

A gendered spatial analysis of legislative preferences in the Italian parliament

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Abstract

Studies on female legislative behavior suggest that when introducing and/or approving a feminist agenda is at stake, women parliamentarians may challenge party cohesion by allying across party lines (Swers 2002; Sanbonmatsu 2006). However, evidence is mixed (see for example Lloren 2011), and how and why gender cohesion within the legislature may emerge and whether it is actually a threat to party cohesion are still open questions.

In this paper we analyze a specific parliamentary activity - bill co-sponsorship - in the Italian Parliament as a source of important information about MPs' original preferences (see Aleman & alt. 2009) and we study how gender affects party cohesion. Do women form a separated group in the Italian parliament? On average, are they more or less distant from the center of their parties than men? Does gender affect systematically party cohesion?

The paper is innovative both for the data source and the methodological approach. We use a principal component analysis of co-sponsorship data gathered in the Italian lower chamber (Curini & Zucchini 2012) between 1983 and 2008 in order to indentify the ideal points of MPs in a multidimensional space for each legislature. The data obtained from this technique allow us to estimate the impact of gender on party cohesion at the individual level while controlling for the impact of several other variables of different kind (individual, partisan and institutional). We find that : 1) on average women show higher gender cohesion inside the parties and higher party cohesion than men; 2) gender's effect is not conditional on individual characteristics, the size and organization of the parliamentary parties and the share of women members of the latter; 3) the different behavior of women MPs may depend on the different patterns of female recruitment in the parties.

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1. Introduction

Female representation in contemporary parliaments has been intensively studied from both the perspective of legislative recruitment (Lovenduski & Norris 1993; Matland & Studlar 1996) and of legislative behavior (especially in terms of policy preferences) of elected women (Thomas and Welch 1991; Reingold 1992; Wängnerud 2000). The importance of improving women's descriptive representation has often been supported by arguing that women, once elected, may "act for women", so that having more women MPs may have significant political consequences for the legislative agenda of a country. Studies on legislative behavior have mostly concentrated on single countries, focusing especially on Anglo-Saxon and Northern European areas, and highlighted that, under certain circumstances, women parliamentarians actually tend to prioritize more than men women-related legislation in their legislative activity. This stream of literature suggests that when introducing and/or approving a feminist agenda is at stake, women parliamentarians may challenge party cohesion by allying across party lines (Swers 2002; Sanbonmatsu 2006). However, evidence is mixed (see for example Lloren 2011), and how and why gender cohesion within the legislature may emerge and whether it is actually a threat to party cohesion are still open questions.

The present paper focuses on the Italian case-study and pursues the aim of testing whether and how gender is a source of sub-group cohesion in the parliament and in the parties, and whether and how it may affect party cohesion in general. The interpretation of the results of the analysis suggests us as well some hypotheses about the possible links between gender cohesion, party cohesion and the processes of selection and recruitment of prospective MPs.

The paper is innovative both for data source and methodological approach. First, contrary to several studies about gender cohesion in legislative behavior, which focus on the last stage of the legislative process (final votes, roll-calls)¹, here we focus on the original preferences of women and men MPs. Following a previous study about the Italian committee cohesion (Curini & Zucchini 2012), we use a specific parliamentary activity - bill co-sponsorship - in the Italian lower chamber between 1979 and 2008 as a source of important information about the original preferences of MPs. Actually, in the Italian legislative environment co-sponsorship reveals individual legislative preferences that are very likely to be original and very weakly affected by party discipline and strategic calculus (see Aleman & alt. 2009), as we argue in the following section.

The second innovation concerns the methodology applied to this study. In fact, we use a principal component analysis of co-sponsorship data in order to identify the ideal points of MPs in a

¹ For an exception see Swers (2002), in which also co-sponsorship in two legislatures in the US Congress is analyzed.

multidimensional space for each legislature. The data obtained from this technique allows us to identify the position of MPs in a multidimensional space, so that we can analyze cohesion at the individual level while controlling for the impact of several other variables of different kind (individual, partisan and institutional). In turn this information helps us to answer in a reliable way some simple questions: do women form a separated group in the Italian parliament? On average, are they more or less distant from the center of their parties than men? Does gender affect systematically party cohesion?

Third, we consider the entire range of policy issues covered by the co-sponsorship activity, and not only women-related legislation, and this allows us to conduct a more complete analysis of cohesion.

Moreover, the time span we cover in our analysis is longer than that considered in any other study on the topic. The data we use range throughout eight legislatures (29 years) and enable us to assess the stability of some patterns of policy preferences.

Finally, this paper reduces the impressive gap in the literature about female representation in the Italian parliament, where female legislative behavior has rarely been considered (for two exceptions, see Papavero 2011 and Carando 2010).

As to the structure of the paper, in the following section we explain why and how we build a multidimensional legislative space based on co-sponsorship behavior. The data we obtain allow us to estimate in the third section the gender cohesion in general and inside parliamentary parties and the party cohesion separately for male and female MPs. The fourth and fifth sections are entirely dedicated to estimate by multilevel regression models the existence of a gender effect on party cohesion. In the sixth section we control also for the minority status of women. The final section is dedicated to discuss the main results of our analysis and what they reveal about parliamentary recruitment of men and women in the Italian parties.

2. Estimating MPs' (almost) original policy preferences

Trying to estimate empirically the original MPs' policy preferences is not an easy exercise. One obvious, but still somehow misleading, way is to use each MP's actual voting behavior. This road has led to the development of an extensive literature in political science that analyzes roll-calls. Originally born to investigate the U.S. Congress, this methodology has started to be increasingly employed even in other contexts, including parliamentary democracies (see Poole 2005; Cox and McCubbins 2005; Hix, Noury and Roland 2005; Curini and Zucchini 2010). The problem of this methodology is that, especially in a parliamentary context, by scaling roll-calls we measure just the structure of the "revealed behavioral space" (Hix and Jun 2009). Therefore the MPs' estimated ideal points, as well as the latent dimension(s) revealed by the voting behavior, are linked only indirectly with the underlying ideological and policy dimensions of conflict in a polity (Shepsle and Weingast 1994; Hall and Grofman 1990). They are also the outcome of the impact of party discipline (that, on average, is clearly (much) higher in parliamentary

democracies compared to presidential ones) on MPs behavior. In this case we cannot talk about cohesion anymore, as the similarity of preferences is not original. Discipline is a “top down “ phenomenon, the outcome of a strategic game played within the party in which rank and file members respond to rewards and punishments created by some internal party decision-making regime or by the legislative rules (Giannetti and Laver 2008). The confidence vote procedure, for instance, is an institution that can affect the level of discipline². Moreover, many roll call studies are indiscriminately based on very large samples of votes that are inherently determined by endogenous agenda formation processes that clearly introduces the possibility of a selection bias in roll-call votes (see Carrubba et al. 2006, 2008).

The most common alternative sources to identify policy positions are not available in European Countries or are completely blind to the preferences of individual MPs. Party manifestos and/or expert surveys belong obviously to this last categories. On the other hand, interest groups ratings are absent in European countries³.

One possible solution to this riddle is to rely on legislative co-sponsorship as the best source from which to infer, at least partially, the MPs’ original preferences. Indeed, as rightly noted in the path breaking contribution by Aleman et al. (2009), “activities that have no immediate policy consequences and do not depreciate the party label are not as tightly monitored by party leaders. Consequently, floor voting choices should more intensely reflect the costs of defection imposed by parties than cosponsoring should”. A second advantage of using co-sponsorship pertains to agenda processes. Bill sponsorship takes place at the beginning of the legislative process and it is usually less affected by strategic considerations than other parliamentary behaviors. Finally, in the Italian Parliament sponsoring a bill is a very frequent and easy activity, which does not require to comply with any special rule or criterion: any individual MP can do it.

The decision to cosponsor a bill reveals MP’s preference for the proposal over the current status quo, as well as a special interest in or importance attached to that particular bill. Moreover, while effective voting decides a policy, cosponsoring legislation can be seen as a low-cost position taking by MPs who signal their policy preferences to target audiences (e.g., constituents), or to fellow representatives, or to both (see Kessler and Krehbiel 1996).

As far as data inferred from co-sponsorship describe original policy preferences we have also indirectly information about the identity of MPs who are selected by parties and voted by the electorate. The bills MPs sponsor mirror their preferences before entering parliament better than any other behavior.

² On the conceptual difference between unity, cohesion and discipline see Sieberer (2006) and Hazan (2003).

³ Note nevertheless that interest group ratings, although supplied by observers qualified and sophisticated enough “to differentiate legislators according to genuine policy differences rather than inconsequential or symbolic behavior” (Krehbiel 1991: 118), are still mainly built upon roll calls.

We rely on data provided by the Italian Parliament website about all the bills introduced in the Italian Chamber of Deputies between 1979 and 2008, that is from the 8th up to the 15th Legislature⁴. These data have been already processed in a previous paper (Curini and Zucchini 2012) about the committees' cohesion and we use the same individual ideal points extracted in that study. In short, Curini and Zucchini built an affiliation matrix for each legislature, with each cell indicating the number of times that each pair of legislators cosponsored legislation together. Then they used a principal-components analysis (PCA) with singular-value decomposition on this agreement matrix to extract the ideal-point estimates of the MPs. The underlying idea is that any two MPs present more similar (dissimilar) policy preferences the more (less) they co-sponsor the same bills.

3. Gender cohesion and Party Cohesion in the Italian Chamber of Deputies

The concept of cohesion has an immediate spatial description. If we can represent individual preferences on the policy space as individual ideal points, then the proximity of the ideal points of MPs who belongs to a certain subset of the parliament represents the level of cohesion of that subset. To measure the proximity or dispersion of MPs with respect to a specific subset of MPs we can calculate the Euclidean distance separating each MP from the median position of the subset. We call this measure DISPERSION and it is obviously the opposite of cohesion. Subsets of Parliament may change according to the research questions. The debate in literature suggests three research questions (and three possible subsets):

- 1) Are women MPs closer each other than men in the Parliament ?
- 2) Are women MPs closer each other than men in their parties ?
- 3) Does gender affect party cohesion and how ?

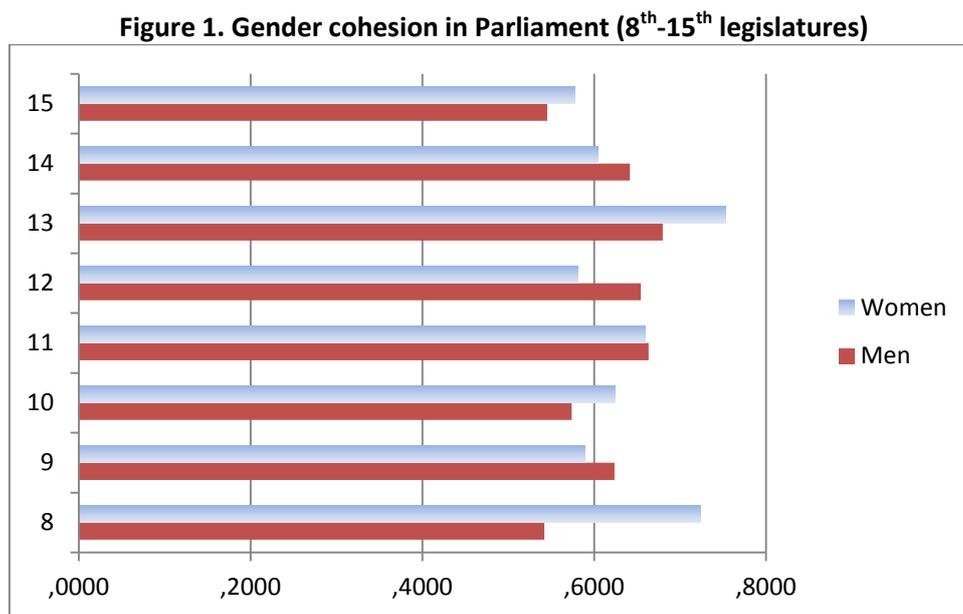
The first question is only seemingly an easy question. If we decide to measure directly the distance of each woman from the multidimensional median of women in parliament, we will obtain a measure overwhelmingly biased by the distribution of women MPs among different parties. In the Italian Parliament, women have been disproportionally concentrated in the Communist Party and in its heirs. Therefore, according to this biased measure, women would be systematically always more cohesive than men. Using this measure, in fact, we would somehow compare the cohesion of a party with the cohesion of the whole Parliament. On the contrary, we are interested in checking the proximity of women (compared with the proximity of men) once we have controlled for their party membership. For this purpose, a plausible descriptive measure of gender proximity in the parliament can be constructed in four steps:

- 1) first we should calculate the gender median for each dimension within each party that has women MPs;

⁴ Previous legislatures are not available in the Digital Data Archive in the Parliament website. See <http://www.senato.it/leggiadocumenti/index.htm>

- 2) then we calculate a median value for each dimension of the previous gender medians.
- 3) We calculate for both women and men the Euclidean distances that separate the gender medians in each party from the medians of gender medians.
- 4) Finally we calculate the mean of the previous distances.

Figure 1 illustrates such a mean per legislature. No stable pattern is visible. We do not have any reason to argue that women are in general systematically more cohesive than men , once we have controlled for the party membership.



On the contrary, when we consider gender cohesion inside parties, women MPs appear always and systematically more cohesive than men. The mean of the DISPERSION of men is always higher. Are women in the parties also a sub-group clearly separated from men? By studying party cohesion in general we can outright exclude it. Women are not only less dispersed than men as regards the gender medians within the party. In all legislatures, with the exception of the 8th legislature, women are less distant – i.e. less dispersed - from the median of their parties than men (Fig.3). In other words, women appear to be systematically closer to the legislative preferences of the majority of their parties. As they are a minority within each party, we can define them as a “nested group” instead of a “separated group” (see as example Fig.4). Far from being an element of heterogeneity, women seem on average to strengthen the party cohesion. This phenomenon, at least looking at the Italian legislative arena, suggests that gender should be seriously taken in consideration when political scientists try to explain party cohesion.

Figure 2 Gender cohesion in parliamentary parties (8th-15th legislatures)

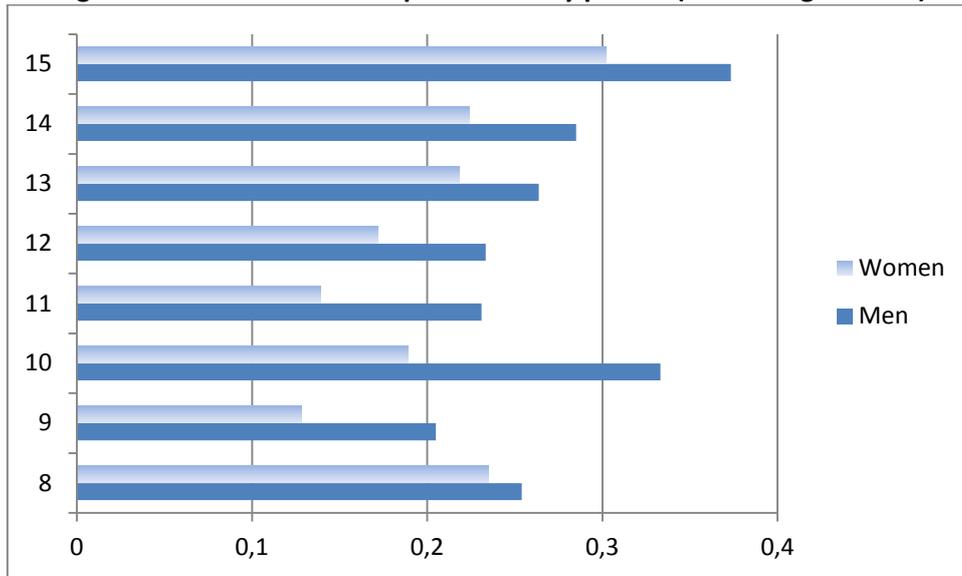
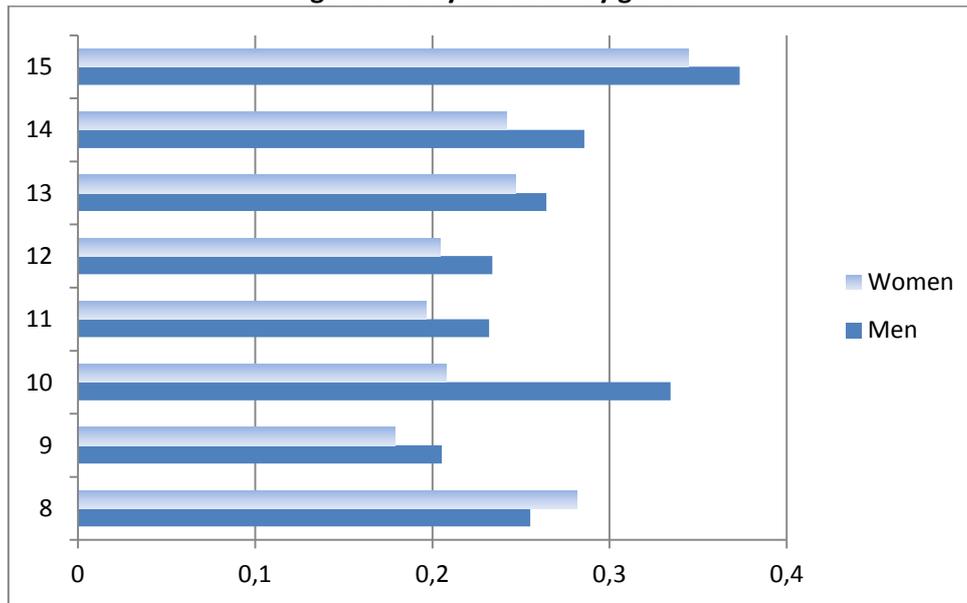


Figure 3 Party cohesion by gender



However, aggregate data cannot say anything reliable about how and whether gender affects the distribution of the policy preferences of legislators. These results may actually depend on many factors and the connection between gender and cohesion can be in fact spurious. Among the factors potentially affecting this connection we should consider first and foremost the prevailing militancy of women MPs in certain parliamentary parties that differ from the others in terms of organization and size, the occupation before entering parliament, age and parliamentary seniority. Once these factors or others have been taken into consideration the influence of gender on cohesion at the aggregate level may disappear or reverse the sign.

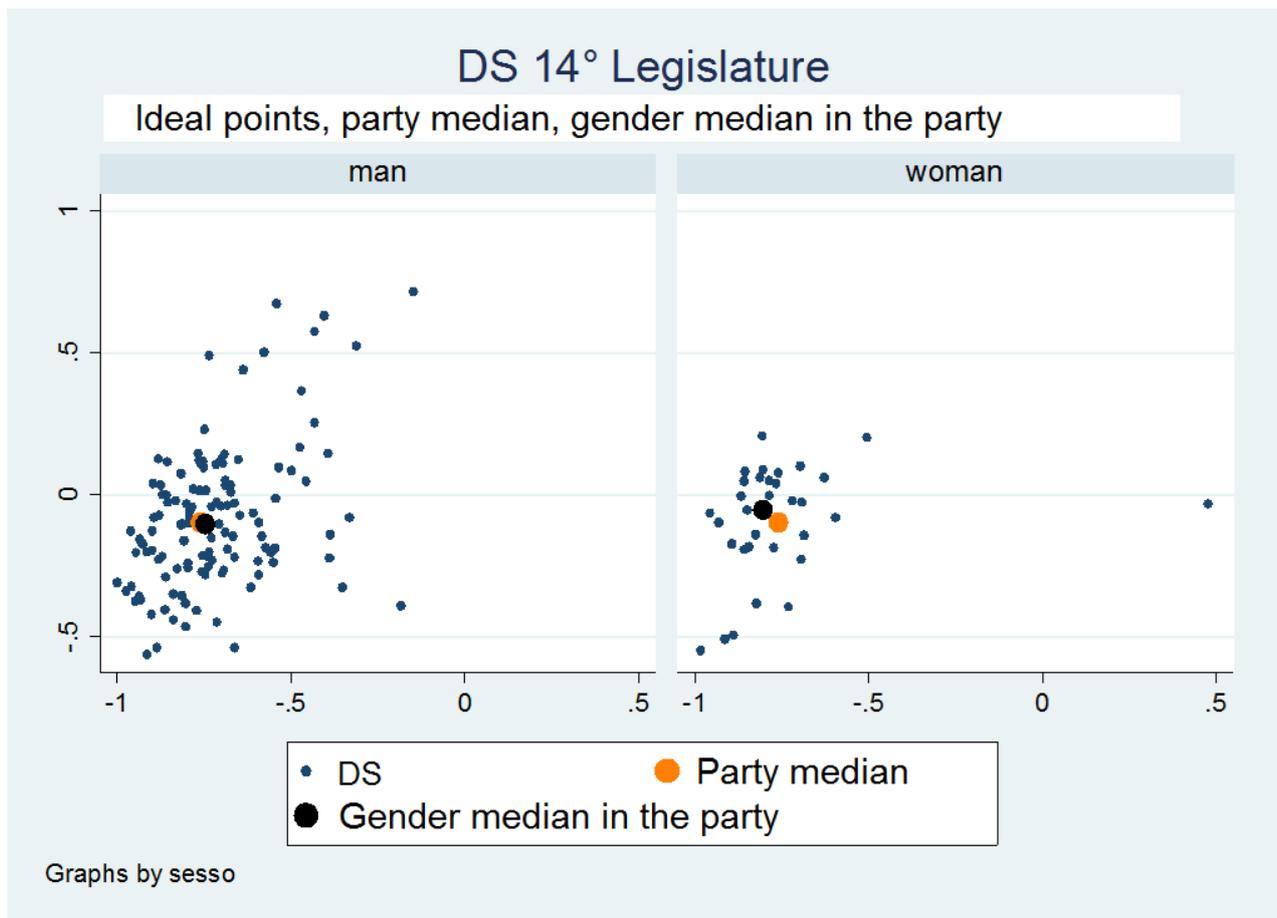


Figure 4. Ideal points DS Party in 14th Legislature by gender

Therefore only by a multivariate analysis at the individual level that takes in consideration explicitly other factors we could assess the impact of gender and its meaning. In the next paragraph we put forward some hypotheses about the factors that a-priori can affect party cohesion and “absorb” the impact of gender.

4. Behind gender’s effect: possible individual, partisan and systemic explanations of party cohesion

The propensity of MPs to align their legislative preferences to the preferences of the majority of the party could depend a-priori on their lack of autonomy and resources. It can also reflect the MP’s involvement in party organization (somehow his/her “party socialization”) and the role played in the party organization and in the Parliament on behalf of the party . Therefore we could put forward the following five hypotheses at individual level:

H1: Young people are most affected by the preferences of the party majority. Therefore party dispersion decreases as age increases.

H2: Rookies are most affected by the preferences of the party majority. Party dispersion increases as parliamentary seniority increases

H3: MPs without a university degree are less dispersed (more “aligned”) than MPs who are graduated.

H4: Whoever holds a parliamentary office mirrors more faithfully the party majority position.

H5: MPs who had previous experience in the party organization are more likely to be aligned with their party majority and such alignment increases with the importance of the role played in the organization. However as an important role in the party means also more autonomy and resources, we expect also that such alignment increases at a decreasing rate.

MPs who were professional politicians before their first elections are supposed to be more sensitive to the legislative preferences of the party majority as they do not have alternative career perspectives. Therefore:

H6: The professional politicians are more aligned with the party median than MPs with a different professional background.

Other factors that may affect party cohesion work at the party level. Big parties are supposed to be more heterogeneous than small ones. Ideological and organizational legacies can make some parties more cohesive than others. The Italian Communist party and its main heirs are more centralized at the national level. Moreover, according to the literature (see for example Newell 2000), we expect in general leftist parties to be more cohesive than rightist ones. They insist more on the uniformity of the ideological message and less on the local leadership. Therefore we can put forward at the party level the three following hypotheses:

H7: MPs belonging to big parties are more likely to be more distant from the median position of their parties (namely to be more “dispersed”) than MPs who are members of small parties.

H8: The MPs who belong to the Communist Party (PCI) and its following reincarnations (PDS, DS, PD) are less dispersed than other MPs.

H9: Dispersion increases as the party ideology moves from left to right positions in the ideological spectrum.

Finally, at the systemic level electoral systems should play an important role in affecting the alignment of the MP's policy preferences to the party's policy preferences. According to Shugart & Carey (1995) when personal vote element prevails then we should expect less party cohesion. In this respect, plurality rule with single member districts and proportional systems with open lists induce much more personal vote than proportional systems with closed lists. Between the 8th and the 11th legislature, the Italian deputies were elected by a proportional open list system, while between the 12th and the 14th the system was mixed, with 75% of MPs elected by a single member district contest and the remaining 25% elected in closed party lists. The last Chamber of Deputies we take in consideration (15th Legislature) was elected by a proportional system with closed list and a majority prize at national level. Therefore, we expect that

H10: MPs elected in single-member district contests or in proportional system with open lists are more dispersed than MPs elected by proportional system with closed lists.

Table 1. Variables summarizing hypotheses about party cohesion

Control variables	Distance from party median (PARTY DISPERSION)
Individual level	
H.1 Age	+
H.2 Tenure	+
H.3 Education	+
H.4 Parliamentary office	-
H.5a Party experience (simple term)	-
H.5b Party experience (quadratic term)	+
H.6 Profession (political profession)	-
Party level	
H.7 Parliamentary Party Size	+
H.8 Party Organization (Communist Party)	-
H.9 Member of leftist party (0=most leftist-10=most rightist)	-
Systemic level	
H.10 Single member district and proportional system with open list	+
Legislatures	No expectation

5. Variables' operationalization and Data Analysis

The majority of the independent variables suggested by the previous hypotheses are operationalized in a trivial and uncontroversial way. TENURE is the number of Legislatures each MP has already experienced before the legislature taken in consideration in the analysis. EDUCATION is a dummy variable assuming value 1 in case of university degree. PARTY SIZE is the number of MPs who belong to a parliamentary party. PROFESSION is a categorical variable comprising ten groups of professions. Other variable operationalizations require a slightly longer explanation. PARLIAMENTARY OFFICE is a dummy variable assuming value 1 when a MP holds a committee office in the Chamber of Deputies. PARTY EXPERIENCE is an ordinal variable that ranks from 0 (no party experience) to 8 (member of the party national executive). In order to control for the organization peculiarity (PARTY ORGANIZATION) of the Italian Communist party we created a dummy variable that takes value 1 when the Mp belongs to the

Italian Communist Party or to all parties that are usually considered its organizational heirs (PDS, DS, PD). In order to estimate party positions (IDEOLOGICAL POSITION) along a generic left-right scale, we use different expert surveys (Castles and Mair 1984, Huber and Inglehart 1995, Benoit and Laver 2006). To allow for direct comparisons, we have normalized all the expert left-right scores on a 0 to 10 scale (on this transformation, see Gabel and Huber 2000). Finally, with respect to the role played by electoral rules, we have introduced a variable named ELECTORAL SYSTEM that takes value 1 when the Mp is elected through a party-centered system as the PR with closed list, and zero when, on the contrary, the system is more candidate-centered, as in case of proportional system with open list or plurality system with single member district (SMPS). In our case-study, the first situation applies to MPs elected during the 15th legislature and to the MPs elected in the PR quota from the 12th to the 14th legislature; the other situations apply to the MPs elected by SMPS from the 12th to the 14th legislature and to the MPs elected since the 8th up to the 11th Legislatures.

Our dataset is structured at least in three levels. MPs are quite often reelected, therefore more than one observation can correspond to the same MP. In turn, the MPs belong to different parliamentary parties. Ignoring this multilevel character of the data could affect the validity of our estimation. In particular, this could lead to residuals that are not independent within the same MPs and within the same party, violating one crucial assumption of OLS regression (Steenbergen and Jones 2002). Therefore, we have considered a three-level model in which each observation for a MP is nested in the same MP across legislatures, in turn nested in a given party. Such a model allows for each observation to be correlated within the MP and the party. This is achieved by including in the analysis random intercepts at the MP level and at the party level to capture the differences at the two levels in the propensity of the representatives in each legislature to locate themselves farther away from (or closer to) their median party position that are not picked up by the systematic (fixed) variables in the model. We believe this is the most appropriate method to directly address the particular structure of our data, and at the same time taking systemic, partisan and individual effects into due account.

Table 2 Party Dispersion. Multilevel models

DEP VAR: PARTY DISPERSION	Model 1	Model 2	Model3
<i>MPs' attributes</i>			
SEX		-.0228** (.0094)	-.0130 (.01075)
TENURE		.0133*** (.0023)	.0144*** (.0023)
SEX*TENURE			-.0135* (.0073)
AGE		.00027 (.00035)	.00027 (.00035)
EDUCATION		.00296 (.0074)	.00287(.00741)

PARLIAMENTARY OFFICES		-.0154* (.0084)	-.0154* (.0084)
PARTY EXPERIENCE		-.0093** (.0038)	-.0094** (.0038)
PARTY EXPERIENCE^2		.0010** (.0005)	.0010** (.0005)
PROFESSION (reference level =Political Professions)			
Bureaucrats and public employee		-.0076 (.0105)	-.0067(.0105)
Lawers and Judges		-.0084 (.0109)	-.0090 (.0109)
Accountants and consultants		-.0072 (.0146)	-.0071(.0147)
Architects and Engineers		-.0346* (.0192)	-.0349* (.0193)
Physicians and Pharmacists		-.0201 (.0147)	-.0207 (.0147)
Teachers, researchers and professors		-.00007(.0099)	.0005(.0099)
Managers, private employee and blue collars		-.0052 (.0103)	-.0059(.0103)
Landowners and farmers		-.0169 (.0316)	-.0163(.0317)
Other professions		.0364 (.0251)	.0360(.0252)
<i>Party attributes</i>			
IDEOLOGICAL POSITION		.0054*** (.0017)	.0053***(.0017)
ORGANIZATION TRADITION		-.0549*(.0304)	-.0757*(.0412)
PARTY SIZE		.0006***(.0001)	.0006***(.0001)
<i>System's attribute</i>			
ELECTORAL SYSTEM		-.0325***(.0123)	-.0278**(.0124)
LEGISLATURES (reference level 8° Leg.)			
9°		-.0199*(.0120)	-.0202*(.0120)
10°		.0806***(.0117)	.0800***(.0117)
11°		.0106(.0131)	.0109(.0130)
12°		.0298**(.0140)	.0311**(.0141)
13°		.0712***(.0137)	.0721***(.0138)
14°		.0772***(.0142)	.0761***(.0142)
15°		.1456***(.0184)	.1520***(.0183)
Constant	.265***(.0138)	.173***(.0321)	.146***(.0292)
Log likelihood	706.246	1061.238	1066.278
LR Test against null model		47.38 ***	49.85***
Variance at level 1	.0396001	.0344914	.0340389
Variance at level 2	.0037166	.0020354	.0024292
Variance at level 3	.003266	.0013636	.0013522

Level 1 units (observations)	4778	4553	4553
Level 2 units (MP)	2960	2811	2811
Level 3 units (PARTY)	21	21	21

chi2(2) = 26.40 Prob > chi2 = 0.0000

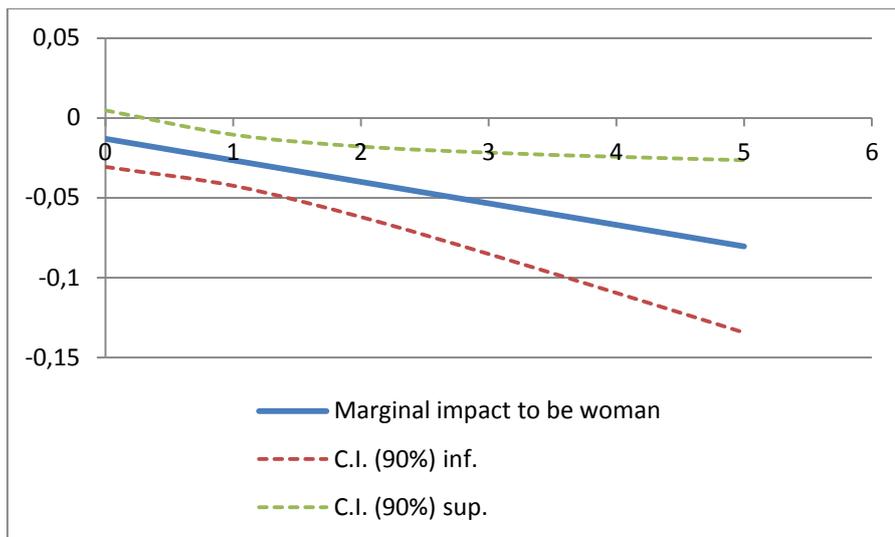
Table 2 shows the results of the two models we estimated. The first is an a-theoretical model without level-1, level-2 and level-3 predictors, which allows us to decompose the total variance in our dependent variable among individual observations, MP level and party level. This model allows us to estimate the so called intra-class correlation, ρ , a measure that tells us how much of the total variation in the level of DIVERGENCE can be explained by party-level differences and Mp level differences. To put it in a formal way: $\rho = \text{Var}(\zeta_{1j}) / \text{Var}(\zeta_{1j} + \varepsilon_{ij})$, where $\text{Var}(\varepsilon_{ij})$ is the variance component of DISPERSION at the individual level and $\text{Var}(\zeta_{1j})$ is the variance component at Mp and party level. Knowing that $\text{Var}(\varepsilon_{ij})$ shown in the sixth to last row in the table is .039, and that the value of $\text{Var}(\zeta_{1j})$ is .007, we can infer that party-level variance and MP-level variance in our data account for around the 15% of the total variance (i.e., $.007 / (.007 + .039)$). This means that 15 percent of the difference in levels of DIVERGENCE can be explained by the fact that an observation belongs to a specific MP and in turn a MP belongs to one particular party rather than another.

The second model includes all explanatory variables we derive from our hypotheses and gender. Against any plausible expectation, gender plays a significant and negative impact on dispersion. Many hypotheses about the role played by other explanatory variables are confirmed but none encompasses the effect of gender. At the individual level the MPs' seniority and offices in the parliament decrease significantly the DISPERSION. PARTY EXPERIENCE does the same and at a decreasing rate. All variables at the party level have the expected and significant impact. The only real surprise comes from the type of ELECTORAL SYSTEM. Electoral rules that are usually supposed to emphasize the personal vote decrease significantly the DISPERSION. Mps elected in a proportional system with open list or in a single member district with plurality rule seem systematically more cohesive than Mps elected in proportional systems with closed list. Summing up, women do not appear to be less dispersed than men because they belong overwhelmingly to a specific and very cohesive party, or because they have on average less parliamentary seniority, or because they are more involved in the party organization, or because they mainly belong to small parties. If we exclude a "biological" attitude under the different behavior of women and men, such a result suggests that recruitment process and/or the evolution of policy preferences at the individual level may work differently according to the MP's gender. This hypothesis is indirectly supported by the evidence coming from a careful inspection of the variable that at the individual level affects more strongly (and positively) the level of party dispersion: TENURE. If we re-run the previous explanatory model by introducing an

interaction factor composed by SEX and TENURE we find out that such a term has a significant and negative impact. Being women makes MP less dispersed as the tenure increases (Fig. 5) and, on the other hand, an increase of the TENURE affects positively and significantly the level of party dispersion only when the MPs are men.

All this said, we should still control whether these results are affected by the number of women in the parliamentary parties.

Fig. 5. Gender Impact on Party Dispersion with different levels of tenure



Tab. 3 Marginal Impact of tenure on Party dispersion by gender

	Delta-method
	dy/dx
TENURE	
_at	
Men	.0144*** (.0023)
Women	.00096(.0071)

6. Gender effect or minority effect?

Women in the Italian parties have always been a minority group. Still now they are just 23% of the representatives in the Chamber of Deputies and inside the big parties they never have overcome the threshold of 30%. Such a circumstance can suggest that the effect of gender is in fact a byproduct of the numerosness of women in the parliamentary parties. In other terms, the higher level of party cohesion of women we found out could depend on their status as minority and not on some substantial and enduring difference in their policy preferences vis à vis men. The size of a minority group can affect the level of party cohesion of its members in different and contrasting ways, which can be predicted according to different theories about how the preferences of a minority group change. We can distinguish a statistical theory, a cooptation theory and a critical mass theory.

- 1) *A statistical theory.* Imagine that the people, men and women, who aspire to be elected to a certain party are all normally distributed in terms of policy preferences around the central position of this party. If both men and women were separately and randomly selected and voted from such an universe of political aspirants, then the probability that women's preferences reflect as faithfully as (or more than) men the underlying distribution of preferences will depend on their proportion. When the group of women is small the level of dispersion around the median will be higher (there

will be more “errors”). On the contrary an increase of the group size should correspond to less dispersion.

- 2) *A cooptation theory*. Imagine that men and women who aspire to be elected to a certain party are two distinct groups of the same size, both normally and similarly distributed in terms of policy preferences around the central positions of the party. Both men and women are selected according to a lexicographic criterion: first aspirant politicians close to the central preferences, then aspirant politicians more and more distant from the center. When the sample of women that are selected and voted is smaller than the sample of men, then the percentage of women close to the party center will be much higher than the percentage of men in the same condition. As the sample of women grows in comparison with the sample of men, then the impact of gender on the party cohesion should have to diminish.

The two previous theories suppose that preferences of aspirant politicians do not change in the legislative arena. The following theory supposes that preferences are directly affected by the proportion of women in the legislative party.

- 3) *The critical mass theory*. This theory relies on an argument originally proposed to explain behavior in the corporate organizations, according to which when a minority group grows in size, its members can more effectively combat the direct and indirect influences that has led them to produce mimetic behaviors and to emulate the majority group’s preferences (Kanter 1977). The type of relationship between “conformism” and proportion of minority group is not continuous: the percentage of members who belong to the minority has to overcome a threshold to induce the minority members to reveal their sincere preferences. However the value of this threshold is quite changeable according to the authors and fields where this argument is applied (Dahlerup 2005).

Theory 1 predicts a rapid homogenization of women’s preferences with men’s preferences as the group of women grows. However, with low percentages of women we should expect less cohesion. Such a prediction is at odds with what we found. If women in the Italian parliamentary parties are still too few, then we should observe less cohesion and not more cohesion among women in comparison with men. Similarly, if the proportion of women is large enough to be “representative”, then we should observe no gender’s effect. In our analysis we do not observe neither the former nor the latter, so we can infer that Theory 1 is unable to explain the different cohesion of women and men MPs.

On the contrary, Theories 2 and 3 seem to be more reliable for this purpose. In fact, they predict that with few women, the dispersion of women’s preferences around the party median should be very low. An increase of the proportion of women should increase also the level of party dispersion. The main difference between the predictions of the two theories is about the shape of the functional connection between proportion of women and cohesion: according the Critical mass theory we should expect stable level of cohesion of women in connection with an increase of women’s proportion until when a not better specified

threshold had been overcome. Relying on Theory 2 and 3, therefore, we can put forward the following hypothesis:

H.11 As the proportion of women elected in the party increases the negative impact of being women on the party dispersion decreases or does not change.

This hypothesis is tested by introducing two new models. In the first one we add to the Model 2 a two variables interaction factor composed by SEX and the proportion of women in the party (PERCWPARTY). Our expectation is that such interaction may be negative and significant, or not at all significant. In other terms, we expect that a woman MP is more or equally dispersed than men when the group of women grows compared to the group of men, no matter her party affiliation. In the second model we take in consideration also different party organization types. We introduce a three variables interaction model composed by SEX, PERCWPARTY and LEGACYPCI. The Communist party and its heirs are parties seemingly more women's friendly, where female recruitment have been strong and where female quotas in the party appointments have been provided in the party statutes since 1992. We expect that in these parties the effect of the previous interaction is positive (more dispersion) and stronger than in other parties.

Tab. 3 PARTY DISPERSION. Models with interactions

DEP VAR: PARTY DISPERSION	Model 1	Model 2
<i>MPs' attributes</i>		
SEX	-.0276 (.0202)	-.0358*(.0206)
PERCWPARTY	-.0007(.0007)	-.0007(.0008)
SEX*PERCWPARTY	.0003 (.0010)	.0008(.0012)
ORGANIZATION TRADITION	-.0655*(.0406)	-.0371(.0704)
SEX* ORGANIZATION TRADITION		.1950*(.1046)
PERCWPARTY* ORGANIZATION TRADITION		-.0013(.0027)
SEX*PERCWPARTY*ORGANIZATION TRADITION		-.0091*(.0049)
TENURE	.0134***(.0023)	.0133***(.0023)
AGE	.0003(.0003)	.0002(.0003)
EDUCATION	.0025(.0074)	.0023(.0074)
PARLIAMENTARY OFFICES	-.0153*(.0084)	-.0152*(.0084)
PARTY EXPERIENCE	-.0096**(.0038)	-.0094**(.0038)
PARTY EXPERIENCE^2	.0010**(.0005)	.0010**(.0005)
PROFESSION (reference level =Political Professions)		
Bureaucrats and public employee	-.0072(.0105)	-.0074(.0105)

Lawers and Judges	-0.0090(.0109)	-0.0086(.0109)
Accountants and consultants	-0.0078(.0147)	-0.0078(.0147)
Architects and Engineers	-0.0347*(.0194)	-0.0344*(.0194)
Physicians and Pharmacists	-0.0207(.0148)	-0.0202(.0147)
Teachers, researchers and professors	.0001(.0100)	.0004(.0099)
Managers, private employee and blue collars	-0.0062(.0103)	-0.0061(.0103)
Landowners and farmers	-0.0172(.0318)	-0.0186(.0318)
Other professions	.0367(.0252)	.0370(.0252)
<i>Party attributes</i>		
IDEOLOGICAL POSITION	.0053***(.0017)	.0053***(.0017)
PARTY SIZE	.0006***(.0001)	.0006***(.0001)
<i>System's attribute</i>		
ELECTORAL SYSTEM	-0.0290**(.0124)	-0.0289**(.0124)
LEGISLATURES (reference level 8° Leg.)		
9°	-0.0209*(.0120)	-0.0198*(.0120)
10°	.0826***(.0120)	.0902***(.0131)
11°	.0097(.0130)	.0115(.0131)
12°	.0326**(.0141)	.0356**(.0143)
13°	.0707***(.0137)	.0697***(.0138)
14°	.0755***(.0142)	.0765***(.0143)
15°	.1546***(.0185)	.1547***(.0185)
Constant	.1598***(.0314)	.1590***(.0315)
Log likelihood	1065.0372	1067.7459
LR Test against null model	43.46***	43.37***
Variance at level 1	.0339906	.0339259
Variance at level 2	.0025155	.0025367
Variance at level 3	.0012197	.0012382
Level 1 units (observations)	4553	4553
Level 2 units (MP)	2811	2811
Level 3 units (PARTY)	21	21

Table 3 shows that our a-priori expectations are partially disconfirmed. In model 1 the interaction between gender and the proportion of women in the party is not significant. If we differentiate between types of party organization, the results are quite intriguing. The interaction factor with three variables has a negative and marginally significant coefficient. In the parties different from the Communist Party (and its heirs) being women when the proportion of women is high diminishes very slightly the negative impact on the party dispersion. On the contrary, when we consider the Communist Party (and its heirs) for smallest proportion of women no significant impact of gender can be seen. However, as such a proportion increases, the impact of gender becomes stronger and significantly negative. In other terms, when the percentage of women increases in the parties that are the organizational heirs of the Communist party, the dispersion of women around the party medians decreases more and more, compared with that of men of the same parties. The initial idea, behind cooptation theory, that in these parties men and women who aspire “reasonably” to be politicians were similarly distributed around central positions of the party appears completely wrong. In the Communist party’s tradition women who aspire to a political career seem to be much more “central” and an increase of the proportion of women implies, *coeteris paribus*, a less dispersed (or more cohesive) party. On the contrary, data about other parties suggest that in these parties even if women are systematically less dispersed than men an increase of women’s proportion will reduce slowly such a difference.

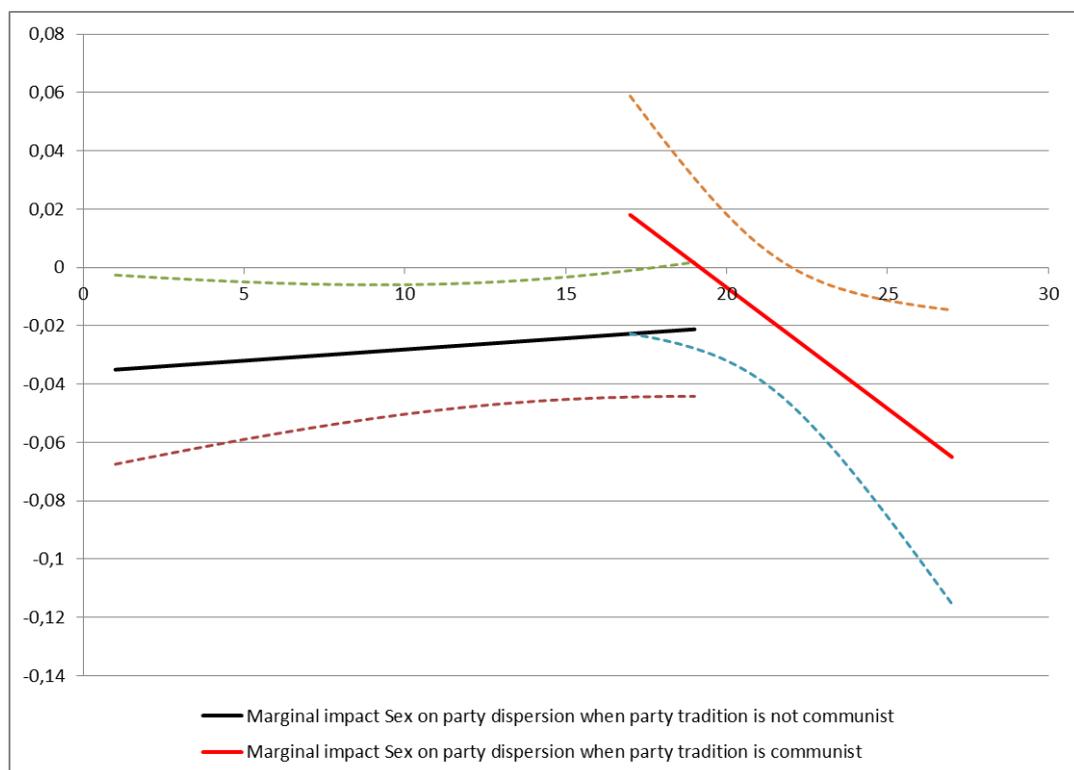


Fig. 6 Marginal impact Sex on Party Dispersion by organization tradition and proportion of women in the party

7. Summary and (provisional) conclusions

At the outset of this paper we put forward some research questions about gender and cohesion in the Italian parliament: are women MPs more cohesive than men in the Italian parliament? Do they form a separated sub-group in their parties? Are they more or less distant than their male colleagues from the centre of the party? The study of policy preferences that we inferred from the co-sponsorship behavior in the Italian Parliament has given us some unexpected answers.

As to the first question, gender does not appear to be a factor able to create a trans-party similarity in policy preferences. Thus, contrary to the findings of other studies, gender does not seem to threaten party cohesion in the Italian parliament. This suggests that Italian women MPs do not behave as a cross-party interest group, at least when we look at the co-sponsorship activity. On the contrary, within each single party women appear to be a much more cohesive group than men, although they do not form a separated group. Indeed, once a rich variety of other variables at individual, partisan and systemic level is controlled, on average women are much closer to the center of their parties than men. The combination of these two characteristics (intra-gender cohesiveness and higher closeness to the centre of the party) suggests the image of women as a “nested” group within each single party. We also find out that this seems to be a structural and persistent feature. In fact, we have also controlled whether the impact of gender on party cohesion is spurious and affected by women’s status of minority in the Italian parties and parliament. The cooptation theory and the critical mass theory we considered in the section 6 suggest that an increase of the number of women would imply a decrease of both their gender and party cohesiveness. Yet, still the Italian case study has disconfirmed this prediction: for the non-Communist parties, an increase of the percentage of women elected does not mitigate so much the impact of female gender on party cohesion; in the Communist party and its organizational heirs it makes women’s cohesion to the centre of the party even stronger.

Thus, everything else taken under control, being a woman persistently and positively affects party cohesion in the Italian parliament. This seems to suggest that if party cohesion reinforces a party’s brand, then slating women as candidates could be a good investment for the party leadership, no matter women candidates’ profession, age, education or parliamentary seniority.

However, the last finding opens the floor to further research in order to understand why the increase of the number of women elected does not increase their variety (their dispersion), as it happens to men. Here, we just put forward some interpretations of the data analyzed that may be transformed into working hypotheses for a future study. It is very likely that beneath this gender difference in party cohesion there are patterns of legislative recruitment that are very different for women and men. On the one hand, it is possible that women MPs (especially those elected in the PCI and its heirs) form a group well integrated in the party establishment, with also some influence on the process of selection and recruitment of other women. If this were true, this would mean that they would have the possibility to co-opt female

prospective MPs with very similar preferences, and this would give them more chances to achieve some shared policy goals once in the parliament.

On the other hand, the persistent proximity of women MPs to the centre of the party (to the leadership) may be also interpreted as the effect of a persistent political weakness of women: being a woman is like being a rookie, a condition of relative and primary deprivation that cannot be broken up in other elements. It is possible that the women selected and recruited by the party leaderships can count mainly (if not only) on the political resources that the latter can guarantee to them. In this case, party cohesion would mean lack of autonomy from the party leadership. Moreover if the dispersion around the party median means also that there is a variety of policy positions in the party, it seems that in the Italian parliament such a variety is a luxury for women compared to men.

In conclusion, the analysis we made in this paper suggests that in future studies on gender and party cohesion more attention should be paid to the link between the processes of selection and recruitment of women MPs and the policy preferences they display in their legislative activity.

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