Magenta, 63, 20123 Milano (I), web site: www.feem.it, e-mail: working.papers@feem.it

Social Capital and Political Accountability*

Tommaso Nannicini

Bocconi University, IGER & IZA

Andrea Stella

Harvard University

Guido Tabellini

Bocconi University, IGER, CEPR & CIFAR

Ugo Troiano

Harvard University

April 2010

Abstract

In this paper, we empirically investigate a channel through which social capital may improve economic wellbeing and the functioning of institutions: political accountability. The main idea is that voters who share norms of generalized morality demand higher standards of behavior on their elected representatives, are more willing to bear the cost of acquiring information, and are more likely to base their vote on criteria of social welfare rather than (narrow) personal interest. We take this conjecture to the data using information on the Italian members of Parliament in the postwar period (1948–2001). The empirical evidence shows that the electoral punishment of political misbehavior is considerably larger in electoral districts with high social capital, where social capital is measured by blood donation, and political misbehavior refers to receiving a request of criminal prosecution or shirking in parliamentary activity. Accordingly, episodes of political misbehavior are less frequent in electoral districts with high social capital.

JEL codes: D72, D73, Z10.

Keywords: social capital, culture, political agency.

*Financial support by the European Research Council (Grant No. 230088) and by MIUR is gratefully acknowledged. We thank Alberto Bisin and seminar participants at the CEPR/FEEM Conference on “Economics of Culture, Institutions, and Crime,” CIFAR, IGER-Bocconi, and LSE for helpful comments; Leonardo Borlini for legal advice; Mariaflavia Harari and Lucia Spadaccini for excellent research assistance. Address correspondence to: guido.tabellini@unibocconi.it.

Despotism (...) sees in the separation among men the guarantee of its continuance, and it usually makes every effort to keep them separate. (...) A despot easily forgives his subjects for not loving him, provided they do not love one another.

Tocqueville (1840)

In a society of amoral familists there will be few checks on officials, for checking on officials will be the business of other officials only.

Banfield (1958)

1 Introduction

Several political scientists and economists have argued that social capital is an important determinant of economic development and of the functioning of institutions (Banfield 1958, Putnam 1993, 2000, Fukuyama 1995, Guiso, Sapienza, and Zingales 2008, Tabellini 2008, 2009, Algan and Cahuc 2010).¹ But what is the mechanism through which this happens? And what exactly does social capital stand for? Despite a large literature on these topics, these questions remain largely unanswered.

The goal of this paper is to explore empirically one particular channel through which social capital can induce efficient political outcomes. The basic idea is that voters who share cultural traits of generalized trust and respect for others are more likely to hold politicians accountable to high standards of behavior, and are less tolerant of moral hazard or misbehavior by their political representatives. We exploit data on the behavior of Italian voters and political representatives in the postwar period to test these hypotheses.

Italy is ideally suited to ask these questions, because within Italy there are large differences in social capital and other related cultural traits. We compare the average behavior of voters and politicians in different electoral districts. Our main indicator of social capital is average per-capita blood donations in Italian provinces, although the results are robust to alternative measures of social capital. We rely on two indicators of misbehavior of political incumbents in national elections: the first is represented by prosecutors' requests to proceed with criminal investigation against a member of Parliament (*Richiesta di Au-*

¹In particular, social capital—measured in a number of ways, from survey responses on the level of trust to blood donation—has been shown to be positively associated with economic development (Knack and Keefer 1997, Tabellini 2009), financial development (Guiso, Sapienza, and Zingales 2004), indicators of good government (Putnam 1993, La Porta et al. 1997), and work effort (Ichino and Maggi 2000).

torizzazione a Procedere, called RAP from here on); the second is the rate of absenteeism in electronic votes by members of Parliament during a legislative term.

According to both indicators, misbehavior by the incumbent is more frequent in electoral districts with less social capital. More importantly, the electoral punishment of the incumbent's misbehavior is stronger in districts with more social capital. Receiving a RAP for serious crimes reduces individual preference votes in the (open-list) proportional system before 1994 by 25% in districts with above-average social capital, while it has no impact in the others. An increase in the absenteeism rate equal to its standard deviation reduces the probability of being reelected in the same majoritarian (single-member) district after 1994 by 24 percentage points (about 42%) in provinces with above-average social capital, while it has a positive (although insignificant) impact in the others. Our estimates are robust to the use of a number of politician-specific and district-specific control variables (including income, education, and newspapers diffusion in the electoral district), as well as province of election and politician fixed effects in most specifications.

These results are related to the theoretical literature on political agency. Ferejohn (1986), Persson and Tabellini (2000), Alesina and Tabellini (2008), Besley (2006) study theoretical models where rational voters discipline moral hazard or adverse selection by the elected incumbent through retrospective voting. These works suggest two channels through which social capital might affect equilibrium political outcomes. The first channel is *information*. In these models, more informed voters are better able to discipline the incumbent or to select more competent representatives. Higher social capital might increase the willingness of any atomistic individual to bear the cost of gathering and processing information about the behavior of his political representative.² The second channel is *cooperation* amongst voters. Suppose that the political incumbent engaging in moral hazard can also provide targeted redistribution to specific groups of voters. Then Ferejohn (1986) and Persson and Tabellini (2000) show that the disciplining effect of elections breaks down, because each group finds it optimal to vote on the basis of a group-specific measure of wellbeing. To discipline the incumbent, voters must vote retrospectively and according to a criterion of aggregate (rather than group-specific) social welfare. But doing so requires some implicit cooperation between voters. Intuitively, voters must refrain from rewarding a corrupt or lazy politician despite receiving some targeted or clientelistic ben-

²Indeed, Alesina and Giuliano (2009) show that the more individuals rely on the family as a provider of services, insurance, transfer of resources, the lower civic engagement and political participation are.

efits from him, and this is not incentive compatible in a Nash equilibrium where different social groups do not cooperate.³ Social capital might make cooperation sustainable and induce individuals to vote according to aggregate social welfare criteria.

In our data, even if we control for voters' information, as measured by the district-specific readership of non-sport newspapers, the impact of social capital on the diffusion of political misbehaviors and their electoral punishment remains significant both in statistical and economic terms. One interpretation of this finding is that voters endowed with higher social capital are more willing to punish a corrupt incumbent, despite receiving clientelistic transfers, because they implicitly cooperate to vote according to aggregate (as opposed to group or district specific) welfare criteria. An alternative but not very different interpretation is that high social capital is associated with an intrinsic reluctance to reappoint in office a politician who misbehaved, irrespective of the clientelistic benefits that he brought to the district, because this would violate a deeply held code of conduct. As a result of such voting rules, political incumbents are discouraged from misbehaving where social capital is high.

A few empirical studies have asked whether voters punish political corruption or other misbehaviors by their elected representatives.⁴ Peters and Welch (1980) first tackled this issue by evaluating the impact of corruption charges on the reelection prospects of the US Representatives in the elections from 1968 to 1978. Their study finds that voters do indeed punish corrupt politicians, although corruption charges represent only one of the many factors concerning voters when casting their vote. Welch and Hibbing (1997) reach a similar conclusion, finding that corruption charges rarely cause incumbent US Representatives to resign, retire, or lose in primaries, although they often make politicians lose votes and occasionally elections. For Brazil, Ferraz and Finan (2008) exploit (random) audit reports on municipal governments and show that corruption disclosure is punished

³Alesina and Tabellini (2008) obtain similar results in a political agency model with adverse selection.

⁴Several theories have been advanced to understand why voters would support corrupt politicians. Rundquist, Strom, and Peters (1977), for instance, provide two explanations: the first relies on imperfect information and claims that voters are not able to discriminate between honest and dishonest politicians; the second assumes an explicit or implicit trade-off between ideology and corruption on the part of voters. Myerson (1993) emphasizes the same trade-off when comparing electoral systems, and claims that it is harsher under majoritarian elections because entry barriers are higher. A third explanation is instead provided by Peters and Welch (1980): corruption may be seen as a necessary evil, since it is functional to a smooth functioning of the State organization. A final explanation may be that there is some sort of collusion between politicians and voters, or a subset of them, as it would be the case with the clientelistic or divide-and-rule strategy of the Ferejohn's (1986) model discussed above.

by voters in terms of decreased reelection probability. They also show that this punishment is more pronounced in municipalities with radio stations.

A contribution closely related to ours is represented by Chang, Golden, and Hill (2010), who study the first eleven legislative terms of the Italian Republic from 1948 to 1994. They assess the impact of receiving a RAP on the probability of being reelected in the subsequent term, and find that being investigated for a potentially serious crime slightly decreases the probability of reelection, approximately by the same degree found by Peters and Welch (1980) for the US. Looking at the legislative terms separately, however, they find that corruption charges affect the reelection prospects of Italian Representatives only in the last term, that is, in the XI legislature (1992–94), characterized by major judicial scandals that involved one third of the members of Parliament and a breakdown of the party system that made the major political parties of the postwar period disappear. According to their interpretation, the reaction of voters was particularly strong in the 1990s because of the exceptional dissemination of relevant information by the mass media in this period.

Gagliarducci, Nannicini, and Naticchioni (2008) also closely relate to our study. They show that political rent-seeking, measured as the absenteeism rate of members of Parliament, which is in turn correlated with their outside income, is more pronounced for politicians elected in the majoritarian system as opposed to politicians elected under (closed-list) proportional representation. These previous results are consistent with ours. These papers estimate the average effect of political misbehavior on election outcomes, however, and did not ask whether the election outcomes differ by electoral districts based on social capital, information, or other observable voters' features.

The outline of the paper is as follows. Section 2 describes the data. Section 3 presents the empirical results on how social capital influences political misbehavior. Section 4 discusses how social capital influences election outcomes. Section 5 concludes.

2 The Data

Because Italian political institutions have changed in the postwar period, we use two samples and different measures of electoral outcomes and misbehavior in the two samples. In both samples, we have an unbalanced panel where the units of analysis are members of Parliament, and the period refers to legislative terms. As explained below, however, some variables refer to the electoral district where the incumbent stands for reelection.

Table 1 summarizes the two samples. The first one refers to the legislatures elected between 1948 (the first parliamentary election of the Italian Republic) and 1987, thus legislatures I–X included. During this period, also known as *First Republic*, the electoral system for the Parliament was proportional representation with open party lists (i.e. the possibility of casting preference votes on individual candidates). After dropping observations with missing values, we end up with a sample of 5,849 representatives in the First Republic. The source is Chang, Golden, and Hill (2010). The data only refer to the House of Representatives (therefore excluding the Senate).⁵ In this sample, we measure political outcomes by the difference in preference votes received by the incumbent between two consecutive elections (expressed in logs). Clearly, this variable is only available for incumbents who stood for reelection. In the First Republic, preference votes were important not only because they ordered candidates within each party list and thus determined election outcomes, but also because they measured each candidate’s political influence and were used to allocate party resources and appointments. On average, politicians in the South collected more preference votes, even after controlling for district magnitude. Indeed, the number of personal votes normalized by the total number of representatives elected in the district was about 1,227 in the North, 1,605 in the Center, and 2,211 in the South (all differences are significant at the 1% level).

Throughout this period, elected representatives enjoyed immunity from criminal prosecution. Immunity could be waved by a vote of Parliament, at the request of the prosecutor. The prosecutor’s request to continue with its criminal investigation (RAP) was public knowledge, it typically received a lot of attention from the media, and it was always brought to Parliament for a final vote on the issue.⁶ Our measure of misbehavior in this sample consists of a dummy variable equal to one if the incumbent representative received a RAP in the outgoing legislative term, and zero otherwise.⁷ The source for this variable is again the dataset by Chang, Golden, and Hill (2010). Not all alleged criminal offenses brought against elected representatives were actually very serious, though. For instance,

⁵The XI legislative term (1992–1994) marks the transition to the so-called *Second Republic*, following judicial scandals that destroyed major political parties and led to the adoption of a mixed electoral system in 1993. This term is excluded from the analysis, because members of Parliament elected in 1992 (eventually) stood for reelection under a different electoral system, and also because it clearly represents an outlier in the history of the Italian First Republic.

⁶Parliamentary immunity and the RAP procedure were abrogated in 1993 by the XI legislature.

⁷Many representatives actually received more than one RAP, but the results reported below are robust to replacing the dummy variable with the actual number of RAP’s received.

some RAP's refer to crimes such as the promotion of meetings in public places without prior notice, the publication or spreading of false news, or road-traffic offenses. For this reason, we also coded a dummy variable that refers only to the more serious crimes (*serious* RAP), namely corruption, private interest in official duties, racketeering organization, fraud, and violence (including murder).⁸

By definition, a RAP is an allegation of malfeasance, rather than a conviction, and as such it could also capture judicial zeal and prejudice. As noted by Chang, Golden, and Hill (2010), however, at the province level there exists a strong correlation between charged corruption (as measured by the fraction of representatives receiving a RAP) and a more objective measure of corruption based on the extent of missing infrastructures in public works in the 1990s.⁹ Furthermore, it should be noted that members of Parliament could receive a RAP from any Italian tribunal and the political or cultural attitudes of local judges are not necessarily correlated with the probability of being charged. In the whole sample, we observe that politicians belonging to the opposition parties were more likely to be charged until the 1970s, while politicians in the government coalition were more likely to be charged afterwards.¹⁰ In our empirical analysis, we always control for the partisan identity of politicians in examining the political impact of malfeasance charges.

Table 2 shows that 24% of the representatives in our sample received at least one RAP, half of them (12% of the sample) for serious crimes. Figures 1 and 2 show the distribution of the two measures across areas (North, Center, and South). Representatives elected in Southern districts are more likely to receive both types of criminal prosecutions, and these regional differences are statistically significant.¹¹

The second sample refers to legislatures XII and XIII in the Second Republic, corresponding to the period 1994–2001. Following the 1993 electoral reform, this second sample has a mixed electoral system: about 75% of both the House of Representative and the Senate were elected in single-member districts under plurality rule. The remaining 25% was

⁸In Appendix II, we give details on the offenses included in both measures.

⁹See Golden and Picci (2005) on how this objective measure of corruption is built.

¹⁰Throughout the sample period of the First Republic, the government coalition was formed by the Christian Democrats (DC, the biggest Italian party), its minor centrist allies, and, eventually, the Italian Socialist Party (PSI). The opposition parties were the Italian Communist Party (PCI, the second biggest Italian party) on the left and the post-fascist party (MSI) on the right.

¹¹The regional differences in the probability of receiving a RAP are always statistically significant at the 1% level. The difference in the probability of receiving a serious RAP between the North and the South is also significant at the 1% level, while the differences between the Center and the other two areas are significant at the 5% level.

elected under proportional representation with closed party lists (i.e., without preference votes) for the House, and under proportional representation selecting the best losers in the single-member districts for the Senate. Since we expect accountability to be stronger under plurality rule, in the baseline estimations, we restrict our attention to incumbents that stand for reelection in single-member districts.¹² We also exclude the XIV legislature (2001-2006), because in 2005 there was yet another electoral reform reintroducing proportional representation. As a robustness check, however, we also look at the members of Parliament elected in the proportional tier of the mixed-member electoral system: 595 observations over the terms XII, XIII, and XIV (because proportional politicians could be reelected in the same system/district also in the XV term).

We thus measure political outcomes in this second sample as a dummy variable that equals one if the incumbent is reelected in the *same electoral district*, and zero otherwise. We comment below on the robustness of the results if the dummy variable is redefined as equal to one if the incumbent is reelected, irrespective of whether in the same or in another district. Table 3 shows that 50% of members of Parliament were reelected, 32% in the same (majoritarian) district. There are no significant differences in reelection patterns across the different areas of Italy (North, Center, and South).

Since parliamentary immunity was dropped in 1993, in the Second Republic we measure political misbehavior by absenteeism, defined as the percentage of votes missed in the outgoing legislature without a legitimate reason. The source for this variable is the dataset used by Gagliarducci, Nannicini, and Naticchioni (2008). Absenteeism is clearly a less important form of misbehavior, compared to being accused of criminal offenses. It is also less widely publicized. Nevertheless, it is still a breach of the implicit contract between the representative and his voters, and it corresponds closely to the theoretical constructs of the political agency literature on moral hazard. Gagliarducci, Nannicini, and Naticchioni (2010) show that absenteeism is positively associated with the amount of outside income by members of Parliament, therefore capturing shirking or rent-seeking. As shown in Table 3, the average absenteeism rate is about 34%. Figure 3 displays its distribution in the North, Center, and South of Italy. The average absenteeism rate in the North (36%) is different from the average rate in the Center (32%) and in the South (39%) only at the 10%

¹²Persson and Tabellini (2000) study a theoretical model based on career concerns, which predicts accountability to be stronger under plurality rule than under closed-list proportional representation. Persson, Tabellini, and Trebbi (2003) in cross-country data and Gagliarducci, Nannicini, and Naticchioni (2008) in the data set of Italian politicians we also use show that this is confirmed by the empirical evidence.

significance level, while the difference between the Center and the South is statistically significant at the 1% level.

For both samples, we also observe several features of political incumbents. We report them in Table 2 and Table 3 for the earlier and later sample, respectively. These observed characteristics can be grouped in two broad categories. First, we observe some individual features, such as gender, age, marital status, education, and pre-election occupation. Over 90% of incumbents are male, their average age is about 50 (a bit younger in the earlier sample, and a bit older in the latter sample), and most of them have college education (63% in the earlier sample, 70% in the later one). Second, we know the recent political history of each incumbent, and in particular whether they belonged to the majority coalition, whether they had a role in national or local government, or in a parliamentary committee, or in their party, and whether they were freshmen or not. More such variables are available in the second sample than in the first one. Their sources are the datasets mentioned above for the First Republic and Second Republic.

Finally, we also collected data on the district in which the incumbent stands for re-election. In the first sample there are 32 districts, in some cases consisting of a single province, in others of several provinces. In the second sample there are 475 single-member districts in the House and 230 in the Senate.

Following Guiso, Sapienza and Zingales (2004), social capital is measured by per capita blood donations in 1995. For the First Republic, we measure social capital in the electoral district by taking the weighted average of per-capita blood donations in the provinces included in that district. For the Second Republic, we impute to each single-member district the level of per-capita blood donations in the province containing that district. As shown in Figure 4, its distribution in Northern and Southern Italy is starkly different. We can also construct social capital in the province or region of birth of each incumbent, since we know where he/she is born.¹³

As additional control variables at the district level, we also collected data on per-capita income in 2003, and the percentage of the over-19 population with a high school degree in 2003. Their source is the National Statistical Office (ISTAT). As a proxy for voters'

¹³We also collected alternative indicators of social capital, such as generalized trust (the percentage of individuals who think that most people can be trusted, according to the World Value Surveys in 1990-91 and 1995-97); how individuals have voted in the 1946 referendum on the monarchy; the number of sport associations; the percentage of individuals enrolled in sport associations out of the provincial population. Most of the results are robust to the use of these alternative indicators of social capital.

information about politics, we retrieved data on the diffusion of non-sport newspapers in 2001–2002. The source is the dataset collected by Cartocci (2007). All of these data also refer to the province and are aggregated to the district as described above. We have non-missing data for 92 Italian provinces. Table 4 displays summary statistics and correlation coefficients for blood donations, per-capita income, education, and newspapers diffusion at the province level. Clearly, social capital is positively correlated with economic development and voters’ information, although it displays a negative correlation with the level of education attained in the province.

3 Social capital and political misbehavior

This section investigates the link between political misbehavior and social capital. There are at least two ways in which social capital might influence political misbehavior. The first one operates through the social capital “embedded” in the representatives themselves. The behavior of political representatives also reflects their values and preferences. An environment with low social capital might breed political representatives who are more opportunistic and less likely to internalize true social welfare. The second channel operates through voters’ behavior. As argued in the introduction, in an environment with low social capital, voters are less likely to be informed. Moreover, even if informed, voters may be more tolerant of political abuses. As a result, elected representatives face weaker incentives to please the voters, and are selected based on criteria other than honesty and competence. Both mechanisms lead to similar predictions: less social capital is correlated with a worse agency problem and more political abuses. The two channels are hard to disentangle, however, also because voters’ behavior affects the intrinsic qualities of politicians through selection effects.

Motivated by these priors, we estimate a regression where the dependent variable is political misbehavior by political incumbents, and the regressor of interest is social capital. The basic regression we estimate is thus:

$$Y_{ijt} = \delta_t + \tau SC_j + \underline{X}_{ijt}'\beta + \underline{Z}_j'\alpha + \epsilon_{ijt}, \quad (1)$$

where subscript i refers to the politician, j to the area of election, t to the legislature; the dependent variable Y measures either having received a RAP, or absenteeism, both in the current legislature. The variable of interest is social capital in the area of election, SC_j .

Throughout we also control for a set of observable individual features listed in Tables 2 and 3 (the vector X), and of district-specific variables listed in Table 4 (the vector Z). Estimation is by Probit, when the dependent variable is the binary variable RAP, or OLS, when the dependent variable is the rate of absenteeism.¹⁴

Equation (1) is a reduced form, in the sense that, as already noted, the coefficient of interest τ reflects the social capital of both politicians and voters. Moreover, the effect of voters' social capital might operate both directly (it discourages moral hazard by the incumbent) or indirectly, through sorting (incumbents who are more likely to misbehave choose to stand for election in areas with low social capital). In our case, however, self-selection is a component of the effect we want to identify.

To shed more light on the interplay between voters' and politicians' social capital, we exploit the politicians' place of birth (k) and the associated social capital (SC_k). Thus, we estimate alternatively

$$Y_{ijkt} = \gamma_k + \delta_t + \tau SC_j + \underline{X}'_{ijkt}\beta + \underline{Z}'_j\alpha + \epsilon_{ijkt}, \quad (2)$$

to control for the time-invariant characteristics of politicians' place of birth γ_k (including social capital, which is usually assumed to be persistent in time), and

$$Y_{ijkt} = \delta_t + \tau SC_j + \gamma SC_k + \underline{X}'_{ijkt}\beta + \underline{Z}'_j\alpha_1 + \underline{Z}'_k\alpha_2 + \epsilon_{ijkt} \quad (3)$$

in the subsample of *migrants*, namely politicians who stand for election in an area (j) different from that of birth (k), for whom $SC_j \neq SC_k$.¹⁵ This last regression, however, should be interpreted with caution, because migrants are a (very) self-selected subsample, meaning that they are not a random draw from the original population in the province of birth and SC_k could thus be uninformative about their true social capital.

In principle we could also estimate (1) with individual fixed effects, drawing inference from *movers* (as opposed to migrants), that is, individual incumbents running for reelection in different districts at different points in time. In both samples there are too few such individuals, however, and such specification leads to inconclusive results.

¹⁴As the absenteeism rate is bounded between 0 and 1, we also estimated equation (1) with the GLM estimator proposed by Papke and Wooldridge (1996), and all of the results were quantitatively the same (available upon request).

¹⁵As a reference, we also look at the social capital of birth in isolation:

$$Y_{ijkt} = \gamma_j + \delta_t + \gamma SC_k + \underline{X}'_{ijkt}\beta + \underline{Z}'_k\alpha_2 + \epsilon_{ijkt},$$

controlling for the (time-invariant) characteristics of the district of election γ_j .

3.1 Criminal prosecutions

Table 5 reports the estimates when the dependent variable is the binary variable RAP (marginal effects are reported). The upper panel measures RAP by the more comprehensive definition, while the lower panel refers to serious crimes.

The first two columns include social capital in the district of election. Column 1 is the most parsimonious specification, that includes however per capita income and education in the district, as well as dummy variables for five macro-regions (North-West, North-East, Center, South, Islands). Hence the estimated coefficient of interest only reflects variation across districts and within each macro-region. Given the high correlation between social capital and the other district specific variables, and considering that there are only 32 districts, this is already a demanding specification. The estimates reveal that the incidence of both general and serious RAP are significantly lower in districts with more social capital. In particular, according to the baseline specification in column 1, an increase in social capital equal to its standard deviation would reduce the incidence of receiving a RAP by about 16%, and the incidence of a RAP for serious crimes by about 7%. Moving from the lowest level of social capital (recorded in the Southern province of *Caltanissetta*) to the average level would reduce RAP by 20%, and serious RAP by 9%. Moving from the lowest to the highest level of social capital (recorder in the Northern province of *Cremona*) would reduce RAP by 75%, and serious RAP by 35%.

Column 2 adds newspapers circulation in the district as a regressor. Its estimated coefficient is always statistically significant in both panels. The estimated coefficient of social capital shrinks, and remains statistically significant when RAP refers to the general definition (upper panel), but not with regard to serious crimes (lower panel). This suggests that at least part of the effect of social capital in the district of election reflects the channel of information diffusion.

The remaining columns attempt to disentangle the effect of social capital in the district of election versus the region of birth. Column 3 starts by adding to the basic specification a dummy variable for the region of birth.¹⁶ The estimated coefficient in the district of election does not change at all (in the upper panel) or it shrinks a little (in the lower panel), and it remains statistically significant only with regard to general RAP. Overall, this suggests that social capital where elected plays an important role, irrespective of the

¹⁶Unfortunately, the Second Republic sample does not contain information on the province of birth.

region of birth. This inference is reinforced by the remaining three columns. When social capital in the district of election is replaced by social capital in the region of birth, the latter is statistically significant in both panels if fixed effects for the district of election are omitted (column 4), but not if they are included (column 5). Moreover, when both social capital where elected and at birth are included (column 6), restricting the sample to migrants only, the estimated coefficient of social capital remains negative and very large in absolute value, although imprecisely estimated, and it is significant with regard to general RAP; the estimated coefficient of social capital at birth, instead, either has the wrong sign or is very close to zero, and it is never significant.

The effect of social capital on criminal prosecutions thus seems a feature of where the incumbent is elected, and not of where he comes from. Both this and the relevance of newspapers diffusion suggest that the effect captures the behavior of voters, rather than inherited norms of the candidates. Nevertheless, we cannot be sure because we lack information on where the candidate grew up. Moreover, intrinsic features of the candidate might still play a role if more demanding voters' behavior induce sorting by the candidates across districts with different social capital. This is indeed part of the effect of social capital on political misbehavior that we are identifying.

A final concern with the above estimations is that social capital discourages criminal prosecution through the behavior of the judiciary, rather than of voters. A priori this does not seem very likely, because the effect might go in the opposite direction: more zealous judges in districts with higher social capital might increase the likelihood of RAP's, not necessarily reduce it. Anyway, because of this concern, we now turn to absenteeism, a misbehavior that hurts the voters but does not correspond to any criminal wrongdoing.

3.2 Absenteeism

Table 6 has the same structure of Table 5, except that there is only one measure of misbehavior in this sample of majoritarian politicians in the Second Republic. Moreover, the specification here includes more individual-specific variables, since this more recent dataset has more information on the candidates, including the province of birth (instead of simply the region). Finally, social capital and the other district-specific variables vary over a larger number of areas, namely 92 provinces.

The results are qualitatively very similar to those obtained for RAP, although they are more precisely estimated and social capital where elected remains always statistically significant. In particular, columns 1 and 2 refer to social capital in the province of election. Absenteeism is always significantly lower in districts with more social capital. In particular, according to the baseline specification in column 1, an increase in social capital equal to its standard deviation would reduce absences in parliamentary votes by about 14%. Moving from the lowest to the average level of social capital would reduce absences by 17%, and moving from the lowest to the highest level of social capital by 64%. A large newspapers circulation also discourages absenteeism, but here unlike for RAP the estimated coefficient of social capital increase marginally when this additional regressor is included.

Columns 3-6 try to disentangle the effect of social capital in the province of election versus the province of birth. As for RAP, the effect of social capital where elected remains large in absolute value and statistically significant even with the inclusion of fixed effects for the province of birth (column 3), or if both kinds of social capital are included in the estimation with migrants only (column 6). The effect of social capital at birth, on the other hand, is not statistically significant as soon as the province of election is controlled for (column 5). Overall, therefore, these results support the inference that absenteeism is discouraged by the social capital of voters—both directly and indirectly, through the endogenous sorting of candidates in each district—rather than by inherited norms of the candidates as measured by the social capital at birth.

Finally, in Table 7, we run the same set of estimations of Table 6 on the (closed-list) proportional members of Parliament in the Second Republic legislative terms XII, XIII, and XIV, in order to assess whether the same correlation between social capital and political misbehavior is at work also under institutions associated with a lower degree of political accountability and higher rent-seeking (see Gagliarducci, Nannicini, and Naticchioni, 2008). The results show no significant correlation between the absenteeism rate and both the social capital of election and birth of the members of Parliament. This finding does not seem to be driven by the lower accuracy induced by the reduced sample size, because point estimates, with the exclusion of column 6, are also much lower than those on majoritarian members of Parliament. This negative result is important, because it further reinforces the inference that social capital affects misbehavior through political accountability: the effect of social capital is only present where political institutions allow politicians to be held accountable.

4 Social capital and election outcomes

A plausible interpretation of the results in the previous section is that voters are more tolerant of political abuses in districts with low social capital, so that political representatives face weaker incentives to pursue social welfare, or are poorly selected. If this interpretation is correct, we should see that voters in districts with high social capital are more willing to punish incumbents who misbehaved. This section tests this hypothesis, again looking at how voters react to both RAP and absenteeism.

Starting with RAP, the basic specification we estimate is:

$$\Delta VOT_{ijt} = \delta_t + \gamma_j + \tau RAP_{ijt} \cdot SC_j + RAP_{ijt} \cdot \underline{Z}'_j \lambda + \theta RAP_{ijt} + \underline{X}'_{it} \beta + \epsilon_{ijt}, \quad (4)$$

where the dependent variable is the difference of log votes (ΔVOT_{ijt}) received by incumbent i in district j between the elections at the end and beginning of term t . The coefficient of interest is τ , namely the effect of social capital in the district of election interacted with the corresponding RAP. We expect $\tau < 0$: electoral punishment for misbehavior is harsher where there is more social capital. Throughout we control for legislative term (δ_t) and district (γ_j) fixed effects, individual features of the incumbent (X) and the interaction of RAP with other district-specific variables Z (namely per-capita income, education, and newspapers diffusion). Estimation is by OLS, and robust standard errors are clustered by district. As in the previous section, we estimate (4) with two different measures of RAP, referring to general and serious offenses, respectively.

Implicitly, with this specification we assume that voters' punishment is permanent, that is, the incumbent is permanently punished for additional RAP's received in the current legislature. The advantage of this specification is that, taking differences in preference votes between two consecutive elections, we take care of unobserved and time-invariant individual variables potentially correlated with RAP. Nevertheless, as an additional check, we also estimate equation (4) by adding individual (legislator-specific) fixed effects. Unlike in the reduced form regression of the previous section, here we are interested in the effect of the interaction $RAP_{ijt} \cdot SC_j$, a variable that varies over both i and j ; hence, even in a regression with both individual and district fixed effects, we draw inferences from all observations, and not just from the movers.

Precisely because we are interested in the interaction between RAP and social capital, however, district and individual fixed effects do not entirely remove the problem of

unobserved variables that vary across both individuals and districts, and that might be correlated with *RAP*. In particular, the estimation of equation (4) may suffer from a possible self-selection problem into the treatment *RAP*. In the previous section, we have argued that the evidence suggests that voters are more effective in discouraging misbehavior in districts with higher social capital, either because incumbents are more self-restrained, or because politicians with a lower propensity to misbehave enter politics anticipating voters' behavior. Here, this means that misbehavior by the incumbent is not random, but could be systematically correlated with the error term of equation (4).

As we are interested in estimating τ , this self-selection would be a major problem only if the arising bias were different in areas characterized by different levels of social capital. To control for that, as discussed in Appendix II, we should include a full set of interactions between individual and district fixed effects. This specification is too demanding for our data. We therefore rely on an alternative specification that may be described as a good approximation, where we basically demote the degrees of freedom problem by reducing social capital to a binary variable. In particular, we estimate equation (4) with (and without) individual fixed effects and omitting the interaction variable (i.e., constraining $\tau = 0$), but in two different samples: the districts with social capital above and below the mean, respectively.¹⁷ We then test whether the estimated coefficient on *RAP* ($\hat{\theta}$) is the same in the two samples. Hence, in the specification with individual fixed effects, the identification comes from politicians who have been repeatedly elected in areas with the same social capital and have received a RAP in one term but not in another.

Furthermore, under plausible assumptions, the baseline specification of equation (4) estimates a *lower bound* of the true punishment τ (in absolute value), as the above source of possible endogeneity works against us. Specifically, as discussed in Appendix II, we need to assume that politicians who have improved their electoral prospects (and can therefore better afford to be punished) are more likely to misbehave in areas with high social capital than where social capital is low: in other words, where the expected punishment is higher, only those who can better afford the (electoral) price of receiving a RAP decide to misbehave. Under this assumption, the estimated difference in the electoral punishment between areas with high versus low social capital is smaller than the true difference, and we estimate a lower bound (in absolute value).

¹⁷Results are robust to the use of different cutoffs: the median, the 25th, and the 75th percentile.

An additional problem with equation (4) is non-random sample selection, as we only observe preference votes for incumbents who choose to run for reelection. But incumbents who obtained very severe RAP's in districts where voters are very demanding might choose to opt out of the election. Nevertheless, in the data, the decision of whether or not to run for reelection is uncorrelated with RAP, social capital, and their interactions, suggesting that this is not a serious problem.

To avoid this problem, however, in the sample of the Second Republic, where misbehavior is measured by absenteeism, we redefine the dependent variable as being reelected in the same district ($REELE_{ijt}$). We thus estimate:

$$REELE_{ijt} = \delta_t + \gamma_j + \tau Y_{ijt} \cdot SC_j + \lambda Y_{ijt} \cdot Z_j + \theta Y_{ijt} + \underline{X}'_{ijt} \beta + \epsilon_{ijt} \quad (5)$$

where Y_{ijt} refers to absenteeism. Here, an incumbent who chooses not to run is coded as not reelected, so that sample selection is not an issue. Estimation is by Probit, with standard errors clustered by district. The specification is otherwise the same as with RAP in equation (4), except that in this sample we have a richer set of observable individual features. An important reason why in this sample we can look at election outcomes, rather than just preference votes, is that here the electoral rule is plurality rule in single-member districts. Therefore, the link between votes and election outcomes is more powerful than in the proportional electoral system with open lists of the First Republic, where the order in the list is often the main determinant of the final outcome.

This sample has a drawback relative to the First Republic, however: since there are only two legislatures, the degrees of freedom problem is more severe when individual fixed effects are included.

4.1 Criminal prosecutions

Table 8 reports the estimates of equation (4). Again, the upper panel refers to the general and broader definition of RAP, while the lower panel refers to serious RAP. The coefficient of interest is that on the interaction between RAP and social capital (i.e., $\hat{\tau}$). Column 1 estimates the basic specification, where RAP is interacted with social capital but not with other district-specific variables. The estimated coefficient of interest is negative and statistically significant, as expected, and the effect is stronger in the case of serious RAP, as one might also have expected. Column 2 adds the interactions between RAP and other district-specific variables (per-capita income, education, newspapers diffusion). The effect

of the interaction between RAP and social capital becomes even larger in absolute value and gains significance, in both panels.

According to the specification in column 2, receiving a RAP is going to decrease the amount of preference votes by 21% in areas with average social capital and by 28% in areas with the highest level of social capital, while it has no significant impact where social capital is completely lacking. For serious RAP, the impact is minus 9% on average and minus 56% in areas with the highest social capital, while it is again insignificant in areas with the lowest social capital.

Furthermore, the remaining two columns (3 and 4) repeat the same exercise but add individual fixed effects. The estimated coefficient of serious RAP interacted with social capital remains stable and significant, while that of general RAP interacted with social capital becomes negligible and insignificant.

Table 9 estimates a similar specification in the split sample, again for general and serious RAP. Columns 1 and 3 refer to districts with social capital above the mean, columns 2 and 4 to districts below the mean. We are interested in whether the estimated coefficient of RAP is different in the two samples, as reported by the p-value of the Wald tests at the bottom of each panel. The estimates are consistent with those of Table 8. When individual fixed effects are omitted (columns 1 and 2), the difference between the two samples is highly significant, according to both definitions of RAP. When individual fixed effects are included (columns 3 and 4), the difference in the estimated coefficients of RAP is statistically significant only for serious RAP, although even in the general definition the estimated coefficient of RAP is only significant and larger in absolute value in the high social capital sample. Looking at our preferred specification with individual fixed effects, receiving a RAP approximately reduces preference votes by 12% in areas with above-average social capital, while it has no impact in areas with below-average social capital. Similarly, being prosecuted for serious crimes reduces preference votes by 25% in areas with above-average social capital and has no impact in the others.

Finally, in Figures 5 and 6, we visually inspect whether our results are driven by outlying electoral districts. Within each of the 32 districts we estimate the electoral punishment of RAP and serious RAP controlling for individual-specific variables. We then separately regress the electoral punishment on both social capital and the other district-specific variables (Z). The figures plot the scatter and linear correlation between the residuals of these last two regressions, that is, the correlation between the electoral

punishment of political misbehavior and social capital partialing out the impact of other district-specific characteristics. The negative correlation is always highly significant and does not appear to be driven by outliers.

Overall, the above estimates are in line with the priors and suggest that indeed voters in districts with high social capital are more willing to punish political misbehavior, especially when it involves prosecution for serious crimes.

4.2 Absenteeism

Table 10 reports the estimates of equation (5). The coefficient of interest is that on the interaction between the absenteeism rate and social capital ($\hat{\tau}$). In the specification of column 1, absenteeism is interacted with social capital but not with other district-specific variables. The estimated coefficient of interest is again negative and statistically significant. As in the case of RAP, when we add the interactions between absenteeism and other district-specific variables in column 2, the effect of the interaction between absenteeism and social capital becomes even larger in absolute value. For the sake of completeness, we also report the estimates with individual fixed effects in columns 3 and 4, but they are inconclusive, perhaps because of the low amount of within variation as the panel consists of only two legislative terms in the Second Republic. According to the specification in column 2, the effect of shirking parliamentary duties on reelection is positive (although insignificant) where there is no social capital. An increase in the absenteeism rate equal to its standard deviation reduces the probability of being reelected in the same (single-member) district by 1 percentage point (about 2%) in areas with average social capital, and by 22 percentage points (about 70%) in areas with the highest level of social capital.¹⁸

Table 11 further looks at the association between the electoral punishment of shirking and social capital using the split-sample specification. As for RAP, columns 1 and 3 refer to districts with social capital above the mean, columns 2 and 4 to districts below the mean. We are interested in whether the estimated coefficient of the absenteeism rate is different in the two samples, as reported by the p-value of the Wald test. When individual fixed effects are omitted (columns 1 and 2), the difference between the two samples has

¹⁸Using reelection—instead of reelection in the same district—as dependent variable in the estimation of equation (5) provides results that are similar in terms of statistical significance but lower in magnitude (available upon requests). This means that political parties may decide to “save” some misbehaving politicians by letting them run for reelection in a different electoral district.

the expected sign and is highly significant. In particular, an increase in the absenteeism rate equal to its standard deviation reduces the probability of being reelected in the same (single-member) district by 24 percentage point (about 42%) in areas with above-average social capital, and it has a positive (although insignificant) effect in areas with below-average social capital. When individual fixed effects are included (columns 3 and 4), the difference in the estimated coefficients of absenteeism has no longer the expected sign, but it is statistically insignificant according to the Wald test.

In Figure 7, we visually inspect whether the above results are driven by outlying provinces of election. Looking at the 92 Italian provinces in our sample, we repeat the two-step estimation strategy implemented for RAP and serious RAP in Figures 5 and 6, respectively. The correlation between the electoral punishment of shirking and social capital—partialing out the impact of other district-specific characteristics—is negative (as expected), highly significant, and does not appear to be driven by outliers.

Overall, although the limited panel dimension of the Second Republic sample may hamper the consistent implementation of the specifications with individual fixed effects, the available empirical evidence is again in line with the priors and suggests that members of Parliament elected in districts with high social capital cannot safely expect to shirk their duties without being punished in terms of reelection probability.

Finally, in Table 12 and Table 13, we look at the electoral punishment of the absenteeism rate of proportional politicians in the Second Republic. As expected, in a context where voters' degrees of freedom in choosing their preferred candidates are severely hampered by the closed party lists, the interaction between social capital and absences is never statistically significant. Indeed, politicians who are elected in the proportional tier and make more absences end up being rewarded with a higher reelection probability (see Table 13), but this effect is not statistically different in areas with high versus low social capital. Figure 8 further shows the lack of any significant correlation between social capital and the (partialled-out) punishment of political misbehavior for proportional members of Parliament. Again, this negative result supports the inference that social capital discourages misbehavior through political accountability, because the correlation between voting patterns and social capital is only present where political institutions allow politicians to be held accountable.

5 Conclusions

In this paper, we have empirically investigated the impact of social capital or cultural traits shared by voters on the degree of political accountability. Using data on Italian members of Parliament in the postwar period, we have shown that political misbehavior—measured by both criminal prosecution and absenteeism in Parliament votes—is negatively correlated with the social capital of the district where politicians have been elected. More importantly, the electoral punishment of political misbehavior is considerably more pronounced in districts with high social capital. We interpret this as evidence that social norms of generalized trust on the part of voters are an important factor in keeping elected officials accountable for their actions.

Our findings can thus explain why political corruption and clientelism seem to be much more prevalent in countries and regions with low social capital. If voters are more tolerant of political misbehavior, their elected representatives face weaker incentives to pursue social welfare. Moreover, political representatives are less likely to be selected on criteria of honesty and general competence. Our results also point to an interaction between social capital and institutions in keeping politicians accountable. Indeed, the negative correlation we detect between political misbehavior (or the electoral punishment of political misbehavior) and social capital is at work only for politicians elected either under open-list proportional representation or in majoritarian (single-member) districts, while it is not present under closed-list proportional representation, where the scope for holding politicians accountable is much more limited.

Finally, our empirical results are also consistent with an alternative interpretation: political accountability fails where there is low social capital not because voters have the wrong value system, but because in such districts the political opponent is also corrupt (i.e., voters have no alternative). This explanation cannot be entirely ruled out, but it is not very convincing because the pool of potential political candidates is large. Moreover, in such a situation, national political parties would have very strong incentives to place honest candidates precisely in the districts where they are most needed, and likewise individuals with a strong reputation for honesty would face sharp incentives to oppose corrupt politicians.

References

- Alesina, A., and P. Giuliano (2009), “Family Ties and Political Participation,” NBER Working Paper No.15415.
- Alesina, A., and G. Tabellini (2008), “Bureaucrats or politicians? Part II: Multiple policy tasks,” *Journal of Public Economics*, 92, 426–447.
- Algan, Y., and P. Cahuc (2010), “Social Attitudes and Economic Development: An Epidemiological Approach,” *American Economic Review*, forthcoming.
- Banerjee, A.V., and R. Pande (2009), “Parochial Politics: Ethnic Preferences and Politician Corruption,” mimeo, MIT.
- Banfield, E. (1958), *The Moral Basis of a Backward Society*, New York, NY: Free Press.
- Besley, T. (2005), *Principled Agents? The Political Economy of Good Government*, Oxford: Oxford University Press.
- Chang, E.C., M.A. Golden, and S.J. Hill (2010), “Legislative Malfeasance and Political Accountability,” *World Politics*, forthcoming.
- Ferejohn, J. (1986), “Incumbent Performance and Electoral Control,” *Public Choice*, 50, 5–25.
- Ferraz, C., and F. Finan (2008), “Exposing Corrupt Politicians: The Effect of Brazil’s Publicly Released Audits on Electoral Outcomes,” *Quarterly Journal of Economics*, 123, 703–745.
- Fukuyama, F. (1995), *Trust: The Social Virtues and the Creation of Prosperity*, New York, NY: Free Press.
- Ichino, A., and G. Maggi (2000), “Work Environment and Individual Background: Explaining Regional Shirking Differentials in a Large Italian Firm,” *Quarterly Journal of Economics*, 115, 1057–1090.
- Gagliarducci, S., T. Nannicini, and P. Naticchioni (2008), “Electoral Rules and Politicians’ Behavior: A Micro Test,” IZA Discussion Paper No.3348.
- Gagliarducci, S., T. Nannicini, and P. Naticchioni (2010), “Moonlighting Politicians,” *Journal of Public Economics*, forthcoming.
- Golden, M.A., and L. Picci (2005), “Proposal for a New Measure of Corruption, Illustrated with Italian Data,” *Economics & Politics*, 17, 37–75.

- Guiso, L., P. Sapienza, and L. Zingales (2004), “The Role of Social Capital in Financial Development,” *American Economic Review*, 94, 526–556.
- Guiso, L., P. Sapienza, and L. Zingales (2008), “Social Capital as Good Culture,” *Journal of the European Economic Association*, 6, 295–320.
- Knack, S., and P. Keefer (1997), “Does Social Capital Have an Economic Payoff? A Cross-Country Investigation,” *Quarterly Journal of Economics*, 112, 1251–88.
- La Porta, R., F. Lopez de Silanes, A. Shleifer, and R. Vishny (1997), “Trust in Large Organizations,” *American Economic Review*, 87, 333–338.
- Myerson, R.B. (1993), “Effectiveness of the Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis,” *Games and Economic Behaviour*, 5, 118–132.
- Papke, L.E., and J.M. Wooldridge (1996), “Econometric Methods for Fractional Response Variable with an Application to 401 (K) Plan Participation Rates,” *Journal of Applied Econometrics*, 11, 619–632.
- Persson, T., and G. Tabellini (2000), *Political Economics*, Cambridge, MA: MIT Press.
- Persson, T., G. Tabellini, and F. Trebbi (2003), “Electoral Rules and Corruption,” *Journal of the European Economic Association*, 1, 958–989.
- Peters, J.G., and S. Welch (1980), “The Effects of Charges of Corruption on Voting Behavior in Congressional Elections,” *American Political Science Review*, 74, 697–708.
- Putnam, R. (1993), *Making Democracy Work. Civic Traditions in Modern Italy*, Princeton, NJ: Princeton University Press.
- Putnam, R. (2000), *Bowling Alone*, New York: Simon and Schuster.
- Rundquist B., G. Strom, and J. Peters (1977) “Corrupt Politicians and Their Electoral Support: Some Experimental Observations” *American Political Science Review*, 71, 954-963.
- Tabellini, G. (2008), “The Scope of Cooperation: Values and Incentives,” *Quarterly Journal of Economics*, 123, 905–950.
- Tabellini, G. (2009), “Culture and Institutions: Economic Development in the Regions of Europe,” *Journal of the European Economic Association*, 6, 255–294.
- Toqueville, A. (1840), *Democracy in America*.
- Welch, S., and J.R. Hibbing (1997), “The effects of charges of corruption on voting behavior in Congressional elections, 1982-1990,” *Journal of Politics*, 59, 226–239.

Appendix I: Main offenses included in our measures of criminal prosecution (*RAP* and *serious RAP*)

- List of serious offenses included in both the broad and narrow definition of RAP:

- Corruption.
- Private interest in official acts or official duties.
- Tax evasion, tax dodging.
- Violation of the new laws on combating criminality; criminal conspiracy; confederation to commit a crime; racketeering organization.
- Trade fraud.
- Abuse, word of abuse.
- Forgery in public acts and public duties.
- Handling (receiving) stolen goods.
- Homicide, murder.
- Attempted domestic violence (brutality); violence or threat to public officer.
- Criminal damage; damage of public building.
- Defamation, insult, libel; false allegations.
- Bouncing a check.
- Embezzlement of public property or public funds.

- List of other offenses included only in the broad definition of RAP:

- Unlawful assembly; disturbance in an election meeting.
- Destruction or damage to bill-posting; unlawful bill-posting.
- Road-traffic offenses.
- Impediment, hindrance, or obstruction to free movement.

- Instigation to fascism.
- Bodily injury.
- Contempt (*oltraggio a pubblico ufficiale*).
- Publication or spreading false news.
- (Unlawful) interruption of public utility.
- Destruction of propaganda placards or notices; breach of the rules on electoral propaganda.

Appendix II: Nature and direction of self-selection bias

Using a potential-outcome framework, define $\Delta VOT_i(1)$ as the potential outcome of politician i in case he received a RAP, and $\Delta VOT_i(0)$ as the potential outcome in case he did not receive a RAP.¹⁹ Conditional on the level of social capital of the district of election ($SC = k$, with $k = H, L$ and $H > L$), potential outcomes can be written as:

$$\Delta VOT_{ik}(1) = \mu_{1k} + U_{ik}(1)$$

$$\Delta VOT_{ik}(0) = \mu_{0k} + U_{ik}(0),$$

where $\mu_{1k} - \mu_{0k}$ captures the common electoral punishment for receiving a RAP in district k and $U_{ik}(1) - U_{ik}(0)$ is the idiosyncratic punishment of individual i in district k .

If we regress the observed outcome on the received RAP by OLS within every district (or we control for district fixed effects in a saturated model), the estimated coefficient provides a biased estimate of the average treatment effect on the treated in district k , which can be expressed as: $\tau_k = E[\Delta VOT_{ik}(1) - \Delta VOT_{ik}(0) | RAP = 1, SC = k]$. In particular, the mean selection bias is:

$$MSB_k = E[U_{ik}(0) | RAP = 1, SC = k] - E[U_{ik}(0) | RAP = 0, SC = k],$$

that is, the average idiosyncratic electoral outcome in the case of no treatment for politicians who end up receiving a RAP and politicians who do not receive it, respectively. A positive value of MSB_k means that, on average in district k , individuals with improved electoral prospects if they remained honest ($U_{ik}(0)$ high) are more likely to misbehave ($RAP = 1$) than individuals whose electoral prospects have worsened ($U_{ik}(0)$ low); in other words, misbehavior is more likely amongst those who can afford to lose votes because their electoral prospects are expected to improve. Conversely, $MSB_k < 0$ means that political misbehavior is more likely amongst those whose electoral prospects would have deteriorated even if they had remained honest. Note also that the idiosyncratic error term U_{ik} refers to *changes* in preference votes relative to the previous election, since we are taking first differences.

As we are interested in the comparison between τ_k in districts characterized by different levels of social capital, assuming that the idiosyncratic electoral outcomes of each politician are constant across time, we could remove the mean selection bias in each district by including politician fixed effects within every district (or by saturating the model with a full set of interactions between politician and district fixed effects).

If we cannot do that because of data restrictions, however, we can still predict the direction of the bias when comparing the estimated treated effects in districts with high

¹⁹We summarize the main identification issues in the framework of the First Republic, i.e., with the log difference of preference votes as outcome variable and RAP as treatment of interest. The reasoning easily extends to the Second Republic framework, with reelection as outcome and absenteeism as treatment.

versus low social capital. In particular, the estimated difference between the electoral punishment/reward of RAP in areas with high versus low social capital is made up of both the true difference and the difference between the mean selection biases in the two areas:

$$\hat{\tau}_H - \hat{\tau}_L = (\tau_H - \tau_L) + (MSB_H - MSB_L)$$

Clearly, if MSB_k is the same in all districts k , or if it does not covary systematically with social capital, then our estimates are unbiased. Thus, we are only concerned by MSB that varies systematically with social capital. Given that we have taken first differences (i.e., as explained above, MSB refers to unobservable changes in electoral prospects between two consecutive elections), it is not obvious why there would be a specific correlation with time invariant features of the district.

If MSB covaries systematically with social capital, then we can estimate either a lower or an upper bound, depending on the patterns of correlations. Assume first that the true difference is negative, $(\tau_H - \tau_L) < 0$, meaning that the electoral punishment of RAP is higher (or the electoral reward is lower) in areas with more social capital. Then, as long as the mean selection bias is larger in districts with high social capital, $MSB_H > MSB_L$, the estimated difference in the electoral punishments is going to be a *lower bound* of the true difference in absolute value. In fact, we have either $(\tau_H - \tau_L) < 0 < (\hat{\tau}_H - \hat{\tau}_L)$ or $(\tau_H - \tau_L) < (\hat{\tau}_H - \hat{\tau}_L) < 0$. The latter is indeed our case, as $(\hat{\tau}_H - \hat{\tau}_L) < 0$ in the data.²⁰

At the end of the day, to obtain a lower bound interpretation of our estimates, we need to assume that, where social capital is high, politicians with improved electoral prospects *without* RAP are more likely to self-select into RAP, compared to districts with low social capital: in other words, where the expected punishment is higher, only those who can afford the (electoral) price of receiving a RAP decide to misbehave. Of course, we would obtain an upper bound interpretation with the opposite assumption, namely that—where the expected punishment is higher—only those who are desperate and would end up not being reelected anyway decide to misbehave. We believe that the lower bound assumption is plausible in our context, where most incumbents effectively compete for reelection, although we cannot completely rule out the opposite hypothesis.

²⁰Alternatively, if $(\tau_H - \tau_L) > 0$, the punishment of RAP would be higher (or the reward lower) in areas with less social capital. In this case, as long as $MSB_H > MSB_L$, the estimated difference would be an *upper bound* of the true difference: $(\hat{\tau}_H - \hat{\tau}_L) > (\tau_H - \tau_L) > 0$. This is not the case in our data, however.

Tables and Figures

Table 1: The two samples at a glance

| Legislative term | Obs. |
|----------------------------------|-------|
| I (1948–1953) | 549 |
| II (1953–1958) | 547 |
| III (1958–1963) | 579 |
| IV (1963–1968) | 594 |
| V (1968–1972) | 598 |
| VI (1972–1976) | 587 |
| VII (1976–1979) | 599 |
| VIII (1979–1983) | 596 |
| IX (1983–1987) | 599 |
| X (1987–1992) | 601 |
| Total (“First Republic” sample) | 5,849 |
| XII (1994–1996) | 618 |
| XIII (1996–2001) | 596 |
| Total (“Second Republic” sample) | 1,214 |

Notes. Non-missing observations across legislative terms since 1948. *“First Republic” sample*: House of Representatives only. *“Second Republic” sample*: House of Representatives and Senate; majoritarian members of Parliament only. The XI legislative term (1992–94) marks the transition from the First to the Second Republic, and it is dropped because members of Parliament were (re)elected under a different electoral system in the XII term. The XIV legislative term (2001–2006) is dropped because members of Parliament were (re)elected under a different electoral system in the XV term.

Table 2: Individual characteristics of members of Parliament – *First Republic*

| | Mean | S.d. | Min | Max | Obs. |
|------------------------|-------|------|-------|-------|-------|
| Male | 0.93 | 0.25 | 0.00 | 1.00 | 5,849 |
| Age | 48.33 | 9.44 | 18.00 | 98.00 | 5,849 |
| Years of schooling | 15.24 | 5.30 | 0.00 | 21.00 | 5,849 |
| Government appointment | 0.16 | 0.36 | 0.00 | 1.00 | 5,849 |
| Local experience | 0.61 | 0.49 | 0.00 | 1.00 | 5,849 |
| Freshman | 0.38 | 0.49 | 0.00 | 1.00 | 5,849 |
| Majority coalition | 0.50 | 0.50 | 0.00 | 1.00 | 5,849 |
| Migrant | 0.21 | 0.41 | 0.00 | 1.00 | 5,849 |
| Lawyer | 0.16 | 0.37 | 0.00 | 1.00 | 5,849 |
| Executive | 0.04 | 0.20 | 0.00 | 1.00 | 5,849 |
| Politician | 0.17 | 0.37 | 0.00 | 1.00 | 5,849 |
| Entrepreneur | 0.03 | 0.16 | 0.00 | 1.00 | 5,849 |
| Teacher | 0.12 | 0.32 | 0.00 | 1.00 | 5,849 |
| Physician | 0.04 | 0.19 | 0.00 | 1.00 | 5,849 |
| RAP | 0.24 | 0.43 | 0.00 | 1.00 | 5,849 |
| Serious RAP | 0.12 | 0.32 | 0.00 | 1.00 | 5,849 |
| Candidate | 0.70 | 0.46 | 0.00 | 1.00 | 5,849 |
| Reelected | 0.54 | 0.50 | 0.00 | 1.00 | 5,849 |

Notes. All variables are dummies, except *Age* (in years) and *Years of schooling*. *Government appointment* includes ministers and vice-ministers. *Local experience* stands for previous government experience at the local level (e.g., mayor). *Freshman* means that the previous parliamentary tenure is zero. *Majority coalition* identifies the government coalition. *Migrant* identifies politicians elected in a province different from that of birth. Job dummies refer to the preelection occupation. *RAP* is equal to one if the politician receives a request for the removal of parliamentary immunity because suspected of criminal wrongdoing. *Serious RAP* refers to a request for serious crimes (see Appendix I). *Candidate* is equal to one if the member of Parliament stands for reelection in the next term. *Reelected* is equal to one if the member of Parliament wins the bid for reelection.

Table 3: Individual characteristics of members of Parliament – *Second Republic*

| | Mean | S.d. | Min | Max | Obs. |
|-------------------------|-------|------|-------|-------|-------|
| Male | 0.92 | 0.28 | 0.00 | 1.00 | 1,214 |
| Married | 0.77 | 0.42 | 0.00 | 1.00 | 1,214 |
| No. of children | 1.53 | 1.20 | 0.00 | 9.00 | 1,214 |
| Age | 49.50 | 9.44 | 27.00 | 84.00 | 1,214 |
| Years of schooling | 16.11 | 2.43 | 5.00 | 20.00 | 1,214 |
| National politician | 0.25 | 0.44 | 0.00 | 1.00 | 1,214 |
| Government appointment | 0.06 | 0.24 | 0.00 | 1.00 | 1,214 |
| Parliament appointment | 0.13 | 0.34 | 0.00 | 1.00 | 1,214 |
| Local experience | 0.54 | 0.50 | 0.00 | 1.00 | 1,214 |
| Freshman | 0.55 | 0.50 | 0.00 | 1.00 | 1,214 |
| Majority coalition | 0.58 | 0.49 | 0.00 | 1.00 | 1,214 |
| Migrant | 0.20 | 0.40 | 0.00 | 1.00 | 1,214 |
| Lawyer | 0.14 | 0.34 | 0.00 | 1.00 | 1,214 |
| Executive | 0.13 | 0.33 | 0.00 | 1.00 | 1,214 |
| Politician | 0.12 | 0.32 | 0.00 | 1.00 | 1,214 |
| Entrepreneur | 0.10 | 0.30 | 0.00 | 1.00 | 1,214 |
| Teacher | 0.10 | 0.30 | 0.00 | 1.00 | 1,214 |
| Self-employed | 0.10 | 0.30 | 0.00 | 1.00 | 1,214 |
| Physician | 0.10 | 0.29 | 0.00 | 1.00 | 1,214 |
| Preelection income | 0.12 | 0.35 | 0.00 | 11.32 | 1,214 |
| Absenteeism rate | 0.36 | 0.24 | 0.00 | 0.98 | 1,214 |
| Reelected | 0.50 | 0.50 | 0.00 | 1.00 | 1,214 |
| Reelected same district | 0.32 | 0.47 | 0.00 | 1.00 | 1,214 |

Notes. All variables are dummies, except *No. of children*, *Age* (in years), *Years of schooling*, and *Preelection income* (in million of Euros, 2004 prices). *National politician* stands for being a member of the party executive committee at the national level. *Government appointment* includes ministers and vice-ministers. *Parliament appointment* captures whether the politician is president or vice-president of the Parliament, or of a single committee. *Local experience* stands for previous government experience at the local level (e.g., mayor). *Freshman* means that the previous parliamentary tenure is zero. *Majority coalition* identifies the government coalition. *Migrant* identifies politicians elected in a province different from that of birth. Job dummies refer to the preelection occupation. *Preelection income* is the total gross income in the last year before being elected. *Absenteeism rate* is the percentage of votes missed without any legitimate reason during the legislative term. *Reelected* and *Reelected same district* (with the latter referring to single-member districts in majoritarian elections) are dummies equal to one if the politician wins the bid for reelection. Majoritarian members of Parliament only.

Table 4: Social capital measure and other characteristics of Italian provinces

| | Mean | S.d. | Min | Max | Blood | Income | Education | Newspapers |
|----------------|-------|------|-------|-------|-------|--------|-----------|------------|
| Blood donation | 2.80 | 2.21 | 0.00 | 10.52 | 1.00 | | | |
| Income | 15.33 | 3.21 | 10.04 | 20.72 | 0.52 | 1.00 | | |
| Education | 31.70 | 3.41 | 25.10 | 46.29 | -0.32 | 0.06 | 1.00 | |
| Newspapers | 7.91 | 3.90 | 1.94 | 17.54 | 0.33 | 0.69 | 0.11 | 1.00 |

Notes. The left panel reports descriptive statistics of the variables; the right panel reports the correlation coefficients between them. *Blood donation* is the number of blood bags (about 16oz) every 100 inhabitants in 1995 (source: Guiso, Sapienza, and Zingales, 2004). *Income* is per-capita income in 2003, measured in thousand of Euros (source: Istat). *Education* is the share of people over 19 with a high-school degree in 2003, expressed in percentage points (source: Istat). *Newspapers* is the diffusion of non-sport newspapers every 100 inhabitants in 2001–2002 (source: Cartocci, 2007). Number of provinces: 92.

Table 5: The impact of social capital on malfeasance – *First Republic*

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Dependent variable: RAP | | | | | | |
| Social capital of election | -0.017*** [0.004] | -0.010** [0.005] | -0.017** [0.007] | | | -0.027*** [0.008] |
| Social capital of birth | | | | -0.013*** [0.005] | 0.002 [0.010] | 0.004 [0.011] |
| Newspapers | | -0.008*** [0.003] | | | | |
| Years of schooling | -0.001 [0.001] | -0.001 [0.001] | -0.001 [0.001] | -0.001 [0.001] | -0.001 [0.001] | -0.004 [0.004] |
| Government appointment | -0.066*** [0.015] | -0.067*** [0.015] | -0.067*** [0.016] | -0.066*** [0.016] | -0.065*** [0.015] | -0.062* [0.034] |
| Local experience | 0.019 [0.020] | 0.020 [0.021] | 0.019 [0.020] | 0.017 [0.021] | 0.021 [0.021] | -0.011 [0.029] |
| Freshman | -0.050*** [0.011] | -0.050*** [0.011] | -0.048*** [0.011] | -0.050*** [0.011] | -0.049*** [0.011] | -0.083*** [0.025] |
| Majority coalition | -0.099*** [0.016] | -0.100*** [0.016] | -0.097*** [0.016] | -0.096*** [0.016] | -0.099*** [0.017] | -0.126*** [0.032] |
| Other control variables | Yes | Yes | Yes | Yes | Yes | Yes |
| Region of birth dummies | No | No | Yes | No | No | No |
| District of election dummies | No | No | No | No | Yes | No |
| Obs. | 5,849 | 5,849 | 5,849 | 5,849 | 5,849 | 1,217 |
| Dependent variable: Serious RAP | | | | | | |
| Social capital of election | -0.004*** [0.001] | -0.001 [0.001] | -0.003 [0.002] | | | -0.004 [0.003] |
| Social capital of birth | | | | -0.003** [0.001] | -0.001 [0.003] | -0.001 [0.004] |
| Newspapers | | -0.003*** [0.001] | | | | |
| Years of schooling | 0.000 [0.001] | -0.000 [0.001] | 0.000 [0.001] | 0.000 [0.001] | -0.000 [0.001] | -0.001 [0.001] |
| Government appointment | -0.010* [0.006] | -0.010* [0.006] | -0.011* [0.005] | -0.010* [0.006] | -0.010* [0.006] | -0.001 [0.019] |
| Local experience | 0.003 [0.007] | 0.003 [0.007] | 0.003 [0.007] | 0.002 [0.007] | 0.004 [0.007] | -0.006 [0.013] |
| Freshman | -0.007* [0.004] | -0.007* [0.004] | -0.007* [0.004] | -0.007* [0.004] | -0.007* [0.004] | -0.007 [0.011] |
| Majority coalition | -0.026*** [0.007] | -0.026*** [0.006] | -0.025*** [0.006] | -0.026*** [0.007] | -0.026*** [0.007] | -0.041** [0.017] |
| Other control variables | Yes | Yes | Yes | Yes | Yes | Yes |
| Region of birth dummies | No | No | Yes | No | No | No |
| District of election dummies | No | No | No | No | Yes | No |
| Obs. | 5,849 | 5,849 | 5,849 | 5,849 | 5,849 | 1,217 |

Notes. Probit estimations; marginal effects reported. Estimation (6) is restricted to migrants (i.e., politicians elected in a region different from that of birth). Dependent variables: dummy equal to one if the politician received a request for the removal of parliamentary immunity because suspected of any criminal wrongdoing (*RAP*), or because suspected of a serious crime (*Serious RAP*). Social capital is measured as blood donation. *Other control variables* include: age, age squared, legislative term dummies, job dummies, district-specific income and education, macro-region dummies (North-West, North-East, Center, South, Islands). Robust standard errors clustered at the district of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 6: The impact of social capital on the absenteeism rate of majoritarian members of Parliament – *Second Republic*

| | (1) | (2) | (3) | (4) | (5) | (6) |
|------------------------------|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Dependent variable: Absenteeism rate | | | | | |
| Social capital of election | -0.022*** [0.005] | -0.024*** [0.004] | -0.029*** [0.006] | | | -0.019* [0.011] |
| Social capital of birth | | | | -0.009* [0.005] | -0.000 [0.006] | 0.008 [0.006] |
| Newspapers | | -0.008** [0.003] | | | | |
| Years of schooling | 0.001 [0.003] | 0.001 [0.003] | 0.002 [0.003] | 0.001 [0.004] | 0.001 [0.003] | -0.026*** [0.007] |
| National politician | 0.036** [0.015] | 0.035** [0.015] | 0.032** [0.014] | 0.034** [0.014] | 0.038*** [0.014] | 0.101*** [0.032] |
| Government appointment | 0.045* [0.023] | 0.046** [0.023] | 0.041 [0.025] | 0.049* [0.026] | 0.040 [0.028] | -0.039 [0.053] |
| Parliament appointment | 0.046** [0.022] | 0.049** [0.022] | 0.047** [0.023] | 0.049** [0.024] | 0.055** [0.025] | 0.014 [0.038] |
| Local experience | -0.012 [0.012] | -0.012 [0.012] | -0.015 [0.013] | -0.011 [0.014] | -0.019 [0.014] | -0.016 [0.028] |
| Freshman | -0.030* [0.015] | -0.031** [0.015] | -0.035** [0.015] | -0.028* [0.015] | -0.034** [0.014] | -0.017 [0.033] |
| Majority coalition | -0.161*** [0.014] | -0.162*** [0.014] | -0.167*** [0.015] | -0.160*** [0.014] | -0.169*** [0.014] | -0.193*** [0.032] |
| Preelection income | 0.074*** [0.027] | 0.075*** [0.028] | 0.078*** [0.026] | 0.076*** [0.020] | 0.070*** [0.020] | 0.064*** [0.012] |
| Other control variables | Yes | Yes | Yes | Yes | Yes | Yes |
| Province of birth dummies | No | No | Yes | No | No | No |
| Province of election dummies | No | No | No | No | Yes | No |
| Obs. | 1,214 | 1,214 | 1,214 | 1,214 | 1,214 | 248 |

Notes. OLS estimations. Members of Parliament elected in the majoritarian tier of the mixed-member electoral system only. Estimation (6) is further restricted to migrants (i.e., politicians elected in a region different from that of birth). Dependent variable: absenteeism rate (i.e., percentage of votes missed without any legitimate reason during the term). Social capital is measured as blood donation. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, district-specific income and education, macro-region dummies (North-West, North-East, Center, South, Islands). Robust standard errors clustered at the province of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 7: The impact of social capital on the absenteeism rate of proportional members of Parliament – *Second Republic*

| | (1) | (2) | (3) | (4) | (5) | (6) |
|------------------------------|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Dependent variable: Absenteeism rate | | | | | |
| Social capital of election | -0.007 [0.006] | -0.010 [0.006] | -0.007 [0.008] | | | 0.025 [0.021] |
| Social capital of birth | | | | -0.006 [0.006] | -0.006 [0.006] | 0.006 [0.012] |
| Newspapers | | -0.003 [0.004] | | | | |
| Years of schooling | -0.004 [0.005] | -0.004 [0.005] | -0.004 [0.006] | -0.004 [0.005] | -0.004 [0.005] | -0.003 [0.008] |
| National politician | 0.011 [0.025] | 0.011 [0.025] | 0.014 [0.027] | 0.010 [0.023] | 0.010 [0.024] | 0.001 [0.038] |
| Government appointment | 0.061 [0.069] | 0.061 [0.069] | 0.059 [0.071] | 0.063 [0.045] | 0.064 [0.046] | 0.023 [0.071] |
| Parliament appointment | 0.027 [0.029] | 0.027 [0.029] | 0.019 [0.032] | 0.026 [0.030] | 0.028 [0.032] | -0.068 [0.058] |
| Local experience | -0.024 [0.018] | -0.024 [0.018] | -0.024 [0.018] | -0.021 [0.017] | -0.020 [0.019] | -0.013 [0.047] |
| Freshman | -0.029 [0.028] | -0.029 [0.028] | -0.034 [0.028] | -0.030 [0.029] | -0.029 [0.028] | -0.061 [0.044] |
| Majority coalition | -0.212*** [0.023] | -0.212*** [0.024] | -0.209*** [0.024] | -0.213*** [0.023] | -0.211*** [0.021] | -0.131*** [0.040] |
| Preelection income | 0.084** [0.037] | 0.084** [0.037] | 0.083** [0.038] | 0.086 [0.051] | 0.084 [0.050] | 0.042 [0.053] |
| Other control variables | Yes | Yes | Yes | Yes | Yes | Yes |
| Province of birth dummies | No | No | Yes | No | No | No |
| Province of election dummies | No | No | No | No | Yes | No |
| Obs. | 595 | 595 | 595 | 595 | 595 | 163 |

Notes. OLS estimations. Members of Parliament elected in the proportional tier of the mixed-member electoral system only. Estimation (6) is further restricted to migrants (i.e., politicians elected in a region different from that of birth). Dependent variable: absenteeism rate (i.e., percentage of votes missed without any legitimate reason during the term). Social capital is measured as blood donation. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, district-specific income and education, macro-region dummies (North-West, North-East, Center, South, Islands). Robust standard errors clustered at the province of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 8: Social capital and the electoral punishment of malfeasance (A) – *First Republic*

| | (1) | (2) | (3) | (4) |
|--|----------------------|----------------------|----------------------|---------------------|
| Dependent variable: Log difference of votes | | | | |
| RAP | -0.014 [0.033] | -0.148 [0.256] | -0.040 [0.059] | 0.111 [0.517] |
| RAP × social capital | -0.015* [0.009] | -0.022** [0.011] | -0.009 [0.020] | 0.005 [0.029] |
| Years of schooling | 0.001 [0.002] | 0.001 [0.002] | 0.000 [0.000] | 0.000 [0.000] |
| Government appointment | 0.148*** [0.023] | 0.149*** [0.023] | 0.054 [0.034] | 0.057* [0.034] |
| Local experience | 0.006 [0.018] | 0.005 [0.018] | 0.000 [0.000] | 0.000 [0.000] |
| Freshman | 0.074*** [0.018] | 0.075*** [0.018] | 0.088*** [0.031] | 0.087*** [0.031] |
| Majority coalition | 0.028 [0.018] | 0.030 [0.018] | -0.037 [0.064] | -0.040 [0.064] |
| Other control variables | Yes | Yes | Yes | Yes |
| District of election dummies | Yes | Yes | Yes | Yes |
| RAP × Z_j | No | Yes | No | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 3,913 | 3,913 | 3,913 | 3,913 |
| Dependent variable: Log difference of votes | | | | |
| Serious RAP | 0.088** [0.039] | 0.081 [0.397] | 0.064 [0.069] | 0.734 [0.579] |
| Serious RAP × social capital | -0.045*** [0.012] | -0.061*** [0.015] | -0.064*** [0.023] | -0.058* [0.033] |
| Years of schooling | 0.001 [0.002] | 0.002 [0.002] | 0.000 [0.000] | 0.000 [0.000] |
| Government appointment | 0.152*** [0.023] | 0.152*** [0.023] | 0.052 [0.034] | 0.056* [0.034] |
| Local experience | 0.003 [0.017] | 0.002 [0.017] | 0.000 [0.000] | 0.000 [0.000] |
| Freshman | 0.076*** [0.018] | 0.077*** [0.017] | 0.089*** [0.030] | 0.088*** [0.030] |
| Majority coalition | 0.034* [0.019] | 0.033* [0.019] | -0.036 [0.063] | -0.037 [0.063] |
| Other control variables | Yes | Yes | Yes | Yes |
| District of election dummies | Yes | Yes | Yes | Yes |
| Serious RAP × Z_j | No | Yes | No | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 3,913 | 3,913 | 3,913 | 3,913 |

Notes. OLS estimations. Dependent variable: log difference of number of votes (between past and future elections); members of Parliament who run for reelection only. *RAP* is equal to one if the politician receives a request for the removal of parliamentary immunity because suspected of criminal wrongdoing. *Serious RAP* refers to a request for serious crimes (see Appendix I). *Other control variables* include: age, age squared, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). The district-specific characteristics Z_j include: income, education, and newspapers. Social capital is measured as blood donation. Robust standard errors clustered at the district of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 9: Social capital and the electoral punishment of malfeasance (B) – *First Republic*

| | (1) | (2) | (3) | (4) |
|--|------------------------------|------------------------------|------------------------------|------------------------------|
| | Above-mean social capital | Below-mean social capital | Above-mean social capital | Below-mean social capital |
| Dependent variable: Log difference of votes | | | | |
| RAP | -0.108** [0.037] | -0.019 [0.025] | -0.116* [0.060] | -0.035 [0.044] |
| Years of schooling | 0.002 [0.003] | -0.000 [0.002] | 0.000 [0.000] | 0.000 [0.000] |
| Government appointment | 0.138*** [0.041] | 0.151*** [0.030] | 0.106* [0.058] | 0.024 [0.042] |
| Local experience | -0.026 [0.026] | 0.027 [0.024] | 0.000 [0.000] | 0.000 [0.000] |
| Freshman | 0.083** [0.028] | 0.064** [0.026] | 0.087* [0.048] | 0.072* [0.040] |
| Majority coalition | 0.021 [0.037] | 0.040 [0.024] | 0.022 [0.089] | -0.148 [0.092] |
| Other control variables | Yes | Yes | Yes | Yes |
| District of election dummies | Yes | Yes | Yes | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 1,645 | 2,268 | 1,645 | 2,268 |
| <i>Wald test p-value</i> | <i>0.025</i> | | <i>0.226</i> | |
| Dependent variable: Log difference of votes | | | | |
| Serious RAP | -0.139** [0.056] | 0.042 [0.035] | -0.247*** [0.072] | -0.005 [0.052] |
| Years of schooling | 0.002 [0.003] | -0.000 [0.002] | 0.000 [0.000] | 0.000 [0.000] |
| Government appointment | 0.142*** [0.042] | 0.154*** [0.029] | 0.103* [0.057] | 0.024 [0.042] |
| Local experience | -0.025 [0.027] | 0.023 [0.023] | 0.000 [0.000] | 0.000 [0.000] |
| Freshman | 0.085*** [0.027] | 0.067** [0.026] | 0.088* [0.048] | 0.075* [0.040] |
| Majority coalition | 0.028 [0.037] | 0.045* [0.024] | 0.018 [0.088] | -0.148 [0.092] |
| Other control variables | Yes | Yes | Yes | Yes |
| District of election dummies | Yes | Yes | Yes | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 1,645 | 2,268 | 1,645 | 2,268 |
| <i>Wald test p-value</i> | <i>0.003</i> | | <i>0.004</i> | |

Notes. OLS estimations in different subsamples (districts with social capital above/below mean); social capital is measured as blood donation. Dependent variable: log difference of number of votes (between past and future elections); members of Parliament who run for reelection only. *RAP* is equal to one if the politician receives a request for the removal of parliamentary immunity because suspected of criminal wrongdoing. *Serious RAP* refers to a request for serious crimes (see Appendix I). *Other control variables* include: age, age squared, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). The *Wald test* evaluates whether the coefficient of the absenteeism rate is different in the two subsamples (above/below mean). Robust standard errors clustered at the district of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 10: Social capital and the electoral punishment of the absenteeism rate of majoritarian members of Parliament (A) – *Second Republic*

| | (1) | (2) | (3) | (4) |
|--|--|----------------------|----------------------|----------------------|
| | Dependent variable: Reelected same district | | | |
| Absenteeism rate | 0.066 [0.109] | 0.297 [0.568] | -0.708* [0.382] | -3.037 [1.914] |
| Absenteeism rate \times social capital | -0.087** [0.035] | -0.117** [0.054] | 0.107 [0.096] | 0.086 [0.127] |
| Years of schooling | 0.012 [0.008] | 0.012 [0.008] | 0.051 [0.057] | 0.063 [0.058] |
| National politician | -0.013 [0.036] | -0.012 [0.036] | -0.267*** [0.095] | -0.262*** [0.096] |
| Government appointment | 0.054 [0.067] | 0.054 [0.067] | -0.020 [0.126] | -0.015 [0.128] |
| Parliament appointment | 0.057 [0.047] | 0.054 [0.047] | 0.100 [0.089] | 0.071 [0.092] |
| Local experience | 0.098*** [0.031] | 0.099*** [0.030] | 0.184 [0.128] | 0.197 [0.129] |
| Freshman | -0.032 [0.034] | -0.032 [0.034] | -0.089 [0.083] | -0.091 [0.084] |
| Majority coalition | -0.202*** [0.035] | -0.202*** [0.035] | -0.111** [0.055] | -0.098* [0.057] |
| Preelection income | -0.006 [0.032] | -0.006 [0.033] | -0.781 [0.571] | -0.751 [0.573] |
| Other control variables | Yes | Yes | Yes | Yes |
| Province of election dummies | Yes | Yes | Yes | Yes |
| Absenteeism rate $\times Z_j$ | No | Yes | No | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 1,214 | 1,214 | 1,214 | 1,214 |

Notes. Probit estimations; marginal effects reported. Members of Parliament elected in the majoritarian tier of the mixed-member electoral system only. Dependent variable: dummy equal to one if the member of Parliament is reelected in the same (majoritarian) district in the next term. *Absenteeism rate* is the percentage of votes missed without any legitimate reason during the legislative term. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). The district-specific characteristics Z_j include: income, education, and newspapers. Social capital is measured as blood donation. Robust standard errors clustered at the province of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 11: Social capital and the electoral punishment of the absenteeism rate of majoritarian members of Parliament (B) – *Second Republic*

| | (1) | (2) | (3) | (4) |
|--|------------------------------|------------------------------|------------------------------|------------------------------|
| | Above-mean social capital | Below-mean social capital | Above-mean social capital | Below-mean social capital |
| Dependent variable: Reelected same district | | | | |
| Absenteeism rate | -0.558*** [0.123] | 0.131 [0.098] | -0.410 [0.588] | -0.669* [0.383] |
| Years of schooling | 0.011 [0.012] | 0.011 [0.010] | 0.002 [0.138] | 0.098 [0.068] |
| National politician | 0.048 [0.043] | -0.101** [0.049] | -0.324* [0.164] | -0.258** [0.126] |
| Government appointment | 0.106 [0.105] | 0.053 [0.076] | 0.053 [0.239] | -0.073 [0.155] |
| Parliament appointment | 0.018 [0.071] | 0.142* [0.075] | 0.081 [0.140] | 0.105 [0.124] |
| Local experience | 0.049 [0.054] | 0.129*** [0.048] | 0.348 [0.226] | 0.147 [0.165] |
| Freshman | 0.005 [0.051] | -0.104** [0.052] | 0.009 [0.152] | -0.116 [0.113] |
| Majority coalition | -0.387*** [0.058] | -0.045 [0.067] | -0.211* [0.120] | -0.094 [0.067] |
| Preelection income | 0.415*** [0.118] | -0.108 [0.220] | 1.145 [1.418] | -1.197* [0.636] |
| Other control variables | Yes | Yes | Yes | Yes |
| Province of election dummies | Yes | Yes | Yes | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 616 | 598 | 616 | 598 |
| <i>Wald test p-value</i> | <i>0.014</i> | | <i>0.205</i> | |

Notes. Probit estimations in different subsamples (provinces with social capital above/below mean); social capital is measured as blood donation; marginal effects reported. Members of Parliament elected in the majoritarian tier of the mixed-member electoral system only. Dependent variable: dummy equal to one if the member of Parliament is reelected in the same (majoritarian) district in the next term. *Absenteeism rate* is the percentage of votes missed without any legitimate reason during the legislative term. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). Robust standard errors clustered at the province of election level are in brackets. The *Wald test* evaluates whether the coefficient of the absenteeism rate is different in the two subsamples (above/below mean). Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 12: Social capital and the electoral punishment of the absenteeism rate of proportional members of Parliament (A) – *Second Republic*

| | (1) | (2) | (3) | (4) |
|--|--|---------|---------|---------|
| | Dependent variable: Reelected same district | | | |
| Absenteeism rate | 0.411** | -0.796 | 0.537 | -2.061 |
| | [0.167] | [1.506] | [0.369] | [2.989] |
| Absenteeism rate \times social capital | -0.030 | -0.045 | -0.141 | -0.299 |
| | [0.045] | [0.093] | [0.107] | [0.237] |
| Years of schooling | 0.013 | 0.013 | 0.158 | 0.137 |
| | [0.011] | [0.011] | [0.113] | [0.124] |
| National politician | 0.119** | 0.117** | 0.091 | 0.081 |
| | [0.049] | [0.049] | [0.142] | [0.154] |
| Government appointment | 0.029 | 0.022 | -0.138 | -0.111 |
| | [0.105] | [0.105] | [0.161] | [0.173] |
| Parliament appointment | 0.019 | 0.023 | -0.270* | -0.218 |
| | [0.068] | [0.068] | [0.151] | [0.170] |
| Local experience | 0.023 | 0.026 | -0.694 | -0.717 |
| | [0.049] | [0.049] | [0.460] | [0.466] |
| Freshman | -0.066 | -0.067 | 0.077 | 0.089 |
| | [0.049] | [0.049] | [0.148] | [0.153] |
| Majority coalition | 0.080 | 0.080 | 0.056 | 0.062 |
| | [0.054] | [0.055] | [0.099] | [0.103] |
| Preelection income | 0.325** | 0.328** | -0.200 | -0.225 |
| | [0.158] | [0.160] | [0.246] | [0.251] |
| Other control variables | Yes | Yes | Yes | Yes |
| Province of election dummies | Yes | Yes | Yes | Yes |
| Absenteeism rate $\times Z_j$ | No | Yes | No | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 595 | 595 | 595 | 595 |

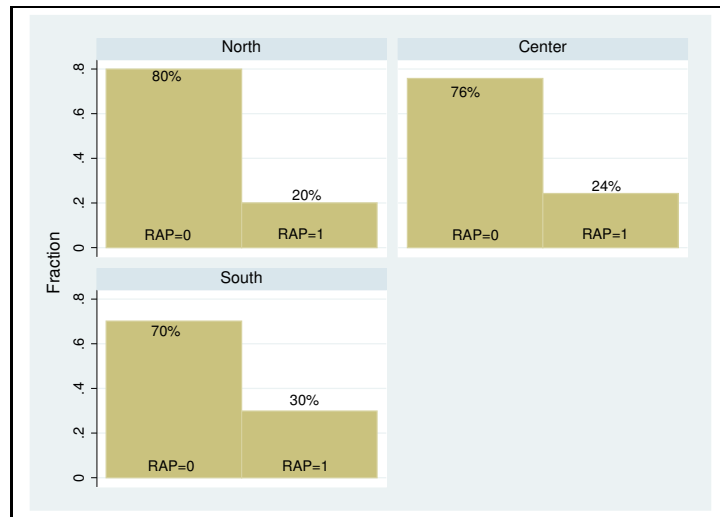
Notes. Probit estimations; marginal effects reported. Members of Parliament elected in the proportional tier of the mixed-member electoral system only. Dependent variable: dummy equal to one if the member of Parliament is reelected in the same (majoritarian) district in the next term. *Absenteeism rate* is the percentage of votes missed without any legitimate reason during the legislative term. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). The district-specific characteristics Z_j include: income, education, and newspapers. Social capital is measured as blood donation. Robust standard errors clustered at the province of election level are in brackets. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 13: Social capital and the electoral punishment of the absenteeism rate of proportional members of Parliament (B) – *Second Republic*

| | (1) | (2) | (3) | (4) |
|--|------------------------------|------------------------------|------------------------------|------------------------------|
| | Above-mean social capital | Below-mean social capital | Above-mean social capital | Below-mean social capital |
| Dependent variable: Reelected same district | | | | |
| Absenteeism rate | 0.314*** [0.102] | 0.428*** [0.104] | 0.339 [0.361] | 0.016 [0.597] |
| Years of schooling | 0.015** [0.007] | 0.018 [0.015] | 0.237 [0.171] | 0.249 [0.268] |
| National politician | 0.223*** [0.038] | -0.025 [0.067] | 0.180 [0.186] | -0.109 [0.273] |
| Government appointment | 0.255*** [0.077] | -0.206 [0.217] | -0.050 [0.200] | -0.033 [0.392] |
| Parliament appointment | 0.033 [0.088] | 0.000 [0.062] | -0.405* [0.208] | 0.583 [0.434] |
| Local experience | 0.038 [0.055] | 0.015 [0.100] | 0.000 [0.000] | -0.436 [0.751] |
| Freshman | -0.070 [0.049] | -0.067 [0.058] | -0.114 [0.206] | -0.293 [0.400] |
| Majority coalition | 0.066 [0.058] | 0.133 [0.133] | 0.107 [0.122] | 0.419 [0.279] |
| Preelection income | 0.387** [0.157] | 0.169 [0.232] | -3.836 [2.418] | -8.194** [3.437] |
| Other control variables | Yes | Yes | Yes | Yes |
| Province of election dummies | Yes | Yes | Yes | Yes |
| Individual fixed effects | No | No | Yes | Yes |
| Obs. | 310 | 285 | 310 | 285 |
| <i>Wald test p-value</i> | <i>0.958</i> | | <i>0.690</i> | |

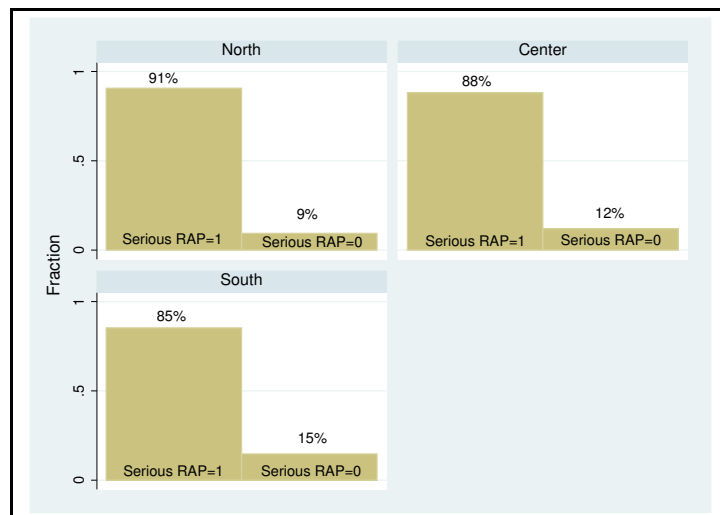
Notes. Probit estimations in different subsamples (provinces with social capital above/below mean); social capital is measured as blood donation; marginal effects reported. Members of Parliament elected in the proportional tier of the mixed-member electoral system only. Dependent variable: dummy equal to one if the member of Parliament is reelected in the same (majoritarian) district in the next term. *Absenteeism rate* is the percentage of votes missed without any legitimate reason during the legislative term. *Other control variables* include: age, age squared, married, number of children, legislative term dummies, job dummies, macro-region dummies (North-West, North-East, Center, South, Islands). Robust standard errors clustered at the province of election level are in brackets. The *Wald test* evaluates whether the coefficient of the absenteeism rate is different in the two subsamples (above/below mean). Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Figure 1: RAP across areas



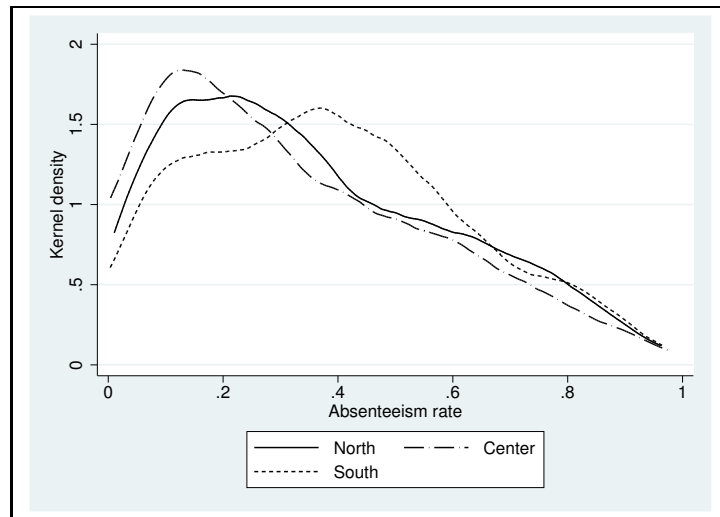
Notes. Fraction of members of Parliament receiving a RAP in the provinces of the North, Center, and South of Italy (Istat classification).

Figure 2: Serious RAP across areas



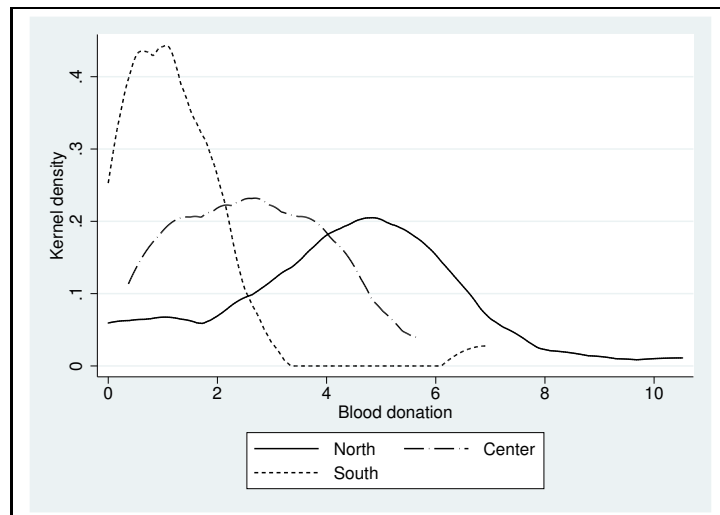
Notes. Fraction of members of Parliament receiving a RAP for serious crimes (see Appendix I) in the provinces of the North, Center, and South of Italy (Istat classification).

Figure 3: Absenteeism rate across areas



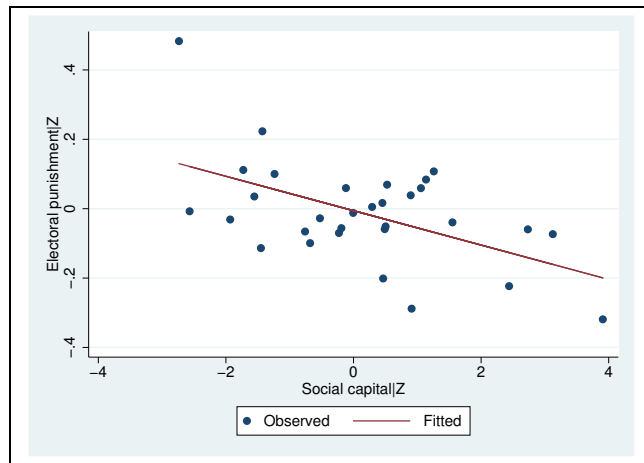
Notes. Kernel density of the absenteeism rate of the members of Parliament elected in the provinces of the North, Center, and South of Italy (Istat classification).

Figure 4: Social capital across areas



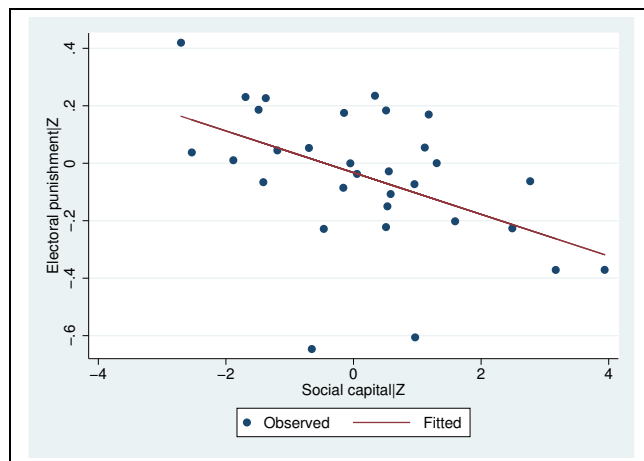
Notes. Kernel density of the social capital measure (number of blood bags every 100 inhabitants) in the provinces of the North, Center, and South of Italy (Istat classification).

Figure 5: Social capital and the electoral punishment of RAP



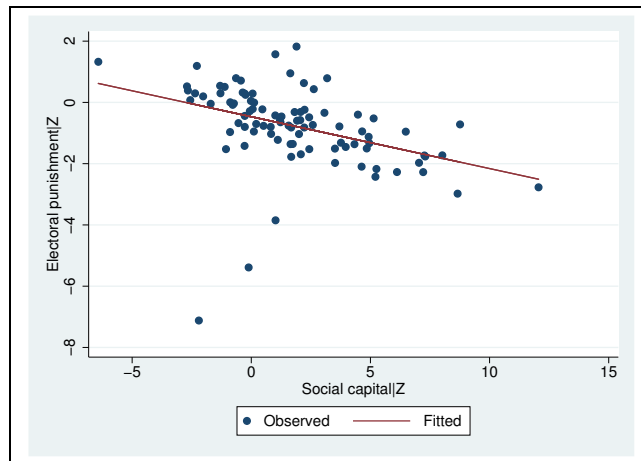
Notes. *Electoral punishment* is the district-specific effect of receiving a RAP on the log difference of future versus past votes. *Social capital* is measured as the number of blood bags every 100 inhabitants. The district-specific characteristics Z_j include: income, education, and newspapers. The slope coefficient is equal to -0.050 (p-value: 0.011).

Figure 6: Social capital and the electoral punishment of serious RAP



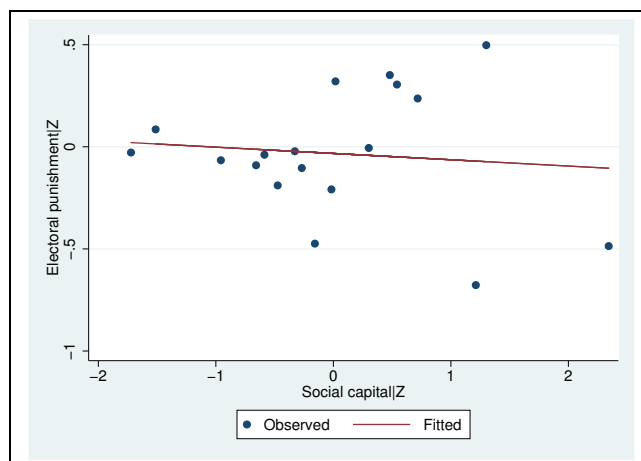
Notes. *Electoral punishment* is the district-specific effect of receiving a RAP for serious crimes on the log difference of future versus past votes. *Social capital* is measured as the number of blood bags every 100 inhabitants. The district-specific characteristics Z_j include: income, education, and newspapers. The slope coefficient is equal to -0.073 (p-value: 0.000).

Figure 7: Social capital and electoral punishment for majoritarian politicians



Notes. *Electoral punishment* is the province-specific effect of the absenteeism rate on reelection (majoritarian members of Parliament only). *Social capital* is measured as the number of blood bags every 100 inhabitants. The district-specific characteristics Z_j include: income, education, and newspapers. The slope coefficient is equal to -0.169 (p-value: 0.000).

Figure 8: Social capital and electoral punishment for proportional politicians



Notes. *Electoral punishment* is the region-specific effect of the absenteeism rate on reelection (proportional members of Parliament only). *Social capital* is measured as the number of blood bags every 100 inhabitants. The district-specific characteristics Z_j include: income, education, and newspapers. The slope coefficient is equal to -0.031 (p-value: 0.729).

NOTE DI LAVORO DELLA FONDAZIONE ENI ENRICO MATTEI

Fondazione Eni Enrico Mattei Working Paper Series

Our Note di Lavoro are available on the Internet at the following addresses:

<http://www.feem.it/getpage.aspx?id=73&sez=Publications&padre=20&tab=1>
http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=266659
<http://ideas.repec.org/s/fem/femwpa.html>
<http://www.econis.eu/LNG=EN/FAM?PPN=505954494>
<http://ageconsearch.umn.edu/handle/35978>
<http://www.bepress.com/feem/>

NOTE DI LAVORO PUBLISHED IN 2010

| | | |
|----|---------|---|
| GC | 1.2010 | Cristina Cattaneo: Migrants' International Transfers and Educational Expenditure: Empirical Evidence from Albania |
| SD | 2.2010 | Fabio Antoniou, Panos Hatzipanayotou and Phoebe Koundouri: Tradable Permits vs Ecological Dumping |
| SD | 3.2010 | Fabio Antoniou, Panos Hatzipanayotou and Phoebe Koundouri: Second Best Environmental Policies under Uncertainty |
| SD | 4.2010 | Carlo Carraro, Enrica De Cian and Lea Nicita: Modeling Biased Technical Change. Implications for Climate Policy |
| IM | 5.2010 | Luca Di Corato: Profit Sharing under the threat of Nationalization |
| SD | 6.2010 | Masako Ikefuji, Jun-ichi Itaya and Makoto Okamura: Optimal Emission Tax with Endogenous Location Choice of Duopolistic Firms |
| SD | 7.2010 | Michela Catenacci and Carlo Giupponi: Potentials and Limits of Bayesian Networks to Deal with Uncertainty in the Assessment of Climate Change Adaptation Policies |
| GC | 8.2010 | Paul Sarfo-Mensah and William Oduro: Changes in Beliefs and Perceptions about the Natural Environment in the Forest-Savanna Transitional Zone of Ghana: The Influence of Religion |
| IM | 9.2010 | Andrea Boitani, Marcella Nicolini and Carlo Scarpa: Do Competition and Ownership Matter? Evidence from Local Public Transport in Europe |
| SD | 10.2010 | Helen Ding and Paulo A.L.D. Nunes and Sonja Teelucksingh: European Forests and Carbon Sequestration Services : An Economic Assessment of Climate Change Impacts |
| GC | 11.2010 | Enrico Bertacchini, Walter Santagata and Giovanni Signorello: Loving Cultural Heritage Private Individual Giving and Prosocial Behavior |
| SD | 12.2010 | Antoine Dechezleprêtre, Matthieu Glachant and Yann Ménière: What Drives the International Transfer of Climate Change Mitigation Technologies? Empirical Evidence from Patent Data |
| SD | 13.2010 | Andrea Bastianin, Alice Favero and Emanuele Massetti: Investments and Financial Flows Induced by Climate Mitigation Policies |
| SD | 14.2010 | Reyer Gerlagh: Too Much Oil |
| IM | 15.2010 | Chiara Fumagalli and Massimo Motta: A Simple Theory of Predation |
| GC | 16.2010 | Rinaldo Brau, Adriana Di Liberto and Francesco Pigliaru: Tourism and Development: A Recent Phenomenon Built on Old (Institutional) Roots? |
| SD | 17.2010 | Lucia Vergano, Georg Umgieser and Paulo A.L.D. Nunes: An Economic Assessment of the Impacts of the MOSE Barriers on Venice Port Activities |
| SD | 18.2010 | ZhongXiang Zhang: Climate Change Meets Trade in Promoting Green Growth: Potential Conflicts and Synergies |
| SD | 19.2010 | Elisa Lanzi and Ian Sue Wing: Capital Malleability and the Macroeconomic Costs of Climate Policy |
| IM | 20.2010 | Alberto Petrucci: Second-Best Optimal Taxation of Oil and Capital in a Small Open Economy |
| SD | 21.2010 | Enrica De Cian and Alice Favero: Fairness, Credibility and Effectiveness in the Copenhagen Accord: An Economic Assessment |
| SD | 22.2010 | Francesco Bosello: Adaptation, Mitigation and "Green" R&D to Combat Global Climate Change. Insights From an Empirical Integrated Assessment Exercise |
| IM | 23.2010 | Jean Tirole and Roland Bénabou: Individual and Corporate Social Responsibility |
| IM | 24.2010 | Cesare Dosi and Michele Moretto: Licences, "Use or Lose" Provisions and the Time of Investment |
| GC | 25.2010 | Andrés Rodríguez-Pose and Vassilis Tselios (lxxvi): Returns to Migration, Education, and Externalities in the European Union |
| GC | 26.2010 | Klaus Desmet and Esteban Rossi-Hansberg (lxxvi): Spatial Development |
| SD | 27.2010 | Massimiliano Mazzanti, Anna Montini and Francesco Nicolli: Waste Generation and Landfill Diversion Dynamics: Decentralised Management and Spatial Effects |
| SD | 28.2010 | Lucia Ceccato, Valentina Giannini and Carlo Gipponi: A Participatory Approach to Assess the Effectiveness of Responses to Cope with Flood Risk |
| SD | 29.2010 | Valentina Bosetti and David G. Victor: Politics and Economics of Second-Best Regulation of Greenhouse Gases: The Importance of Regulatory Credibility |
| IM | 30.2010 | Francesca Cornelli, Zbigniew Kominek and Alexander Ljungqvist: Monitoring Managers: Does it Matter? |
| GC | 31.2010 | Francesco D'Amuri and Juri Marcucci: "Google it!" Forecasting the US Unemployment Rate with a Google Job Search index |
| SD | 32.2010 | Francesco Bosello, Carlo Carraro and Enrica De Cian: Climate Policy and the Optimal Balance between Mitigation, Adaptation and Unavoided Damage |

| | | |
|----|---------|--|
| SD | 33.2010 | Enrica De Cian and Massimo Tavoni: <u>The Role of International Carbon Offsets in a Second-best Climate Policy: A Numerical Evaluation</u> |
| SD | 34.2010 | ZhongXiang Zhang: <u>The U.S. Proposed Carbon Tariffs, WTO Scrutiny and China's Responses</u> |
| IM | 35.2010 | Vincenzo Denicolò and Piercarlo Zanchettin: <u>Leadership Cycles</u> |
| SD | 36.2010 | Stéphanie Monjon and Philippe Quirion: <u>How to Design a Border Adjustment for the European Union Emissions Trading System?</u> |
| SD | 37.2010 | Meriem Hamdi-Cherif, Céline Guivarch and Philippe Quirion: <u>Sectoral Targets for Developing Countries: Combining "Common but Differentiated Responsibilities" with "Meaningful participation"</u> |
| IM | 38.2010 | G. Andrew Karolyi and Rose C. Liao: <u>What is Different about Government-Controlled Acquirers in Cross-Border Acquisitions?</u> |
| GC | 39.2010 | Kjetil Bjorvatn and Alireza Naghavi: <u>Rent Seekers in Rentier States: When Greed Brings Peace</u> |
| GC | 40.2010 | Andrea Mantovani and Alireza Naghavi: <u>Parallel Imports and Innovation in an Emerging Economy</u> |
| SD | 41.2010 | Luke Brander, Andrea Ghermandi, Onno Kuik, Anil Markandya, Paulo A.L.D. Nunes, Marije Schaafsma and Alfred Wagtendonk: <u>Scaling up Ecosystem Services Values: Methodology, Applicability and a Case Study</u> |
| SD | 42.2010 | Valentina Bosetti, Carlo Carraro, Romain Duval and Massimo Tavoni: <u>What Should We Expect from Innovation? A Model-Based Assessment of the Environmental and Mitigation Cost Implications of Climate-Related R&D</u> |
| SD | 43.2010 | Frank Vöhringer, Alain Haurie, Dabo Guan, Maryse Labriet, Richard Loulou, Valentina Bosetti, Pryadarshi R. Shukla and Philippe Thalmann: <u>Reinforcing the EU Dialogue with Developing Countries on Climate Change Mitigation</u> |
| GC | 44.2010 | Angelo Antoci, Pier Luigi Sacco and Mauro Sodini: <u>Public Security vs. Private Self-Protection: Optimal Taxation and the Social Dynamics of Fear</u> |
| IM | 45.2010 | Luca Enriques: <u>European Takeover Law: The Case for a Neutral Approach</u> |
| SD | 46.2010 | Maureen L. Cropper, Yi Jiang, Anna Alberini and Patrick Baur: <u>Getting Cars Off the Road: The Cost-Effectiveness of an Episodic Pollution Control Program</u> |
| IM | 47.2010 | Thomas Hellman and Enrico Perotti: <u>The Circulation of Ideas in Firms and Markets</u> |
| IM | 48.2010 | James Dow and Enrico Perotti: <u>Resistance to Change</u> |
| SD | 49.2010 | Jaromir Kovarik, Friederike Mengel and José Gabriel Romero: <u>(Anti-) Coordination in Networks</u> |
| SD | 50.2010 | Helen Ding, Silvia Silvestri, Aline Chiabai and Paulo A.L.D. Nunes: <u>A Hybrid Approach to the Valuation of Climate Change Effects on Ecosystem Services: Evidence from the European Forests</u> |
| GC | 51.2010 | Pauline Grosjean (lxxxvii): <u>A History of Violence: Testing the 'Culture of Honor' in the US South</u> |
| GC | 52.2010 | Paolo Buonanno and Matteo M. Galizzi (lxxxvii): <u>Advocatus, et non Iatro? Testing the Supplier-Induced-Demand Hypothesis for Italian Courts of Justice</u> |
| GC | 53.2010 | Gilat Levy and Ronny Razin (lxxxvii): <u>Religious Organizations</u> |
| GC | 54.2010 | Matteo Cervellati and Paolo Vanin (lxxxvii): <u>"Thou shalt not covet ...": Prohibitions, Temptation and Moral Values</u> |
| GC | 55.2010 | Sebastian Galiani, Martín A. Rossi and Ernesto Schargrodsky (lxxxvii): <u>Conscription and Crime: Evidence from the Argentine Draft Lottery</u> |
| GC | 56.2010 | Alberto Alesina, Yann Algan, Pierre Cahuc and Paola Giuliano (lxxxvii): <u>Family Values and the Regulation of Labor</u> |
| GC | 57.2010 | Raquel Fernández (lxxxvii): <u>Women's Rights and Development</u> |
| GC | 58.2010 | Tommaso Nannicini, Andrea Stella, Guido Tabellini, Ugo Troiano (lxxxvii): <u>Social Capital and Political Accountability</u> |

(lxxxvi) *This paper was presented at the Conference on "Urban and Regional Economics" organised by the Centre for Economic Policy Research (CEPR) and FEEM, held in Milan on 12-13 October 2009.*

(lxxxvii) *This paper was presented at the Conference on "Economics of Culture, Institutions and Crime" organised by SUS.DIV, FEEM, University of Padua and CEPR, held in Milan on January 20-22 2010.*