Málaga Economic Theory Research Center Working Papers

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August 7, 2019

Abstract

This paper analyzes how the preferences of political representatives for social spending differ across gender groups, and what the effects of gender differences are for the equilibrium policies. We use a unique survey data from the CIS in Spain, comprising a sample of 350 male and 230 female political representatives of national chambers (Congress and Senate) and regional parliaments. Our findings suggest that, in general, female representatives have a stronger preference for social spending than male representatives. Interestingly, these gender differences arise within members of the right-wing party (of PP), whereas left-wing representatives (of PSOE) males and females, are more homogenous. In a comparison between national versus regional representatives, we find that within representatives of national chambers, women over men show on average, an additional probability of 25 percent points of self-reporting preferences for additional spending in education and pensions. However, within representative members of regional parliaments, gender differences in preferences are not statistically significant. We also provide a theoretical model, which serves us to understand the effects of gender party composition on the equilibrium policies. Our model reveals that gender quotas benefit right-wing parties. Intuitively, women provide moderation to rightist parties, which in turn produces electoral advantage.

Keywords: Gender differences; preferences for social spending; gender quotas; Downsian electoral competition

JEL: D72; H75; J16

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1. Introduction

During the last decades, the presence of women in developed Western countries has increased in importance. International institutions and state governments are implementing measures to recruit more women into economic and political leading positions. An increasing number of countries have introduced laws that foster women representation in relevant decision-making positions. In 2002, Belgium introduced the Gender Equality Act, in 2003, Norway introduced the Gender Equality Ombud, in 2007, Spain introduced the Law on Equality, and many other European countries such as Italy, France, Netherlands, Germany and Croatia have developed similar laws. The implementation of these laws are increasing the visibility of females not only in the executive boards of large companies, but also in seats of national and regional parliaments. For instance, in Spain, the Law on Equality amended the electoral law, party lists to the national and the regional parliaments are required no less than 40 percent of candidates of either sex or, in France, party lists for the National Assembly and the Senate require an equal amount of female and male candidates.

This paper focus on women political representatives and their effect on electoral competition and political outcomes. Our research questions are the following: What is the impact of female politicians on political competition? Does female representatives differ from male in preferences for public policies? We explore the first question from a theoretical perspective by proposing a model that draws predictions on the strategic recruitment of women to party-lists. The model serves us to understand the effects of the introduction of gender quotas in the political competition. We investigate the second question from an empirical perspective. We analyze gender differences in preferences for public expenditure within Spanish political representatives. The Elite Survey, conducted by the Centro de Investigaciones Sociológicas (CIS) between 2009 and 2010 to 580 political representatives of national (the Spanish Congress and the Senate) and regional (the Autonomous Parliaments) chambers, provides a unique survey to explore these differences just after the approval of gender quotas for the Spanish party lists.[2]

The proposed theoretical analysis is based on the reported evidence (see Lott and Kenny, 1999; Abrams and Settle, 1999; Edlund and Pande 2002; Aidt and Dallal 2008; Chen 2014, Hicks et al., 2016) that females over males usually show a stronger preference for social spending. Building on this finding, we study parties' optimal decisions as to the number of women to include in their lists and on the equilibrium policies. We account for two vote-maximizer parties that differ in their ideological cleavage, left versus right, and their perceived valence. In this respect, our model follows the political competition setting described by Ansolabehere and

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[2] The CIS is a public entity that depends on the Spanish Government. We analyze the study survey 2827 which, is the only survey carried out by the CIS to the Spanish political representatives. In order to gather anonymity of the respondents, the gender and the chamber membership responses are only available under request at the CIS's headquarters in Madrid.

Snyder (2000) and Groseclose (2001). We refer to valence, as any exogenous characteristic, such as the charisma or competence of a party's candidate, which may affect vote-decisions (Stokes, 1963). Interestingly, we show that when no party has a clear valence advantage, only the right-wing party includes women in its party list. When one party has a large valence advantage over the opponent, the party with the valence advantage proposes moderate policies, whereas the party with the valence disadvantage proposes a differentiated policy. Intuitively, the weight that voters assign to the valence issue is endogenously determined; being high when the political parties propose very similar policies, and low when they propose rather different policies. In terms of the strategic recruitment of women, it implies that if the valence advantage belongs to the right-wing party, both parties include women in their parties' lists; whereas if the valence advantage belongs to the left-wing party, no party includes women in its party's list.

We also serve of this analysis to draw predictions on the introduction of gender quotas in the political arena and on the sort of policies that we may expect under alternative scenarios. An interesting one considers that right-wing females do show a stronger preference for social spending than right-wing males, but that preferences of left-wing females and males are not that different. For this scenario, which is consistent with the results that we later obtain in the empirical analysis of the Spanish case, we deduce that the right-wing party will always include women in its party list (i.e., this party benefits from a policy of gender quotas), unless the left-wing party has a clear valence advantage. As for the left-wing party, our results suggest that it will always be indifferent between including women in its party list or not.

Our empirical exercise uses survey data from the CIS, containing the responses of 350 male and 230 female Spanish political representatives of national and regional chambers. We use the representatives' responses to their preferences for several areas of public expenditure, their left-right self-placement, their party-membership, the type of chamber-membership and their gender. We group preferences for social policies into four categories, from stronger that includes more public spending in the following areas - pensions, education, health and unemployment insurance -, to weaker categories that includes three, two or just one of these areas. We propose a logistic regression model that estimates the probability of self-reporting preferences for more public spending in some or all of the proposed areas. Our results suggest that female Spanish representatives show a higher preference for social spending than male representatives do. This higher preference, however, is statistically significant within members of the PP party (the Spanish main right-wing party), and within members of the national chamber, but these difference is not statistically significant within members of the PSOE party (the Spanish main left-wing party), and within members of the regional parliaments. [3] The largest difference emerges within national representatives (of Congress or the Senate) where, females compared to males, both with mean left-right ideology, show an additional probability of 25 percent points

[3] Our result is line with a recent analysis to Spanish municipalities by Bagues and Campa (2017), revealing that the effect of gender quotas on the size of local government expenditure is not statistically different from zero.

of self-reporting preferences for more public spending in education and pensions, and this difference increases by 6 percent points when considering national representatives of the PP party.

Our contribution belongs to the recent and blooming empirical literature on gender economics, and more precisely, to the literature that studies gender effects on social outcomes and policies. From the demand side, female voting has been shown to increase government spending (see Lott and Kenny, 1999; Abrams and Settle, 1999; Bravo-Ortega et al., 2018). From the supply side, several authors evaluate the effects of female representatives on political outcomes. In this respect, Clots-Figueras (2011) studies the impact of women politicians in Indian state governments. Her results suggest that female legislators from lower castes invest more in "women-friendly" laws, such as health and early education; however, female legislators from higher castes do not exert any impact on these policies. With a focus on education, Clots-Figueras (2012) studies the impact of politicians' gender on education achievements in Indian states. She finds that increasing female political representation increases the probability of individuals finishing primary education in urban areas, but not in rural areas. Clots-Figueras and Bhalotra (2014) also find similar positive effects of female representation on the provision of antenatal and early childhood public health services in India. More recently, in a study of Brazilian municipalities Brollo and Troiano (2016) find that female mayors are less likely to engage in corruption.

Other papers in the literature focus on the issue of female representation and gender quotas. Bagues and Esteve-Volart (2012) investigate the reasons behind the low number of female legislators. They analyze Spanish elections during period 1996-2008, and show that even though parties have increased the number of women in their parties' lists, women are usually nominated to poorer positions on the ballot, which explains the empirical observation. Also for Spain, Coller et al. (2016) observe that the increase in the number of women in the national and regional parliaments brought about different opinions, expectations and skills, and more social-based initiatives into the parliaments; but that it did not change the way political debates take place in parliaments. Out of our frontiers, Baltrunaite et al. (2014) analyze if gender quotas improve the quality of Italian municipal politicians. Their results show that the introduction of gender quotas is associated with an increase in the average education level of elected politicians. In a similar vein, but with a very different result, Goréky et al. (2014) study the effect of the introduction of gender quotas in the open-list proportional representation electoral system of Poland. They obtain that the introduction of quotas resulted in an increase in the number of female candidates and in a decline in women's electoral performance.

Instead of measuring the effect of female or gender quotas on effective policies, our empirical analysis tries to find evidence of gender differences in preferences on public spending. In this regards, Svaleryd (2009) shows that, among Swedish local representatives, women regard childcare as more important than men do and, in a study for Taiwan, Chen (2013) finds that

female mayors show stronger preferences for more government spending in social welfare policies.

Our results contributes to the existing literature in two respects. First, from a theoretical perspective we evaluate the electoral consequences of strategically including women representatives either to moderate or to polarize voters' perception of parties' locations. As far as we know, this is the first theoretical work evaluating the impact on electoral competition of women and men's different sensitivities towards social policies. Second, from an empirical perspective we explore gender differences in preferences according to a unique survey to members of the Spanish Parliament and the Spanish Autonomous Parliaments.

The work is organized as follows. Section 2 presents a simple theoretical model, which we analyze in Section 3. Section 4 presents some extensions on this model. In Section 5 we present the survey data and perform some descriptive statistics. Section 6 performs the regression analysis. Finally, Section 7 concludes.

2. A simple theoretical model

We consider an election between two office-seeking political parties, L and R, and a continuum of voters. Parties have preferred ideologies $\bar{x}_L$ and $\bar{x}_R$, respectively, with $0 \leq \bar{x}_L < \bar{x}_R \leq 1$. Voter i has a preferred ideology x_i, with $x_i \sim F[0,1]$ and $F(\cdot)$ being a continuous distribution function.

Parties compete for voters on two dimensions, policy and valence. Let x_L represent the policy platform of party L and let x_R represent the policy platform of party R. Without loss of generality, we assume $x_L < x_R$.[4] Additionally, party L has valence v_L and party R has valence v_R. We refer to the valence of a party as any exogenous characteristics, such as the charisma or competence of the party's candidate, which may affect a voter's utility for voting to a party. As usual in the literature, we assume that voters prefer higher valence values to lower values. We further assume $v_R - v_L \sim G[-a, a]$, i.e., the valence advantage of party R over party L is distributed according to a continuous distribution function $G(\cdot)$, with support $[-a, a]$. Note that when $v_R - v_L > 0$, party R has a valence advantage over party L; whereas when $v_R - v_L < 0$, it is party L that has a valence advantage.

The key deviation from the existing literature is that the policies proposed by parties L and R, x_L and x_R, respectively, depend on the number of women that a party includes in its party list. The assumption is that the preferences of men and women for policies are not necessarily the

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[4] Allowing for $x_L > x_R$ means that parties change their ideological labels. Since parties are not policy-motivated, it has no effects on the results.

same; hence, including (more or less) women in a party's list may change the party's policy platform.

Based on the empirical evidence[5], we assume that women's preferences are more pro-spending on social policies (or left-wing policies) than men's preferences. Hence, including women in a party's list makes the party's platform more leftist.[6] Formally, it implies that party L's policy position is given by:

$$x_L(m_L) = \bar{x}_L - g(m_L), \tag{1}$$

where $m_L \in [0, m_L^{max}]$ is the number of women that party L includes in its list, and $g(\cdot)$ is a function that determines how the number of women in a party list affects the party's policy position. We assume $g(\cdot) > 0$ and $g'(\cdot) > 0$. Analogously, party R's policy position is given by:

$$x_R(m_R) = \bar{x}_R - g(m_R), \tag{2}$$

where $m_R \in [0, m_R^{max}]$ is the number of women that party R includes in its list.

Political parties choose, simultaneously, the number of women m_j, with $j \in \{L, R\}$, to include in the party list so as to maximize the party's share of votes. Parties are office-seeking (though they have a preferred policy) and receive a rent of $P > 0$ for holding office. There are no costs for running for an election. The type of elections that we have in mind are parliamentary elections under proportional representation with closed parties' lists.[7]

Voters observe the policies proposed by the two parties, x_L and x_R, their valence characteristics, v_L and v_R, and based on this decide for whom to vote. The utility to voter i for voting for party j, with $j \in \{L, R\}$, is:

$$u_i(x_i; x_j, v_j) = -(x_i - x_j)^2 + \beta v_j, \tag{3}$$

where $\beta > 0$ is a measure of the voter's intensity of preferences for the valence dimension over the policy dimension.

Let $\hat{\imath}$ be the indifferent voter, i.e., the voter who receives the same utility from voting for any of the two parties, $u_{\hat{\imath}}(x_i; x_L, v_L) = u_{\hat{\imath}}(x_i; x_R, v_R)$. The indifferent voter divides the policy support $[0,1]$ in two intervals, such that all i for whom $u_i(x_i; x_L, v_L) > u_i(x_i; x_R, v_R)$ vote for party L,

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[5] See Lott and Kenny (1999), Abrams and Settle (1999), Edlund and Pande (2002), Aidt and Dallal (2008), Chen (2014) or Hicks et al. (2016).
[6] In Section 4 we discuss variations of this assumption and how it affects our results.
[7] This is, for instance, the case of Spanish Parliamentary Elections.

and all i for whom $u_i(x_i; x_L, v_L) < u_i(x_i; x_R, v_R)$ vote for party R. Simple algebra determines the expression of the indifferent voter's preferred policy, $x_{\hat{\imath}}$, which is given by:

$$x_{\hat{\imath}} = \frac{\beta(v_L - v_R)}{2(x_R - x_L)} + \frac{x_L + x_R}{2} \qquad (4)$$

Note that since $x_L < x_R$, then $x_{\hat{\imath}} > \frac{x_L + x_R}{2}$ when $v_L > v_R$, and $x_{\hat{\imath}} < \frac{x_L + x_R}{2}$ when $v_L < v_R$. This means that whenever $x_L < x_R$, the higher the valence advantage of party L over R, the higher the share of votes that party L receives. Note, furthermore, that ceteris paribus β, the smaller the distance between the two parties' platforms, $x_R - x_L$, the higher the importance that valence issues have on the determination of the indifferent voter. To see it, note that when $x_R \sim x_L$, i.e., the two parties propose very similar policy platforms, the valence (dis)advantage of party L over party R has a great effect in determining the indifferent voter; hence, the number of votes that each party receives. In contrast, when $x_R - x_L$ is large, i.e., the two parties propose very different policy platforms, valence issues have a smaller effect in determining the share of votes of the two parties. These ideas will be key to explain our results.

3. Results

In this section we analyze the equilibria of the game. Note that we consider a simultaneous game with complete information; hence, the equilibrium concept is Nash equilibrium. We say that a profile of strategies (m_L^*, m_R^*) is a Nash equilibrium of the game when each party's strategy is a best response to the other party's strategy. That is to say, the strategy profile (m_L^*, m_R^*) is an equilibrium of the game when:

$$m_L^* \in \arg\max_{m_L \in M_L} F(x_{\hat{\imath}}) \qquad \text{and} \qquad m_R^* \in \arg\max_{m_R \in M_R} 1 - F(x_{\hat{\imath}}),$$

with M_j being the set of strategies of player j, with $j \in \{L, R\}$.

The next result characterizes the equilibria of the game.

Proposition 1. *Let* $\theta = \frac{(x_R - x_L)^2}{\beta}$.

    i)   *Suppose $v_R - v_L < -\theta$. In this case, both parties reduce their vote shares by increasing the number of women in their party's lists. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (0,0)$.*

ii)   *Suppose $v_R - v_L > \theta$. In this case, both parties increase their vote shares by increasing the number of women in their party's lists. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (m_L^{max}, m_R^{max})$.*

iii)   *Suppose $v_R - v_L \in (-\theta, \theta)$. In this case, party R increases its vote share by increasing the number of women in its party's list and party L reduces its vote share by increasing the number of women in its party's list. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (0, m_R^{max})$.*

Proof. First, substitution (1) into (4) we have $x_{\hat{\imath}} = \frac{\beta(v_L - v_R)}{2(x_R - \bar{x}_L + g(m_L))} + \frac{\bar{x}_L - g(m_L) + x_R}{2}$. Then:

$$\frac{\partial F(x_{\hat{\imath}})}{\partial m_L} > 0 \Leftrightarrow \frac{\partial x_{\hat{\imath}}}{\partial m_L} > 0 \Leftrightarrow -\frac{1}{2}g'(m_L) - \frac{2\beta(v_L - v_R)g'(m_L)}{4(x_R - \bar{x}_L + g(m_L))^2} > 0 \Leftrightarrow v_R - v_L > \frac{(x_R - x_L)^2}{\beta}.$$

Now, substitution (2) into (4) we have $x_{\hat{\imath}} = \frac{\beta(v_L - v_R)}{2(\bar{x}_R - g(m_R) - x_L)} + \frac{x_L + \bar{x}_R - g(m_R)}{2}$. Then:

$$\frac{\partial F(x_{\hat{\imath}})}{\partial m_R} < 0 \Leftrightarrow \frac{\partial x_{\hat{\imath}}}{\partial m_R} < 0 \Leftrightarrow -\frac{1}{2}g'(m_R) + \frac{2\beta(v_L - v_R)g'(m_R)}{4(\bar{x}_R - g(m_R) - x_L)^2} < 0 \Leftrightarrow v_R - v_L > -\frac{(x_R - x_L)^2}{\beta}.$$

This proves the result. QED.

The results of points *i) - iii)* of Proposition 1 are illustrated in Figure 1.

The results in Figure 1 show three different situations, according to the sign of the derivative $\frac{\partial x_{\hat{\imath}}}{\partial m_j}$, for $j \in \{L, R\}$. Case *i)* corresponds to a situation in which $\frac{\partial x_{\hat{\imath}}}{\partial m_L} < 0$ and $\frac{\partial x_{\hat{\imath}}}{\partial m_R} > 0$; hence, to a situation in which both parties decrease their vote shares by increasing the number of women in their party's lists. Then, in the equilibrium of this case, both parties choose the minimum number of women that they are allowed, i.e., zero. In this case, the parties' platforms are $(x_L^*, x_R^*) = (\bar{x}_L, \bar{x}_R)$. Case *ii)* corresponds to the opposite situation, in which $\frac{\partial x_{\hat{\imath}}}{\partial m_L} > 0$ and $\frac{\partial x_{\hat{\imath}}}{\partial m_R} < 0$. In this case, both parties increase their vote shares by increasing the number of women in their party's lists. Then, in the equilibrium of this case, both parties choose the maximum (permitted) number of women. In this case, the parties' platforms are $(x_L^*, x_R^*) = (\bar{x}_L - g(m_L^{max}), \bar{x}_R - g(m_R^{max}))$. Finally, case *iii)* corresponds to a situation in which $\frac{\partial x_{\hat{\imath}}}{\partial m_L} < 0$ and $\frac{\partial x_{\hat{\imath}}}{\partial m_R} < 0$. In this case, party R (L) increases (decreases) its vote share by increasing the number of women in the party's list. Then, in the equilibrium of this case party L does not include women in its list and party R includes as much women as it is permitted. The parties' platforms in this case are $(x_L^*, x_R^*) = (0, \bar{x}_R - g(m_R^{max}))$, with $x_L^* < x_R^*$. Note that the equilibria described above may contemplate situations in which one party losses the election

with probability one. This is the case when $x_{\hat{\imath}}\big|_{(m_L^*, m_R^*)} \neq x_m$, with x_m being the median voter, $F(x_m) = \frac{1}{2}$. Note that because there is no cost for running for office, such strategy profiles are equilibria of the game.
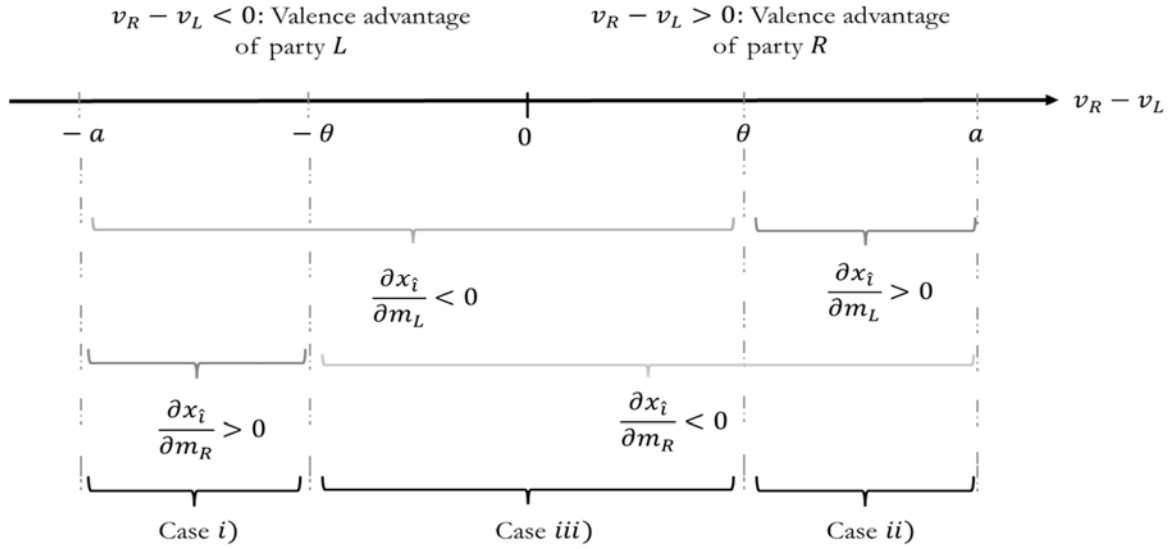

Figure 1. We represent the sign of the derivative $\frac{\partial x_{\hat{\imath}}}{\partial m_j}$, which determines party j's best response, as a function of the valence (dis)advantage of party R over party L, $v_R - v_L$. We denote $\theta = \frac{(x_R - x_L)^2}{\beta}$

We next provide an intuition for these results. To this, suppose first that none of the two parties have a high valence advantage over the other. This corresponds to case *iii)*. In this case, a voter's decision is mostly based on the policy dimension, as parties are very similar in their valences. Here, increasing a party's share of votes requires, necessarily, moderating the party's platform, seeking to approach the location of the median voter. Because including women in a party's list implies that a party's platform moves to the left, in this case party R optimally chooses to include women and party L optimally chooses not to include women.

Let us now move to the more interesting scenarios of cases *i)* and *ii)*, which correspond to situations in which one of the parties has a great valence advantage over the other. There are two important ideas that derive from equation (4). First, when $|v_L - v_R|$ takes high values, the first term of equation (4) becomes bigger in size; hence, it has greater effects on determining the indifferent voter, i.e., the parties' vote shares. Second, for a given $v_L - v_R > 0$, the smaller the distance $x_R - x_L$, the more rightist the indifferent voter $\hat{\imath}$ is; and the higher the distance $x_R - x_L$, the more leftist the indifferent voter $\hat{\imath}$ is. When $v_L - v_R < 0$, it is the opposite. With these ideas in mind, let us focus on case *i)*, i.e., party L has a great valence advantage over party

R.[8] In this case, as $v_L - v_R > 0$, party L gains vote share by minimizing the distance $x_R - x_L$, i.e., by proposing a policy platform similar to party R's platform. The reason is that doing so, it makes that voters perceive parties as more similar in the policy dimension; hence, it induces voters to pay more attention to valence differences in order to decide their vote. This argument also explains why party R gains vote share by maximizing the distance $x_R - x_L$, i.e., by proposing a very different policy platform from that of party L. The reason is that because party R is down in the valence competition, it wants voters not to cast their vote based on the valence dimension, as if they were to vote that way, party R would clearly be the loser.

4. Extensions of the theoretical model

This section discusses two extensions of the proposed theoretical model: i) political competition and differences in gender preferences for moderate policies; and ii) political competition and the introduction of gender quotas.

4.1. Political competition and differences in gender preferences for moderate policies

In this section we consider that there are differences in gender preferences for moderate policies, i.e., women have a stronger (alternatively, weaker) preference for moderate policies than men. For the sake of exposition, let us suppose that women prefer more moderate policies than men. In terms of the model described in Section 2, it means that the introduction of women in a party's list will moderate the party's policy platform. Formally, it means that equation (1) is now $x_L(m_L) = \bar{x}_L + g(m_L)$, whereas equation (2) does not change.

Under this new scenario, it is easy to show the following result.

Proposition 2. *Let* $\theta = \frac{(x_R - x_L)^2}{\beta}$.

    i)   *Suppose $v_R - v_L < -\theta$. In this case, party L increases its vote share by increasing the number of women in its party's list and party R reduces its vote share by increasing the number of women in its party's list. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (m_L^{max}, 0)$.*

    ii)   *Suppose $v_R - v_L > \theta$. In this case, party L decreases its vote share by increasing the number of women in its party's list and party R increases its vote share by increasing the number of women in its party's list. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (0, m_R^{max})$.*

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[8] In this case, it is easy to show that $x_{\hat{\imath}} > x_R > \frac{x_L + x_R}{2}$. The analysis and intuition for the case *ii)* is analogous.

iii)   *Suppose $v_R - v_L \in (-\theta, \theta)$. In this case, both parties increases their vote share by increasing the number of women in their party's lists. The equilibrium in this case is unique and it is given by $(m_L^*, m_R^*) = (m_L^{max}, m_R^{max})$.*

Proof. Assuming $x_L(m_L) = \bar{x}_L + g(m_L)$, the result follows directly from the proof of Proposition 1. QED.

This result states that under the new scenario, the party with the valence advantage will always gain by introducing women in its party list; hence, moderating its platform. In contrast, the party with the valence disadvantage prefers not to introduce women in its party list; hence, trying to differentiate its platform from the competitor's platform. Last, when none of the parties have a clear valence advantage, both parties benefit from catering to the median voter; hence, by including women in their lists and so presenting more moderate platforms.

Note also that this analysis serves us to draw predictions on other slightly different scenarios, such as one in which women of right-wing parties are more pro-spending than men; however, women of left-wing parties are not that different, in terms of pro-spending preferences, from men. To this case, our model predicts that party R would always include women in its party list, except for the case in which party L has a clear valence advantage over party R. In the latter case, party R would prefer not to include women, trying so to differentiate its platform from party L's platform; hence, reducing the relevance that the voters assign to the valence dimension. As for party L, our results suggest that it would always be indifferent between including women in its party list or not, as it would have no effect on the proposed policy platform.

4.2. Political competition and the introduction of gender quotas

Last, we explore the effects that the introduction of gender quotas has on the political competition and the policies proposed by the parties. By a gender quota, we mean any formal regulation that requires parties to include a minimum number of women in a party's list.

Under the assumption that women's preferences are more pro-spending than men's preferences, we observe that the introduction of a gender quota induces party R to moderate its platform and party L to propose an extreme platform. When none of the two parties have a clear valence advantage, it clearly benefits party R. In the case in which there is one party with a clear valence advantage over the other, the policy of a gender quota either benefits both parties or harms both parties; hence, the effect is ambiguous in this case.

Last, under the assumption that women's preferences are more moderate than men's preferences, we can conclude that the introduction of a gender quota induces both parties to converge to the median voter. It is interesting to note that, in this case, the introduction of a gender quota has clearer effects than in the previous scenario. In fact, in this case, the policy of

a gender quota always benefits the party with the valence advantage and harms the party with the valence disadvantage. Last, in the case in which none of the two parties has a clear valence advantage over the other, the introduction of a gender quota benefits the two parties.

5. Data

Our empirical exercise uses survey data collected by the Centro de Investigaciones Sociológicas (CIS), study number 2827. The survey, entitled *Élites Políticas en España*, was conducted between 2009 and 2010, just after the approval in 2007 of Law on Equality (that introduced electoral gender quotas) and the first Spanish General Elections of 2008 under this Law. This survey is unique in Spain, as there is no other containing a similar questionnaire to Spanish political representatives. The study comprises the responses of 580 Spanish political representatives of the Spanish Congress, the Senate and the Autonomous Parliaments.[9]

About 23 percent of the representatives in the sample are member of the Spanish Congress and the Senate, and the remaining 67 percent are members of Autonomous Parliaments. Additionally, 350 respondents are males, and 230 females. Finally, about 40 percent of respondents are members of the Partido Popular (PP), about 37 percent are members of the Partido Socialista Obrero Español (PSOE), 9 percent are members of the Basque and Catalan nationalist parties, and the remaining respondents are members of other minoritarian parties.

5.1. The preferences of the Spanish political representatives

In this section, we explore the political position and preferences for public expenditure in certain social areas of male and female Spanish representatives.

Our main variable of interest is the politician's preference for public expenditure in social areas. For each of the following areas of public budget - environmental protection, health, public safety, education, armed forces and defense, pensions, unemployment insurance and arts and culture - the respondents were asked to express how much they would like to spend. There are five possible answers: 1- "Much more", 2- "More", 3- "The same as now", 4- "Less", 5- "Much less". We focus on four areas of public budget that are traditionally associated with social areas. These areas are health, education, pensions and unemployment insurance. Public expenditure in these areas target different social groups: the elderly, the children and the unemployed; besides, health services provide a universal coverage to all the society and in particular, to the public that cannot access private health insurances. We exclude from our analysis other areas – environmental protection, public safety, armed forces and defense, and arts and culture - that are of general interest but do not target any specific social group.

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[9] The Spanish Congress has 350 members and the Senate 260. The sample contains the responses of 126 members of Congress and the Senate that corresponds to 20 percent of the representatives of these national chambers.

Another variable of interest is the political position of the representative. The survey contains a question about ideological self-location of the respondent in a 1 to 10 scale, where 1 stands for extreme left and 10 for extreme right. We use the answers to this question to identify the political position of each representative, and model this variable as a discrete variable, taking values 1, 2, ... to 10, from the more leftist to the more rightist political position.

The last variable of interest is the gender of the politician, which can also be identified from a question in the survey. We model this as a binary variable, taking value 1 when the representative is a female and value 0 when it is a male.

Our goal is to disentangle whether the gender of the representative, male versus female, exerts any impact on the politicians' preferences for increasing expending in the aforementioned social areas. We use the gender of the respondent and the respondent's self-location in the left-right dimensions as independent variables to explain the preferences of the representatives over the selected areas of public expenditure. We also explore gender differences within the two dominant parties in Spanish politics during the first decade of the 2000s, PP and PSOE, and within the national and the regional chambers.[10]

To this aim, we group responses 1 and 2 ("Much more" and "More", respectively) and calculate the fraction of males and females that give either a 1 or 2 response, over the total number of valid responses, for each of the areas of social spending that we consider. Table 1 represents the responses.

AREAS OF PUBLIC POLICIES	Men	Women	Differential
HEALTH	74.9%	76.1%	1.2%
EDUCATION	90%	94.1%	4.1%
PENSIONS	73.6%	82.9%	9.3%
UNEMPLOYMENT INSURANCE	51.5%	53.5%	2%

Table 1. Preferences for more expenditure in social programs by gender group

Two observations are in order:

First, in all the selected areas we observe how the percentage of female representatives responding either 1 or 2 is above that of male representatives. Women over men prefer more public expenditure in health, education, pensions and unemployment insurance than men do.

Second, the largest difference between the responses of women and men is in the area pensions, where about 83 percent of women respond either 1 or 2, over 74 percent of men. Regarding education, about 4 percent of women over men prefer more expenditure in this area, and about

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[10] Starting in 2014, other left-wing and right-wing political parties such as Podemos and Ciudadanos entered in the political arena and gained substantive political representation.

2 percent and 1 percent of women over men prefer more expenditure in unemployment insurance and health, respectively.

Next, we restrict the sample to those politicians that are members of the two largest nationwide parties in the 2008 General Elections, the Partido Socialista Obrero Español (PSOE) and the Partido Popular (PP), each representing the left and the right nationwide political parties. The two parties together achieved 84 percent of votes in the 2008 General Elections. The members of UPN (Unión del Pueblo Navarro) are included as members of PP, since this party presented its candidacy to the 2008 General Election in association to PP. The sample contains 228 representatives of PP and 218 of PSOE. We describe in Table 2 the preferences by gender and party-affiliation, PP versus PSOE.

AREAS OF PUBLIC POLICIES	PARTY	Men	Women	Differential
	PP	66.7 %	74.5 %	**7.8%**
HEALTH	PSOE	78.8 %	76.1 %	-2.7%
	PP	84.7 %	90.3 %	**5.6%**
EDUCATION	PSOE	94.4 %	98.3 %	**3.9%**
	PP	65.8 %	81.1%	**15.3%**
PENSIONS	PSOE	80 %	84.8 %	**4.8%**
	PP	35.1%	40.4 %	**5.3%**
UNEMPLOYMENT INSURANCE	PSOE	64.3 %	61.9 %	-2.4%

Table 2. Preferences for additional social expenditure by gender and political party

Several comments are in order:

First, note how both men and women of PSOE, with respect to PP, reveal stronger preferences for an increase in spending in all the social areas. These differences are particularly relevant among men in the area of unemployment insurance, where about two times more PSOE's representatives prefer additional unemployment protection than PP's representatives do.

Second, PP's female representatives show stronger preferences for social programs when compared to men of their same political party. Whereas in all of the four areas, PP's women want more public expenditure than men do, when comparing PSOE representatives, women want more expenditure than men do in just two areas - education and pensions.

Third, the greatest difference between men and women is in pensions and among PP's representatives. We find that an additional 15 percent of PP women want additional public expenditure in pensions than PP men representatives do. An additional 8 percent, 6 percent and 5 percent of PP women prefer more expenditure in health, education and unemployment

insurance respectively, than PP men do. Among PSOE's representatives, an additional 4 percent and 5 percent of women prefer more public expenditure than men do in the areas of education and pensions, respectively.

In sum, the statistics in Table 2 reveal that women make the conservative party less rightist in terms of representatives' preferences for public expenditure. The effect of women representatives over men in the socialist party is not that clear since in areas such as health and unemployment, a higher percentage of men want more public expenditure than women do.

Our sample contains responses of political representatives belonging to different chambers, national and regional. At the national level, the survey contains responses of members of the Spanish Congress and the Senate. At the regional level, the political representatives are members of the Autonomous Parliaments. Our next table measures the extent to which there are gender differences between revealed preferences for social expenditure across chambers, national (20 percent of the respondents in the sample) versus regional (80 percent of the respondents in the sample).

AREAS OF PUBLIC POLICIES	Chamber	Men	Women	Differential
HEALTH	Regional	75.1%	74.8%	-.3%
	National	74.6%	79.3%	**4.7%**
EDUCATION	Regional	89.5%	91.6%	**2.1%**
	National	90.8%	100%	**9.2%**
PENSIONS	Regional	77.5%	81.4%	**3.9%**
	National	66.9%	86.4%	**19.5%**
UNEMPLOYMENT INSURANCE	Regional	59.8%	55.7%	-4.1%
	National	36.6%	48.4%	**11.8%**

Table 3. Preferences for additional social expenditure by gender and chamber

Importantly, we find that gender differences are higher among representatives of the national chambers. In all the areas of social policies, women representatives in the national chamber want more expenditure than their male representatives do. The difference is more relevant in the area of pensions, where about 19 percent of females of the national chamber prefer additional expenditure than men do. An additional 12 percent and 9 percent of women in the national chambers prefer more expenditure in unemployment and education than men do, and the differences in health are small, as no more than 5 percent of women prefer more public spending in this area. In the regional chamber, gender differences are small (no more than 4 percent) and these differences only occur in the areas of pensions and education.

Health and Education are competences transferred to the regional parliaments, whereas the competences on pensions and unemployment insurance belong to the Spanish Congress. This can explain why men in regional parliaments express stronger preferences for additional expenditure on those social policies dictated by the national government and reveal weaker preferences for those social policies under the competence of the regional parliaments.

We finally compare the average self-location of women and men in the 1-10 ideological space where 1 means extreme left and 10 means extreme right. There are 569 out of 580 representatives providing an answer to their ideological self-location. Average reported responses are represented in Figure 2. The average self-location of the entire sample is 4.5, i.e., the average respondent is centrist-left. We observe in Figure 2 how the average self-location of male and female representatives are around 4.5 and there in no statistically significant difference in means between them (note that the two confidence intervals overlap one another). The mean self-location of PP and PSOE representatives is clearly different and, on average, PP representatives self-locate around 5.9, and PSOE representatives around 3.3. Within each party, PP and PSOE, there are certain differences between male and female self-location of representatives, but the difference is not statistically significant at the 95 percent confidence interval.
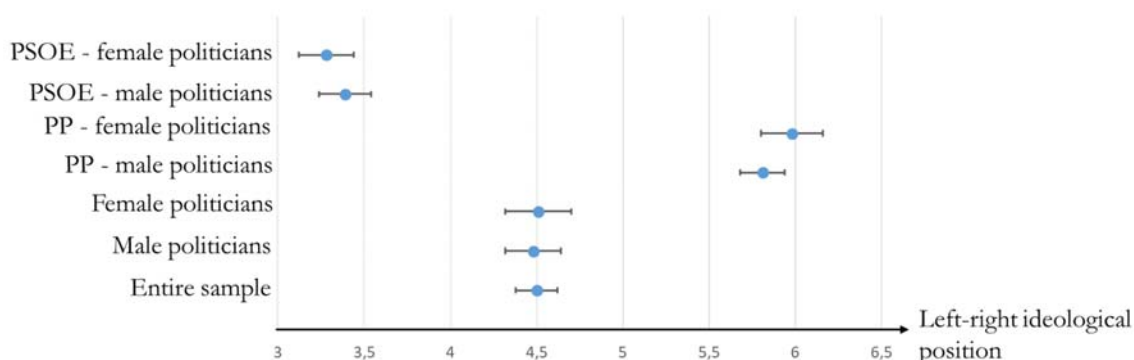

Figure 2. Average self-location in the left-right dimension with 95% confidence intervals

5.2. A classification of social preferences

Representatives express their preferences for expenditure in different areas of social spending. We propose a classification of the strength of individual social preferences in terms of the number of areas for which a representative reports that he/she wants "Much more" or "More" public spending. First, we order the areas of public policies in terms of the deduced gender differences in Table 1. From lower to higher gender differences, the order is unemployment

insurance, health, education and pensions.[11] Second, we define the following four categories of preferences:

1) Strong Social Preferences: when a representative reports that he/she likes "Much more" or "More" expenditure in the following four areas: pensions, education, health and unemployment insurance.
2) Moderate Social Preferences: when a representative reports that he/she likes "Much more" or "More" expenditure in the following three areas: pensions, education and health.
3) Weak Social Preferences: when a representative reports that he/she likes "Much more" or "More" expenditure in the following two areas: pensions and education.
4) Pro-elderly Preferences: when a representative reports that he/she likes "Much more" or "More" expenditure in pensions.

In Table 4, we present the frequency and percentage of respondents that give either a 1 ("Much more") or 2 ("More") response, over the total number of valid responses, for each category of preferences. According to our proposed classification, about 43 percent of the responses (over 573 politicians that provided a valid answer to the expenditure question) want more expenditure in the following four areas: health, education, pensions and unemployment insurance. This figure increases to 61 percent when unemployment is not included in the definition, and increases up to 73 percent when education is not included. We find that there is a majoritarian group of representatives with moderate social preferences, but less than a majority of the representatives in our sample with strong social preferences.

TYPE OF PREFERENCES	Frequency	Percentage
Strong Social	245	42.8%
Moderate Social	352	61.2%
Weak Social	417	72.5%
Pro-elderly	447	77.6%

Table 4. Representatives with social preferences

We use the proposed classification of preferences in our following regression analysis.

6. Regression analysis

For each of the proposed type of preferences described in Table 4, we estimate the probability that a representative self-reports such a preference as a function of individual left-right position

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[11] Note that unemployment insurance and health generate about the same gender difference. However, health as oppose to unemployment insurance, is more widely understood as part of the welfare state. Thus, unemployment is the first area that we discard in the definitions of pro-social preferences.

(discrete variable, taking values 1, 2,… to 10, from leftist to rightist) and the gender group of the representative (binary variable, taking value 1 when the representative is a female and value 0 when it is a male). We want to know if women over men are more likely to report a preference for a higher spending in social policies when controlling for parties' preferences. Note that our results in Figure 2 reveal that within the two dominant political parties, PP and PSOE, there is no association between gender and self-reported left-right positions, but there is strong association between party membership and left-right positions. Thus, we consider that self-reported left-right positions capture the party-effect on individual preferences for more expenditure in social programs.

We use a logistic regression model to estimate the probability of self-revealing social preferences against not revealing. Regressions are run in Stata. Table 5 shows the estimated coefficients to each independent variable, gender and the ideological left-right self-reported position. We analyze four different models, from 1 to 4, each of which measuring the probability of reporting the four classes of preferences, from strong social to pro-elderly preferences.

	(1) Strong social	(2) Moderate social	(3) Weak social	(4) Pro-elderly
Gender	0.168	0.287	0.377	0.444[**]
	(0.181)	(0.181)	(0.200)	(0.217)
Ideology	-0.401[***]	-0.242[***]	-0.237[***]	-0.205[**]
	(0.063)	(0.0596)	(0.065)	(0.069)
Constant	1.413[***]	1.462[***]	1.947[***]	2.060[***]
	(0.294)	(0.294)	(0.326)	(0.349)
N	563	565	565	566
Pseudo R^2	0.0591	0.0257	0.0257	0.0217

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 5. Logistic regression estimating the probability of self-reporting pro-social preferences

According to Table 5, two comments are in order.

First, the left-right ideology has a significant effect on the probability of reporting a preference for social spending, for each of the four classes of preferences. As expected, a more leftist reported position is associated with a higher likelihood of showing a preference for social spending, for each of the social preference that we consider; and a more rightist position is associated with a lower probability.

Second, women over men show a higher probability of reporting pro-social preferences (regression coefficients are always positive); this effect increases in statistical significance as we move to weaker definitions of social preferences. The analysis reveals that the effect of gender

is only statistical significant above the 95 percent confidence level in model (4), i.e., when measuring the likelihood of women over men showing pro-elderly preferences. Thus, women over men show, in a clear way, more propensity to have pro-elderly preferences.[12]

Next, we distinguish between PP and PSOE politicians. The PP's representatives comprise 41.7 percent of the sample (242 respondents), whereas PSOE's representatives cover 37.6 percent of the sample (218 respondents). We have already showed that there is no statistically significant gender difference in the left-right ideological positions within each group PP and PSOE; hence, we next exclusively analyze whether gender differences exert some impact on the probability of declaring pro-social preferences.

Table 6 describes the regression results and allows a comparison between political parties.

	(1) Strong social		(2) Moderate social		(3) Weak social		(4) Pro-elderly	
	PP	PSOE	PP	PSOE	PP	PSOE	PP	PSOE
Gender	0.367	0.0683	0.649**	-0.0945	0.579**	0.155	0.752**	0.128
	(0.295)	(0.274)	(0.269)	(0.291)	(0.286)	(0.345)	(0.316)	(0.361)
Constant	-1.156***	0.118	-0.182	0.757***	0.411**	1.324***	0.714***	1.494***
	(0.197)	(0.184)	(0.168)	(0.197)	(0.171)	(0.225)	(0.178)	(0.236)
N	238	216	239	216	239	216	239	217
Pseudo R^2	0.0056	0.0002	0.0179	0.0004	0.0136	0.0009	0.0213	0.0006

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 6. Logistic regression estimating the probability of self-reporting pro-social preferences by political party

The most striking fact in Table 6 is that within PP representatives, females show a higher propensity to have pro-social preferences than male do. In three out of four of the models, from moderate social to pro-elderly, female PP representatives show more propensity than male representatives do to reveal that they want more public spending, and this effect is statistically significant at the 95 percent confidence interval. We find, interestingly, that among PSOE representatives, gender differences have no statistically significant effect on the probability of revealing pro-social preferences (regression coefficients are close to zero and in model (3), the gender coefficient is negative).

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[12] The pseudo R[2] shows low values and the model, therefore, does not provide an accurate explanation of the preferences for social expenditure. Note, however, that we do not explore any behavioral model explaining the heterogeneity in preferences besides the differences in gender and ideology. There could be missing explanatory variables, such as age (which is not available in the survey), religion or other, but in no case, we believe that these variables interfere the gender effect.

We next explore how regional versus national chambers make a difference over the propensity of women to reveal social preferences. We distinguish between representative members of the Spanish Congress and the Senate, against those members of the Autonomous Parliaments. The former group contains 133 politicians of which, 91 are male (68 percent) and 42 (32 percent) are female. The latter group contains 447 politicians of which, 289 are male (58 percent) and 188 are female (42 percent). For each of these groups we replicate our analysis in Table 4, i.e., we estimate a logistic probability function explaining the probability of self-reporting pro-social preferences as a function of the left-right ideology and the gender of the representative.

Table 7 below describes the results of the regression analysis accounting for the two types of chambers: national versus regional. The independent variables are gender and self-reported left-right ideological positions. As already mentioned, we account for the left-right ideology as a control for political party membership.

	(1) Strong social		(2) Moderate social		(3) Weak social		(4) Pro-elderly	
	Nation	Region	Nation	Region	Nation	Region	Nation	Region
Gender	0.228	0.106	0.627	0.177	1.379***	0.128	1.190**	0.226
	(0.398)	(0.206)	(0.403)	(0.204)	(0.511)	(0.224)	(0.517)	(0.245)
Ideology	-0.166	-0.475***	-0.108	-0.287***	-0.298**	-0.231***	-0.343**	-0.172**
	(0.129)	(0.0728)	(0.124)	(0.0685)	(0.141)	(0.0740)	(0.146)	(0.0798)
Constant	0.0741	1.856***	0.636	1.747***	1.829***	2.064***	2.246***	2.073***
	(0.594)	(0.345)	(0.587)	(0.343)	(0.676)	(0.378)	(0.707)	(0.406)
N	125	438	126	439	126	439	126	440
Pseudo R^2	0.0119	0.0804	0.0181	0.0327	0.0788	0.0204	0.0738	0.0125

Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 7. Logistic regression estimating the probability of self-reporting pro-social preferences by chamber

Our regression analysis in Table 7 reveals that gender differences are only statistically significant at the national level, but there is no clear effect of gender differences at the regional level. That is, women in the Spanish Cortes Generales, show higher propensity than men do, to reveal their preferences for additional spending in pensions and education. Both the model where we estimate weak social preferences and pro-elderly social preferences show that women over men are more likely to reveal pro-social preferences, in its weak and pro-elderly version.

Joining our results in Table 6 and Table 7, we deduce that the largest gender gap in social preferences is at the national level and within right-wing representatives.

6.1. Quantifying the gender gap in social preferences

We estimate the differential probability of a woman versus a man of self-reporting pro-social preferences, which we refer to as gender gap. We consider the definition of weak social preferences that encompasses additional spending in education and pensions. We explore the gender gap in three cases: first, the gender gap within PP representatives; second, the gender gap within representatives in national chambers and; third, the combined gender gap within PP representatives in the national chambers. The two first cases correspond to scenarios where we have shown that gender exerts a statistically significant impact (at the 95 percent confidence interval) on the probability of self-reporting weak social preferences; the third scenario is the combination of the previous ones. For the first case, the sample size comprises 239 respondents, for the second, the sample size is 126 and, in the final scenario, the sample reduces to 52 respondents. Consequently, predicted probabilities are less accurate the smaller the sample size.

We represent in Figure 3 the marginal effects of gender in the logistic regression that estimates the probability of self-reporting weak social preferences in the three-abovementioned scenarios. Several comments are in order.

First, the upper-left panel, which represents the gender gap within PP representatives, indicates that, on average, PP male representatives show a 60 percent (estimated) probability of self-reporting weak social preferences against the 72 percent probability that show PP female representatives. Thus, there is a 12 percent gender gap, meaning that, on average, a PP female representative has a 12 percent higher probability of self-reporting weak social preferences than a male of the same party. Confidence intervals intersect to each other and we cannot therefore assert that the two groups, male and female, show statistically different probabilities.

Second, the upper-right panel represents the gender gap within representatives in the national chambers (evaluated at the mean of the self-reported left-right ideology). The panel shows a higher gender gap than in the previous panel. Note that, in this case, the confidence intervals do not intersect to each other, i.e., the estimated probabilities for each group are statistically different. The figures in this case say that when considering a national representative with average left-right ideology, the average probability of self-reporting weak social preferences is 62 percent points if it is a man and 87 percent points if it is a woman. Thus, fixing the ideology at the mean in the left-right dimension, a woman versus a man shows on average, an additional probability of 25 percent points of self-reporting weak social preferences.

Third, the bottom panel represents the gender gap within PP representatives in the national chambers. We find that both male and female average probabilities of self-reporting weak social preferences reduce with respect to our previous scenarios. We observe that male national representatives of PP are less pro-social and, on average, they show a probability of 51 percent points of self-reporting weak social preferences, a probability that is about 10 percent points lower than that of a male national representative with mean left-right ideology. The gender gap among PP national representatives is 31 percent points. Importantly, note how this higher gap

is mostly due to the lower fraction of PP men at the national chambers reporting that they want "Much more" or "More" spending in education and pensions. The gender gap that we have measure, however, is not based on statistically different probabilities among gender groups. We believe that this is due to the small sample size of our survey and we conjecture that the deduced effect may persist when exploring some larger scale surveys, which for instance comprise representatives of several nations.
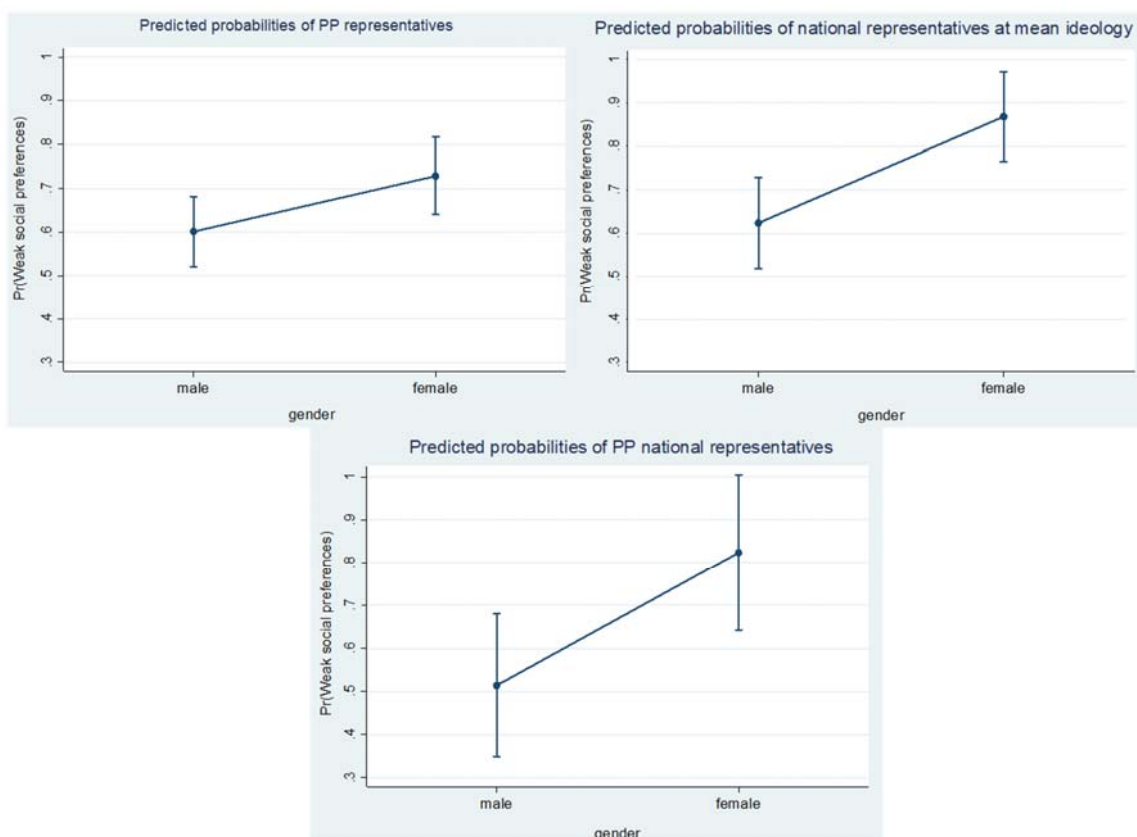

Figure 3. Marginal effects of gender over adjusted predicted probabilities at the 95% confidence interval

7. Conclusions

This paper explores the effect of women's representation in electoral competition. Our aim is twofold, analyzing from a theoretical perspective the effects of gender differences on the electoral competition, and exploring from an empirical perspective the preferences for social spending across gender groups.

The theoretical model builds on the documented empirical evidence that women over men have a stronger preference for social spending. We propose a model of two-party competition where vote-maximizer political parties strategically determine the number of women to include in their parties' lists. Our results suggest that in close election races, i.e., when no party has large valence

advantage over its opponent, the right-wing party has incentives to introduce women in its party list, whereas the left-wing party does not gain from such a strategy. Intuitively, women candidates moderate the policy platform of the right-wing party but make extreme the policy platform of the left-wing party. When a party enjoys a large valence advantage over its opponent, either both parties benefit from including women in their parties' lists or none of them do it. The former scenario occurs when the right-wing party enjoys larger valence advantage. In this case, the left-wing party gains by differentiating its platform from the opponent's platform, as it reduces the relevance that voters attach to the valence issue. The introduction of women helps the left-wing party accomplish this objective. The right-wing party seeks moderation and women serve to this objective. The latter scenario, in which no party benefits from the introduction of women, holds when the left-wing party enjoys larger valence advantage. In this case, the right-wing party seeks to differentiate its platform from the opponent's platform. This is accomplished when the right-wing party reduces the number of women in its party's list. If the three deduced scenarios – close elections, right-wing advantage and left-wing advantage – are equally likely, our analysis reveals that gender quotas benefits right-wing parties, in two out of three scenarios, the right-wing party gains additional votes from strategic moderation through women recruitment.

Our empirical analysis uses a unique survey run by the CIS to Spanish elected representatives of the Congress, the Senate and the Autonomous Parliaments, with a total of 350 man respondents and 230 woman respondents. We investigate whether women over men representatives show more intense preferences for social spending when controlling for party affiliation. Our results suggest that female Spanish representatives show higher preference for social spending than male representatives do. This is in line with previous literature. Our more interesting findings emerge when we analyze gender differences across groups: i) PP versus PSOE representatives (the largest Spanish right-win and left-win parties respectively), and ii) national versus regional representatives. We find that left-wing representatives, male and female, are alike in terms of their preferences for social spending (the effect of gender over the probability of self-reporting preferences for social spending is not statistically different from zero). However, female and male representatives of the right-wing party differ from each other in terms of their preferences for social spending. We find that this is more likely for a female representative of PP to prefer more public expenditure in pensions, education and health than for a male representative of PP. Our conjecture is that Spanish left-wing representatives of PSOE, male and female, are more homogenous due to the party ideological left location associated to stronger social protection. By contrast, the Spanish right-wing party, PP, is a conservative party that defends moderation in public expenditure. Interestingly, within the conservative party, we find that women representatives introduce moderation in terms of preferences for social expending. Finally, we explore gender differences within chambers, national versus regional. We find that gender differences have no impact within representatives of the regional parliaments, but it does within representatives of the national chambers where a woman versus a man (with mean left-right ideology) shows on average, an additional probability of 25 percent points of self-reporting a

preference for additional spending in education and pensions. This interesting result indicates that regional and national representatives face different motivations. National representatives male and female differ from each other and, as expected, women show a stronger preference for social spending than men. Regional representatives however, male and female, are more homogenous in terms of preferences for social spending. Our result for the regional parliaments in Spain is in line with the evidence found by Bagues and Campa (2017) for the Spanish municipalities where, gender quotas have no effect on the size of local government expenditure.

Our results open new empirical questions to explore. Does political representatives from national versus regional or municipal levels show stronger ideological motives? Does higher levels of government provide more heterogeneous gender preferences? We showed that Spanish political representatives provide an affirmative response to the previous questions; it remains to show if our results are of immediate export to other democracies around the world.

We conclude that the introduction of female representatives in the political life has effects that go beyond the recruitment of more women into leading political positions. Women moderate right-wing policies and especially at the national level, they show stronger sensitivity towards education and the economic protection of the elderly. The role of women moderating right-wing parties and their distinguishable preferences at the national level will surely provide more social protection; hence a better society.

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