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A matter of trust: The search for accountability in Italian politics, 1990–2000

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Abstract During the Nineties Italian politics underwent major changes. Following the uncovering of systemic corruption, the current political establishment was wiped out. The system of representation at both the national and local level underwent a significant transformation that improved voters' control over their elected representatives. We argue that both events were the consequence of citizens' demand for greater accountability of public officers. We model the relationship between voters and politicians as a repeated Trust game. In such game, cooperation can be attained by means of external or internal controls. Whereas judicial investigation is an external monitoring mechanism, the electoral reform provides controls internal to the political system. We explain the Italian transition between these different modes of control and show under which conditions a cooperative equilibrium can be established in which voters trust their representatives who in turn act in the public interest.

Keywords Trust games · Monitoring and sanctioning systems · Principal-agent relationship · Electoral systems · Political accountability

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1 Introduction

Political exchanges, such as the one between voters and their representatives, involve an informal, tacit contract. As in any contract, there is a time lag between promise and delivery, and information is asymmetrical. Voters cannot know the motivations of politicians, or the quality of the services they will provide. Both sides can benefit from an honest exchange, yet there is the potential for cheating. If voters trust, they make themselves vulnerable to exploitation by opportunistic politicians, but no democracy can function without a large amount of impersonal trust.

A standard solution to this kind of one-sided "social dilemma" is to introduce some form of external or internal social control. External controls involve the existence of "impartial" agencies that monitor and sanction compliance with the agreements we enter into. Institutional protection, however, can be costly. As argued by Fehr and Gächter (2000), monitoring and sanctioning require a complex organization, and often the very existence of such external controls can be counterproductive, in that it creates an atmosphere of threat and distrust. Internal controls instead rest on the possibility of repeated, non-anonymous interactions. Monitoring compliance with agreements, as well as sanctioning violations, are activities directly performed by the parties involved, insofar as they have the opportunity of repeatedly interacting with each other over time. The repetition itself, with its possibilities for signaling, retaliation and reputation formation, becomes an enforcement mechanism (Kreps 1990).

In a political system, however, repeated interactions do not occur in a vacuum. Electoral systems, as systems of rules for aggregating voters' preferences, govern political exchanges between the voters and their representatives. The existing electoral rules will determine the relative ease or difficulty of monitoring the politicians' performance, as well as the quality of the cooperative agreement between voters and politicians. In the absence of electoral rules that make the politician directly accountable to his voters, it may be expedient to introduce external controls. Indeed, we would expect to find external controls in place whenever the level of accountability of politicians' performance has been low. Reliance on internal controls, in turn, is made possible by a system in which the monitoring of performance and the assignment of responsibilities are relatively easy tasks. In such a system, punishments and rewards can be effectively used by voters to promote their interests.

A good example of an efficient internal control that we will extensively discuss is the direct election of mayors in local governments in Italy. An alternative, less efficient system is one in which mayors are elected by representatives in the local legislature, and are thus less accountable to voters. Unsatisfactory performance in this case can always be vindicated as the outcome of the mayor's allegiance to a political party (or coalition of parties), who has the ultimate responsibility for poor performance. In the latter case, dissatisfied citizens may push for a form of external control. In the Italian experience of the Nineties, external control took the form of judiciary intervention. Magistrates took the responsibility of ensuring that the actions

of elected officials would be in voters' interest. To this end, judicial control over elected representatives was much strengthened.

In line with the pioneering work by Putnam (1993), theories of social capital emphasize the role of impersonal trust and norms of reciprocity in supporting democratic regimes. Many of these theories make the assumption that attitudes generated in one social domain will generalize to other public spheres. For example, Putnam has claimed that participating in voluntary associations builds generalized trust. However, more recent empirical work on membership in voluntary associations and levels of impersonal trust casts doubts on Putnam's hypothesis (Stolle 1998). Quite to the contrary, the high levels of trust that one observes in close-knit networks do not seem to generalize to other groups, or to the political sphere. It is however true that democracies need impersonal trust to survive, and that a major task of political theory is to explain what builds, supports, or destroys it. Our view is that institutions play a crucial role in building and maintaining generalized trust.¹ Political institutions such as electoral systems may facilitate or hamper the monitoring of politicians' performance, and thus increase or decrease their political accountability. Greater accountability, in turn, is likely to promote a climate of trust.

Italy is a case in point. The Nineties will be remembered in Italian political history as the years of the transition from the "First Republic" to the "Second Republic". This transition has been marked by two revolutionary events stemming from citizens' dissatisfaction with the political system. First, there was the disclosure by the judiciary and the media of generalized political corruption. Second, the electoral system for municipal elections was changed in favor of direct elections of mayors.² Both these phenomena can be viewed as the outcome of voters' expressed desire for greater accountability on the part of their elected representatives in legislatures and executives.

One might ask whether voters' desire was for greater accountability or for less corruption, and whether these two issues should be identified. Electoral systems based on direct elections of mayors, though formally accountable, might be corrupt. For example, the Chicago administration in the 1960s fits our accountability standards (i.e., direct election of mayors), but it went down in history as a corrupt local government. Corruption in this case was not isomorphic with lack of accountability. Whereas in Chicago corruption and accountability co-existed, in Italy corruption was publicly perceived as deriving from lack of accountability. Therefore, greater political accountability of elected representatives in Italy – but not in Chicago – was seen as a crucial institutional tool for winning the fight against corruption. Hence although corruption and accountability are not necessarily inversely related, in Italy they were publicly perceived to be so.

¹ For a discussion of personal vs. impersonal trust, see Hardin (2001).

² At the national level, the reform changed the electoral system from proportional representation (PR) toward a mixed system with strong elements of plurality (PL).

In the eyes of the electorate, Italian politics was characterized by two elements: an electoral system that diluted policymakers' responsibility, and a judicial system powerless in the face of overpowering political parties. This situation led to the popular opinion that both a weak judicial system and the electoral rules were the major contributors to the degeneration of the Italian political system, a system characterized by unaccountable public administrations often plagued by corruption. In this framework, the publicly supported judicial intervention commonly known as *mani pulite* ("clean hands") and the electoral reform were seen as means to encourage public policies in the interest of collective welfare and a more direct and responsible relationship between voters and elected representatives.

The Italian experience is particularly interesting because it shows a clear-cut transition from external to internal systems of control in local elections. The old electoral system provided little accountability and was replaced by a costly system of external controls, which was in turn abandoned in favor of a more efficient system of internal controls. Though the whole Italian electoral system was substantially changed, a new system of internal controls was best realized in local elections, where voters can now directly elect public officers. For this reason, we concentrate on the new system of local electoral rules. Yet we believe that the conclusions we draw for institutional design go beyond the particulars of Italian local electoral rules and can be generalized to national electoral systems.

We model the transition between different control systems by means of a trust game, in which the voter is the trustor and the politician is the trustee. The advantages of providing a formal model are manifold. For one, a formal model allows to integrate several assumptions in a coherent complex and promote disciplined thinking about an issue. Though a formal model, by its very nature, tends to cut through the complexity of social phenomena, it makes very clear what we deem to be the essential features of the issue we study. Whether what we deem essential is really so is an empirical question, not a formal one. Our model presupposes that both voters and public officers act as if rational, in the sense of having a preference ordering over outcomes, and choosing the most preferred one. Within this framework, we show under which conditions it makes sense to move to a different electoral system, and how a cooperative equilibrium can be established in which voters trust their politicians, who in turn have an incentive to reciprocate and act in the public interest.³

³ Tversky, et al. (1990) noted that a change of procedures can lead to preference reversals, so that preferences may not be stable under different sets of rules. This analysis suggests that agents prefer outcomes with higher probabilities and lower payoffs even though they assign a higher pecuniary value to outcomes with lower probabilities and higher payoffs. As far as the politicians are concerned, it is their preferred outcomes (regardless of pecuniary value) that are relevant. As far as the voters are concerned, their preferences have tax implications, but the tax system is beyond the scope of this paper and treated as exogenous.

2 The model

The relationship between voters and politicians can be modeled as a trust game, in which the voters may choose to play one of two possible games (Fig. 1): a low trust game denoted by G_1 or a high trust game denoted by G_2 . More specifically, our model describes the interaction between voters and mayoral candidates.

In G_1 , player 1 (the voter) has two possible strategies: do not trust (NT), or trust with formal restrictions (TR). If he does not trust, player 1 gets a payoff of x and player 2 (the mayoral candidate) gets nothing. In this case, "getting nothing" would mean not being elected. Trusting with restrictions would instead mean that the candidate (player 2) is elected, but that he is subject to a set of "external controls". If player 1 decides to trust, the size of his endowment is tripled to $3x$, and player 2 must then decide whether to reciprocate (R), returning $3x/2$ to the sender and keeping $3x/2$ for himself, or not reciprocate (NR) at a cost of $-x$. In this case, player 1 gets 0.

G_1 represents the case in which the performance of player 2 is externally monitored by a third-party agency, and transgressions are easily detected and punished. External controls, by imposing negative sanctions on deviant behavior, work by changing players' incentives. In G_1 , player 2's payoff for failing to reciprocate is $-x$. A usual argument against external controls points to their costs. Monitoring performance, identifying and punishing transgressors and enforcing agreements are all costly activities that require specialized agencies. A less obvious but perhaps equally substantial cost is represented by the fact that external controls tend to generate an atmosphere of uncertainty and mistrust. This atmosphere is not conducive to risk-taking and innovation, as agents may find it safer to provide the minimum acceptable level of performance. The costs of external controls are represented in G_1 by the size of the endowment's multiplier. In G_1 the endowment is only tripled, whereas in G_2 it is quadrupled.

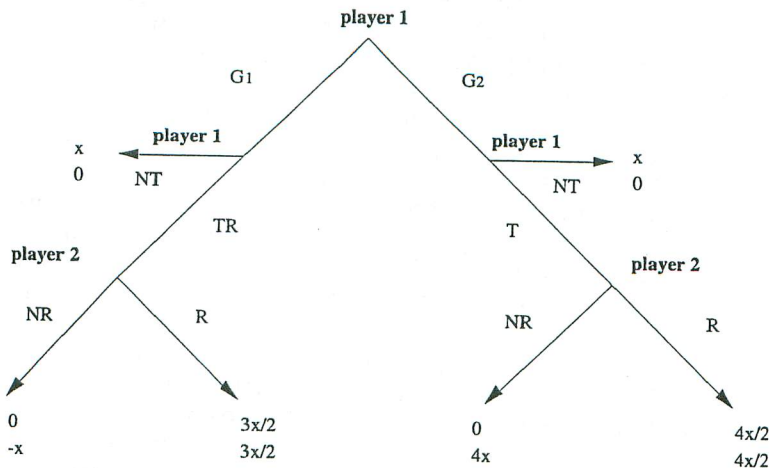


Fig. 1 The trust game as played before the electoral reform

In G_2 , the set of possible actions for player 1 is {T, NT}, and the action set for player 2 is to reciprocate or not reciprocate {R, NR}. In G_2 , however, if player 1 decides to trust the size of his endowment is quadrupled to $4x$, so if player 2 reciprocates each gets $2x$, whereas if player 2 does not reciprocate, he gets to keep the $4x$, and player 1 gets nothing. If the game of Fig. 1 is played once, the unique subgame perfect Nash equilibrium is for player 1 to choose G_1 and then TR, and for player 2 to choose R.

The conclusion is that in a one-shot scenario, the best solution is for the voters to impose external controls, even if they involve a cost. The players would do better if they were to simply trust and reciprocate (by playing G_2), but player 2 has an obvious incentive to cheat. If the game were to be repeated a finite number of times, and players' rationality is common knowledge, we would reach the same result via backward induction (Bicchieri 1993). In the last period, player 2 would have an incentive to reciprocate only in G_1 , and player 1 would know that. So in the last period player 1 would choose G_1 . In the penultimate period, knowing what would happen in the last period, player 2 would have no reason to reciprocate in case G_2 were played, and player 1 – knowing that – would have no reason to play G_2 , the high trust game. The same reasoning would apply to each period, hence the only rational strategy is for player 1 to always play G_1 and TR, and for player 2 to always respond with R.

If the game is repeated indefinitely (or if there is uncertainty as to its length), however, it becomes possible for the players to cooperate with each other, and thus get better payoffs, in the absence of any external control. Repetition itself, with its possibilities for signaling, retaliation and reputation formation, becomes an enforcement mechanism. Indeed, the folk theorem for repeated games states that, for a low enough discounting of the future, there are many equilibria in which the players behave cooperatively (Fudenberg et al. 1994).

In the indefinitely repeated version of the game, we assume that players discount future earnings at the rate $1 - \delta$, where $\delta \in (0, 1)$ is the probability that the game ends from one round to the next. The expected number of rounds in an indefinitely repeated game is then $r = 1/\delta$. So for example a trusting-reciprocating behavioral pattern can be supported as an equilibrium if both players adopt a grim-trigger strategy. Player 1 initially plays G_2T , and keeps playing G_2T if player 2 plays R, but after the first defection (NR), he switches to G_1TR forever. Player 2 on his part will respond with R to G_2T , but after either G_2NT or G_1TR are played once, he will always respond with NR whenever player 1 chooses G_2T again. This equilibrium can be supported as long as $\delta \leq 1/5$.⁴ Other trigger strategies can be used to support cooperative behavior along the equilibrium path, under similar restrictions on δ .

Conditional cooperation, however, is predicated on the assumption that players can directly monitor each other's performance. To punish defection, we need to be sure defection has occurred, but it might be difficult to dis-

⁴ Player 2 will choose NR in G_2 if $4x + (1/\delta \dots) 1.5x > 4x/2 (1/\delta)$, where δ is the probability that the game ends this round and the expected number of rounds after the first is $1/\delta \dots$. For him to choose NR, δ must be greater than $1/5$.

tinguish defection from a "mistake" or a situation in which the transgressor was "forced" by circumstances to behave in a non-reciprocating way. For example, game G_2 may be played either with a mayor who is directly elected, or with a mayor who is chosen by the winning party. In the first case, we can reasonably assume that the mayor (player 2) is directly accountable to his electors. Monitoring will be relatively easy, and the above analysis of the indefinitely repeated game will apply.

Suppose instead that the electoral system is such that electors vote for a political party, who in turn will independently choose its candidate to office. In this case, the elected officer has to balance two different loyalties, one to his party and another to the voters. In this context, many decisions can be presented as "constrained" by party loyalty or dictated by party interests. Player 1 will thus have to weigh the advantage of playing G_1 and getting $3x/2(r)$ against repeatedly playing G_2 in a condition of imperfect monitoring. Imperfect monitoring in this case does not mean that player 2's actions are not observable. They are, but the reasons behind the choices are not easy to decipher. A bad policy decision may be the result of poor personal judgment as well as the outcome of a compromise with the demands of one's political party.

The difficulty of monitoring performance will constrain the set of trigger strategies available to player 1. There will still be cooperative equilibria, but we may expect many of them to be more advantageous for player 2. In all these equilibria, there will be a maximum number of rounds in which player 2 is allowed to play NR without being punished, provided the expected payoff for player 1 is greater or equal to $3x/2(r)$. Let n^* be the number of rounds in which player 2 plays NR, and let K be the total number of rounds of the game thus far. Then n^*/K will tell how often player 2 cheats.

For example, player 1 may play the following strategy: start by playing G_2 and trusting, and continue trusting for n -rounds, irrespective of what player 2 does. After that, trust only if reciprocated, otherwise revert to G_1 and TR. Were player 2 to know that player 1 plays this strategy, it would be best for him to play NR for n -rounds, and then play R for the rest of the game (provided there is a high enough probability that the game continues another round). Player 1, in turn, will choose this strategy, and thus the proportion of cheating it can tolerate, if $0 + 2x(1/\delta - (n^* + 1/K + 2 \cdot 1/\delta)) \geq 3x/2(1/\delta)$, or $2x(1 - n^* + 1/K + 2) \geq 3x/2$.⁵ In our game, player 1 will tolerate cheating one sixth of the time or less, and revert to formal controls for a higher frequency of cheating.

⁵ In the repeated Trust game, player 1 (the voter) has to assess the probability p that player 2 (the politician) will cheat in any stage game. Since p is unknown, it is a random variable with Beta distribution with parameters α and β . The (a priori) probability density of p is thus $Be(\alpha, \beta) p^{\alpha-1} (1-p)^{\beta-1}$. Since the player has no a priori information, we assume a constant density on the $[0,1]$ interval (a binomial distribution), i.e., the value of p is a number between 0 and 1, and each number is equiprobable. The probability density of p is thus 1 if $0 < p < 1$, and 0 otherwise. This corresponds to $Be(1,1)$. The prior probability density for p is then $Be(1,1) \cdot p^{-1} (1-p)^{-1} = 1$. Suppose now that player 1 has observed player 2 to cheat n times over k games. What is the posterior probability density of p , given the observation that player 2 cheated n times over k games? It is $Bi(p,k) \cdot Be(1,1)$. It follows that the expectation of the posterior distribution for p is $n+1/k+2$.

The model we propose explains how a trusting, cooperative interaction between voters and representatives can be sustained. A crucial assumption is that the interaction has no known termination. Indeed, even if a particular mandate has a set time limit, usually the politician will continue her career through re-election in the same office or through the election in another office. A city mayor may want to stay in office for one more term or to become a Parliament or Senate member, and thus benefit from a reputation of honesty and efficiency. The model also shows why electoral rules matter. If the mayor is directly elected, the possibility of "explaining away" a bad performance is severely restricted. If instead the mayor is elected by the winning party, there is much more room for justifying poor performance, and our model predicts that – depending upon the actual costs and payoffs – there will be a certain amount of "cheating" involved (and tolerated). The difficulty of monitoring performance creates a power imbalance in the relationship between voters and the politician, and a disincentive for the elected politician to perform optimally. Since it will be usually difficult for the politician to exactly calculate how much "cheating" will be tolerated, there might be a tendency to cross the boundary. In that case, voters will try to implement external controls, which is exactly what happened in Italy.

3 Some history

In this section we briefly describe the historical background surrounding the transition from the First to the Second Republic in Italy. Besides describing the facts, we will focus upon the citizens' role in fostering the transition. We believe that neither the judicial action nor the electoral reform would have been implemented without strong popular support. In other words, we want to stress that the electoral and political transformations that occurred in Italy in the Nineties were not the result of autonomous initiatives undertaken by the judiciary and the political parties. They were rather the consequence of a pressing demand by the citizens for more accountable and reliable representatives.

For the sake of clarity, we organize this section into three separate subsections. In the first subsection we describe the *mani pulite* judicial intervention and its political consequences. In the second subsection we analyze the process leading to the electoral reform and briefly describe the features underlying the new system of representation at the local level. In the last subsection we make some summary evaluations and comments.

3.1 The corruption scandal and its political consequences

The end of 1989 saw the exposure of a huge corruption scandal. The occurrence of systematic corruption was dubbed *Tangentopoli* (Bribesville) and was legally prosecuted by the *mani pulite* judicial operation. The judicial investigation was pursued by Italian magistrates who enjoyed overwhelming popular support. The scale of the scandal was unprecedented in modern

Italian history. Within three years, the scandal destroyed virtually all the parties that had governed Italy since the end of the Second World War. In particular, Italy witnessed the disappearance of the entire moderate political establishment.

Table 1 displays the electoral preferences of Italian voters before and after the judicial investigation. It can be seen that (with the exception of Pannella) all the parties located at the center of the political spectrum, such as *Partito Repubblicano Italiano*, *Democrazia Cristiana* and *Partito Liberale Italiano* totally disappeared. This created a huge vacuum at the center of the Italian political arena and led to a race to occupy that space. An array of new parties rose from the ashes of the former moderate bloc. These parties include *Alleanza Democratica*, *Patto Segni*, *Partito Popolare Italiano* and *Forza Italia*. The new parties were able to obtain the support of about 37% of the Italian voters.

The party shares reported in Table 1 refer to changes in parties' electoral support at the national level. However, it is important to note that in Italy, with the only exception of the *Lega Nord*,⁶ the local party system mirrors the national party system. This means that the electoral changes that took place at the local level roughly matched those occurring at the national level.

3.2 The electoral reform

In the early 1990s a campaign for referenda to change Italy's electoral laws was launched. The referenda that followed led to a new system of representation that reformed the institutional framework within which voting took place at the national and local level. The electoral reform campaigns extended to the Spring of 1993 and the popular support in favour of electoral change at the national and local level was overwhelming. The basic change in the electoral rules at the national level resulted in a 75%/25% PL/PR split in the seats for the Chamber of Deputies (Lower House) elections.⁷ As far as the Senate (Upper House) elections were concerned, a single-member-district plurality system was adopted.

Let us now describe in greater detail the new rules for the election of local representatives, since our analysis mainly focuses on the effects of the reform of the system of representation at the local level. Under the old proportional representation, each voter was required to make two choices. The voter first selected his preferred political party list, and then a limited (relative to the population size of the college) number of candidates within the list. The seats were then assigned to party lists in proportion to the votes obtained. Next, the candidates in the list were ranked according to the number of votes obtained by each individual candidate. For example, if the total number of seats at stake was 10, and a particular 8-candidate party list received 40% of the votes, it was assigned 40% of the seats, i.e., 4 seats. Further, in such a list

⁶ The Northern League is a regional party whose support is mainly located in the northern part of Italy.

⁷ Note that 'PR' stands for 'proportional representation', and 'PL' stands for 'plurality'.

Table 1 Electoral preferences before and after *Tangentopoli*

| Old parties | 1992 Elections | 1994 Elections | New parties |
|-------------------------------|-------------------|-------------------|------------------------------|
| <i>Left</i> | | | <i>Left</i> |
| Rifondazione Comunista | 5.6 | 6.0 | Rifondazione Comunista |
| Partito Democratico Sinistra | 16.6 | 20.4 | Partito Democratico Sinistra |
| Rete | 1.9 | 1.9 | Rete |
| Verdi | 2.8 | 2.7 | Verdi |
| Partito Socialista Italiano | 13.6 | 2.2 | Partito Socialista Italiano |
| Partito Socialdemocratico | 2.7 | – | |
| | – | 1.2 | Alleanza Democratica |
| Total | 42.7 | 34.4 | |
| <i>Center</i> | | | <i>Center</i> |
| Partito Repubblicano Italiano | 4.4 | – | |
| | – | 4.7 | Patto Segni |
| Democrazia Cristiana | 29.7 | 11.1 | Partito Popolare Italiano |
| | – | 21.0 | Forza Italia |
| Partito Liberale Italiano | 2.8 | – | |
| Pannella | 1.2 | 3.4 | Pannella |
| Total | 38.1 | 40.2 | |
| <i>Right</i> | | | <i>Right</i> |
| Lega Nord | 8.7 | 8.5 | Lega Nord |
| Movimento Sociale Italiano | 5.4 | 13.5 | Alleanza Nazionale |
| Total | 14.1 | 22.0 | |
| Other parties | 5.1 | 3.4 | Other parties |

the four most voted candidates were elected, while the remaining four were not.

Under the new electoral system, there were two important changes in the election of local representatives. First, voters select a party list but then, instead of choosing more than one candidate from the list, they only pick their most preferred candidate. Second, only 70% of the seats are assigned to party lists in proportion to their share of the total vote. Of the remaining 30% of the seats, 20% are assigned to the list or coalition of lists obtaining the highest number of votes (a majority premium), and 10% are assigned to the party list or coalition of lists with the second highest number of votes (a minority premium).⁸

The most innovative element of the reform towards plurality is the direct election of mayoral candidates (and local governors). Prior to the reform, mayors were elected by representatives in the local legislature. They are now directly elected by the voters, with a second ballot between just the two front-runners when necessary. Under the old electoral system, political parties played an important role in choosing the mayor, since the choice took place after the election. In the new system, parties have a considerably diminished role since voters choose their mayor by direct election. The new rules thus allow voters to actively reward or punish competent or incompetent administrations. This results in greater accountability on the part of the elected executives.

⁸ For a detailed description of the electoral reforms, see Mudambi et al. (2001).

3.3 Summary evaluations

Between 1989 and 1993, the democratic relationship between Italian voters and elected representatives underwent major changes. As displayed in Fig. 2, during this period there was growing dissatisfaction with political parties (represented by decreasing trust): citizens did not trust their elected representatives to act in their interest, resented the lack of accountability and expressed a desire for change.⁹

However, political change presents voters with a well-known collective action problem. It is in the interest of each voter to initiate a change, but acting in isolation is costly and ineffective. The problem is thus how to coordinate joint action and provide sufficient incentives for voters to participate. In this situation of widespread discontent, a new leader or a new movement have a good chance to organize citizens by giving structure and content to their dissatisfaction.

The voters' discontent was first seized and coordinated by a new political party, the Northern League, which quickly became a substantial political force in the northern part of the country. The electoral support for this new political movement, however, remained circumscribed to northern Italy. At the same time, a group of magistrates in Milan started the *mani pulite* operation, which spread very rapidly to the rest of Italy. Again, voters' dissatisfaction was the underlying necessary condition for the success of the judicial operation against political corruption.¹⁰

The popular success of the Northern League on one side, and of the Milan judges on the other, opened the way to the demand for referenda to reform the electoral system. The electoral reform can thus be seen as the outcome of successful coordination and channeling of citizens' dissatisfaction with traditional politics. Reform advocates claimed that the reform would provide the following benefits:

- (1) It would enact a clear-cut alternative between two political blocs, thus ending party fragmentation;
- (2) it would offer a stable government not subject to constant inter-party negotiations;
- (3) direct elections at the local level would facilitate attributing and monitoring political responsibility;
- (4) citizens would vote for people and not for parties;
- (5) it would reduce political corruption.¹¹

⁹ The measure of political trust represented on the vertical axis of Fig. 2 was calculated using national opinion polls by DIAKRON, an Italian marketing agency. See Pilo (1996) for a careful description of this survey.

¹⁰ See Bicchieri and Rovelli (1995).

¹¹ The benefits of a mixed system of representation both in Italy as well as in other countries have been critically evaluated by Mudambi et al. (2001), Mudambi and Navarra (2004), Grofman and Lijphart (1986), Massicotte and Blais (1999), and Shugart and Watterberg (2000).

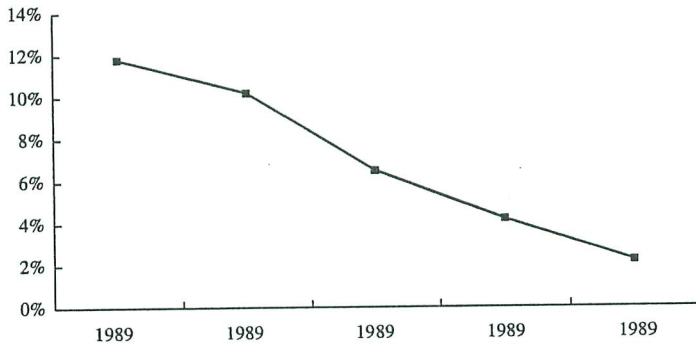


Fig. 2 Trust in political parties Source: G. Pilo (1996) *Perché il Polo ha perso le elezioni*. Newton & Compton Editori Roma

The electoral reform that took place after *mani pulite* was achieved on the wave of citizens' demand for a system of representation that makes the political system accountable to citizens. The motivations that lay behind the popular support of the judicial prosecution of political corruption were also instrumental in changing the electoral system.

4 The trust game and Italian politics

In Sect. 2 we described the relationship between voters and elected representatives as a trust game. In this section we connect the model with the events that animated Italian politics in the nineties. In the nineties we observed a transition from a low to a high trust regime in the relationship between voters and elected representatives. This transition took place in two stages. The first stage covers the early period of the decade (1990–1994/5), in which the desire to make politicians accountable took the shape of judiciary control. The second stage comprises the second half of the nineties (1994/5–2000), in which the change to a new system of representation provided an effective mechanism for monitoring the performance of elected representatives. In this section we show how the move to a low-trust game (G_1) and then back again to a new, high trust game (G_2) in which monitoring of public officials is feasible follows the temporal order of Italian institutional change.

Using a formal approach to examine the actions that generated the outcomes of the most recent Italian political history will allow us to derive important implications for the process of institutional change that is still occurring in Italy.

4.1 Accountability and external controls

The model presented in Sect. 2 shows that in an indefinitely played trust game conditional cooperation between voters and elected representatives can be achieved if the performance of the latter can be effectively monitored. In

the absence of effective monitoring, cooperation between voters and politicians can be best guaranteed with external controls (as in game G_1).

In Italy, the system of representation in place before the electoral reform did not allow citizens to effectively monitor government actions. At the local level, executives were elected in the legislature by the elected representatives. This made local governments more accountable to the legislatures than to citizens and reduced their responsiveness to the preferences of electors. Our model however shows that, even in case of difficult monitoring (and low accountability), game G_2 can be sustained provided there is a "tolerable" level of mismanagement. This level is determined by the costs and benefits of "cheating" as compared with what one would get by playing G_1 , the low trust game. In practice it may be difficult for citizens to perform such calculations, and there may be a temptation on the part of representatives to cheat more often than what would be allowed and tolerated by citizens. Part of the monitoring problem is that it must be clearly understood what compliance means, and that circumstances are not so complex that it becomes impossible to define compliance. If G_2 is played in a low-accountability environment, monitoring becomes almost impossible. The best alternative in this case is to revert to G_1 , and demand external controls. In line with our theoretical model, cooperation between voters and elected representatives was obtained only through an external control exercised by the judiciary. In this context and in response to a popular demand for more accountable representatives, the *mani pulite* judicial operation took off in Milan and soon spread to the entire country.

However, external controls to enforce agreement and cooperation between voters and politicians have twofold costs. The first, obvious cost has to do with the deployment of judiciary resources to monitor the performance of elected representatives, and then punish any violation. Such resources are deflected from other uses, creating a huge backlog of cases. But perhaps more disturbing, such external controls often generate an atmosphere of uncertainty and mistrust that ultimately leads to a reduction in government performance and citizens' welfare (we model this cost as a reduction in the size of the endowment multiplier in G_1). As Frey (1998) suggested, if we consider the relationship between voters and politicians in terms of an agency contract, tighter formal controls might impair the performance of governments and hamper citizens' welfare.

4.2 Democratic contracts

In a representative democracy, elected politicians receive a mandate from the citizens/voters to govern on their behalf. This relationship between voters and elected representatives can be interpreted as a principal-agent relationship in which citizens/voters are the principals and the elected politicians the agents. The voters (principals) use the elections as a means to reward (punish) those politicians (agents) who acted (did not act) in their best interests.

Let us call this special agency relationship a "democratic contract". Like any other agency contract, the democratic contract is designed to guarantee,

as much as possible, that the agent undertakes his contractual obligations. Therefore, contractual mechanisms are designed to align the interests of the agent with those of the principal. The better the design of the democratic contract, the more elected representatives will act in the interest of the citizenry. This implies that a change in the structure of the contract affects the outcome of the relationship between voters and elected politicians.

The *mani pulite* judicial investigation can be interpreted as a change of the terms of the democratic contract between voters and elected representatives. Tighter monitoring by the judiciary was expected to increase the accountability of elected representatives and therefore to improve their performance in serving the interests of the voters. In other words, increased judicial control was expected to increase the marginal costs to politicians of neglecting their duties. Hence the incentive to shirk was expected to diminish, increasing the amount of government activity.

In the traditional principal-agent theory, agents' non-monetary motives are assumed to be constant or even absent. Yet "intrinsic motivations" (Frey 1998) such as pride in a job well done, job satisfaction, etc. may play an important role in agents' performance. Neglecting these psychological factors overlooks what Frey (1998) calls the "crowding out" effect. Frey suggests that when agents are monitored, the intrinsic pride that they take in their work is "crowded out", so that overall agent's efficiency may actually decline. This is particularly true in the case of high skill professions, where agents derive a great deal of utility from a job well done. In our case, judicial control is a form of external monitoring that, according to Frey's analysis, would be expected to reduce the intrinsic motivation of elected representatives to do their jobs. In this framework, tougher controls by the magistrates can be expected to lower the performance of elected officers.

We empirically tested this hypothesis.¹² Specifically, we hypothesized that if the "crowding out" effect operates, elected officials would respond to increased judicial monitoring by raising current expenditures¹³ and reducing capital spending. We conjectured that tighter controls would limit intrinsic motivations of elected officials, leading them to implement only ordinary tasks. For example, a local officer may not want to run the risk of being put under investigation if he invests in a new school to improve the educational facilities of the community. Waiting for better times to come, he would probably only take care of the safer ordinary administration.

In line with this hypothesis, we expected the ratio between capital spending and current local expenditures to be lower in the years following the *Bribesville* scandal. Further, we wanted to see whether greater judiciary control produced different effects depending on the political orientation of local governments. In this respect, two important considerations should be made before moving to the estimation. First, Italian local governments in the period under investigation were mainly led by three political parties: the Christian Democracy (DC), the Italian Socialist Party (PSI) and the Italian

¹² Frey and Jegen (2001) collect and discuss the evidence existing for 'crowding out effects'.

¹³ Current expenditures comprise salaries, utilities, rent and all those short-term expenses that are necessary to run the local administrative machine.

Communist Party (PCI). Second, while the former two parties were strongly affected by the judicial investigation, the latter remained almost untouched. In the light of these facts, we expected the most severe crowding out effect to occur in the local administrations that were under the control of the DC and PSI.

In Table 2 we present the results of econometric testing of the two hypotheses discussed above. We examine two related dependent variables – the level of municipal capital spending as well as the ratio between capital and current municipal spending across Italy. The panel data used in the estimation were obtained from the *Confindustria* database. They consist of 11 time series observations, from 1986 to 1996, for all the 20 Italian regions. It is important to point out that the *Confindustria* database only includes data on the aggregate public expenditure of all municipalities belonging to each Italian region. The independent variables are the levels of electoral support for the three major political parties – the DC, the PSI and the PCI – as well as a dummy to capture the onset of the *mani pulite* operation (1991). We also introduced party-specific effects of the judicial operation by including interaction terms between the onset of the operation and a party's electoral support. For the estimation we pooled the time series data of the 20 regions to form a dataset of 220 observations (11 years \times 20 regions), thus making use of cross-section (short-run) and time-series (long-run) information. The fixed effects specification is used to obtain estimates since it is found to outperform both the base-line ordinary least squares (OLS) as well as the random effects specification. Summary statistics of the variables used in the empirical investigation are shown in Table 3.

We notice that, overall, an increase in the regional support for the PCI (PCI in the table) is associated with a higher ratio of capital to current spending, as well as a higher level of capital spending (though the latter effect is weaker). However, an increase in the regional support for DC and PSI (DC and PSI in the table) is not significantly associated with either the public capital spending ratio or its level. The *Tangentopoli* dummy (TGT in the table) is very significant and negative, indicating the existence of a crowding out effect produced by judicial monitoring. The most interesting result is that the *mani pulite* effect on spending was almost entirely circumscribed to those regions with high levels of DC and PSI support. The interaction between the onset of *mani pulite* and the level of DC and PSI support significantly reduced the ratio of capital to current spending as well as the level of capital spending (TGT \times DC and TGT \times PSI in the table). However, the interaction with the level of PCI support (TGT \times PCI in the table) is not significant. The estimates are controlled for regional disparities in wealth, as indicated by the significant positive effect of regional real per capita income (PERCAP) in the table.

Note that in our empirical investigation we were not interested in the effects produced by different parties on the historical expenditure pattern of Italian local governments. Had we been, we should have considered other possible reasons why we get different types of expenditure patterns (and changes therein) in jurisdictions controlled by different parties. We rather wanted to look at the variation in the composition of local spending due to the corruption scandal uncovered in the early nineties and check whether

Table 2 Estimation of public expenditure (1986–1996). Panel estimates – Fixed effects model^a

| Regressor | Regressand | | | |
|------------------------|---------------------|----------------------------|----------------|----------------------------|
| | OPP / (OPP + CONPA) | | OPP | |
| | Coefficient | “t” statistic ^b | Coefficient | “t” statistic ^b |
| Common constant | –92.304 | –0.32 | 176.556 | 1.29 |
| DC | 611.815 | 1.00 | –175.070 | –1.36 |
| TGT × DC | –125.320 | –2.96*** | –28.060 | –3.07*** |
| PSI | 3120.244 | 1.21 | –11.255 | –0.19 |
| TGT × PSI | –38.854 | 2.03** | 479.706 | 1.93* |
| PCI | 776.820 | 2.00** | 47.929 | 1.72* |
| TGT × PCI | –401.172 | –0.89 | –131.642 | –0.47 |
| TGT | –174.114 | –2.50** | –162.488 | –2.78*** |
| PERCAP | 23.516 | 3.55*** | 4.480 | 2.21** |
| Diagnostics | | | | |
| Adj. R ² | 0.3964 | | 0.3370 | |
| F(8, 211); (“p” value) | 5.89; (0.0001) | | 4.96; (0.0001) | |
| Log-Likelihood | –1643.8067 | | –1501.3851 | |
| S.E. (residuals) | 39802800 | | 17179900 | |
| AIC | 15.007 | | 14.185 | |
| T | 11 | | 11 | |
| N | 220 | | 220 | |

OPP Region-wise capital expenditure to current expenditure (1986–96).*

CONPA Region-wise current expenditure to current expenditure (1986–96).*

PERCAP Region-wise per capita income (at 1990 prices) (1986–96).*

CD Average percentage level of electoral support for the *Democrazia Cristiana* (1968–91).**

PCI Average percentage level of electoral support for the *Partito Comunista Italiano* (1968–91).**

PSI Average percentage level of electoral support for the *Partito Socialista Italiano* (1968–91).**

TGT *Tangentopoli* dummy, taking the value 1 for the years from 1992 to 1996, 0 otherwise.

^a Region-wise fixed effects are additive to the common constant and are not reported, but available from the authors. The fixed effects model is statistically superior to the base-line OLS model as well as the random effects model. The regional effects are significant and affect mean public expenditures, rather than the variance of these expenditures.

^b White’s heteroskedasticity-consistent variance-covariance matrix used to compute “t” statistics.

* Estimate statistically significant at the 10% level.

** Estimate statistically significant at the 5% level.

*** Estimate statistically significant at the 1% level.

* *Source:* For years 1986–93, *Le regioni in cifre*, ISTAT, various years. For years 1994–96, *Annuario statistico italiano*, ISTAT, 1996, 1997, 1998.

** *Source:* Quarant’anni di elezioni in Italia, ISTAT, 1993.

there are differences between two types of local governments: those led by parties untouched by the judicial investigation and those led by parties significantly shaken by the *mani pulite* operation. Our goal was to test whether the rising judiciary control produced different motivational effects on elected officials depending on the political orientation of local governments. The results we have obtained seem to indicate that the strengthening of judicial control through the *mani pulite* investigation significantly reduced the

Table 3 Summary statistics

| Variable | Mean | Standard deviation |
|-------------------|----------|--------------------|
| OPP | 693.16 | 454.7535 |
| CONPA | 11467.23 | 8446.0695 |
| OPP/(OPP + CONPA) | 0.0735 | 0.0451 |
| CD | 0.3665 | 0.0884 |
| PCI | 0.2793 | 0.1148 |
| PSI | 0.1122 | 0.0493 |
| TGT | 0.4545 | 0.5222 |
| PERCAP | 22.432 | 5.7608 |

motivation of DC and PSI legislators and executives to invest in capital spending, but had no effect on PCI elected representatives.¹⁴ Further, the results of Table 2 account for the lower payoff in the low-trust game G_1 (Fig. 1), where the effects of external monitoring are captured by a smaller endowment multiplier.

4.3 Incentive changes

In a low-trust relationship between voters and elected representatives (G_1 in the game of Fig. 1), only the imposition of effective external controls guarantees mutually cooperative behavior (voters trust and politicians reciprocate), by changing the incentives of both parties. The drawback of using external controls is a reduction in the size of the endowment multiplier, and hence lower equilibrium payoffs. In light of this unsatisfactory result, the parties might be expected to search for a different institutional mechanism to ensure that elected representatives act in the citizens' interests. Due to its lower cost, an *internal* control mechanism would be chosen, whenever possible.

As we mentioned earlier, the lack of effective monitoring was due to the system of representation in place before the electoral reform in which no direct control over the behavior of politicians existed as it was mediated by political parties. In this framework, mayors faced no direct costs associated to neglecting their duties since they acted as the agents of political parties (see G_2 in Fig. 1). In other words, parties were directly accountable to their voters and mayors' government responsibilities were significantly reduced. Thus, a change in electoral rules toward increasing the responsiveness of elected representatives to voters' preferences through direct elections of mayoral candidates was expected to provide the degree of internal control that would induce cooperation between voters and politicians without producing any crowding-out effect.

With the new electoral rules, mayors are directly elected by the voters and therefore are directly accountable to them. Their loyalty is first to the voters and only in second instance to the representatives elected in the legislature. This change in the electoral rules allows for effective monitoring of gov-

¹⁴ For a more detailed discussion of the crowding out effect to explain Italian local governments' performance in the 1990s see Maimone and Navarra (2001).

ernment performance, since policy outcomes are now the direct responsibility of the mayor. Directly elected local representatives have greater autonomy from party interests and are more sensitive to voters' desires since their election depends on citizens' satisfaction.

The change of the electoral systems can be understood as a change in the incentive structure of the game. Besides indefinite play, effective monitoring is necessary to foster cooperation between voters and elected representatives. In the presence of effective monitoring, voters and representatives can choose the better game G_2 (in terms of cooperative payoff), and cooperate with each other over time.

We have assumed that the move to G_2 , the high-trust game, in the presence of an electoral system that makes representatives directly accountable to citizens is a net improvement over G_1 . The costs of external controls have been removed, and greater transparency means that, in an indefinitely repeated game, citizens do not have to put up with equilibria in which representatives "cheat" some of the time. Such equilibria are still possible, but in this context they are much more difficult to justify. The new electoral rules have redressed some of the power imbalances inherent in the old system such that in the high trust game the payoffs associated to the combination of actions trust (T) and do not reciprocate (NR) would change to become 0 and $-x$ for player 1 and player 2, respectively (see Fig. 3).

We would thus expect to find a higher level of satisfaction with the working of the Italian democracy *after* the new electoral system was in place. Indeed, as Table 4 shows, the satisfaction with the way democracy worked in Italy reached its lowest level in 1993, in the middle of the judicial investigation. In the same year, local elections were held governed by the new system of representation with direct election of mayors. In the years following 1993 the level of satisfaction with Italian democracy increased steadily, reaching its peak in 1999. The move from external to internal controls

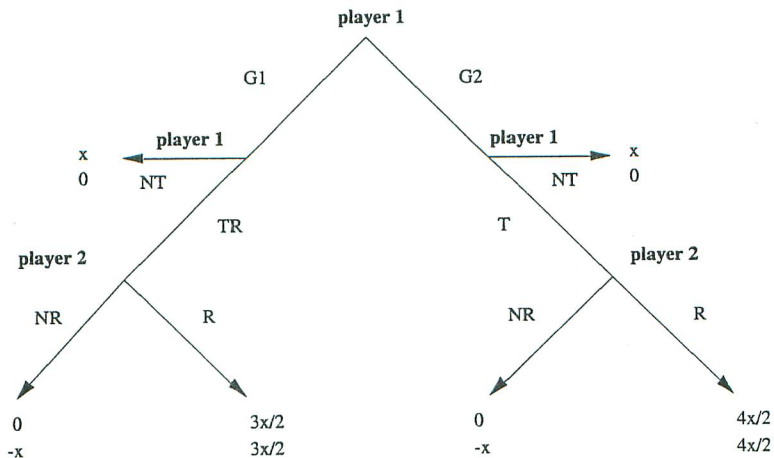


Fig. 3 The trust game as played after the electoral reform

Table 4 Level of satisfaction with Italian democracy (%)

| | 1993 ITA | 1993 EU | 1995 ITA | 1995 EU | 1997 ITA | 1997 EU | 1999 ITA | 1999 EU |
|---------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|
| Satisfied | 13 | 44 | 20 | 48 | 30 | 48 | 43 | 42 |
| Not satisfied | 82 | 41 | 79 | 48 | 67 | 47 | 32 | 38 |
| Do not know | 5 | 15 | 1 | 3 | 3 | 5 | 25 | 20 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

ITA Italy; EU European Union.

Source: Eurobarometer 1995, 1999.

clearly reduced the level of public dissatisfaction with the working of the Italian democracy.

5 Concluding remarks

Economic analysis provides a methodology for evaluating proposals to reform social institutions. Institutional reforms are generally advocated with the goal of improving people's welfare. Thus, any methodology for evaluating proposed reforms must involve some concept of welfare, i.e., what people want in their lives. Institutions of course may change people's preferences, and change them in unpredictable directions. This fact, however, makes comparisons between different institutions very difficult, if not outright impossible. Economists usually assume that reforming institutions will not change what people want: the assumption that changing institutional rules does not change people's preferences is intended to provide a common scale on which different institutions can be compared.

In our model, agents' preferences are stable, and different institutional rules are compared on the basis of their efficacy in providing agents with incentives to trust/reciprocate. The literature on preference reversals suggests that the relationship between preferences and expected monetary value can be non-monotonic. However, this is not directly relevant to our argument. We focus on the fact that politicians' preferred outcomes could differ under different institutional systems, not on the precise outcomes that different systems generate. In the game-theoretic model we propose, a particular reform of an institutional rule induces different equilibria in the indefinitely repeated game. If such equilibria are better than those occurring under the older institutional rule, then our model provides some support for the proposed reform.

On the footsteps of Bates et al. (1998) and Grofman (2001), our aim has been to provide a theoretically grounded explanation of real-world phenomena, i.e., the Italian political events that occurred in the Nineties. In so doing we departed from thick descriptions that involve a detailed representation of historical, cultural and social contexts, and focused instead on simplifying assumptions and formal modeling to capture the essence of our story and make theoretical sense of a complex world.

The Italian political scene in the Nineties was shaped by citizens' attempt to raise the accountability of elected representatives. If self-interest led pol-

iticians astray, then an effort was made to create institutional mechanisms ensuring that compliance became the best option for potential transgressors. The goal was to introduce new incentives, and both the *mani pulite* judicial operation and the electoral reform aimed to fulfill this objective. Institutional change via the electoral system reform, however, is a far superior option. It favors greater responsiveness of elected representatives to voters' preferences and enhances politicians' accountability. In so doing, it breeds trust and encourages better performance on the part of public officers.

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