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Fiscal Federalism

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ABANDON SHIP? PARTY BRANDS AND POLITICIANS' RESPONSES TO A POLITICAL SCANDAL [*]

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ABSTRACT: How do politicians react to a political earthquake? In this article, we study politicians' – rather than voters' – responses to the main political scandal in Italian recent history (Tangentopoli), and overcome endogeneity concerns by analysing the local implications of this national corruption scandal. We find that local politicians withdraw support for incumbents in parties hit by Tangentopoli – inducing early government terminations in such municipalities. Moreover, politicians in parties hit by the scandal exhibit higher rates of party switching and lower re-running rates. By decreasing the value of the party "brand", scandals thus become transmitted across politicians and levels of government via partisan cues.

JEL Codes: D72, H30, H77

Keywords: Accountability, corruption, party cues, brands, multi-level governance

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[*] We are grateful to Toke Aidt, Pamela Campa, Francesco Drago, Miriam Golden, Roland Hodler, Joshua Holm, Valentino Larcinese, Mickael Melki, Hannes Mueller, Luigi Pascali, Nicola Persico, Shanker Satyanath, Mark Schelker, Daniel M. Smith, Jim Snyder, Rune Sørensen, Andrea Tesei, Jan Vermeir, Stephane Wolton, as well as seminar participants at the Barcelona Economic Institute (IEB), EU Commission Joint Research Centre (Ispra, Italy), LSE, University of Fribourg, University of Pompeu-Fabra, Warwick University, the "Corruption, Tax Evasion and Institutions" Workshop (Riga, May 2017) and the "Petralia Workshop" at Ortygia Business School (Sicily, July 2017) for valuable comments and suggestions. Sergio Galletta gratefully acknowledges financial support from the Swiss National Science Foundation (grants Early Postdoc.Mobility – 15860 and Advanced Postdoc.Mobility – 167635) and Benny Geys from the Fonds voor Wetenschappelijk Onderzoek Vlaanderen. Gianmarco Daniele gratefully acknowledges financial support from the Recercaixa project: "Limits to political corruption: Media, party systems, civil society and citizens" (2016ACUP 00177).

1. Introduction

Anecdotal evidence shows that political scandals have important effects on implicated politicians' careers, as well as on broader aspects of governance in the affected jurisdiction. For instance, "Watergate" led to US President Richard Nixon's resignation, while the 2016 impeachment of Brazilian President Dilma Rousseff caused severe political instability at different levels of governance. Academic research likewise illustrates that voters punish corrupt incumbents in the poll booth, which lies at the heart of elections' role as a key accountability mechanism (Ashworth, 2012; Fisman and Golden, 2017).[1] In this article, we provide evidence that political scandals also affect – and trigger behavioural responses from – politicians not directly implicated by the scandal.

Our central argument is that political scandals have implications *beyond* the politicians directly involved because they can tarnish the party "brand" (Desposato and Scheiner, 2008; Lupu, 2014).[2] Party names are often used by voters as low-cost, heuristic cues about the politicians associated with these parties (Snyder and Ting, 2002, 2003; Geys and Vermeir, 2014, and references therein), which can be of significant value to politicians less known to the broader public. Furthermore, parties provide benefits to politicians in terms of electoral campaigns, media coverage, career opportunities, and so

[1] For instance, Ferraz and Finan (2008) show that corrupt incumbents are punished in Brazilian municipalities. In similar vein, Nannicini et al. (2013) find that Italian deputies charged with criminal offences receive fewer votes at the next elections – though only in districts with high levels of social capital. Interestingly, such electoral retribution might in some cases also spill over to the challenger Chong et al. (2014) or politicians not yet charged with wrongdoing (Chang et al., 2010).

[2] One recent example concerns a rent-seeking scandal involving leading figures of the socialist party in Brussels in 2017, which motivated other parties' refusal to (continue to) cooperate with any members of this party in a coalition government. Highlighting the damage to the party "brand", the scandal instigated an 'Our hands are clean' movement among other members of the socialist party – both within Brussels and beyond (`http://www.lecho.be/dossier/samusocial/Ceci-n-est-pas-une-fronde/9904273?ckc=1&ts=1501237145`). Likewise, local newspaper stories covering the 1992-94 corruption scandal in Italian politics – which is central to our analysis – provide extensive anecdotal evidence in line with our argument. For instance, a socialist councilor in Canosa (Puglia) is cited in La Gazzetta del Mezzogiorno (7 September 1993) stating: "We resigned from our positions to create a new political movement because of the deep moral crisis hitting almost all existing political parties". In similar vein, the 25 March 1994 edition of La Stampa linked municipal political crises in Piemonte to the national corruption scandal and cited the mayor of Ivrea saying: "We are facing a phenomenon [i.e. crisis in the local coalitions] due to the de-legitimization of the old system".

on (Heller and Mershon, 2005; Desposato, 2008). However, when a party is hit by a scandal, the value of being associated – or even seeming to be associated – with that party declines dramatically. The party name then no longer provides a simple cue towards the policy positions of this party and its members (Wittman, 1989; Aldrich, 1995; Jones and Hudson, 1998), but also triggers negative associations due to the scandal. Rational politicians will therefore reassess their desired level of association with the party, and change their position if necessary (Heller and Mershon, 2005; Desposato, 2008).[3]

From a theoretical perspective, such reoptimization can take different forms, and thereby generates distinct empirically observable implications. First, when politicians are members of the party involved in a scandal, breaking their association with the party might involve terminating their party membership (e.g., by running as an independent or switching to another party), or leaving politics altogether. Clearly, leaving the party – or leaving politics – when their party is in power may cause it to lose political support, which in turn can work to increase the probability of a government crisis (as in the Italian examples mentioned in footnote 2). Second, a scandal-hit party's coalition partners may wish to break their association by retracting support for the government – again increasing the possibility of political deadlock and government crisis (as in the cases of Brussels and Brazil mentioned earlier). This line of argument leads to two empirically verifiable hypotheses. The first is that politicians withdraw support from parties involved in a scandal – thereby triggering an increased probability of early government terminations. This may arise both due to politicians within the scandal-hit party (since scandals are likely to undermine party discipline; Kato, 1998) and those outside it (because it becomes more complicated for the incumbent to bargain for support; Tsebelis and Chang, 2004). The second hypothesis is that politicians are likely to break – or, at the very least, limit – their personal ties to parties involved in a scandal (e.g., by running as an independent or switching to another party).

Our empirical analysis of these propositions studies the most famous political scandal

[3]While the exact mechanism leading scandals to reduce the party "brand" value is not central to our argument, one can imagine at least three possible reasons: i) there might be a pure popularity effect, whereby voters are less likely to vote for politicians affiliated with a party tainted by a scandal (as an expressive act); ii) voters might expect lower utility from politicians affiliated with a tainted party that is losing influence (as an instrumental calculation); iii) politicians might expect reduced possibilities for gaining power via affiliation with a tainted party. Whatever the underlying mechanism, one would expect a drop in the utility politicians receive from the party brand.

in Italian modern history – generally referred to as *Tangentopoli* (literally: "Bribe City") or *Mani Pulite* (literally: "Clean Hands") – which took place in the period 1992-1994. All main political parties were involved in this scandal, but the two leading national parties – the Christian Democrats (DC) and the Italian Socialist Party (PSI) – were implicated most severely (more details below). While Tangentopoli represents a strong case of widespread corruption, establishing causal effects of any scandal on politicians' behaviour is challenging, since endogeneity concerns are rarely avoidable. From this perspective, it is crucial that the timing of Tangentopoli was unexpected for local politicians, and that only few local politicians were implicated. Hence, the scandal provides an arguably exogenous information shock to local politicians about the (relative) value of specific party brands, which we exploit to provide a credible causal estimate of politicians' responses using a difference-in-differences (DiD) estimation strategy. While the conventional wisdom holds that Tangentopoli caused an earthquake in Italian national politics (Reed and Scheiner, 2003; Heller and Mershon, 2008; Chang et al., 2010), we have less evidence on the shocks it caused at the local level.

Our first main finding is that a scandal taking place at the *national* level can induce increased prevalence of *municipal* governments' early termination. We not only observe more local government crises in the period 1992-1994, but show that such crises arose especially in municipalities ruled by the parties most strongly implicated in Tangentopoli. This is consistent with our argument that politicians retract support from local incumbents affiliated to the affected parties (even though these have no direct involvement in the scandal). Furthermore, we find significant evidence that politicians within the affected parties' local affiliates change their behaviour. They are significantly less likely to run again in upcoming local elections (and less likely to be reelected when they do), and significantly more likely to switch partisan affiliation towards independent local parties. Interestingly, the latter proves to be a viable strategy since it works to insulate these politicians at least partially from the electoral repercussions of the scandal. Overall, therefore, our findings provide strong support for the notion that scandals are transmitted across politicians via partisan cues.[4]

[4]This is consistent with a large literature on organizational stigma illustrating that the negative societal perception of specific social actors (e.g., brothels, bankrupt firms or outlaw motorcycle clubs) often transfers onto individuals affiliated to the stigmatized actor (e.g., clients, company directors or bikers) (Goffman, 1963; Kulik et al., 2008; Hudson and Okhuysen, 2009; Kvale and Murdoch, 2017).

Several extensions and robustness tests validate these central findings. First, we show that the increase in local government early terminations is most pronounced in electoral districts with a higher number of national politicians charged in the scandal. This confirms that the local disclosure of corruption news is a key driver behind our results. Second, our results are robust to including controls for demographic characteristics of both the mayor and local councilors. This excludes the possibility that our results are due to differential reactions among distinct types of politicians, which may be distributed differently across parties. Third, directly controlling for worsening local economic conditions due to the severe economic downturn in the mid-1990s, or for the local popularity of new populist parties (such as Lega Nord), leaves our findings unaffected – ruling out that these possible confounding factors drive our inferences. Finally, local government early termination might be due to local politicians directly implicated in Tangentopoli. We address this via a meticulous investigation of local newspapers for a sample of about 1.460 municipalities (circa 18% of Italian municipalities). In municipalities governed by a party involved in Tangentopoli at the national level, only 13% of government crises can be linked to charged local politicians (compared to 25% elsewhere). Dropping these municipalities from the sample leaves our findings unaffected.

Our analysis contributes to a number of literatures. First, while existing work has studied *voter* responses to corruption scandals (Ferraz and Finan, 2008; Nannicini et al., 2013; Chong et al., 2014; Cavalcanti et al., 2016), it has thus far failed to analyze whether and how *politicians* react to information shocks arising from political scandals.[5] Our findings illustrate that politicians meaningfully adjust their behaviour in light of the decreasing brand value of a party tainted by a corruption scandal. This suggests that previous studies looking only at voters' reactions might pick up the *overall* response to a popularity shock (i.e., including the effect of politicians' reaction). Second, political alignment with the ruling party at different levels of government advances politicians' ability to bring benefits to their constituency (Solé-Ollé and Sorribas-Navarro, 2008; Albouy, 2013; Fouirnaies and Mutlu-Eren, 2015; Fiva and Halse, 2016). We contribute to this literature on the role of parties in politics by showing that corruption scandals can become transmitted across politicians and levels of government through party "cues"

[5]Parties likewise appear to respond to negative popularity shocks. Cavalcanti et al. (2016), for instance, show that the public exposure of corrupt incumbents induces Brazilian parties to bring forward better-educated politicians during subsequent local elections (see also Chang et al., 2010).

(Snyder and Ting, 2002, 2003; Geys and Vermeir, 2014). This testifies to an important 'dark side' of partisan alignment between politicians. Third, a rich research tradition investigates politicians' decision to switch parties (for partial reviews, see Desposato, 2008; Heller and Mershon, 2008). Most of these studies focus on (potential) switchers' personal characteristics and electoral incentives (Kato, 1998; Reed and Scheiner, 2003; Heller and Mershon, 2005), although more recent work also highlights that switching is particularly prominent at specific points in the parliamentary cycle (Mershon and Shvetsova, 2008) and often motivated by access to distributive resources (Desposato, 2008; Desposato and Scheiner, 2008). To the best of our knowledge, we are the first to analyze switching decisions of local – rather than national or regional – politicians, and illustrate that switching decisions can be affected by party dynamics at different levels of government. Closely related, we provide the first evidence that party switching might be an effective strategy for politicians hoping to retain voter support in light of a scandal hitting their party. Finally, this paper is linked to the literature on political instability, which is generally considered an important obstacle to economic development (Alesina et al., 1996). Our contribution here is to highlight that corruption scandals can represent a source of short-term political instability, and as such might affect the longer-term development path of a country, region or municipality.

The next section describes the Italian institutional framework and main events of the Tangentopoli scandal. Then, sections 3 and 4 report on our estimation strategy and key findings, while section 5 offers several robustness checks. Section 6 concludes.

2. Institutional background

2.1. Italian politics before Tangentopoli

After World War II, Italy introduced a bicameral government system. In the lower chamber ("Camera"), elections were organized in 32 districts. Seats within each district were allocated to parties based on their vote share, and within each party to the candidates with the highest number of votes (i.e. open-list PR). For the upper chamber ("Senato"), elections were held in 20 districts subdivided into single-member constituencies. If a candidate received 65% of the vote, (s)he was elected. If no candidate reached this threshold, votes were grouped by party list at the district level and used to allocate seats across parties using a method similar to the one for the lower chamber.

At the local level, Italy's roughly 8,000 municipalities were likewise governed using

a parliamentary system with a legislative branch ("Consiglio", or local council) and an executive branch ("Giunta", or local government). In bigger municipalities (i.e., above 5,000 inhabitants), voters voted for party lists and could also express preferences for individual candidates. Seats were allocated proportionally to parties, and within each party were assigned to the candidates with most votes. In smaller municipalities, citizens voted directly for council candidates, which were elected in order of their vote tallies. In both cases, the mayor was subsequently appointed by the local council using a (qualified) majority vote (with the exact voting rules depending on the number of rounds needed to appoint the mayor).[6] Importantly, unlike in many other countries local councils in Italy can face early dissolution. As this constitutes one of our central dependent variables, we describe the various conditions for such dissolutions in detail in section 3.

Before Tangentopoli, the national and local political arenas were dominated by three political parties: Christian Democrats (DC), Italian Communist Party (PCI) and Italian Socialist Party (PSI). These received, respectively, 34%, 26% and 14% of the votes in the last national election prior to Tangentopoli (i.e., in 1987). A coalition government was established between DC and PSI, with the support of three minor parties (i.e., Italian Democratic Socialist Party (PSDI), Italian Liberal Party (PLI) and Italian Republican Party (PRI)). PCI was the main opposition party, although it split into two parties (i.e., Democratic Party of the Left (PDS) and Communist Refoundation Party (PRC)) following the dissolution of the Soviet bloc in 1991. DC was the dominating party at the local level. In 1991, for instance, it held the mayor position in about 50% of Italian municipalities. Figure 1 shows that despite a clear predominance of PCI in central Italy, the three main political parties are represented in municipalities across all regions.

Figure 1 Here

2.2. A brief history of Tangentopoli

Investigations into what became the largest political scandal in Italian modern history started in Milan in February 1992. Within a few weeks, a vast and well-established

[6]Law 142/1990 slightly adjusted the rules for the selection of the mayor. It removed a quorum requirement for local councilors participating in the vote, and imposed that new local elections would have to be organized in case it took more than three voting rounds to appoint the mayor or if this decision was not taken within 60 days from the election.

system of corruption was uncovered whereby public procurement contracts were allocated in exchange for bribes to the ruling parties. These bribes were generally managed by the party's headquarters for vote-buying activities (Newell, 2000). Parallel investigations were soon set up in every Italian region and within months hundreds of politicians, entrepreneurs and public officials had been charged with corruption (Gundle and Parker, 1996). At the end of 1994, no less than 23% of the Italian national deputies had been charged with corruption or related activities (see also Heller and Mershon, 2008; Chang et al., 2010).[7] While 19 out of 20 regions saw politicians charged with corruptive practices, the number of charged politicians per region closely matches the distribution of the Italian population (and the number of elected deputies in each region).

Important for our identification strategy, the scandal involved predominantly politicians from the two main ruling parties (DC and PSI). This is illustrated in Figure 2, which shows the distribution of charged politicians by year and political party. The figure clearly indicates the peak of the corruption scandal in 1993. The number of charged politicians sharply declined in 1994 and only one politician was charged in 1995 (not in the graph). More importantly, the figure indicates that 75% of the charged politicians belong to the two main ruling parties. An additional 13% were members of the minor parties in the government coalition ("Other gov." in Figure 2), and only 4% was elected in the left-wing block. The remaining ones were distributed across other minor parties. In percentage terms, 35% of politicians elected for the incumbent coalition partners (DC/PSI and minor allied parties) was charged, compared to 16% among minor non-ruling parties and less than 2% among the left-wing block. As such, the incumbent coalition partners can be credibly viewed as much more strongly affected by the scandal(Heller and Mershon, 2008; Chang et al., 2010), and we exploit this "differing treatment intensity" for identification purposes (Angrist and Pischke, 2008; Berrebi and Klor, 2008, p.208). Interestingly, while the Communist PCI generally supported the investigations, DC and PSI repeatedly (though unsuccessfully) tried to block them arguing that members of parliament benefit from Parliamentary immunity. This provides

[7]Our calculations here rely on data from Ceron and Mainenti (2015). This source provides comprehensive information on politicians in the Italian Chamber of Deputies charged with any type of criminal behaviour (including corruption, misappropriation, abuse of power, as well as illegal party funding), and includes the year in which the politician was charged, his/her party affiliation and election district (for further details, see Ceron and Mainenti, 2015).

further illustration that DC and PSI were most strongly implicated, while PCI was more marginally hit by the scandal.[8]

Figure 2 Here

During the national elections of June 1992 – i.e., just after the start of Tangentopoli – DC and PSI lost electoral support, but maintained sufficient seats again to form a coalition government (with support from the Italian Liberal Party (PLI) and the Italian Social-Democratic Party (PSDI)). In these elections, the two parties arising from the dissolved PCI (i.e., PDS and PRC) jointly received 21% of the votes in the lower chamber and 23% in the upper chamber. Over the next 18 months the number of charged politicians rapidly increased (Figure 2), and a new national electoral law based on majoritarian rule was approved by referendum in 1993 (Gundle and Parker, 1996; Newell, 2000). A new electoral law was also implemented at the local level, which introduced the direct election of the mayor and a majority premium for the winner.[9] DC – which had been ruling Italy uninterruptedly for almost fifty years – was disbanded in 1994, and national elections held that same year saw PSI nearly completely lose its electoral support. Starting from 1992, DC and PSI also rapidly lost control of municipal councils, and were replaced by new emerging parties (i.e., Forza Italia and Lega Nord) and especially by Civic Parties.[10] The institutional shock was so dramatic that historians define this period as the end of the Italian First Republic.

[8]Survey data collected in June 1992 likewise illustrate that more than 60% of (Milanese) voters perceived DC and PSI as most strongly implicated by the scandal, compared to 41% for PCI and 12% or less for all other parties (La Repubblica, 12 June 1992). While this confirms DC and PSI as the main culprits also in the mind of voters, it suggest an important spillover to the other main national party (PCI), which we explicitly account for in our analysis below.

[9]This does not affect our identification strategy as we focus on local governments elected prior to Tangentopoli. Moreover, this electoral system change was implemented in all municipalities at the same time, and our main findings already materialize *before* this legal change was implemented (more details below).

[10]Such Civic Parties are political parties with a local organization based on a local leader, but without any regional or national party affiliation. Although Civic Parties were already active at the local level prior to Tangentopoli, their popularity increased drastically after 1992.

3. Empirical analysis

3.1. Identification strategy and empirical methodology

Assessing politicians' responses to a political scandal via a simple comparison of jurisdictions with and without scandals imposes several identification issues. First, omitted variables including political and economic conditions may affect both the probability of a scandal occurring and outcomes such as early government termination or politicians' decision to run again in upcoming elections. Second, political instability might also trigger scandals when those in power increase rent extraction to compensate for the expected decrease in future earnings. Third, we are particularly interested in the response to scandals of politicians not themselves implicated in this scandal (those implicated will naturally respond). Yet, it is hard to guarantee politicians' lack of involvement when a scandal arises within their jurisdiction.

Our identification strategy therefore takes advantage of three important characteristics of the scandal as well as the Italian institutional and political framework. First, as mentioned, Tangentopoli predominantly implicated national-level politicians, which mitigates the above-mentioned endogeneity concerns when analyzing local instead of national politicians (we return to this in section 5). Second, many Italian parties are active at both the national and local level, though not all local parties are linked to national parties. This provides variation in the degree to which local office-holders were affiliated to the national parties involved in Tangentopoli. Hence, we can exploit partisan connections between certain subsets of politicians (Snyder and Ting, 2002, 2003; Solé-Ollé and Sorribas-Navarro, 2008; Geys and Vermeir, 2014; Fiva and Halse, 2016) to study local-level implications of a scandal taking place at the national level. Finally, although the length of the electoral cycle is the same across all municipalities (i.e., five years), not all municipalities hold elections at the same time. This allows us to separate common time trends from the effects under investigation (Dahlberg and Mörk, 2011).

These three characteristics provide an opportunity to address our theoretical propositions outlined in the introduction using a difference-in-differences research strategy. Formally, to assess the effect of Tangentopoli on local governments' early termination, we compare the likelihood of such events before/after Tangentopoli depending on whether or not the local incumbent's party (though *not* the local incumbent, see also section 5) was affected by the scandal. We thereby run the following regression model (with subscripts i and t denoting municipalities and years, respectively):

$$Instability_{it} = \delta_i + \beta_1 \text{ DC/PSI}_{it} \times \text{After Scandal}_t + \beta_2 \text{ DC/PSI}_{it} + \beta_3 \text{ After Scandal}_t + \lambda_t + \epsilon_{it} \quad (1)$$

Our dependent variable $Instability_{it}$ is a dummy equal to 1 when the government in municipality i experiences early termination in year t (for a similar approach, see Gagliarducci and Paserman, 2011). Since the electoral term was equal to five years for all Italian municipalities in the period of interest, $Instability_{it}$ equals 1 when the municipality had elections *before* this five-year term was completed (0 otherwise). This is determined using annual data on local elected officials, which are publicly available on the website of the Italian Ministry of Interior. In our period of observation (1989-1994), there were 1,359 early government terminations in Italian municipalities. According to the Ministry of Interior, this was most often due to the resignation of more than 50% of the councillors (65% of early terminations), which reflects the fact that resignation is a councillor's main way to fully withdraw support for the local incumbent. While arguably a very costly way to dissociate oneself from a scandal-hit party, this cost naturally strengthens the credibility of the action.[11]

While $AfterScandal$ is equal to 1 in our treatment period (i.e., 1992-1994) and 0 in the period prior to Tangentopoli (i.e., 1989-1991), DC/PSI_{it} is an indicator variable equal to 1 when the mayor is affiliated to a national party implicated in the scandal.

[11]Before 1993, municipalities would face early elections if: i) more than 50% of the councillors resigned; ii) the local budget was not approved on time; or iii) the national government removed the local government (e.g., due to suspicion of influence from organized crime; Daniele and Geys, 2015; Galletta, 2017). From 1993 onwards, and due to the direct election of mayors under the new electoral rules (see above), municipal governments could collapse also when: i) the mayor resigned or died, or ii) the councillors voted for the mayor's impeachment. Our analysis does not include early terminations due to mafia infiltration or the death of the mayor, which are unrelated to local political conflicts. All other cases are included since in reality almost every early termination is finally due to a disagreement among local politicians. Note also that until 1992 it was possible to replace the mayor *without incurring new elections* with a politician from a different party of the ruling coalition. In our sample, this occurs only in 2.5% of council-legislature observations, and – importantly – we observe no differential trend across time for DC/PSI mayors in terms of their likelihood to be replaced in this way. Hence, any unobservable factors affecting such decisions appear unrelated to the corruption scandal, which limits concerns about the exogeneity of our main variable of interest.

Based on the discussion in the previous section, DC and PSI are defined as 'treated' by the scandal, as well as the three minor parties in the national government coalition prior to Tangentopoli (i.e., PRI, PLI and PSDI). Our key parameter of interest is the coefficient for the interaction between these two variables (β_1), which reflects the differential impact of the scandal on the probability of local government early termination depending on the mayors' partisan affiliation. Importantly, the sample only includes municipalities whose government was installed prior to Tangentopoli (i.e., before 1992). Municipalities facing early government termination during the scandal are dropped from the sample in subsequent years, because the new ruling coalition would be endogenous to our treatment. Finally, we also include a full set of municipality fixed effects (δ_i) as well as year fixed effects (λ_t), and cluster the error term at the municipality level. Summary statistics for all relevant variables are provided in Table A.1 in the appendix.

3.2. Results for local governments' early termination

To concentrate as narrowly as possible on the period of the scandal, our analysis is based on local political data in the period 1989-1994. We start our observation period in 1989 since this is the first year for which we can determine early local government terminations. To provide a first look at the data, Figure 3 reports the share of local governments facing early termination for each year in the 1989-1994 period separated by the partisan affiliation of the mayor: i) DC and PSI (in the two top panels), ii) PCI (or its successors PDS and PRC after 1991) in the bottom left panel; and iii) Civic Parties and other minor parties unaffected by the scandal in the bottom right panel. Figure 3 indicates that early government dissolution was relatively rare prior to Tangentopoli, but jumped across the board in 1991. More interestingly, Figure 3 displays a strong increase in early government dissolutions in the period 1992-1994 among municipalities governed by a mayor affiliated to the main parties implicated in the national scandal (DC and PSI) – whereas no similar surge is observed for municipalities governed by Civic Parties. (For the data underlying this graphical representation, see Table A.2 in the appendix.)

Figure 3 Here

Table 1 looks at this observation in more detail by presenting the results from estimating equation (1). The columns in Table 1 differ only in terms of the control group employed. In columns (1), (2) and (3), we compare municipalities with DC/PSI mayors

(i.e., the treated group) to all other municipalities. Instead, column (4) only includes municipalities with a mayor from the national opposition party (PCI) in the control group, whereas the control group in columns (5) and (6) includes only municipalities where the mayor was from Civic Parties or minor national opposition parties. We follow this approach because even though the scandal predominantly implicated DC and PSI, its effect may have been strong enough to spill over to the other main national party (PCI) (Chang et al., 2010; Chong et al., 2014, see also footnote 8).

Table 1 Here

Table 1 confirms that the probability of *local* government early termination increases during a *national* corruption scandal in municipalities ruled by parties hit by the scandal (i.e., DC and PSI). This is true whether we control for municipality, time and year-of-election fixed effects (in column (2)) or not (in column (1)).[12] The results are also robust to including additional covariates capturing the demographic characteristics of both mayor and councilors (in column (3)). Specifically, we control for education (i.e., share of municipal councilors with university degree and whether the mayor has such a degree), gender (i.e., share of male councilors and whether the mayor is male) and age (i.e., average age of councilors and the mayor's age). This accommodates the possibility that varying types of representatives may be elected for different parties and respond to the scandal differently. Across the first three columns, the size of the estimated effect is substantial, considering that the average yearly probability of early government termination is 1.1%. Column (3), for instance, predicts an increased probability of early local government termination of about 0.6 percentage points per year in municipalities governed by a party hit by the scandal. Columns (4) and (5) indicate that the control group matters. Local government early termination in treated municipalities increases particularly relative to municipalities governed by Civic Parties (column (5)), but not significantly relative to municipalities governed by the Communist PCI (column (4)). This suggests that Tangentopoli induced some spillover onto all main national parties (Chang et al., 2010; Chong et al., 2014). Column (6) confirms this by illustrating that local government early termination also increased in municipalities with PCI mayors

[12]The inclusion of year-of-election fixed effects controls for potential within-term heterogeneity in the early termination probability (Mershon and Shvetsova, 2008; Becher and Christiansen, 2015).

relative to municipalities with Civic Party mayors. Overall, therefore, Table 1 provides strong confirmation for the idea that politicians at the local level withdraw support from incumbents affiliated to the parties implicated in the national Tangentopoli scandal.[13]

Clearly, the causal interpretation of β_1 relies on the assumption that treated and untreated municipalities would have followed the same trend if the scandal had not occurred (i.e., common trends assumption). To test this, we run a more general version of equation (1) replacing $AfterScandal$ with a set of indicator variables for each year in our observation period (except 1991, which is employed as reference category). This not only allows to capture the temporal dynamics of the effect of the scandal (in years 1992, 1993 and 1994), but also assesses whether municipalities governed by different parties had a similar likelihood of facing early government termination *before* the scandal (i.e., in years 1989 and 1990). Figure 4 provides a graphical representation of the results (see Table A.3 in the Appendix for the regression results). The top panel employs municipalities with PCI mayors as the control group, while the bottom panel employs municipalities with Civic Party mayors as the control group. We find no evidence of statistically significant effects prior to Tangentopoli in either panel.

Figure 4 Here

3.3. Threats to identification: Excluding confounding factors

The early 1990s were a period of substantial political reform in Italy, and heterogenous levels of support for such reforms across the Italian territory may have affected the stability of the municipal political process. This might be problematic if such support was concentrated in areas where DC/PSI held power. To strengthen our interpretation that Tangentopoli is the main driver of the effects observed thus far, we thus first of all need to illustrate that the effects are concentrated where the scandal had most impact.

[13]Table A.4 in Appendix A suggests that the observed effects are stronger for DC than PSI. This is consistent with DC being the strongest national party at the time of the scandal, and having more politicians implicated in the scandal. Even so, it is important to point out that the increase in early government terminations in municipalities with DC/PSI mayors is *not* due to the resignation of local councillors hoping to fill political vacancies at the national level. The reason is that few such vacancies opened up as the scandal had little immediate impact on the number of MPs that resigned. In fact, only 14, 8 and 4 MPs resigned in 1992, 1993 and 1994, respectively (compared to 16 MPs in 1991).

Furthermore, we need to exclude potential confounding factors coming from important events that took place at the same time as the corruption scandal. For example, Italy suffered a severe economic crisis in this period, such that discontent towards the ruling parties at the national level (DC and PSI) might have been due to the poor performance of the Italian economy. Moreover, the emergence of the populist, right-wing Lega Nord just before Tangentopoli could drive our results if this new movement was particularly concentrated in areas where DC and PSI were strongest.[14]

One would expect that Tangentopoli has stronger local effects when i) there are more corruption revelations in the municipality's electoral district (which sends a stronger negative signal about the parties involved), and ii) the level of political competition in the municipality is higher (which puts the local incumbent in a weaker political position). To assess this, the empirical model in equation (1) is extended with a three-way interaction between $AfterScandal$, DC/PSI_{it} and either corruption or electoral competition. We operationalize the level of corruption by looking at both the number and share of national politicians charged with corruption in the electoral district of a municipality. We thereby define an indicator variable *High corruption* equal to 1 when the number (or share) of national politicians charged with corruption in the electoral district of a municipality is above the median of the sample distribution. Electoral competition is operationalized either statically via the political fragmentation of the local council (i.e., the number of parties represented in the council) or dynamically via the presence of at least one change in the political colour of the mayor in the period 1985-1991 (see also Ashworth et al., 2014). The results are presented in Tables 2 and 3, respectively.[15]

Tables 2 and 3 Here

The results in Table 2 show a statistically significant coefficient on the three-way interaction when the control group consists of all other municipalities (columns (1) and (4))

[14]Berlusconi's Forza Italia was only set up in 1994 in response to the scandal, and thus cannot explain that our results already materialize in 1992 and 1993. The centre-left party La Rete was formed in Southern Italy in January 1991, but obtained less than 2% of the vote in the 1992 and 1994 elections. Hence, Lega Nord constitutes the only strong new party arising just before Tangentopoli.

[15]Unfortunately, we are unable to exploit alternative measures of electoral competition – such as the closeness of local elections – since local electoral data are available only from 1993 onward.

or municipalities where the mayor was from Civic Parties or minor national opposition parties (columns (3) and (6)). Its positive sign confirms that the effect on local government early termination is stronger for municipalities situated in electoral districts where more (or a larger share of) national deputies were charged with corruption – and where the value of the party brand arguably declines most. The results in Table 3 similarly indicate that local government early termination increases particularly in treated municipalities with more politically fragmented councils and higher electoral competition. Local incumbents in an already weaker political position thus are particularly sensitive to the decline in party brand value due to Tangentopoli.

Table 4 investigates the possible confounding effect of the severe economic crisis facing Italy in the early 1990s using two proxies for local economic activity. The first captures variation in the number of active firms registered in each municipality between 1991 and 1996 (*% change number of firms*), while the second considers variation in the number of employed individuals between 1991 and 1996 (*% change number of employees*). In both cases, positive (negative) numbers reflect economic growth (decline). The three-way interaction in Table 4 never reaches significance when we consider changes in the number of firms (columns (1) to (3)), and is significantly negative when we look at variation in employment (columns (4) to (6)). Importantly, however, our main coefficient of interest (DC/PSI X $Afterscandal$) remains stable compared to the baseline results. Moreover, even a one standard deviation shift in the number of employees – in either direction – still leaves us with a statistically and substantively meaningful positive effect on our main coefficient of interest. Hence, even though local economic developments appear to have had some influence on local government early terminations, we can exclude that the economic crisis drives our baseline findings.[16]

Tables 4 and 5 Here

In Table 5, we assess the possible confounding effect of the emergence of the populist, right-wing Lega Nord, which was launched as a political alliance in December 1989 and formalized as a political party in January 1991. We proxy its local popularity by its municipal vote share in the 1992 national elections. The results indicate that the three-

[16]We find similar results when looking at municipalities' economic situation in 1991 (rather than the change over the 1991-1996 period). This is important given that the information from 1996 is potentially endogenous, since it could have been affected by the political instability at the municipal level.

way interaction remains insignificant. Its negative sign suggest that our key coefficient of interest (DC/PSI X $Afterscandal$) is somewhat higher in municipalities where Lega Nord is weaker. Yet, as before, our main inferences are unaffected even for municipalities where the popularity of Lega Nord is more than one standard deviation above its mean. Hence, we can exclude that the local political strength of Lega Nord generates our results.

Taken together, these sets of findings strongly suggest that Tangentopoli is the main driver of the observed increase in local government early terminations, which credibly links Tangentopoli to local government instability via politicians' partisan connections.

4. Mechanisms: A focus on local politicians

Given that most cases of local government early termination are due to councillor resignations (see above), this provides suggestive evidence for the idea that local politicians withdraw their support for incumbents from implicated parties.[17] Yet, our results thus far cannot directly assess local politicians' strategic reoptimization of their affiliation with a tainted party. In this section, we explore this mechanism in more detail by evaluating whether local politicians in parties hit by the scandal exhibit higher rates of party switching and lower re-running (and reelection) rates (Kato, 1998; Reed and Scheiner, 2003; Chang et al., 2010). As a first step, we consider all politicians elected in Italian municipalities between 1985 and 1992, and test whether their probability of being reelected or switching party during subsequent electoral rounds varies depending on their party affiliation. Reelection is coded as 1 when the politician runs and is re-elected, while party switching is coded as 1 when the politician is reelected for another party than the one for which (s)he was previously elected. We expect reduced reelection rates and increased party switching for politicians initially on a DC or PSI list after Tangentopoli.[18] The results in Figure 5 and Table A.6 in the Appendix confirm that DC/PSI politicians from 1992 onwards become significantly less likely to be reelected (conditional on running) and more likely to switch party (conditional on being reelected).

[17] Clearly, councillor resignations that force early elections need not (only) reflect a desire to distance oneself from the scandal-hit party. Politicians may also want to capitalize on this party's sudden electoral disadvantage. Still, this is not inconsistent with our proposition that politicians' partisan affiliations cause scandals to have implications beyond the politicians directly involved. Indeed, it likewise implies that party brands cause scandals to spill over across politicians and levels of government.

[18] While politicians may also switch party between elections, our data only provide politicians' party affiliation at the time of local elections. As such, we can only observe switching around elections.

Importantly, we do not observe any differential pre-trends for either variable before the scandal erupted in 1992.[19]

Figure 5 Here

Figure 6 further examines the extent to which politicians historically running on a DC or PSI ticket switched to other parties in local elections from 1991 to 1995. The analysis for each plot starts from the complete set of politicians affiliated to DC/PSI (or its successors) in the recent past, and who were reelected in year t. Hence, all politicians in each sample were elected for DC/PSI (or its successors) in the period immediately preceding the election, and Figure 6 indicates the parties for which this set of politicians is reelected (i.e., 'party of destination') in year t. Observations other than DC/PSI thus naturally reflect party switching.[20]

Figure 6 Here

The results in Figure 6 indicate that roughly 90% of those holding local office for DC/PSI immediately prior to the 1991 and 1992 elections were also elected for these same parties during these elections. This picture changes dramatically in the aftermath of Tangentopoli. Almost half of the local politicians holding office for DC/PSI immediately prior to 1993 were elected under a different party label in the 1993 elections. During the 1994 and 1995 elections, fewer than 40% of local DC/PSI politicians remained faithful to the party (or its immediate successors) for which they had previously been elected. Party switching thus became overwhelmingly common for local DC/PSI politicians (for similar findings at the national level, see Reed and Scheiner, 2003; Heller and Mershon, 2008). They predominantly moved towards Civic Parties and – though to a substantially lesser extent – new right-wing parties. Figure A.2 in the online appendix indicates that

[19]In unreported results, we find that the probability of reelection of a DC/PSI councilor appears to be even lower if the incumbent mayor was from the same party.

[20]As discussed in more detail in Section 5.2, DC and PSI were dissolved at different points in time throughout 1994. Therefore, in 1995 we consider politicians in parties that were widely perceived as the immediate successors of these parties as DC/PSI affiliated (i.e., Cristiano Sociali, Centro Cristiano Democratico, Partito Popolare Italiano and Cristiani Democratici Uniti). Finally, as these figures extend to 1995, we also consider new, populist right-wing parties (i.e., Forza Italia and Lega Nord).

party switching does not show such a dramatic increase after Tangentopoli among local PCI politicians. Moreover, switching became *less* likely over time – particularly in the direction of DC/PSI – for Civic Party politicians (Figure A.1 in the online appendix). This strengthens our interpretation that the party switching observed in Figure 6 is triggered by the decline in the party brand value of DC and PSI after the scandal hit(Desposato, 2008; Desposato and Scheiner, 2008). Finally, it is worth noticing that we observe only limited switching towards the new right-wing parties Forza Italia and Lega Nord. We return to the electoral value of such party switching to politicians below.

A clear caveat of the above analysis is that we cannot distinguish whether DC/PSI politicians might be less likely to run for office again after the scandal (e.g., due to expecting an electoral punishment) and/or might be less likely to receive votes due to the scandal (Chang et al., 2010).[21] To disentangle these two possibilities, we match information about all locally elected politicians since 1985 with information on mayoral elections in the period 1993-1995 (remember that direct mayoral elections were only introduced in 1993). This allows us to identify all mayors and mayoral candidates – as well as their party affiliations prior to Tangentopoli – which we can use to evaluate re-running rates and party switching more directly. Table 6 analyses the decision of mayors in office prior to 1993 to stand for reelection in the period 1993-1995. The dependent variable is an indicator variable equal to 1 when the mayor stands for reelection (0 otherwise), and the main independent variable refers to the mayor's partisan affiliation during the previous legislative term. The results in Table 6 indicate that mayors previously elected on a DC/PSI ticket are approximately 6 percentage points less likely to stand for reelection immediately after Tangentopoli compared to mayors from other parties. Roughly symmetrically, mayors from Civic Parties are almost 9 percentage points more likely than other mayors to stand for reelection. These findings hold even after controlling for year dummies (columns (1) and (3)) and individual covariates (columns (2) and (4)).

Table 6 Here

Finally, one can wonder whether it benefits local politicians to distance themselves from a party entangled in a scandal at the national level. Does the now tainted party

[21] The reason is that we lack data on election candidates. For council members disappearing from our sample over time, we thus cannot know whether they did not stand for election or failed to be reelected. Hence, for those not reelected we also cannot know on which party list they may have featured.

label affect a mayor's chance of reelection, and would electoral retribution be lower when switching to another party? These questions are addressed in Table 7. The dependent variable equals 1 when a mayor is reelected (conditional on having stood for reelection) in the 1993-1995 period and 0 when she stands for reelection but fails to regain the mayor position. As in the previous table, the main independent variable in the first four columns refers to the mayor's partisan affiliation during the previous term. In columns (5) and (6), we furthermore add an interaction term between the mayor's party affiliation in the previous term and her affiliation to a Civic Party list in the current election ($Civicparties_{t+1}$). This interaction captures whether – and to what extent – switching from DC/PSI to a Civic Party list can insulate a mayor from electoral retribution.

Table 7 Here

Columns (1) and (2) in Table 7 indicate that mayors running for reelection in the 1993-1995 period on a DC/PSI label are significantly less likely to be reelected. The point estimates suggest a decrease in their reelection probability with 10 to 12 percentage points compared to mayors from other parties, which is roughly 25% of the standard deviation in mayors' reelection probability. This is substantively meaningful also given that the overall probability of reelection is just over 75%. Columns (3) and (4) indicate that Civic Party mayors have a 4 to 5 percentage points higher probability of reelection in the 1993-1995 period compared to mayors from other parties. Interestingly, columns (5) and (6) illustrate that switching party from DC/PSI to a Civic Party list can provide partial insulation from the electoral cost associated with the tainted DC/PSI party label. Whereas the reelection probability of DC/PSI mayors that do not switch party is 15 to 17 percentage points lower compared to mayors from other parties in the 1993-1995 period, DC/PSI mayors that did switch to a Civic Party list are only 6 to 7 percentage points less likely to be reelected than mayors from other parties. Strategically dissociating oneself from a party implicated in a national scandal thus appears highly beneficial.[22]

[22]We also tested whether the probability of re-running and/or switching for DC/PSI politicians depends upon their observable characteristics (i.e., gender, age and education). We did not find any meaningful variation exploiting these dimensions. Even so, some care is due in interpreting these results as the decision to switch party is not exogenous, and may be influenced by factors affecting (subsequent) electoral success.

5. Further robustness checks

5.1. The role of local corruption

Our identification requires that local politicians were not themselves implicated in the Tangentopoli scandal. If they were, our findings may simply reflect a direct accountability mechanism whereby local corrupt politicians are removed from office. Although several scholars of Italian political history state that Tangentopoli focused on national politicians (Gundle and Parker, 1996; Newell, 2000), they often also mention the involvement of at least some local politicians. As those were typically elected in bigger municipalities with direct ties to the national hierarchy of the implicated parties, we replicated our analysis while dropping all provincial capitals (about 100 municipalities). This leaves our findings unaffected, as reported in columns (1) to (3) of Table 8. Table A.7 in the online appendix illustates that the same holds when excluding the 1%, 5% and 10% largest municipalities from the sample.[23]

Nonetheless, to address this potential concern in more detail, we undertook a meticulous qualitative analysis of local news over the period 1992-1994. We do this for two Italian regions – Piemonte in the north and Puglia in the south – which together represent 18% of Italian municipalities. This choice was driven mostly by practical concerns of data availability as only few local newspapers provide open access to their complete digital archives. Yet, it should be noted that both regions are representative of the rest of Italy in terms of the share of national legislators charged with corruption or related crimes during Tangentopoli. We searched the online archives of La Stampa (for Piemonte) and La Gazzetta del Mezzogiorno (for Puglia) for references to early dissolutions of local governments, and then examined the articles (about 300 in total, digital copies available upon request) for references to politicians charged with corruptive practices.[24] The results indicate that 16 out of 124 cases of early government termination

[23]This also helps alleviate concerns that some national politicians might hold local mandates (usually in larger municipalities), which could invoke a mechanical impact of the scandal in such municipalities.

[24]Both newspapers are a reliable source of local news. With restricted pools of journalists spread across few newsrooms in their regions' main cities, direct links between journalists and local politicians leading to biased corruption reporting are unlikely. Moreover, Italian media played a key role during Tangentopoli in spreading corruption news and the subsequent delegitimization of the national political class (Chang et al., 2010). Media coverage was so intense that some politicians believed admitting their crimes was better than continuing to be accused by the media (Giglioli, 1996). As such, the size and salience of Tangentopoli makes it likely that local newspapers reported all relevent scandals.

in municipalities governed by DC/PSI show some evidence of corrupt local politicians. The same is true for 11 out of 44 cases of early government termination in municipalities governed by other parties. The results in column (4) through (9) in Table 8 indicate that excluding these 16 municipalities from our estimation sample leaves our findings qualitatively unaffected.

Table 8 Here

5.2. The implosion of DC

The dissolution of DC in January 1994 implies that politicians in this party necessarily had to change party, which may provide a 'mechanical' explanation for our party switching findings. However, even though the dissolution of DC (and PSI) induced an important process of fragmentation and party reorganization in the Italian political landscape, we are able to track this process because we have information on which parties were the immediate successors of DC. This allows us to code these parties as if they jointly constituted DC in the period after 1993 (see also footnote 20). Hence, we can monitor the extent to which politicians affiliated to DC prior to Tangentopoli were affiliated to DC-successor parties after 1993 – thus eliminating any purely mechanical effects in our analysis of party switching.

Even so, one might still argue that this fragmentation process directly undermined politicians' expected utility from these DC-successor parties, which might drive our results (rather than Tangentopoli as such). This argument is likely to play some role in explaining the very substantial increase in party switching among DC politicians in 1994 (see Figure 5). Yet, there are a number of elements that make this explanation less credible for the earlier years in our sample. First, the dissolution of DC was entirely unexpected at least until 23 June 1993, when the Secretary of DC suggested that "the end of DC would be possible". This declaration was so unexpected that it caused complaints from all main DC politicians, which led the Secretary to deny having made the statement two days later. Even the Pope declared the next day that "DC doesn't have to die". This is important since, as shown in Figures 4 and 5, the effect of the scandal on local government early terminations and party switching already starts in 1992. Clearly, this precedes the dissolution of DC (in January 1994), which from the discussion above was unpredictable at that point. Second, there is no evidence of a sudden peak in early

dissolutions around June 1993 (as shown in Figure A.3 in the online appendix), which suggests that the implosion of DC as such had little independent impact on local government early terminations.[25] Finally, the implosion of DC cannot explain the fact that local government early termination also increased in municipalities with PCI mayors relative to the control group of municipalities with Civic Party mayors (see above).[26]

5.3. Alternative specifications

Thus far, we concentrated on municipalities where the incumbent mayor is affiliated to DC/PSI. Clearly, this is only one possible operationalization linking the national Tangentopoli scandal to local governments via local politicians' partisan ties. Here, we consider four alternative scenarios varying in the relative power of DC/PSI politicians at the local level. First, we look at municipalities where the mayor and *all* aldermen belong to DC/PSI (group 1). Second, we analyze cases where the mayor belongs to DC/PSI, but at least one alderman is affiliated to PCI or Civic Parties: i.e., municipalities ruled by DC/PSI with at least one coalition partner (group 2). Third, we assess municipalities where the mayor is from PCI or Civic Parties, but at least one alderman is affiliated to DC/PSI: i.e., DC/PSI is part of the local governing coalition, but does not control the mayor (group 3). Finally, we look at municipalities where DC/PSI holds neither the mayor nor any aldermen (group 4). We expect that our main effects are strongest in municipalities where the power of DC/PSI politicians at the local level is largest (group 1) and where these parties are a minor coalition partner (group 3). The latter would be consistent with the party in control of the mayor triggering early elections to distance itself from DC/PSI, thereby capitalizing on those parties' sudden weakness to strengthen its own position.

The results are summarized in Table 9. In column 1, we compare municipalities where both the mayor and all aldermen are controlled by DC/PSI (group 1) to all other municipalities (groups 2, 3 and 4) before and after Tangentopoli. As in the baseline spec-

[25] While the figure indicates an increase in local government early dissolutions in the period September-December 1993, this largely reflects a seasonal trend that is visible also in 1992 and partially in 1994.

[26] Similar arguments also apply to PSI, which was dissolved at the end of a dramatic party convention on 14 November 1994. As for DC, we can track the immediate successor parties of PSI after 1994. Moreover, the dissolution of PSI became a possibility only after the heavy electoral defeat in the 1994 elections (Gundle and Parker, 1996). As already shown, our findings arise already before 1994 (and are also unaffected when omitting 1994 from the sample).

ification, we find that municipalities governed solely by DC/PSI document a statistically significantly higher probability of early government termination once the scandal started. In column 2, we restrict the control group to municipalities where DC/PSI governs in a coalition with other parties (thus comparing group 1 to group 2). While the municipalities with a more dominant role for DC/PSI as expected document a higher level of early government termination after the scandal, the difference is not statistically significant. In column 3, we shift focus to municipalities with a mayor from PCI or Civic Parties in a coalition with DC/PSI (group 3) and compare them to all other municipalities (groups 1, 2 and 4). The point estimate now becomes negative (though insignificant), which is reasonable given that the control group in this case includes municipalities ruled by DC/PSI. Interestingly, however, we find a very strong and statistically significant effect when restricting the control group in column 4 to municipalities without DC/PSI in the governing coalition (effectively comparing groups 3 and 4). This last results strongly suggests that parties in a coalition with DC/PSI as a minor partner indeed trigger early elections to capitalize on these parties' sudden electoral weakness.

Overall, the highest level of local government early termination thus is observed following Tangentopoli for municipalities where the mayor is from DC/PSI - whether or not these parties maintain a coalition government with other parties (i.e., groups 1 and 2). Then, among municipalities where the mayor is from PCI or Civic Parties, local government early termination after the scandal is higher where DC/PSI is part of the coalition (group 3) compared to where it is not (group 4). In line with our theoretical argument concerning the role of the party "brand", these results highlight that the presence of DC/PSI in the local governing coalition is central to the observed increase in local government early termination after the eruption of the scandal.

Table 9 Here

Finally, Table A.5 in the appendix evaluates the robustness of our main findings on local government early termination to the introduction of year-region fixed effects. Although this is a very restrictive specification as it controls for time-varying local shocks,

it again leaves our main results unaffected.[27]

5.4. The new electoral law

A final alternative explanation for our findings lies in a differential impact of the 1993 change in the local electoral law. As explained in Section 2.2, the new electoral law introduced the direct election of the mayor, reinforcing his role within the local council. This might have increased politicians' incentives to run for a Civic Party rather than a national party if they intended to highlight their individual characteristics. As such, it might have induced increased switching rates and local government early termination. Even though the change in electoral law might have had such effects, it is unlikely to explain our findings for three main reasons. First, our results already materialize in 1992 – i.e. *before* the details of the new electoral law and the timing of its implementation was clear. Second, as mentioned before, party switching was much stronger among DC/PSI politicians compared to PCI politicians, which would require that the former are more sensitive to a change in the electoral law. It is not intuitively clear why that should be true. Finally, our main findings are closely linked to the intensity of the national scandal within a municipality's electoral district. Such differential effects are hard to square with a change in electoral law imposed equally across the Italian territory. Interestingly, Heller and Mershon (2005, p.555) likewise argue that the 1993 electoral reforms at the national level "in themselves did not give rise to switching as a new phenomenon".

6. Conclusions

Voters are often found to punish corrupt incumbents on Election Day (Ferraz and Finan, 2008; Chang et al., 2010; Nannicini et al., 2013; Chong et al., 2014; Cavalcanti et al., 2016; Fisman and Golden, 2017). Yet, little is known about how politicians – rather than voters – react to such scandals. Evidently, corruption scandals will impact the implicated politicians' careers. The central contribution of our analysis, however, is to show that such scandals can have substantial implications also beyond the politicians

[27] We also considered exploring the impact of Tangentopoli on an additional dimension of local governance: namely, public finances. Unfortunately, official statistics obtained from the Italian Ministry of Interior are highly incomplete for our period of interest, such that systematic information on total expenditures, revenues or intergovernmental transfers is only available for some municipalities. Furthermore, local government revenue and expenditure assignments were changed substantially in the early 1990s, which further complicates any inferences drawn from the available fiscal data.

directly involved because they may tarnish the party "brand" (Desposato and Scheiner, 2008; Lupu, 2014). That is, since large-scale corruption scandals trigger explicit negative labelling of the involved party (or parties) by the media, they generate a negative societal perception of this party. Studies of organizational stigma show that such negative views often become "extended to individuals linked to, or affiliated with, the stigmatized social actor (e.g., company directors involved in a bankruptcy)" (Kvale and Murdoch, 2017, p.6). Rational politicians then will reassess their affiliation with a party involved in a corruption scandal, even when – or, possibly, particularly when – they are not themselves implicated by the scandal. We test the empirical implications of this line of argument by exploiting the main corruption scandal in Italian recent history (Tangentopoli), which took place in the period 1992-1994 and mostly involved the two leading national parties (the Christian Democratic DC and the Italian Socialist Party PSI).

Our analysis illustrates that a prominent political scandal at the national level causes an increase in early government termination at the local level, especially in municipalities where the mayor is affiliated to a party involved in the scandal. This effect is stronger in regions where more national-level politicians are charged with corruption, and persists even when we exclude municipalities where local politicians might be directly implicated. We also show that mayors affiliated to the parties implicated in the scandal are less likely to stand for reelection, and more likely to have switched party when they are reelected (which is found to mitigate the electoral retribution faced by politicians of the tainted party). Such party switching is also observed for DC/PSI council members more generally. Taken together, these results indicate that local politicians not themselves involved in the scandal re-optimize their behavior relative to the implicated parties by leaving the party, leaving politics, or withdrawing support from the ruling coalition – which subsequently becomes reflected in an increased probability of local government early termination. This attests to the strong relevance of party "brands" in contemporary politics, and particularly highlights a potential 'dark side' of politicians' partisan attachment. Indeed, party labels may cause corruption scandals to spill over across politicians and levels of government.

Figure 1: Mayors' party affiliation in 1991

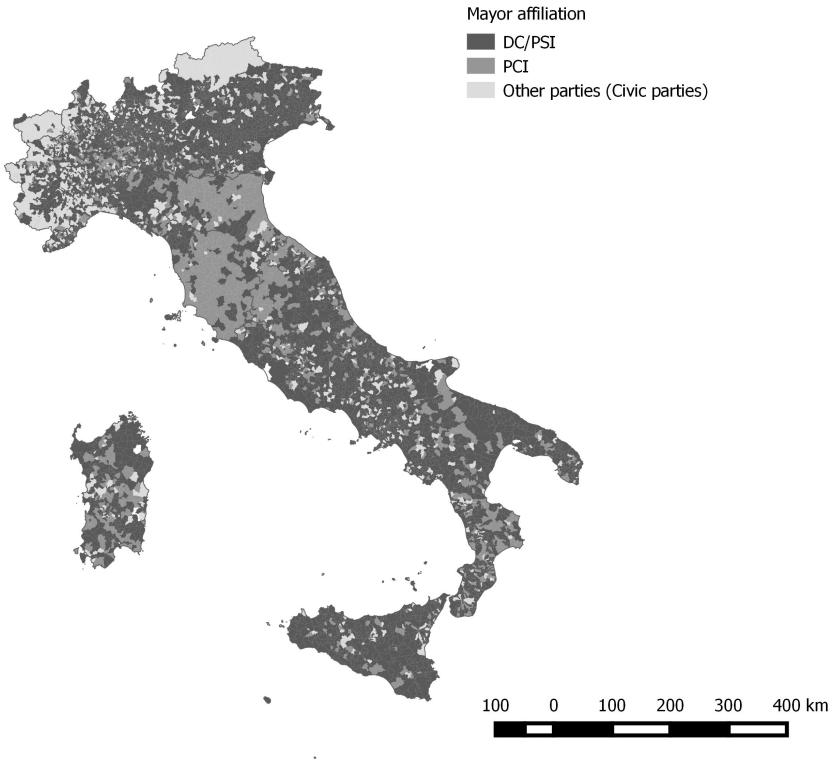
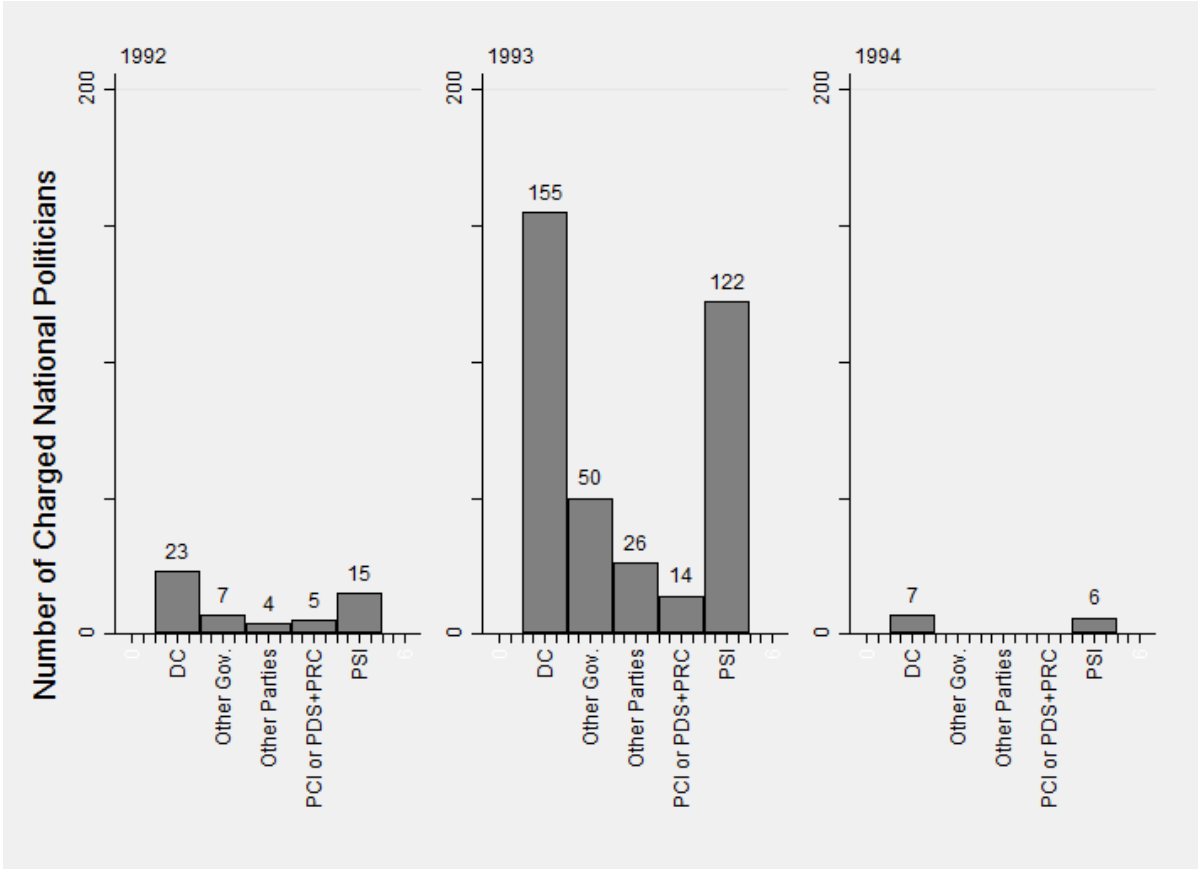
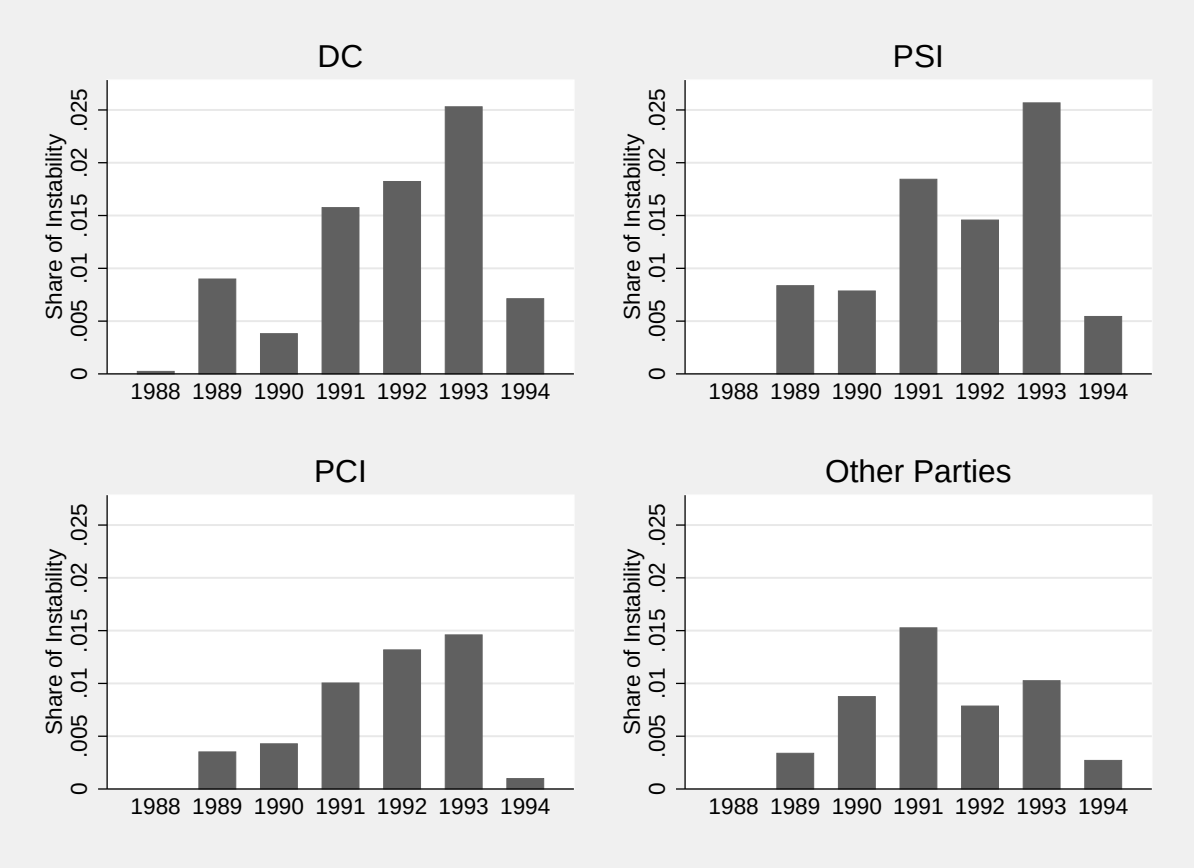


Figure 2: Charged National Politicians by year and party



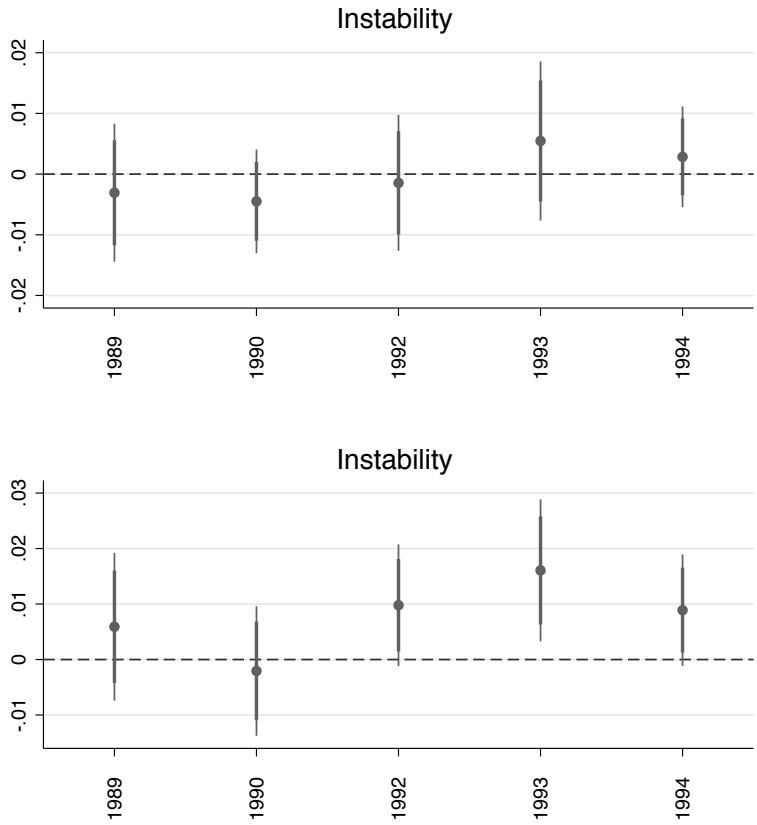
Notes: This figure reports the number of national politicians charged with corruption (or corruption-related offences) by year and party affiliation. Own calculations based on data from Ceron and Mainenti (2015).

Figure 3: Government crisis by party and year



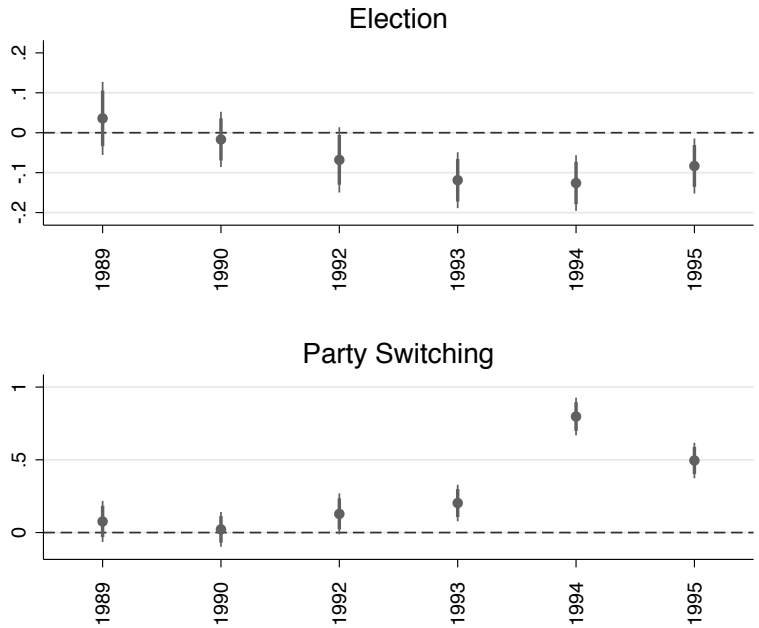
Notes: This figure reports the share of municipalities experiencing early government dissolution by year and the mayor's party affiliation.

Figure 4: Effect dynamics over time (incl. pre-trend)



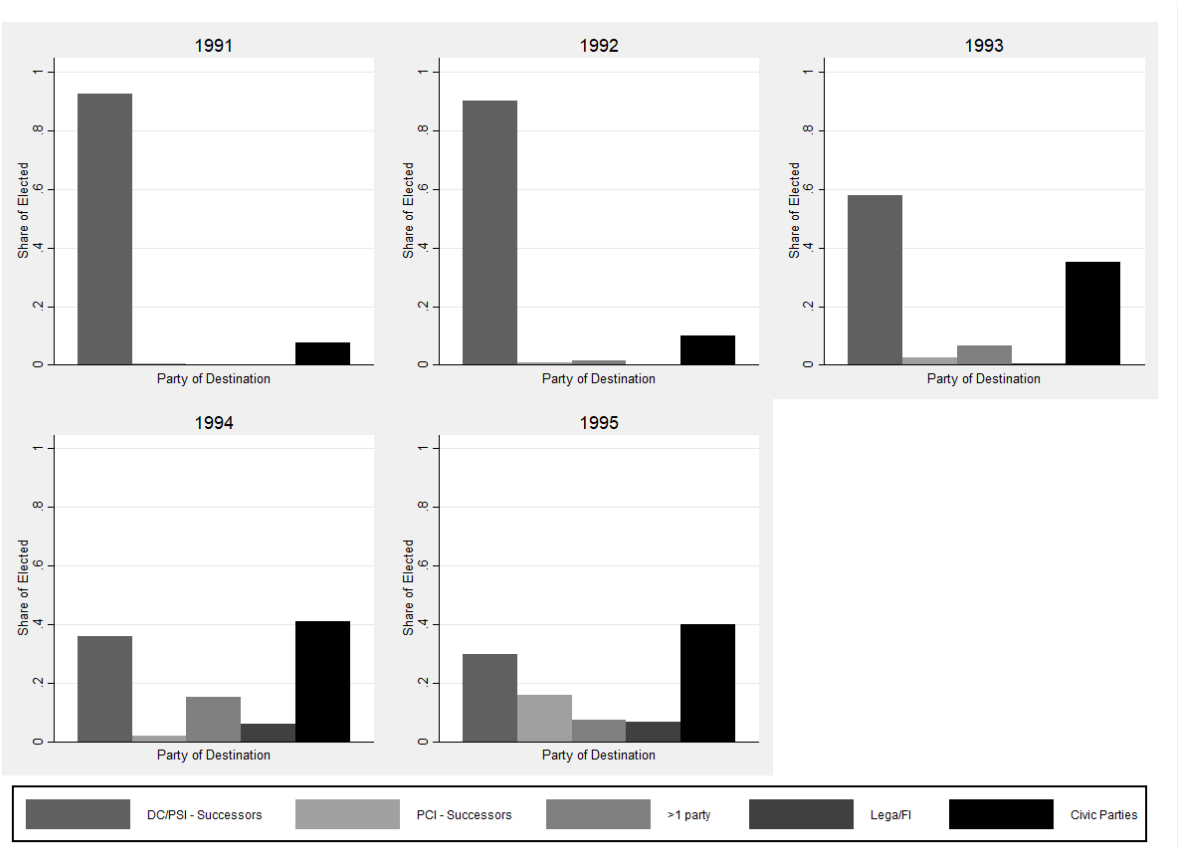
Notes: This figure presents the results of a difference-in-differences model where local government early termination is the dependent variable. The central independent variables are a set of interaction terms between DC/PSI and a set of indicator variables for each year in our observation period (except 1991, which is employed as the reference category). The coefficient estimates of these interaction terms are depicted here, with 90% and 95% confidence intervals. The top panel employs municipalities with PCI mayors as the control group, while the bottom panel employs municipalities with Civic Party mayors as the control group.

Figure 5: Effect on election and party switching (incl. pre-trend)



Notes: This figure presents the results of a difference-in-differences model. The dependent variable is being reelected in the top panel while switching party (conditional on being reelected) in the bottom panel. The central independent variables are a set of interaction terms between DC/PSI and a set of indicator variables for each year in our observation period (except 1991, which is employed as the reference category). The coefficient estimates of these interaction terms are depicted here, with 90% and 95% confidence intervals.

Figure 6: Party switching by local DC/PSI politicians



Notes: This figure depicts the share of DC/PSI politicians elected at the local level that switched to other parties in the 1991 to 1995 local elections. We look at the complete set of politicians elected in year t affiliated to DC/PSI (or its successors) in the period immediately preceding the election. Each panel then indicates the parties for which this set of politicians is elected in year t – i.e., their 'party of destination'. This could be DC/PSI (or its successors), PCI (or its successors), Civic Parties, right-wing parties (such as Forza Italia and Lega Nord), or multiple party affiliations (this phenomenon appeared more frequently after Tangentopoli).

Table 1: National political scandals and local government crises

	Control group					
	PCI/Other parties			PCI	Other parties	
	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.011*	*0.011*	*0.011*	*0.012*	*0.012*	*0.007*
DC/PSI X After Scandal	0.006***	0.007***	0.007***	0.004	0.011***	
	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	
PCI X After Scandal						0.007**
						(0.003)
DC/PSI	0.003**	-0.001	-0.001	0.008	-0.008	
	(0.001)	(0.004)	(0.004)	(0.008)	(0.005)	
PCI						0.018
						(0.014)
After Scandal	0.001	0.014***	0.014***	0.006	0.005	0.011
	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.007)
R^2	0.001	0.011	0.011	0.013	0.014	0.094
N municipalities	8,090	8,090	8,090	7,409	7,014	3,166
N observations	43,872	43,872	43,872	37,525	36,194	14,020
Year FE	No	Yes	Yes	Yes	Yes	Yes
Year of election FE	No	Yes	Yes	Yes	Yes	Yes
Municipality FE	No	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	No	No	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In columns (1) and (2) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In column (3) the control group is composed of municipalities governed by a mayor affiliated with *PCI*, while in columns (4) and (5) the control group is composed of municipalities governed by a mayor affiliated with *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 2: Local government instability and level of corruption

	Number of corrupt politicians			Share of corrupt politicians		
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.011*	*0.012*	*0.012*	*0.011*	*0.012*	*0.012*
DC/PSI X After scandal X High corruption	0.009*	0.007	0.012**	0.008*	0.006	0.010*
	(0.005)	(0.007)	(0.006)	(0.005)	(0.006)	(0.006)
DC/PSI X High corruption	-0.014	0.003	-0.030***	-0.017**	-0.007	-0.029***
	(0.009)	(0.018)	(0.010)	(0.009)	(0.016)	(0.009)
After scandal X High corruption	0.006	0.009	0.005	0.003	0.005	0.002
	(0.004)	(0.006)	(0.005)	(0.004)	(0.005)	(0.005)
DC/PSI X After scandal	0.003	0.001	0.006**	0.003	0.001	0.006*
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
DC/PSI	0.005	0.007	0.004	0.008	0.011	0.005
	(0.005)	(0.008)	(0.006)	(0.005)	(0.009)	(0.006)
After scandal	0.005**	-0.003	-0.008***	0.006**	-0.002	-0.007**
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
R^2	0.012	0.014	0.016	0.012	0.013	0.015
N municipalities	8,090	7,409	7,014	8,090	7,409	7,014
N observations	43,872	37,525	36,194	43,872	37,525	36,194
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In columns (1), (2) and (3) *High corruption* takes value 1 for municipalities belonging to electoral districts where the number of national politicians charged with corruption is above the median of the sample distribution. In columns (4), (5) and (6) *High corruption* instead equals 1 for municipalities belonging to electoral districts where the share of national politicians charged with corruption is above the median of the sample distribution. In columns (1) and (4) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2) and (5) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3) and (6) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 3: Local government instability and political competition

	Party system fragmentation			Electoral competition		
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.011*	*0.012*	*0.012*	*0.011*	*0.012*	*0.012*
DC/PSI X After scandal X High fragmentation	0.010**	0.013**	0.010			
	(0.005)	(0.006)	(0.007)			
DC/PSI X After scandal X High competition				0.022***	0.021***	0.028***
				(0.005)	(0.005)	(0.006)
DC/PSI X High fragmentation	-0.002	-0.004	-0.010			
	(0.006)	(0.007)	(0.009)			
After scandal X High fragmentation	0.011***	0.008	0.010			
	(0.003)	(0.005)	(0.007)			
High fragmentation	-0.014***	-0.015***	-0.007			
	(0.004)	(0.005)	(0.008)			
After scandal X High competition				0.005	0.007**	0.000
				(0.003)	(0.003)	(0.004)
DC/PSI X After scandal	0.004	0.001	0.005**	0.001	0.000	0.001
	(0.003)	(0.004)	(0.003)	(0.002)	(0.002)	(0.003)
DC/PSI	-0.001	0.007	-0.005	-0.005	0.002	-0.013***
	(0.004)	(0.009)	(0.005)	(0.004)	(0.008)	(0.005)
After scandal	0.002	-0.005	-0.009***	0.003	-0.006**	-0.006*
	(0.003)	(0.004)	(0.002)	(0.003)	(0.002)	(0.003)
R^2	0.013	0.015	0.016	0.014	0.016	0.018
N municipalities	8,090	7,409	7,014	8,090	7,409	7,014
N observations	43,872	37,525	36,194	43,872	37,525	36,194
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. *High fragmentation* takes value 1 for municipalities where the number of parties in the city council is above the median of the sample distribution. *High competition* equals 1 for municipalities that experienced at least one change in the party of the mayor in the period 1985-1991. In columns (1) and (4) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2) and (5) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3) and (6) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 4: Local government instability and economic crisis

	% change number of firms (91-96)			% change number of firms (91-96)		
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.011*	*0.012*	*0.012*	*0.011*	*0.012*	*0.012*
DC/PSI X After scandal X % change firms	0.012	0.013	0.017			
	(0.012)	(0.018)	(0.013)			
DC/PSI X After scandal X % change employees				-0.012**	-0.007	-0.015***
				(0.005)	(0.007)	(0.006)
DC/PSI X % change firms	0.037	0.060	0.019			
	(0.025)	(0.049)	(0.029)			
After scandal X % change firms	0.004	0.002	-0.001			
	(0.009)	(0.016)	(0.010)			
After scandal X % change employees				-0.001	-0.005	0.001
				(0.003)	(0.006)	(0.004)
DC/PSI X % change employees				0.002	-0.038	0.016
				(0.012)	(0.040)	(0.011)
DC/PSI X After scandal	0.007***	0.005	0.012***	0.006***	0.004	0.010***
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
DC/PSI	-0.001	0.007	-0.007	-0.001	0.003	-0.008
	(0.004)	(0.008)	(0.005)	(0.004)	(0.008)	(0.005)
After scandal	0.014***	0.006	0.005	0.014***	0.006	0.005
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
R^2	0.011	0.013	0.014	0.011	0.013	0.014
N municipalities	8,079	7,399	7,004	8,079	7,399	7,004
N observations	43,809	37,479	36,137	43,809	37,479	36,137
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. *% change firms* is the percentage change in the number of firms registered in a given municipality between 1991 and 1996. *% change employees* is the percentage change in the number of employees working in firms registered in a given municipality between 1991 and 1996. In columns (1) and (4) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2) and (5) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3) and (6) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 5: Local government instability and Lega Nord electoral success

	% vote Lega Nord (1992)		
	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)
Mean dep. Var:	*0.011*	*0.012*	*0.012*
DC/PSI X After scandal X % vote Lega Nord (1992)	-0.020	-0.002	-0.044
	(0.021)	(0.028)	(0.026)
DC/PSI X % vote Lega Nord (1992)	-0.002	-0.072	0.085*
	(0.039)	(0.067)	(0.045)
After scandal X % vote Lega Nord (1992)	-0.036**	-0.054**	-0.018
	(0.016)	(0.025)	(0.022)
DC/PSI X After scandal	0.010**	0.007	0.016***
	(0.004)	(0.005)	(0.005)
DC/PSI	-0.001	0.012	-0.020**
	(0.008)	(0.013)	(0.010)
After scandal	0.017***	0.009	0.006
	(0.005)	(0.006)	(0.007)
R^2	0.012	0.014	0.015
N municipalities	8,090	7,409	7,014
N observations	43,872	37,525	36,194
Year FE	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. *% vote Lega Nord (1992)* is the vote share of Lega Nord in the 1992 national elections. In columns (1) and (4) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2) and (5) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3) and (6) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 6: Mayors' probability of standing for reelection

	(1)	(2)	(3)	(4)
Mean dep. Var:	*0.285*	*0.285*	*0.285*	*0.285*
DC/PSI	-0.064***	-0.054***		
	(0.009)	(0.009)		
Other parties (civic parties)			0.090***	0.096***
			(0.014)	(0.014)
R^2	0.051	0.064	0.051	0.066
N observations	10,519	10,491	10,519	10,491
Year FE	Yes	Yes	Yes	Yes
Individual covariates	No	Yes	No	Yes

Notes: The dependent variable *Standing* equals 1 when a mayor elected prior to 1992 is standing for re-election in the period 1993-1995, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 if a mayoral candidate was affiliated (before 1992) to either the Christian Democrats or the Italian Socialist Party, while *Other parties* is a dummy equal to 1 when a mayoral candidate was affiliated with either a Civic party or other minor parties. Individual covariates include *gender*, *education* and *year of birth*. Robust standard errors in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 7: Mayor's probability of reelection

	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.755*	*0.755*	*0.755*	*0.755*	*0.755*	*0.755*
DC/PSI	-0.122***	-0.105***			-0.147***	-0.123***
	(0.015)	(0.015)			(0.018)	(0.019)
Other parties (civic parties)			0.038*	0.050**		
			(0.021)	(0.020)		
Other parties (civic parties)$_{t+1}$					-0.048*	-0.025
					(0.027)	(0.027)
DC/PSI X Other parties (civic parties)$_{t+1}$					0.100***	0.070*
					(0.036)	(0.036)
R-squared	0.039	0.066	0.006	0.041	0.042	0.068
Observations	2,996	2,991	2,996	2,991	2,996	2,991
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual covariates	No	Yes	No	Yes	No	Yes

Notes: The dependent variable *Elected* equals 1 for the politician that won the mayoral election, 0 for those candidates that failed to win the election. *DC/PSI* is a dummy variable equal to 1 if a mayoral candidate was affiliated before 1992 to either the Christian Democrats or the Italian Socialist Party, while *Other parties* is a dummy equal to 1 when a mayoral candidate was affiliated to either a Civic party or other minor parties. *Other parties*$_{t+1}$ equals 1 when a candidate is running as a candidate for a Civic party or other minor parties in the current election. Individual covariates include *gender*, *education* and *year of birth*. Robust standard errors in parenthesis * p < 0.1, ** p < 0.05 and *** p < 0.01.

Table 8: Robustness check local corruption (Piemonte & Puglia)

	No province capitals			Only Piemonte and Puglia					
				All			No corruption		
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Mean dep. Var:	*0.011*	*0.012*	*0.012*	*0.008*	*0.010*	*0.008*	*0.007*	*0.009*	*0.007*
DC/PSI X After scandal	0.006**	0.003	0.010***	0.005	-0.001	0.008**	0.005	-0.001	0.008*
	(0.002)	(0.003)	(0.003)	(0.004)	(0.008)	(0.004)	(0.004)	(0.008)	(0.004)
After scandal	0.014***	0.007	0.006	0.001	0.007	0.001	0.005	0.011	0.006
	(0.005)	(0.005)	(0.005)	(0.012)	(0.016)	(0.014)	(0.012)	(0.015)	(0.013)
DC/PSI	-0.001	0.007	-0.008	0.009	0.032	0.004	0.007	0.021	0.004
	(0.004)	(0.008)	(0.005)	(0.008)	(0.028)	(0.007)	(0.007)	(0.028)	(0.007)
R^2	0.010	0.012	0.013	0.007	0.021	0.008	0.007	0.022	0.007
N municipalities	7,998	7,317	6,934	1,463	1,199	1,341	1,446	1,183	1,324
N observations	43,416	37,069	35,806	8,156	5,758	7,236	8,078	5,685	7,165
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In columns (1), (2) and (3) we exclude provincial capitals from the sample. In columns (4), (5) and (6) we include all municipalities in the regions of Piemonte and Puglia, while columns (7), (8) and (9) exclude municipalities where the early dissolution of the local government is linked to corrupt local politicians. In columns (1), (4) and (7) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2), (5) and (8) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3), (6) and (9) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table 9: Robustness check coalition composition

	Group 1 Vs.		Group 3 Vs.	
	Groups 2, 3 and 4	Group 2	Groups 1, 2 and 4	Group 4
	(1)	(2)	(3)	(4)
Mean dep. Var:	*0.011*	*0.013*	*0.011*	*0.008*
DC/PSI (mayor and all aldermen) X After Scandal	0.005**	0.003		
	(0.002)	(0.003)		
PCI/Other parties (at least 1 alderman from DC/PSI) X After Scandal			-0.000	0.010***
			(0.003)	(0.003)
DC/PSI (mayor and all aldermen)	0.002	0.001		
	(0.004)	(0.005)		
PCI/Other parties (at least 1 alderman from DC/PSI)			0.002	-0.003
			(0.004)	(0.007)
After Scandal	0.017***	0.014**	0.019***	0.009
	(0.005)	(0.006)	(0.005)	(0.006)
R^2	0.011	0.016	0.011	0.094
N municipalities	8,090	6,218	8,090	3,166
N observations	43,872	29,852	43,872	14,020
Year FE	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI (mayor and all aldermen)* is a dummy variable equal to 1 for municipalities that have both the mayor and all aldermen from DC/PSI (i.e., group 1). The variable *PCI/Other parties (at least 1 alderman from DC/PSI)* is equal to 1 when a municipality is governed by a mayor from either *PCI* or *Other parties* (Civic parties and minor parties) but at least one alderman is affiliated with *DC/PSI* (i.e., group 3). The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In column (1) the control group is composed of municipalities governed by a mayor from *PCI* or *Other parties* (i.e., groups 3 and 4) and municipalities governed by a mayor from *DC/PSI* but where at least one aldermen is from *PCI* or *Other parties* (i.e., group 2). In column (2) the control group is composed only by municipalities from group 2. In column (3) the control group is composed of municipalities governed by a mayor from *DC/PSI* (i.e., groups 1 and 2) and municipalities governed by a mayor from *PCI* or *Other parties* but where there are no aldermen from *DC/PSI* (i.e., group 4). In column (4) the control group is composed only by municipalities from group 4. Finally, in columns (1) and (3) the whole sample is considered. Instead, the analysis is limited to municipalities governed by a mayor from DC/PSI, in column (2), and PCI/Other parties in column (4). Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

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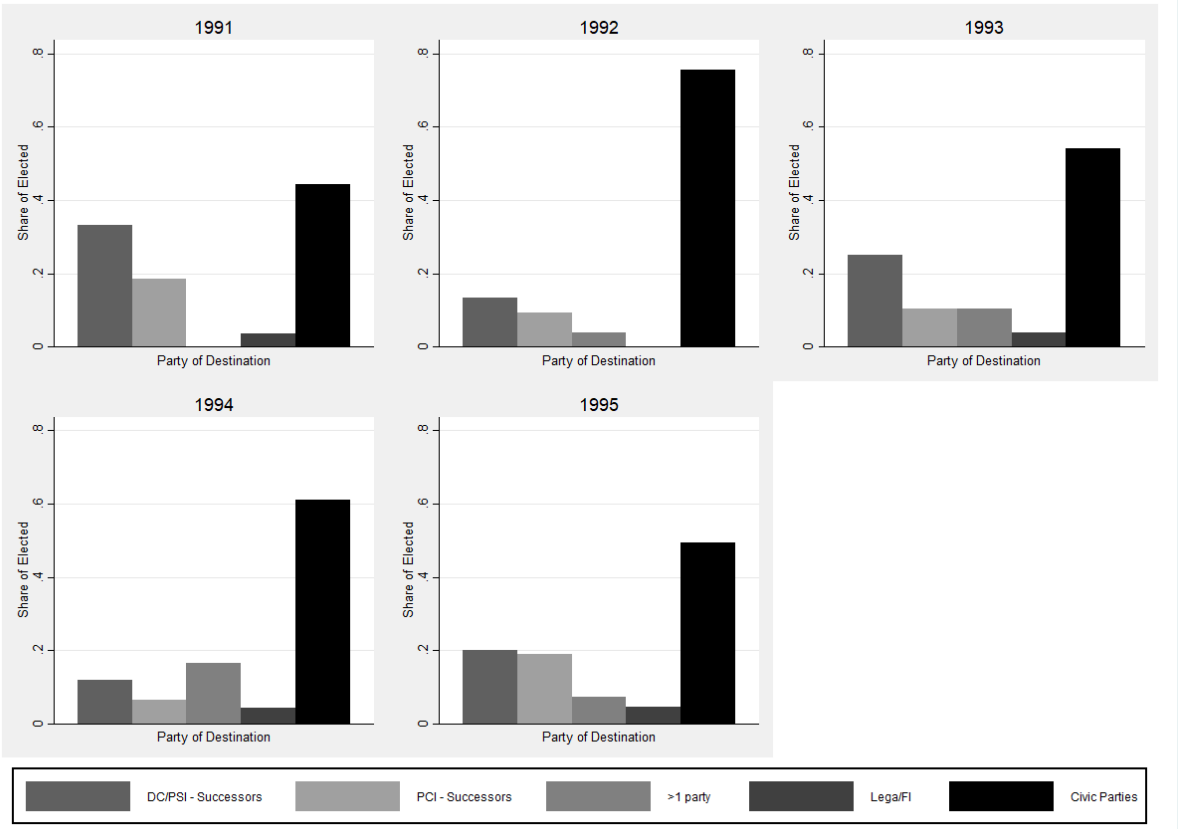
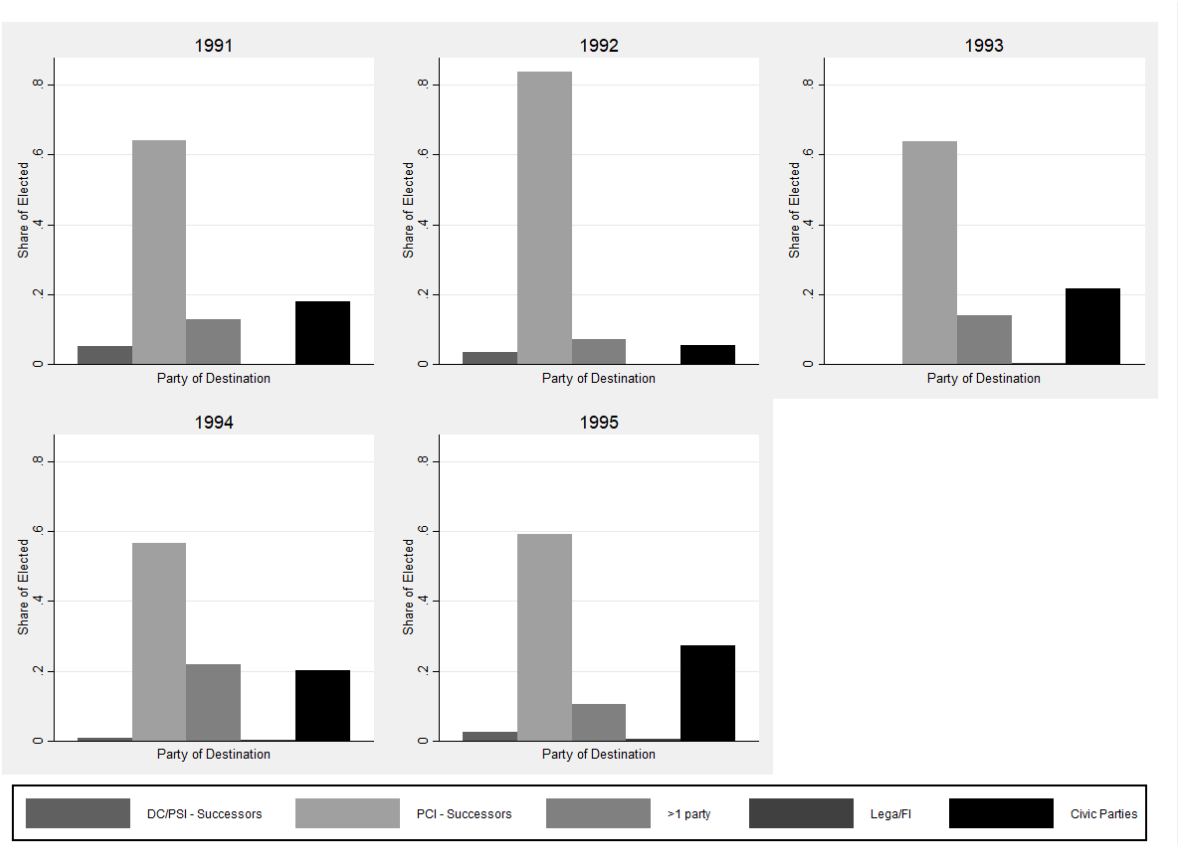
Online Appendix A. Summary statistics and additional results

Figure A.1: Party switching by Civic Party politicians



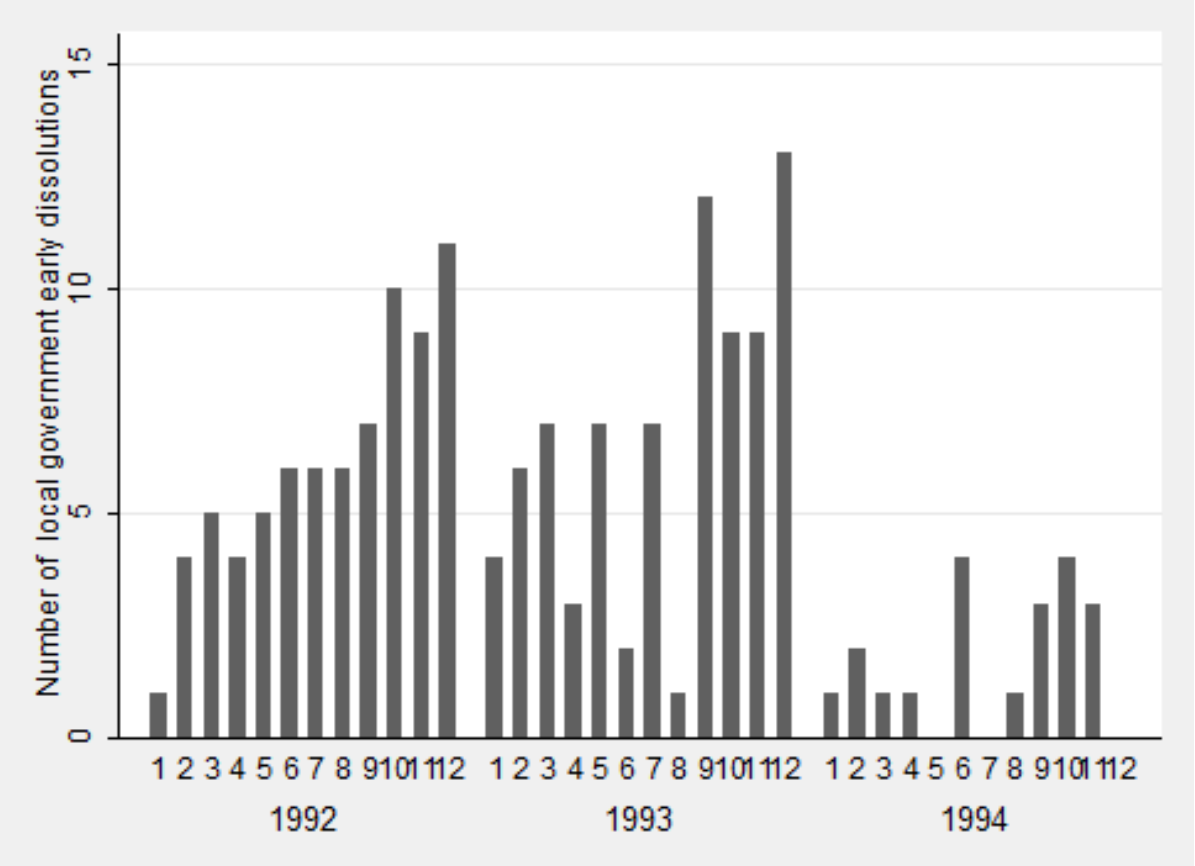
Notes: This figure depicts the share of local politicians originally affiliated to Civic Parties that switched to other parties in the 1991 to 1995 local elections. We look at the complete set of politicians elected in year t affiliated to a given party in the period immediately preceding the election. Each panel then indicates the parties for which this set of politicians is elected in year t ('party of destination').

Figure A.2: Party switching by PCI politicians



Notes: This figure depicts the share of local politicians originally affiliated to PCI that switched to other parties in the 1991 to 1995 local elections. We look at the complete set of politicians elected in year t affiliated to a given party in the period immediately preceding the election. Each panel then indicates the parties for which this set of politicians is elected in year t ('party of destination').

Figure A.3: Monthly number of local government early dissolutions (only DC)



Notes: This figure shows the monthly data for the number of municipalities governed by a mayor affiliated to DC that witness the early dissolution of its government.

Table A.1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Municipalities (1989-1994)					
Instability	0.011	0.106	0	1	43872
DC/PSI	0.681	0.466	0	1	43872
DC	0.515	0.5	0	1	43872
PSI	0.137	0.344	0	1	43872
PCI	0.175	0.38	0	1	43872
Other parties (civic parties)	0.145	0.352	0	1	43872
DC/PSI (mayor and all aldermen)	0.417	0.493	0	1	43872
PCI/Other parties (at least 1 alderman from DC/PSI)	0.167	0.373	0	1	43872
Province capital	0.01	0.101	0	1	43872
High competition	0.515	0.5	0	1	43872
Num. of parties in the city council (above the median)	0.412	0.492	0	1	43872
Num. of corrupt politicians (above the median)	0.395	0.489	0	1	43872
Share of corrupt politicians (above the median)	0.472	0.499	0	1	43872
City council education (graduated)	0.19	0.141	0	0.806	43872
City council gender (male)	0.913	0.076	0.455	1	43872
City council age	40.855	3.567	29.133	60.857	43872
Mayor education (graduated)	0.345	0.475	0	1	43872
Mayor gender (male)	0.968	0.176	0	1	43872
Mayor age	45.652	9.986	19	100	43872
Population (in thousands - 1991)	6.384	36.84	0.031	2775.25	43872
% vote Lega Nord (1992)	0.115	0.111	0	0.538	43872
% change firms (1991-96)	-0.052	0.193	-1	2	43809
% change employees (1991-96)	-0.07	0.308	-1	7.166	43809
All local officials (1989-1995)					
Elected	0.272	0.445	0	1	293762
Switching	0.304	0.46	0	1	75760
DC/PSI - Successors	0.602	0.49	0	1	293762
Age	42.124	10.986	18	100	293762
Gender (male)	0.918	0.274	0	1	293762
Education (graduated)	0.21	0.408	0	1	293762
Mayoral candidates (1993-1995)					
Re-run	0.285	0.451	0	1	10519
Elected	0.756	0.43	0	1	2996
DC/PSI - Successors	0.686	0.464	0	1	10519
Other parties (civic parties)	0.12	0.325	0	1	10519
Year of birth	1944.68	9.890	1907	1972	10517
Gender (male)	0.962	0.192	0	1	10519
Education (graduated)	0.371	0.483	0	1	10491

Table A.2: Local government early dissolution by year and party

Year	DC/PSI	PCI	Other parties	TOTAL
1989	0.9% (5,502)	0.3% (1,409)	0.3% (1,088)	0.7% (8,004)
1990	0.5% (5,566)	0.4% (1,400)	0.7% (1,125)	0.5% (8,090)
1991	1.6% (5,549)	1.0% (1,393)	1.5% (1,128)	1.5% (8,069)
1992	1.8% (5,371)	1.3% (1,365)	0.6% (1,100)	1.5% (7,835)
1993	2.5% (4,178)	1.5% (1,095)	0.9% (977)	2.0% (6,249)
1994	0.7% (3,686)	0.1% (1,011)	0.3% (929)	0.5% (5,625)
TOTAL	1.3% (29,852)	0.8% (7,678)	0.7% (5,127)	1.14% (43,872)

Notes: This table reports the share of municipalities experiencing an early dissolution of its government by year and the mayor's party affiliation. The number of municipalities included in each sample is reported in parenthesis.

Table A.3: Pre-trends and effect development

	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)
Mean dep. Var:	*0.011*	*0.012*	*0.012*
DC/PSI X Scandal$_{t-3}$	0.001	-0.003	0.006
	(0.004)	(0.004)	(0.005)
DC/PSI X Scandal$_{t-2}$	-0.003	-0.004	-0.002
	(0.003)	(0.003)	(0.005)
DC/PSI X Scandal$_{t}$	0.004	-0.001	0.010**
	(0.003)	(0.004)	(0.004)
DC/PSI X Scandal$_{t+1}$	0.010**	0.005	0.016***
	(0.004)	(0.005)	(0.005)
DC/PSI X Scandal$_{t+2}$	0.005*	0.003	0.009**
	(0.003)	(0.003)	(0.004)
DC/PSI	-0.001	0.010	-0.011
	(0.006)	(0.010)	(0.007)
R^2	0.011	0.013	0.014
N municipalities	8,090	7,409	7,014
N observations	43,872	37,525	36,194
Year FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes

Notes:The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. *Scandal* is a set of indicator variables for each year in our observation period (where $t = 1992$). In column (1) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In column (2) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in column (3) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A.4: National political scandals and local government crises – effects by party

	Control group					
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)
Mean dep. Var:	*0.011*	*0.011*	*0.012*	*0.009*	*0.010*	*0.010*
DC X After Scandal	0.008***	0.006**	0.012***			
	(0.002)	(0.003)	(0.003)			
PSI X After Scandal				0.005	0.003	0.009**
				(0.004)	(0.004)	(0.004)
DC	0.002	0.012	-0.008			
	(0.006)	(0.011)	(0.006)			
PSI				-0.014	-0.015	-0.013
				(0.009)	(0.013)	(0.012)
After Scandal	0.008*	0.008*	0.010**	0.017***	0.018***	0.023***
	(0.004)	(0.005)	(0.005)	(0.006)	(0.007)	(0.008)
R^2	0.022	0.027	0.025	0.049	0.053	0.055
N municipalities	7,206	6,524	5,926	4,355	3,304	2,920
N observations	36,593	31,473	28,920	20,052	14,932	12,374
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In columns (1) and (4) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2) and (5) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3) and (6) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A.5: Robustness checks region-year fixed effects

	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)
Mean dep. Var:	*0.011*	*0.012*	*0.012*
DC/PSI X After scandal	0.003	0.001	0.006**
	(0.002)	(0.003)	(0.003)
After scandal	0.004	0.005	-0.001
	(0.003)	(0.004)	(0.003)
DC/PSI	-0.000	0.009	-0.007
	(0.004)	(0.008)	(0.005)
R^2	0.024	0.027	0.028
N municipalities	8,090	7,409	7,014
N observations	43,872	37,525	36,194
Year FE	No	No	No
Region X Year FE	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI). The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In column (1) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In column (2) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in column (3) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A.6: Election and Party switching

	Election	Switching
	(1)	(2)
Mean dep. Var:	*0.272*	*0.304*
DC/PSI X Scandal$_{t-3}$	0.027	0.078
	(0.036)	(0.058)
DC/PSI X Scandal$_{t-2}$	-0.026	0.017
	(0.027)	(0.049)
DC/PSI X Scandal$_{t}$	-0.070**	0.108*
	(0.032)	(0.056)
DC/PSI X Scandal$_{t+1}$	-0.117***	0.179***
	(0.027)	(0.051)
DC/PSI X Scandal$_{t+2}$	-0.120***	0.525***
	(0.027)	(0.056)
DC/PSI X Scandal$_{t+3}$	-0.091***	0.436***
	(0.026)	(0.050)
DC/PSI	0.063**	-0.205***
	(0.026)	(0.049)
R^2	0.077	0.210
N municipalities	8,096	7,901
N observations	29,3762	75,760
Year FE	Yes	Yes
Individual covariates	Yes	Yes

Notes: In column (1) the dependent variable is *elected*, which is equal to 1 if an incumbent politician ran again and was re-elected in the following term (0 otherwise). In column (2) the dependent variable is *switching*, which equals 1 for an incumbent politician that was re-elected in the following term for a different party (0 otherwise). The sample here is restricted to those politicians that were re-elected. *DC/PSI* is a dummy variable equal to 1 if a politician was affiliated in the previous election to either the Christian Democrats or the Italian Socialist Party. *Scandal* is a set of indicator variables for each year in our observation period (where $t = 1992$). Standard errors clustered at the municipality level in parenthesis * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A.7: Robustness check local corruption (Population)

	Below 99% (pop. < 61,233)			Below 95% (pop. < 20,095)			Below 90% (pop. < 11,298)		
	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties	PCI/Other parties	PCI	Other parties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Mean dep. Var:	*0.011*	*0.012*	*0.012*	*0.010*	*0.011*	*0.011*	*0.009*	*0.010*	*0.010*
DC/PSI X After scandal	0.006***	0.004	0.010***	0.005**	0.003	0.008***	0.002	-0.000	0.006**
	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
After scandal	0.015***	0.007	0.006	0.014***	0.009*	0.008	0.014***	0.011**	0.009*
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
DC/PSI	-0.001	0.007	-0.008	-0.001	0.006	-0.007	-0.001	0.005	-0.006
	(0.004)	(0.008)	(0.005)	(0.004)	(0.008)	(0.005)	(0.004)	(0.008)	(0.005)
R^2	0.011	0.013	0.014	0.010	0.012	0.013	0.011	0.013	0.012
N municipalities	7,998	7,317	6,938	7,641	6,961	6,647	7,202	6,528	6,283
N observations	43,430	37,083	35,841	41,678	35,345	34,494	39,480	33205	32,837
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year of election FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City council and mayor characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable *Instability* is a dummy variable equal to 1 when the government in municipality i experiences early termination in year t, 0 otherwise. *DC/PSI* is a dummy variable equal to 1 when the mayor of a municipality is affiliated to either the Christian Democrats (DC) or the Italian Socialist Party (PSI), while *PCI* is a dummy equal to 1 when the mayor of a municipality is affiliated the Italian Communist Party. The variable *After Scandal* is equal to 1 for the period 1992-1994 and 0 for the period 1989-1991. In columns (1), (2) and (3) we exclude the 1% largest municipalities from the sample. In columns (4), (5) and (6) we exclude the 5% largest municipalities, while columns (7), (8) and (9) exclude the 10% largest municipalities. In columns (1), (4) and (7) the control group is composed of municipalities governed by a mayor affiliated to either *Other parties* (Civic parties and minor parties) or *PCI*. In columns (2), (5) and (8) the control group is composed of municipalities governed by a mayor affiliated to *PCI*, while in columns (3), (6) and (9) the control group is composed of municipalities governed by a mayor affiliated to *Other parties*. Standard errors clustered at the municipality level in parenthesis * p < 0.1, ** p < 0.05 and *** p < 0.01.

2013

2013/1, Sánchez-Vidal, M.; González-Val, R.; Viladecans-Marsal, E.: "Sequential city growth in the US: does age matter?"
2013/2, Hortas Rico, M.: "Sprawl, blight and the role of urban containment policies. Evidence from US cities"
2013/3, Lampón, J.F.; Cabanelas-Lorenzo, P-; Lago-Peñas, S.: "Why firms relocate their production overseas? The answer lies inside: corporate, logistic and technological determinants"
2013/4, Montolio, D.; Planells, S.: "Does tourism boost criminal activity? Evidence from a top touristic country"
2013/5, Garcia-López, M.A.; Holl, A.; Viladecans-Marsal, E.: "Suburbanization and highways: when the Romans, the Bourbons and the first cars still shape Spanish cities"
2013/6, Bosch, N.; Espasa, M.; Montolio, D.: "Should large Spanish municipalities be financially compensated? Costs and benefits of being a capital/central municipality"
2013/7, Escardíbul, J.O.; Mora, T.: "Teacher gender and student performance in mathematics. Evidence from Catalonia"
2013/8, Arqué-Castells, P.; Viladecans-Marsal, E.: "Banking towards development: evidence from the Spanish banking expansion plan"
2013/9, Asensio, J.; Gómez-Lobo, A.; Matas, A.: "How effective are policies to reduce gasoline consumption? Evaluating a quasi-natural experiment in Spain"
2013/10, Jofre-Monseny, J.: "The effects of unemployment benefits on migration in lagging regions"
2013/11, Segarra, A.; García-Quevedo, J.; Teruel, M.: "Financial constraints and the failure of innovation projects"
2013/12, Jerrim, J.; Choi, A.: "The mathematics skills of school children: How does England compare to the high performing East Asian jurisdictions?"
2013/13, González-Val, R.; Tirado-Fabregat, D.A.; Viladecans-Marsal, E.: "Market potential and city growth: Spain 1860-1960"
2013/14, Lundqvist, H.: "Is it worth it? On the returns to holding political office"
2013/15, Ahlfeldt, G.M.; Maennig, W.: "Homevoters vs. leasevoters: a spatial analysis of airport effects"
2013/16, Lampón, J.F.; Lago-Peñas, S.: "Factors behind international relocation and changes in production geography in the European automobile components industry"
2013/17, Guío, J.M.; Choi, A.: "Evolution of the school failure risk during the 2000 decade in Spain: analysis of Pisa results with a two-level logistic mode"
2013/18, Dahlby, B.; Rodden, J.: "A political economy model of the vertical fiscal gap and vertical fiscal imbalances in a federation"
2013/19, Acacia, F.; Cubel, M.: "Strategic voting and happiness"
2013/20, Hellerstein, J.K.; Kutzbach, M.J.; Neumark, D.: "Do labor market networks have an important spatial dimension?"
2013/21, Pellegrino, G.; Savona, M.: "Is money all? Financing versus knowledge and demand constraints to innovation"
2013/22, Lin, J.: "Regional resilience"
2013/23, Costa-Campi, M.T.; Duch-Brown, N.; García-Quevedo, J.: "R&D drivers and obstacles to innovation in the energy industry"
2013/24, Huisman, R.; Stradnic, V.; Westgaard, S.: "Renewable energy and electricity prices: indirect empirical evidence from hydro power"
2013/25, Dargaud, E.; Mantovani, A.; Reggiani, C.: "The fight against cartels: a transatlantic perspective"
2013/26, Lambertini, L.; Mantovani, A.: "Feedback equilibria in a dynamic renewable resource oligopoly: pre-emption, voracity and exhaustion"
2013/27, Feld, L.P.; Kalb, A.; Moessinger, M.D.; Osterloh, S.: "Sovereign bond market reactions to fiscal rules and no-bailout clauses – the Swiss experience"
2013/28, Hilber, C.A.L.; Vermeulen, W.: "The impact of supply constraints on house prices in England"
2013/29, Revelli, F.: "Tax limits and local democracy"
2013/30, Wang, R.; Wang, W.: "Dress-up contest: a dark side of fiscal decentralization"
2013/31, Dargaud, E.; Mantovani, A.; Reggiani, C.: "The fight against cartels: a transatlantic perspective"
2013/32, Saarimaa, T.; Tukiainen, J.: "Local representation and strategic voting: evidence from electoral boundary reforms"
2013/33, Agasisti, T.; Murtinu, S.: "Are we wasting public money? No! The effects of grants on Italian university students' performances"
2013/34, Flacher, D.; Harari-Kermadec, H.; Moulin, L.: "Financing higher education: a contributory scheme"
2013/35, Carozzi, F.; Repetto, L.: "Sending the pork home: birth town bias in transfers to Italian municipalities"
2013/36, Coad, A.; Frankish, J.S.; Roberts, R.G.; Storey, D.J.: "New venture survival and growth: Does the fog lift?"

2013/37, Giulietti, M.; Grossi, L.; Waterson, M.: "Revenues from storage in a competitive electricity market: Empirical evidence from Great Britain"

2014

2014/1, Montolio, D.; Planells-Struse, S.: "When police patrols matter. The effect of police proximity on citizens' crime risk perception"
2014/2, Garcia-López, M.A.; Solé-Ollé, A.; Viladecans-Marsal, E.: "Do land use policies follow road construction?"
2014/3, Piolatto, A.; Rablen, M.D.: "Prospect theory and tax evasion: a reconsideration of the Yitzhaki puzzle"
2014/4, Cuberes, D.; González-Val, R.: "The effect of the Spanish Reconquest on Iberian Cities"
2014/5, Durán-Cabré, J.M.; Esteller-Moré, E.: "Tax professionals' view of the Spanish tax system: efficiency, equity and tax planning"
2014/6, Cubel, M.; Sanchez-Pages, S.: "Difference-form group contests"
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