The Stability Effect of Female Political Leaders[*]

Antonio Acconcia and Carla Ronza

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Abstract

Results relying on gender quotas for city council elections, introduced in Italy in 2012, imply that a higher share of female councillors decreases the probability of early termination of the legislature because of councillors' decisions. This conclusion holds true even controlling for education and age of the councillors, party concentration in the council, political color of the government majority, sex of the mayor, and is corroborated by evidence with a long panel data set since the 1980s. It thus supports the view about the stronger willingness of women to settle disagreements and foster cooperation.

Keywords: Government Stability, Women in Politics, Cooperation, Gender Quota

JEL classification: D74; J16; D72

1　Introduction

While women are still significantly underrepresented in politics, during the last decades their presence markedly increased both in developed and developing countries. Women parliamentarians worldwide have risen from 11.7% in 1997 to 24.9% in 2020; during the same period, women parliamentarians in Europe have increased by about 10 percentage points (EIGE, 2021; Women, 2020). The appointment of Kamala Harris as the 49th vice president of the United States—the first woman to achieve such top position—also contributed to the visibility of women as political leaders. Assessing the effects of higher women's political representation has thus become of interest, regardless of the fact that policy commitment to equality between men and women is relevant for its own sake (Duflo, 2012). In this paper, we look at Italian municipalities and provide evidence on the relationship between local government stability and the share of female councillors.

We mainly rely on gender quotas for city council elections introduced by Law No. 215, 2012, to foster women's participation in local governments. This law determined a discrete jump in the share of female councillors (Baltrunaite et al., 2019). We use this variation to control for the plausible endogeneity regarding women in leadership positions: they tend to be sorted in organizations with poorer outcomes (Gagliarducci and Paserman, 2015), appointed to precarious leadership positions (Xing et al., 2020), and elected into office during difficult times (O'Brien, 2015), thus inducing the likely false conclusion that worst accomplishments are due to women.

The statutory duration of the city-council legislature in Italy is five years. However, at least since 2000 anticipated elections can be called because of well-defined reasons. Information about such reasons allows to sort out episodes of early termination for political motivations from other ones. Therefore, we can investigate whether the exogenous change in the number of women determined by the gender quotas had any effect on the intensity of political disagreement among local policymakers, and thus ultimately on the duration of the legislature.

Two main characteristics of Law No. 215 are particularly useful for our purpose. First, the gender quota only applies to municipalities with more than five thousand inhabitants and elections since 2013. Therefore, we can exploit temporal and spatial variations in the data (comparing municipalities above and below the threshold of inhabitants whose governments were elected before and after 2013). Second, people are entitled to vote for two candidates (instead of

one) as long as of different gender. This contributed to increase women's political representation without forcing all voters to choose between men and women, thus overcoming potential gender discrimination. In other words, exercising the right of double preference does not undermine the possibility to vote for a valid woman even when voters have stronger preference for men as councillors.

Results show that a larger share of women among councillors reduces the probability of early termination of local governments for political reasons. Specifically, increasing female representation by 10 percentage points—due to the gender quota—reduces the probability of early termination by 3 percentage points, which is a sizeable effect. For comparison, before the introduction of the 2012 law the average probability of early termination of the municipal legislature for political reasons was 8.6% (or 6.5% if we restrict to early termination episodes due to councillors' decisions). In particular, this effect holds true in addition to potential effects due to change in age and education of elected councillors and controlling for government political stance, concentration of political parties, sex of the mayor, elected councillors unemployed before the election, as well as differences across municipalities. Therefore, it supports the idea that female policymakers are better suited to cooperate for a common goal (Gagliarducci and Paserman, 2021) and that women reveal to be more cooperative than males possibly due to gender difference in self-confidence (Kuhn and Villeval, 2015). Moreover, our finding that the stability of governance does not depend on the sex of the mayor accords with previous evidence overall suggesting that agreements among members of a team with women are more easily achievable (Eckel and Grossman, 2001; Baskaran and Hessami, 2018; Xing et al., 2020).

In 1993, another law was already issued to increase female political representation in local governments. Differently from the more recent one, such law introduced gender quotas for all municipalities and was issued together with a change in the electoral regime. Therefore, it is poorly suited for identifying the effect of more women on government stability.

However, in September 1995 the law was declared unconstitutional because prejudicial to the principle of equal access to elective offices. As expected, by comparing councils formed before September 1995 and those formed during the last three months of the year—when elections were no more characterized by the gender quota—a strong drop in the share of female councillors emerges: the abolition of the quota reduced female-elected councillors from more than 21% to less than 15%. In connection with this drop we find a clear increment in episodes of early termination consistent with our main evidence.

The debate on whether gender matters in politics is ongoing (Hessami and da Fonseca, 2020). Previous results suggest that a higher share of female legislators increases electoral participation (De Paola et al., 2014), lowers numbers of low-educated elected men (Baltrunaite et al., 2014; Besley et al., 2017), positively affects adolescent girls' ambitions (Beaman et al., 2012), and curbs the diffusion of corruption (Jha and Sarangi, 2018; Brollo and Troiano, 2016). Hence, beside ensuring equal opportunities and legitimate democracy, promoting women's presence in politics seems to be beneficial for governmental quality.[1] We contribute to this literature providing evidence that female councillors contribute to enhance political stability.

The rest of the paper is organized as follows. Section 2 describes the data. Section 3 introduces the econometric framework and how potential endogeneity is addressed. Sections 4 and 5 present the results. Section 6 concludes.

2 Institutional Details and Data

The municipal government administration in Italy is in the hands of a mayor and two public bodies, the council and the executive committee. The size of each body is statutory according to population of municipality. The council is an administrative and political body whose members exercise the legislative authority and finance the affairs of the municipality. The mayor is responsible for the governance of the local administration as well as for public order, civil defence, electoral and registry offices, and other duties delegated by higher-order political body. The executive committee is appointed by, and cooperates with the mayor; usually, management powers on specific sectors are attributed to each member of this committee.[2] Since 1993, councillors are elected with an open list system; they are elected by the citizens together with the mayor. Up to the introduction of the gender quota in 2013, voters had one vote for one council candidate. From 1986 to 2015 about forty-eight thousand municipal

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[1]In general, less clear-cut results emerge regarding the supply of public services when more women are policymakers (Bagues and Campa, 2021; Ferreira and Gyourko, 2014; Geys and Sørensen, 2019; Casarico et al., 2021). Yet, female politicians seem to better address women's needs, investing more in health and education (Chattopadhyay and Duflo, 2004; Clots-Figueras, 2011; Baskaran and Hessami, 2019). Moreover, regarding private firms it has been found that those managed by women increase relative labor costs and employment levels (Matsa and Miller, 2013) while those with more gender-diverse boards allocate more effort to monitoring (Adams and Ferreira, 2009).

[2]For municipalities under 15 thousand inhabitants, the executive committee is nominated among the members of the council, while for municipalities with 15 thousand inhabitants or more, the members of the executive committee can be also external to the council.

councils have been elected in Italy.

The statutory duration of the municipal administration is five years, except for the period 1993-99 when it was four years. However, legislatures can terminate before the natural end of the term for a number of reasons. Table 1 shows that more than one third of all Italian municipalities experienced at least one episode of city-council early termination.[3] These municipalities are similar to the rest of the sample in terms of average education of their citizens and participation of women to the labor force. They, instead, differs in terms of average unemployment rate, which is higher among municipalities with greater government instability, and population. Table 2 also shows that the two groups of municipalities are quite different in terms of female presence among municipal councillors: a lower percentage of female councillors characterizes municipalities with at least one episode of early termination. In particular, the percentage of women in municipalities that never experienced legislature early termination is about 20%, more than the presence in municipalities prematurely terminated only once which, in turn, is larger than the presence of women elected in municipalities that experienced more than one episode of early termination. Both differences are statistically significant a 1 percent level. On average, in municipalities experiencing more than one episode of early termination the percentage of women drop to 13.4%. A similar view is suggested by Figure 1 showing the frequency of early terminations for different intensity of women in the councils. Early terminations decrease monotonically from 20% to 6.6% as the number of women increases.

An inside look at characteristics of the councillors by gender is reported in Table 3. We regressed the council-level percentage of women on characteristics of the council and the municipality; evidence in columns 1 and 2 refers to municipalities whose local governments have always reached the statutory date while that in columns 3 and 4 to the rest of the sample. The main results are those related to the dummy mayor and the Herfindahl index. The coefficient attached to the dummy Mayor is estimated positive not allowing for the municipality effect, otherwise it is negative. Therefore, municipalities characterized by more women among councillors also have more episodes of local governments headed by a female mayor (see columns 1 and 3). However, a female mayor is associated with a lower number of women in the council (see columns 2 and 4). This evidence applies to both groups of municipalities, even though it is

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[3]Since official information on early termination is available since 1990, local governments ruling previously have been considered prematurely dissolved if they lasted less than five years.

stronger for municipalities not experiencing early terminations. It likely reflects the intent of political parties to balance their female mayoral candidate with predominantly male council candidates. Moreover, the Herfindahl index suggests a positive correlation with the presence of female councillors, that is more women are elected when the composition of the council is characterized by a lower number of political parties. Since councillors are elected according to both the received votes and the position in the party list, this result likely reflects women being placed at the bottom positions of party lists.[4] Finally, on average higher level of education and lower age of the councillors are associated with more women among councillors.

As we mentioned, different motivations can be attributable to early terminations. Some of them are the natural consequence of formal acts by the councillors, others are due to mayor's decision, and some others are unrelated to political motivations. The group of our main interest is composed of early termination episodes due to formal acts by the councillors explicitly aimed at the dissolution of the legislature, arguably because of political disagreements, that is Councillors' Resignation and No-Confidence Vote. These circumstances realize when either more than 50% of total councillors resigned or explicitly voted to force mayor's resignation.[5] Therefore, they plainly depend on councillors' willingness to cooperate in the interest of preventing government instability and on their ability to settle disagreements. This group includes 2,700 cases, that is more than half of total number of episodes (see Table 4). Early terminations attributable to the mayor are those due to Mayor's Resignation, Incompatibility, and Mayor's Removal. The residual group consists of the following categories plausibly unrelated to political motivations: Financial Statement Rejection, Mayor's Death, Mafia infiltration in city council, and not-coded reasons.

We recognize that sometimes the rejection of financial statement, formally related to technical assessments regarding the municipal budgetary situation, is achieved to ending the legislature because of disagreements among political parties. Therefore, in the following we check the robustness of our results by adding episodes of Financial Statement Rejection to our group of interest. Since

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[4]Even when gender quotas are in place, their rules only refer to the number of women in the list, leaving the party free to place them at the bottom of the list. Thus, when many people are elected from the same party, it will be more likely to pick women.

[5]According to Law 267/2000, when more than 50% of the councillors resign simultaneously the legislature must be stopped. Formally, it ends up when the President of the Republic issues a decree upon recommendation of the Ministry of Interior; a commissioner rules the municipality until the next election. The election will take place in the first electoral round prescribed by the national schedule (usually in spring).

they are few in numbers, our results are not at all due to the way they are considered. Moreover, we notice that early termination due to mafia infiltration is unrelated to councillors' decisions because it takes place when *"evidence emerges regarding direct or indirect links between members of the local government and criminal organisations [...] jeopardising the free will of the electoral body and the sound functioning of the municipal administration"* (D.L. 31/05/1991 No. 164). Therefore, this circumstance is unrelated to political disputes within the majority coalition or between the latter and the opposition coalition. Anyway, the relationship between early termination for mafia and women's presence in municipal bodies is shown to be negative (Baraldi and Ronza, forthcoming), in line with evidence on the negative relationship between corruption and female politicians (Dollar et al., 2001; Jha and Sarangi, 2018). Hence, not accounting for Mafia infiltration episodes would penalize our main evidence.

All reasons together imply that the probability of early termination is roughly 11%. However, for our main analysis we restrict to early termination episodes related to political motivations, that is we drop episodes due to Mayor's Death, Mafia infiltration, and Financial Statement Rejection, while those without information on the motivation are considered part of the untreated group. In this case, the sample probability of early termination becomes 8.2%.

2.1 Gender Quota for Local Elections

Figure 2 depicts the yearly average of female councillors—as percentage of total councillors—across municipalities. Over the years 1985-2015, the percentage of women increased sixfold reaching more than 26% at the end of the sample, a value quite similar to female representation in municipal political bodies of European countries. In particular, women councillors sharply increased as a consequence of the two laws issued in 1993 and 2012, respectively, aiming to promote gender equality in local governments.

The number of women in local political bodies markedly increased in the last part of the sample. According to Law No. 215/2012, since 2013 constituents of councillors in municipalities with at least five thousand inhabitants are allowed to vote for two candidates of a given party list as long as of different gender, otherwise the second vote would be cancelled. Moreover, the same law also prescribes that no more than 2/3 of the candidates of an electoral list can be of the same sex. By mitigating voters' potential gender discrimination, this provision turned out to be particularly effective to raise the number of elected

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women. In particular, since the law only applies to a subset of municipalities we can implement an instrumental variable difference-in-difference strategy, to investigate the effect of an increase in female councillors on the stability of local government.

Law No. 81/1993 established that in municipalities with more than 15,000 inhabitants no more than 2/3 of candidates of a given party list to municipal council could be of the same sex; in smaller municipalities the threshold was fixed at 3/4. While this law was formally addressed to change women's presence in electoral lists, its likely consequence was to increase the number of elected women (De Paola et al., 2010). However, since it applied to all municipalities and overlapped with relevant changes in electoral system (from a party-ballot to an individual ballot election of the mayor), it is poorly suited to ascertain the causal effect of more woman on government stability.[6]

In September 1995, the Constitutional Court declared the gender quota unconstitutional because prejudicial to the equal access to elective offices (Art. 3 and 51 of the Italian Constitution) and it was repealed. Therefore, by relying on this very peculiar occurrence we can exploit the potential variation in the number of women elected soon after the abrogation of the gender quota. Actually, although in 1995 many municipalities voted during the period of validity of the quota, a relevant number of councils were elected in the last part of the year.

3   Econometric Framework

To uncover the effect of gender composition in municipal government on early termination, we consider all city councils elected during the period 1986-2015 or shorter time interval, and estimate the following empirical specification:

$$EARLY_{i,t} = \sigma_i + \delta_t + \beta\ FEMALE_{i,t} + \gamma\ X_{i,t} + \varepsilon_{i,t} \qquad (1)$$

where $EARLY_{i,t}$ is a dummy variable whose value is 100 if the council of municipality i elected in the year t terminated before the natural end of the legislature, and 0 otherwise; $FEMALE_{i,t}$ is the percentage of women among councillors; $X_{i,t}$ is a vector of time-varying control variables and further regressors helpful

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[6]Moreover, at the time of the 1993 gender quota the well-known set of judicial inquiries, called by the media 'Mani Pulite', revealed the massive diffusion of corruption within the Italian political and entrepreneurial system, determining the collapse of the leading parties.

for interpreting our main evidence (and thus γ a vector of coefficients); σ_i is a municipality fixed effect; δ_t is a time fixed effect; $\varepsilon_{i,t}$ is an idiosyncratic error term.

In order to investigate on the driver of the female effect, we consider three main regressors in our empirical model. First, the degree of government stability is reputedly related to the distribution of councillors among parties or the size of the majority party in the council. Under the maintained assumption that stability increases with the size of the majority party, if such party is characterized by a relatively large share of women, then we may mistakenly attribute greater stability to the presence of women. To control for this possibility, the empirical specification contains the Herfindahl index of party concentration within the council. Second, Table 3 signals that female councillors in our sample are on average more educated than their male colleagues. Since the quality and stability of governments seem to be affected by the education of elected officials (Glaeser et al., 2004; Fortunato and Panizza, 2015), a higher number of women among councillors might explain the government stability because of their higher level of education. Thus, the empirical specification also controls for the level of education of the councillors. Third, as previously suggested right-wing women's policy positions tend to be closer to those of the median voter, thus usually receiving more support (Gagliarducci and Paserman, 2021). We ease this hypothesis by controlling for the local government's political stance.

In addition, we also include control variables related to councillors' age and occupation, a dummy identifying councillors elected in their birth-province, a dummy picking the sex of the mayor—given its suggested impact on the probability of early termination (Gagliarducci and Paserman, 2012)—and municipal-level control variables, that is labour-force participation rate of women, unemployment rate, percentage of educated citizens, and size of population. The panel structure of the data set allows to take into account systematic differences in government stability across municipalities as well as any time-specific shock affecting the election outcomes of a given year.

3.1   Endogeneity and Gender Quota

In order to address the endogeneity characterizing our key regressor (Gagliarducci and Paserman, 2015; Xing et al., 2020), we mainly rely on the sharp increase in female councillors that followed the Law No. 215/2012. In particular, we identify local governments elected in municipalities with more than five

thousand inhabitants after 2012 as the treatment group and those elected before this year together with those related to smaller municipalities as the control group.

Specifically, we recover the difference-in-difference variation in female councillors due to the law by estimating the following first stage regression:

$$FEMALE_{i,t} = \sigma_i + \delta_t + \theta LAW2012_{i,t} + \gamma X_{i,t} + \varepsilon_{i,t} \qquad (2)$$

where $LAW2012_{i,t}$ is a dummy variable with values equal to one for treated observations and 0 otherwise. Hence, the 2SLS estimate of β in equation 4 provides our measure of the effect of women on government stability.[7]

4 Results

Tables 5 and 6 present our basic results relative to the full sample. In particular, Table 5 presents the first stage results; those in column 1 are based on the empirical specification without election-specific control variables. Table 6 displays second stage estimations; the first two columns refer to councillors-related early terminations, the rest of the table to mayor-related early terminations. In columns 1 and 3 we report results without election-specific control variables.

As expected, the 2012 law was particularly effective in increasing female representation within municipal administrations: because of the gender law favoring female participation in local governments, the average percentage of women among councillors increased by about 10 percentage points. The t-statistics is extremely high, reassuring about weak instrument concern. Results relative to the control variables are clearly in line with what we observed above: female politicians appear to be more educated; their presence in the council tends to increase with party concentration and to reduce in case of female mayor.

Focusing on the second stage, it follows an estimate of the key coefficient negative and statistically significant—at the 1% level—only in the case of early terminations related to councillors' decisions. Its magnitude implies that the increment of women determined a reduction in the probability of early termination by about 3 percentage points. This effect is robust to the inclusion of controls for election-specific characteristics which only slightly affect the point

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[7]Chesher and Rosen (2013) show that with dummy outcome variable the 2SLS estimator is still consistent for the local average treatment response under the standard restrictions of Imbens and Angrist (1994).

estimate of the coefficient, from -0.29 to -0.33. Given the number of early terminations in the sample, we conclude that the introduction of the double preference voting conditional on gender and the gender quota in electoral lists determined a reduction in the probability of early termination by about 35%.

Evidence on controls suggest that education of the councillors is positively correlated with the probability of early termination perhaps because more educated councillors have better outside options, thus they are less 'scared' to lose the role of public administrator. Age is negatively correlated with early termination that is, ceteris paribus, more stable governments are those with older councillors. We do not find any effect of the number of parties in the council. Hence, even when we control for a number of features of city councils, we still find a distinctive effect on early termination imputable to the share of women.

For Italian city councils during 1993-2003, Gagliarducci and Paserman (2012) find higher probability of early termination when the mayor is a woman. Our evidence relative to the mayor dummy is consistent with their result, though it implies a bit smaller effect. Quite relevant, controlling for the sex of the mayor does not affect the coefficient on female councillors. According to our estimates, the stability effect to the governance induced by the 2012 law is stronger than the instability associated with a female mayor. In this sense, the law seems to have really contributed to increase local government stability.

A completely different picture emerges when we look at episodes of early terminations related to the mayor. None of the main coefficients of the second stage regression is estimated statistically significant at the 5 percent level. In particular, the coefficient of the dummy Mayor is virtually zero; the coefficient of Female is even *positive*. Arguably, this evidence supports our conclusion that by increasing the presence of women in the council the 2012 law has contributed to the reduction of early terminations determined by councillors' political decisions, consistent with potential differences by gender in the ability to foster cooperation and settle disagreements in a forum.[8]

4.1   Robustness of Main Results

In this section, we further investigate the properties of our empirical model. Specifically, we analyze the influence of special status regions and the implications of restricting our sample to municipalities more closely in terms of size

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[8]Results are also robust to the following change in the sample: (i) we drop municipalities that were part of different provinces during the sample period; (ii) we enlarge the group of early terminations for councillors' decisions with episodes due to Financial Statement Rejection.

and to recent years.

Five Italian regions, *Valle d'Aosta, Trentino-Alto Adige, Friuli-Venezia Giulia, Sicilia, and Sardegna*, are recognised by the Constitutional Chart as regions with special status which allows, among others, more independence in the governance of local institutions. In particular, circumstances leading to local government's early termination are regulated by regional laws. For instance, the official decree of local government's dissolution is issued by the President of the Region instead of the President of the Republic. Table 7, column 1, presents the 2SLS results when early terminations are related to councillors and regions with special status are dropped. Results are virtually unaffected.

In column 2, we restrict the sample to municipalities whose population is in the range of 3-15 thousand of people. Electoral rules in municipalities with more than 15 thousand people are a bit different compared to those legal in the rest of the country. Moreover, municipalities with less than 3 thousand people share a different rule relative to the election of the executive committee compared to all others.[9] Therefore, we drop these two groups of municipalities from the sample. Notice that in doing so we also restrict the sample to municipalities more closely in size to the threshold determining the 2012 gender law for local elections, in the spirit of a regression discontinuity analysis. Clearly, even in this case the key coefficient is estimated negative and statistically significant; its size is only slightly affected. The main difference attains at the coefficient of the dummy Mayor which becomes insignificantly different from zero.

In the last column of Table 7, we show the effects of restricting the sample to the shortest possible period to implement our analysis. Our main findings still hold. Overall, these results confirm our main conclusion regarding the impact of the 2012 gender quotas on government stability.[10]

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[9]Municipalities with less than 15 thousand inhabitants follow a single-ballot rule, that is, the mayoral candidate who received the relative majority is elected; moreover, no coalition of electoral lists is allowed. Municipalities with more than 15 thousand inhabitants follow a dual-ballot rule: candidates can be supported by a plurality of lists and the candidate who gets an absolute majority is appointed to be the mayor. If no candidate receives more than 50% of the votes, then the two candidates who gets the higher number of votes face a second round. With reference to the executive committee, in municipalities with more than 3 thousand inhabitants no more than 60% of the members can be of the same sex (Law No. 56/2014).

[10]Table 8 shows results when early terminations are attributable to mayor. Evidence is in line with that relative to the full sample.

4.2 The case of the 1993 Law

During 1993-94, all local governments in Italy were elected according to Law No. 81, 1993, which introduced a gender quota favouring women. However, in September 1995 the gender quota was abolished whereby elections during the last three months of the year were carried out without that provision. We rely on this circumstance to further investigate the impact of female participation in politics. In particular, we estimate equation (4) restricting the sample to 1995 and exploiting the following first stage regression:

$$FEMALE_i = \alpha + \beta \ LAW1995_i + \gamma X_i + \varepsilon_i \tag{3}$$

where $LAW1995_i$ is a dummy variable accounting for municipalities that voted after the abolition of the gender quota.

Figure 3 summarizes the main evidence. As expected, revocation of gender quota had a relevant impact on women election: municipalities that voted without the gender quota show a markedly lower female representation in local councils compared to municipalities that voted before the revocation, that is 15.1% vs. 21.5%. Looking at the probability of early termination, the corresponding figures are roughly 20% and 7%.

A closer analysis of the municipalities that voted in 1995 after revocation of the quota reveals that 64% of them had elections not because the former government naturally ended but because it was dismissed. This finding could arise concerns related to the potential self-selection of municipalities inherently more unstable in the group that voted after September 1995. However, this concern does not find support in the data. In fact, comparing local governments elected in 1995 because the previous legislature naturally ended with the ones elected because the former administration was dismissed, it turns out that the difference in the probability of early termination between the two groups is not statistically significant. Therefore, the high probability of early termination of local governments elected after the revocation of the gender quota—as shown in Figure 3—seems completely unrelated to the sizeable presence in this group of municipalities whose former government terminated early.

Table 9 presents the first stage results; those in column 1 do not include election-specific control variables. Table 10 reports second stage estimations; the first two columns refer to councillors-related early terminations, the rest of the table to all the remaining early termination episodes, including Mayor's

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Death, Financial Statement Rejection and Mafia. Columns 1 and 3 present results without election-specific control variables. In all regressions, standard errors are robust to heteroskedasticity. First stage estimations show that local governments elected after the law repeal have a significantly lower female representation among councillors: about 5 percentage points fewer women. Second stage results deliver an estimate of the key coefficient which is negative and statistically significant only for councillor-related early terminations, suggesting that reducing female representation negatively affects the stability of the government. In particular, a 5 percentage points reduction in women increase the probability of early termination by 5.5 percentage points. All other results are in line with those of the previous analysis. In particular, the coefficient on the sex of the mayor is positive and significant (only for councillor-related early terminations); the average education level of the councillors is positive correlated with the probability of early termination; the party concentration within the council is found to have no effect on government's probability of early termination.

5   Why do women foster stability?

Since more women in local councils reduce the occurrence of collective decisions determining the early termination of the legislature, we argue that the presence of women contributes to foster cooperation and settle disagreements. Some authors indeed point out that, while men tend to prefer unilateral imposition of solutions, women often follow a consensual approach to problem solving and pay more attention to social and civic responsibilities (Rosenthal, 1998; Bolzendahl and Coffé, 2009). By dealing with peace processes, The Geneva Graduate Institute's Broadening Participation Project shows that when women play a key role in negotiations, agreements are almost always reached and the likelihood of reaching an agreement increases with women's inclusion in deal making (O'Reilly et al., 2015).

Greater potential to cooperation characterizing a team including women may be due to nature or nurture determining more selflessness by the women (Melander, 2005; Andreoni and Vesterlund, 2001). Empirical evidence suggests that antagonism is higher towards men of a different group than towards women (McDonald et al., 2011), that both sexes are shown to be more fearful of out-group men than of out-group women (Navarrete et al., 2009), whereby women

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are more trustworthy and better at negotiating than men (Boltz et al., 2010), and that women are more optimistic than men about their teammate's ability (Kuhn and Villeval, 2015). Moreover, some scholars also suggest that women are more likely to act peacefully, favouring non-competitive environments (Niederle and Vesterlund, 2007), and that men actively look for opportunities to compete with each other (Kleinjans, 2009). Therefore, consistent with these results greater cooperation among members of a team including women is the natural explanation for our main evidence; politicians of both genders should be more prone to discuss with women of an opposite party than with men in order to reach an agreement and men should be less willing to be in disagreements with women.[11]

Gagliarducci and Paserman (2012) use data on Italian municipal governments over the period 1993-2003 and provide evidence that councils headed by female mayors have higher probability of early termination, consistent with the idea of discriminating attitudes on the part of male councillors who resist being led by a woman. By saying that we control for the sex of the mayor in our empirical specifications, we do not find a statistically significant coefficient for the dummy picking the sex of the mayor when the sample is restricted to recent years, suggesting that the issue of discrimination might nowadays be less relevant than in the past.

Table 11 provides suggestive evidence in this direction. We report OLS estimates of the following empirical model

$$EARLY_{i,t} = \alpha Council_{i,t} + \beta Mayor_{i,t} + \gamma (Council \times Mayor)_{i,t} + \psi Z_{i,t} + \varepsilon_{i,t} \quad (4)$$

where $Council$ is a dummy identifying councils with at least one woman councillor and $Z_{i,t}$ includes the full set of control variables used above together with municipality-specific and time-specific fixed effects. In particular, in the first column we report results for the period since 1993, while in the second column we restrict to years following those considered by Gagliarducci and Paserman (2012).

When the large sample is used, the coefficient related to the dummy Mayor is estimated positive whereas those related to Council and the interaction term are

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[11]Greater willingness by the women to cooperate may be strategic if they have fewer chances of being re-elected. With data from Brazil, Brollo and Troiano (2016) find that female mayors have lower probability of being re-elected compared to their male counterparts by roughly 20 percentage points. However, it is quite unlikely that differences in the probability of re-election explain our results as the gender quota is not a transitory rule.

estimated negative. Hence, the negative effect of a female mayor on government stability is more pronounced when the mayor heads an entirely male coalition, as made clear by Gagliarducci and Paserman (2012). However, when we restrict to recent years the coefficient of Mayor is no more significant—as well as that of the interaction term—while the coefficient of Council is still negative and statistically different from zero.

The irrelevance of both the dummy Mayor and the interaction term in the recent sample seems to sustain the idea that some progress has been made towards the goal of closing the gender gap in politics. In particular, the irrelevance of the interaction term signals that the stability effect of the women, arguably driven by their ability to foster cooperation among councillors, does not depend on the sex of the mayor.

6   Conclusion

Elections of local governments in Italy provide a helpful framework to investigate whether more women as policymakers do make a difference. We relied on a large panel data set and a natural experiment to assess the impact of female councillors on government stability. The 2012 law issued in Italy to reduce gender gaps in city councils introduced gender quotas in case of municipalities with more than 5,000 population. The direct effect of the law has been a jump in the share of women elected as councillors which, in turn, has caused a strong reduction in the probability of early termination of the legislature driven by councillors' decisions by roughly 35%.

The estimated effect, mainly relying on the spatial and time discontinuity in the election rule introduced by the law, is obtained controlling for municipality fixed effects, characteristics of elected officials such as education and age, party concentration in the council, political color of the government majority, and the sex of the mayor, among others. Moreover, even considering that the focus on a single country excludes the possibility of confounding effects potentially undermining cross-country analysis, a plausible interpretation for the enhancement of the local government stability rests on the greater collaborative spirit among participants when women take part in a forum. Evidence that the sex of the mayor is irrelevant for our main result supports this view, as it rules out the possibility that the effect is mainly driven by the intention of accommodating any proposal of a female mayor.

Previous evidence has suggested that higher female political representation has the potential of discouraging the diffusion of corruption (Brollo and Troiano, 2016), increasing electoral participation (De Paola et al., 2014), and improving education level of public administrators (Baltrunaite et al., 2014; Besley et al., 2017). Given the beneficial effects of government stability (see, for instance, Alesina et al., 1996; Darby et al., 2004; Aisen and Veiga, 2013), our evidence provides a further justification for reducing the gender gap in politics (Profeta, 2017).

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A *List of Variables*

In the following we specify the definition and the source of all the variables used in our paper.

Early: Dummy variable indicating if the local government terminated before the statutory end of the term. It takes value of 100 if the local government has been subject to early termination and 0 otherwise. Source: Ministry of Interior.

Female: Percentage of women among the councillors. It is computed as 100*(Number female councillors)/(Total number of seats in the municipal council). Source: Ministry of Interior.

Law2012: Dummy variable capturing the elections in which voters could express a double preference conditional on gender and electoral lists were subject to gender quotas; that is, the two main novelties introduced by law no. 215/2012. It takes value of 1 for local governments elected after December 2012 in municipalities with at least five thousand inhabitants, 0 otherwise.

Law1995: Dummy variable capturing the local governments elected after gender quota provision of law no. 81/1993 was repealed. It takes value of 1 for local governments elected after September 1995, and 0 for local governments elected before September 1995.

Education: Average education level of municipal council members. For each member of the local government, the years of education are computed considering the minimum number of years required to obtain her/his reported qualification: 0 if 'no qualification', 3 if 'three years of primary school', 5 if '5 years of primary school', 8 if 'secondary school, first level', 13 if 'secondary school, second level', 16 if 'bachelor's degree', 18 if 'master's degree', 21 if 'PhD degree'. Source: Ministry of Interior.

Age: Average age of municipal council members. Source: Ministry of Interior.

Herfindahl: Herfindahl index of political party concentration within the council; it is computed by summing the squares of each party's share in the council. It takes value from 0 to 1 where 1 stands for maximum concentration, that is all the councillors belong to the same party. Source: Ministry of Interior.

Unemployment: Dummy variable taking value of 1 if at least one councillor did not have an occupation (at election). Source: Ministry of Interior.

Right-wing: Dummy variable taking value of 1 if the local government is headed by a right-wing political party, that is a right/center-right political party or civic list. Source: Ministry of Interior.

Left-wing: Dummy variable taking value of 1 if the local government is headed by a left-wing political party, that is a left/center-left political party or civic list. Source: Ministry of Interior.

Council: Dummy variable taking value of 1 if the council has at least one female member. Source: Ministry of Interior.

Birth-province: Percentage of councillors elected in their birth-province. Source: Ministry of Interior.

Municipal labour-force participation rate of women: Percentage rate of municipal labour force participation for women; that is, the percentage of active female population (employed or actively seeking employment) with respect to the whole female working-age population (aged 15-64). Source: Censuses data, National Institute of Statistics (ISTAT).

Municipal unemployment rate: Percentage rate of municipal unemployment. Source: Censuses data, National Institute of Statistics (ISTAT).

Percentage of educated citizens: In a municipality, it is the percentage of citizens with a qualification over the total population. Source: Censuses data, National Institute of Statistics (ISTAT).

Pop_5k: Dummy variable taking value of 1 for local government elected in municipalities with a population greater than or equal to five thousand inhabitants, and 0 otherwise. Source: National Institute of Statistics (ISTAT).

Population: Number of citizens of a municipality, in thousands. Source: National Institute of Statistics (ISTAT).

B   *Early Termination Episodes*

A legislature can terminate before the natural end of the term for several reasons, broadly classifiable in two groups: the ones related to political motivations and the ones unrelated to political motivation (Table A1). In the first group, early termination episodes can be driven by councillors' decision or mayor's decision. Our main interest is on early terminations due to formal acts by the councillors explicitly aimed at the dissolution of the legislature, arguably because of political disagreements, that is Councillors' Resignation and No-Confidence Vote. These circumstances realize when either more than 50% of total councillors re-

signed or explicitly voted to force mayor's resignation. Therefore, they plainly depend on councillors' willingness to cooperate in the interest of preventing government instability and on their ability to settle disagreements. This group includes 2,700 cases, that is more than half of total number of episodes. Early terminations attributable to the mayor are those due to Mayor's Resignation, Incompatibility, and Mayor's Removal, accounting for 1037 cases. In fact, these episodes result from a mayoral decision, respectively of stepping down, undertaking a different job and committing serious infringements.[12] The residual group consists of the following categories plausibly unrelated to political motivations: Financial Statement Rejection, Mayor's Death, Mafia infiltration in city council, and not-coded reasons. Financial Statement Rejection is mainly due to technical assessments regarding the municipal budgetary situation; Mafia infiltration realizes when "*evidence emerges regarding direct or indirect links between members of the local government and criminal organisations [. . .] jeopardising the free will of the electoral body and the sound functioning of the municipal administration*" (D.L. 31/05/1991 No. 164); lastly, there are 317 early termination episodes without any indication of the underlying reason.

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[12]For example, the mayor is removed whenever she/he is charged for a crime.

Table A1: Early Terminations

	Freq.	Percent	Description
Related to Political Motivations			
Councillors' Decision			
Councillors' Resignation	2,541	50.84	More than 50 percent of councillors resign.
No-Confidence Vote	159	3.18	The councillors vote to force the mayor out from his office.
Mayor's Decision			
Mayor's Resignation	740	14.81	The mayor steps down from her/his office.
Mayor's Removal	30	0.60	The mayor is removed after committing serious infringements.
Incompatibility	267	5.34	The mayor undertakes some activities not compatible with her/his office.
Unrelated to Political Motivations			
Mayor's Death	408	8.16	The mayor dies.
Financial Statement Rejection	190	3.80	The councillors do not approve the final municipal budget.
Mafia	292	5.84	The administration is dismissed for suspected mafia infiltration.
Not-coded	371	7.42	Early termination episodes without any indication of the underlying reason.
Total	4998	100.00	

Notes: The percentages are relative to the total number of local governments terminated early.

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Table 1: Descriptive Statistics

Variable	Mean	Std. Dev.	Median
Panel A.			
Municipalities without early termination episodes: 4615			
Citizens with qualification (%)	89.2	6.0	91.3
Unemployment rate (%)	9.5	7.8	6.7
Labour force female participation (%)	37.7	8.7	38.3
Population (Total)	4,181.7	14,666.8	1,860
Panel B			
Municipalities with at least one early termination episode: 3105			
Citizens with qualification (%)	87.4	6.4	89.2
Unemployment rate (%)	13.5	9.5	10.5
Labour force female participation (%)	35.9	8.0	35.6
Population (Total)	12,236.0	65,194.3	3,976

Notes: Panel A refers to municipalities whose local governments have never been subject to early termination while Panel B refers to municipalities where at least one local government terminated early. *Citizens with qualification* is the percentage of citizens with a qualification with respect to the total municipal population. *Unemployment rate* is the municipal percentage rate of unemployment. *Labour force female participation* is the municipal percentage rate of labour force participation for women. *Population* is the number of citizens of a municipality.

Table 2: Mean Difference Tests

	Early Terminations per Municipality		
	0	1	> 1
Female	19.89%	17.47%	13.40%
Difference		2.42***	4.06***

Notes: Municipalities are pooled according to the number of early termination episodes: zero, one, more than one. The first row reports the percentage of female councillors in each group; the second row reports the difference in the percentage of women between groups. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table 3: Women in Local Governments

	(1)	(2)	(3)	(4)
	Municipalities with Early Termination			
	No	No	Yes	Yes
Mayor	0.82***	-1.87***	1.69***	-0.66**
	(3.22)	(-6.98)	(5.09)	(-2.10)
Education	0.54***	1.02***	0.09	0.96***
	(9.47)	(14.45)	(1.38)	(11.28)
Herfindahl	1.66***	1.84***	3.60***	2.40***
	(4.74)	(5.41)	(9.49)	(6.25)
Age	-0.40***	-0.43***	-0.45***	-0.47***
	(-19.27)	(-19.24)	(-17.15)	(-16.54)
Unemployment	1.03***	0.76***	1.34***	1.04***
	(4.72)	(3.54)	(5.63)	(4.63)
Right-wing	-0.91***	-0.66***	-1.25***	-0.74***
	(-4.18)	(-2.99)	(-5.66)	(-3.42)
Left-wing	1.46***	0.24	0.52**	0.27
	(7.01)	(1.18)	(2.34)	(1.25)
Municipality Effect	No	Yes	No	Yes
Observations	26,773	26,773	18,663	18,663

Notes: The table presents results of regressing the percentage of women among councillors on a number of covariates relative to the council and the municipality. Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Age is the average age of councillors; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election); Right-wing (left-wing) is a dummy equal to 1 if the local government is headed by a right-wing (left-wing) political party. Further regressors are: a dummy identifying councillors elected in their birth-province, a dummy identifying municipalities with at least five thousand inhabitants, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. All empirical specifications control for year fixed effect. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

Table 4: Reasons of Early Termination

| | Attributable to | | Other | All |
	Councillors	Mayor		
Number	2,700	1,037	1,261	4,998
Percent	5.91	2.27	2.76	10.94

Notes: Reasons of early terminations attributable to councillors are to those caused by their political decisions and willingness to cooperate: Councillors' Resignation and No-Confidence Vote. Those attributable to mayor are Mayor's Resignation, Mayor's Removal, Incompatibility. The residual group consists of the following categories: Financial Statement Rejection, Mayor's Death, Mafia infiltration in city council, and other not-coded reasons. Percent values are relative to the total number of local governments in the data set.

Table 5: Government Stability and Women

	(1)	(2)
		First Stage
Law2012	10.51***	9.97***
	(27.17)	(26.09)
Mayor		-1.39***
		(-6.80)
Education		1.03***
		(19.07)
Herfindahl		1.74***
		(6.73)
Age		-0.43***
		(-24.50)
Unemployment		0.85***
		(5.47)
Right-wing		-0.71***
		(-4.48)
Left-wing		0.15
		(1.02)
Observations	44,663	44,605

Notes: The table presents results of first stage estimations. In columns 1 we report results without election-specific control variables. The dependent variable is the percentage of women among councillors; Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Age is the average age of councillors; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election); Right-wing (left-wing) is a dummy equal to 1 if the local government is headed by a right-wing (left-wing) political party. Further regressors are: a dummy identifying councillors elected in their birth-province, a dummy identifying municipalities with at least five thousand inhabitants, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. All empirical specifications control for municipality fixed effect and year fixed effect. Clustered t-statistics that account for within-municipality correlation are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 6: Government Stability and Women

	(1)	(2)	(3)	(4)
		Second	Stage	
	Councillors		Mayor	
Female	-0.29***	-0.33***	0.11*	0.13*
	(-3.74)	(-3.91)	(1.80)	(1.90)
Mayor		1.80***		0.23
		(3.56)		(0.71)
Education		0.39***		-0.18
		(2.69)		(-1.62)
Herfindahl		-0.49		-0.61
		(-0.71)		(-1.40)
Age		-0.19***		0.05
		(-3.62)		(1.35)
Unemployment		0.59		-0.31
		(1.42)		(-1.17)
Right-wing		1.49***		0.79***
		(3.12)		(2.69)
Left-wing		-0.55		-0.05
		(-1.33)		(-0.17)
Observations	43,661	43,636	42,050	42,010

Notes: The table presents results of second stage estimations. The first two columns refer to councillors-related early terminations, the rest of the table to mayor-related early terminations. In columns 1 and 3 we report results without election-specific control variables. The dependent variable is a dummy equals to 100 if the council terminated before the natural end of the legislature; Female is the percentage of women among councillors; Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Age is the average age of councillors; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election); Right-wing (left-wing) is a dummy equal to 1 if the local government is headed by a right-wing (left-wing) political party. Further regressors are: a dummy identifying councillors elected in their birth-province, a dummy identifying municipalities with at least five thousand inhabitants, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. All empirical specifications control for municipality fixed effect and year fixed effect. Clustered t-statistics that account for within-municipality correlation are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 7: Further Results on Government Stability, A

	(1) Ordinary	(2) Population	(3) 2008-15
Female	-0.30***	-0.27***	-0.25**
	(-3.64)	(-2.60)	(-2.35)
Mayor	1.87***	1.57*	1.12
	(3.51)	(1.83)	(1.07)
Education	0.41***	0.58**	-0.41
	(2.71)	(2.38)	(-1.43)
Herfindahl	-0.76	0.22	2.81*
	(-1.00)	(0.17)	(1.76)
Age	-0.14***	-0.17*	-0.26**
	(-2.60)	(-1.72)	(-2.49)
Unemployment	0.40	0.92	2.59**
	(0.85)	(1.24)	(2.08)
Right-wing	1.67***	1.95**	5.93***
	(3.21)	(2.45)	(3.45)
Left-wing	-0.68	-0.49	-2.19
	(-1.57)	(-0.70)	(-1.21)
Observations	38582	15274	9450

Notes: The table presents second stage estimations when early terminations
are related to councillors' decisions. Under the heading Ordinary we report
results restricting to regions with special status; under the heading popula-
tion we restrict the sample to municipalities whose population is in the range
of 3-15 thousand of people while under the heading 2008-15 we restrict the
sample to the period 2008-2015. The dependent variable is a dummy equals to
100 if the council terminated before the natural end of the legislature; Female
is the percentage of women among councillors; Mayor is a dummy equals to 1
for female mayor; Education refers to the average years of education of coun-
cillors; Herfindahl is the Herfindahl index of political party concentration in
the council; Age is the average age of councillors; Unemployment is a dummy
variable taking value of 1 if at least one councillor did not have an occupa-
tion (at election); Right-wing (left-wing) is a dummy equal to 1 if the local
government is headed by a right-wing (left-wing) political party. Further re-
gressors are: a dummy identifying councillors elected in their birth-province,
a dummy identifying municipalities with at least five thousand inhabitants,
municipal population, municipal labour-force participation rate of women,
municipal unemployment rate, percentage of educated citizens in the munic-
ipality. All empirical specifications control for municipality fixed effect and
year fixed effect. Clustered t-statistics that account for within-municipality
correlation are in parentheses. Significance is denoted as follows: * significant
at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 8: Further Results on Government Stability, B

	(1) Ordinary	(2) Population	(3) 2008-15
Female	0.12*	0.09	0.02
	(1.86)	(1.18)	(0.24)
Mayor	0.26	-0.26	-1.44
	(0.75)	(-0.55)	(-1.60)
Education	-0.19	-0.16	0.20
	(-1.64)	(-0.96)	(0.78)
Herfindahl	-0.55	-0.11	2.66**
	(-1.13)	(-0.14)	(2.11)
Age	0.05	0.04	0.11
	(1.17)	(0.60)	(1.28)
Unemployment	-0.35	-0.20	0.77
	(-1.14)	(-0.44)	(0.80)
Right-wing	0.78**	0.29	0.67
	(2.42)	(0.61)	(0.59)
Left-wing	0.03	-0.15	0.37
	(0.11)	(-0.32)	(0.21)
Observations	37074	14474	9182

Notes: The table presents second stage estimations when early terminations are related to mayor's decisions. Under the heading Ordinary we report results restricting to regions with special status; under the heading population we restrict the sample to municipalities whose population is in the range of 3-15 thousand of people while under the heading 2008-15 we restrict the sample to the period 2008-2015. The dependent variable is a dummy equals to 100 if the council terminated before the natural end of the legislature; Female is the percentage of women among councillors; Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Age is the average age of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election); Right-wing (left-wing) is a dummy equal to 1 if the local government is headed by a right-wing (left-wing) political party. Further regressors are: a dummy identifying councillors elected in their birth-province, a dummy identifying municipalities with at least five thousand inhabitants, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. All empirical specifications control for municipality fixed effect and year fixed effect. Clustered t-statistics that account for within-municipality correlation are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 9: Early Termination and Women in 1995

	(1)	(2)
		First Stage
Law1995	-5.50***	-4.89***
	(-6.09)	(-5.57)
Mayor		-0.20
		(-0.38)
Education		0.03
		0.32
Age		-0.45***
		(-11.60)
Herfindahl		2.58***
		(4.35)
Unemployment		1.55***
		(4.10)
Observations	5,302	5,291

Notes: The table presents results of first stage estimations. In columns 1 we report results without election-specific control variables. The dependent variable is the percentage of women among councillors; Law1995 is a dummy equals to 1 for local governments elected during the last three months of 1995; Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Age is the average age of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election). Further controls are: a dummy identifying councillors elected in their birth-province, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. Robust t-statistics are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 10: Early Termination and Women in 1995

|	(1)	(2)	(3)	(4)
	Second Stage			
	Councillors		Other	
Female	-1.02*	-1.09*	-0.64	-0.76
	(-1.85)	(-1.75)	(-1.33)	(-1.37)
Mayor		2.85*		0.47
		(1.87)		(0.40)
Education		0.43**		0.41**
		(2.13)		(2.31)
Age		-0.41		-0.27
		(-1.37)		(-1.05)
Herfindahl		0.05		2.97
		(0.02)		(1.63)
Unemployment		-1.42		0.09
		(-1.07)		(0.09)
Observations	5,137	5,137	5,095	5,084

Notes: The table presents results of second stage estimations. The first two columns refer to councillors-related early terminations, the rest of the table to all the remaining early termination episodes, including Mayor's Death, Financial Statement Rejection and Mafia. In columns 1 and 3 we report results without election-specific control variables. The dependent variable is a dummy equals to 100 if the council terminated before the natural end of the legislature; Female is the percentage of women among councillors; Mayor is a dummy equals to 1 for female mayor; Education refers to the average years of education of councillors; Age is the average age of councillors; Herfindahl is the Herfindahl index of political party concentration in the council; Unemployment is a dummy variable taking value of 1 if at least one councillor did not have an occupation (at election). Further controls are: a dummy identifying councillors elected in their birth-province, municipal population, municipal labour-force participation rate of women, municipal unemployment rate, percentage of educated citizens in the municipality. Robust t-statistics are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Table 11: Discrimination

|	1993-2015	2004-2015
Mayor × Council	-7.43**	-4.21
	(-2.38)	(-1.05)
Council	-2.09***	-3.21**
	(-2.70)	(-2.30)
Mayor	9.35***	6.27
	(3.01)	(1.57)
Observations	35755	18501

Notes: The dependent variable is a dummy equals to 100 if the council terminated before the natural end of the legislature; Council is a dummy identifying councils with at least one woman; Mayor is a dummy equals to 1 for female mayor. Regressions include municipality fixed effect, year fixed effect and the full set of control variables. Clustered t-statistics that account for within-municipality correlation are in parentheses. Significance is denoted as follows: * significant at the 10% level; ** significant at the 5% level; ***significant at the 1% level.

Figure 1: Early Termination and Women in Local Governments
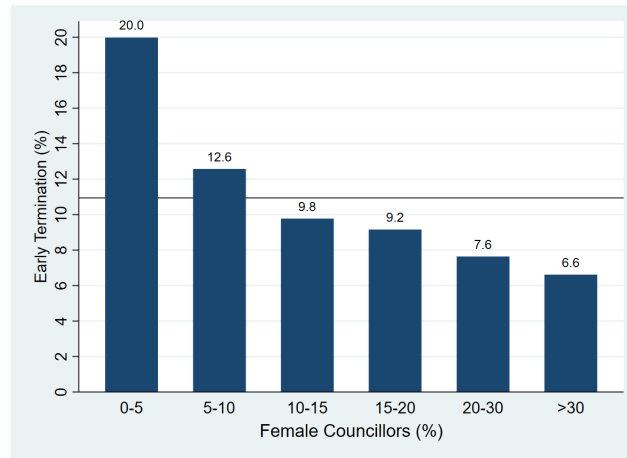
Notes: Percentage of early terminations in municipal administrations according to the percentage of women in their councils. The horizontal line represents the percentage of early terminations in the whole sample.

Figure 2: Women in Local Governments
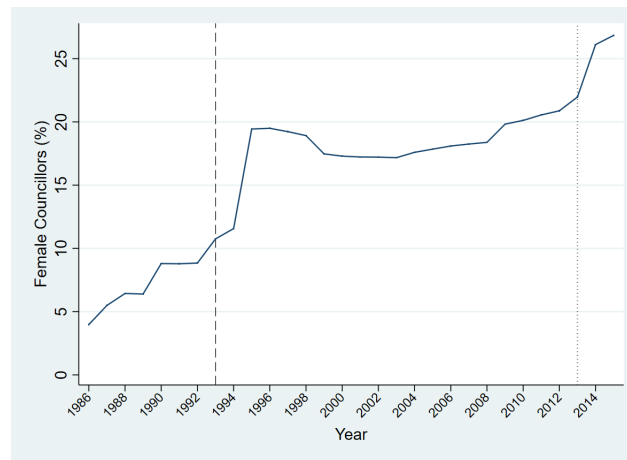
Notes: The average percentage of women each year is computed across local councils of all the Italian municipalities. The dashed line and the dotted line mark the introduction of respectively the gender quota law and the double preference voting law, the two main reforms on female political representation over the considered time-frame.

Figure 3: Early Termination and Women in 1995
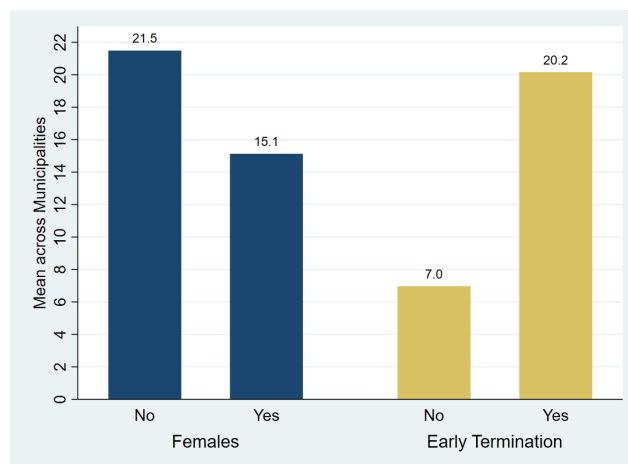
Notes: Local governments elected in 1995 have been divided in two groups: the first one (Treated= No) is made of local governments elected before gender quota abolition; the second one (Treated= Yes) is made of local governments appointed after law no. 81/1993 was abolished. The figure shows the percentage of early termination cases and the percentage of female councillors in local governments.