The role of leaders' characteristics on governments formation

## Alba Huidobro Torres

TESI DOCTORAL UPF / 2022

Directora de la Tesi Dra. Aina Gallego Department of Political and Social Sciences



A la meva família i amics, en especial al Joan.

### Acknowledgments

We must always take the first step to get far down the road. Mine was just twelve years ago when I was debating about the adult I wanted to become. Then I never imagined making it this far. As a first-generation college student in my family, I barely knew what political science meant. However, by chance, I ended up choosing this wonderful road. Even if it was by chance, it was love at first sight. From the very first moment, I realized that this road would fulfil me for the rest of my life. Especially after my first course on political behavior with Professor Ignacio Lago, there was no turning back. I walked to make this dream come true during all these years at my beloved Universitat Pompeu Fabra. I would never have believed it if someone had told me twelve years ago, but now I know that by working hard and walking steadily, I have come this far.

The road had it all. At times it was exciting and wonderful; at others, tortuous and full of obstacles. In all these moments, the strength and passion were excellent guides along the way, but they were not the only ones. I never walked alone on this long road. Many people had the incredible courage to hold my hand. They have been so crucial that no matter how much I fill these pages with my gratitude, there is not enough space to convey how grateful I have been.

Professor Aina Gallego has been an indispensable guide on this journey. Thanks to her, I can see the world beyond my hometown. She has been unconditional and tireless support with the sole objective of making me achieve all the goals I set for myself. She worked hard with me to get here and beyond for five years. She trusted me blindly when even I could not. Thank you so much for your unconditional academic and personal advice at absolutely every step of this road. Thank you very much for our small team, in which we grew to be unbeatable. Also, thank this team, Guillem and Nic, because this dissertation would not be the same without your careful comments, corrections and encouragement.

This dissertation would not be possible without a fantastic co-author as Professor Albert Falcó-Gimeno. I only have words of gratitude since he accepted the hard work of being my co-author. After that, I can only thank you for everything you taught me and the time and effort you dedicated. Thank you very much because I learned a lot from you, not only with your tireless work behind our article but also with your valuable comments on each of the others. I would also like to thank the whole community of political scientists in Barcelona, such as Jordi Muñoz, Toni Rodon, Tania Verge, Abel Escribà, Eva Anduiza, Cesc Amat and Marta Curto who helped me to improve. Growing up and learning in this city surrounded by these outstanding political scientists undoubtedly is a great inspiration.

I cannot forget to thank the people who helped me in my day-to-day way, my family at UPF and IBEI. Many thanks to Abelardo, Jana and Leo for opening the doors of their home to me absolutely whenever I needed it. Many thanks also to Shashwat, Adrià, Rocío, Diego, Aitor, and everyone who came through to office 24.126. They made it much easier to find the strength to work every day. The long conversations of support, the hugs when the bad news reached and the jumps of joy with the good ones were the daily sustenance to get to the end of this road. The challenging moments shared with people in your same shoes are fundamental to not feel alone on this often lonely road. Thank you very much, I will miss you all, but of course, this is not our end.

But when I think of my companions on the day-to-day road, I especially would like to thank Pau Vall-Prat for his unconditional companionship. Having him by my side during this time has been a great gift that this path has given me. Today we end this part of the journey following in each other's footsteps, but I am sure that this friendship has only just begun. Thank you very much, Pau. Let's make this synchronization we have to pull each other never ends.

I will never forget each of the research stays that made the road more fabulous and full of adventures. I could not have written this dissertation without these stops along the way and without the people I met. Thanks to them, I have achieved great academic and personal goals. My first stay at the European University Institute changed my view of Academia completely. Now I know that the Academia is where you work very hard, but simultaneously, you can make beautiful friends who become part of your family. Thanks to Elias Dinas, who welcomed me with open arms and spread his great eagerness to always go one step further in research and be better every day. And of course, thanks to Sergi, Mar, Álvaro, Diego, Margarida, Nerea, Daniel, and everyone I met in the corridors of the EUI. These wonderful crazy people welcomed me from the first day without a second thought. Thank you all for being by my side on this journey, for letting me be part of yours too, and for always enjoying life together.

Also, my time at Oxford University was crucial in discovering that the legacy left through Academia is fundamental to continue growing as a society. Being at one of the oldest universities in the world made me love this profession even more, and every day being more excited to be a part of it. Thank you so much, Andy Eggers, for hosting me at one of the most prestigious colleges in the world, Nuffield College. Your excellent advice on improving the chapters of this thesis was one of the best gifts I could have hoped for on this road. The presence there of other people Leire, Guillermo, Nicetu and Marco, among others, was also crucial in those two long months of English winter, which culminated in an epic escape in March 2020 due to the Covid-19 pande-

mic. Thank you all very much. You helped me and supported me in making important decisions from the very beginning until the last day.

Finally, my last stay on this foreign path ended a few months ago at one of the best universities in the world, the University of California, Berkeley. This stay was decisive for the realization of this dissertation and the rest of my academic career. Many thanks to Ernesto dal Bo for welcoming me right away. Like him, many people were important in my stay in my now beloved California. Many thanks to Rachel Bernhard for opening the doors of her home to me, virtually and physically. She has given me the best advice that a young political scientist on her way to becoming a woman academic can listen to keep her head up in the face of everything and not lower it in the front of anything. Many thanks also to all the friends who, although we were a bit lonely, did not hesitate to support me during my days there. Thank you very much, Kasia, Sylvie, Jaś and Jenny. Thanks to you, those American streets were filled with experiences and company, so I never felt alone. But as always, when you are far away, I also found the Spanish family that made me feel much closer to home. Many thanks to Paula, Alberto, Manu and Fernando for those evenings of movies, guitar songs and "Tortilla de patatas" dinners. Special thanks to Laura, a bizarre coincidence, who became inseparable from our long talks and breakfasts on our beautiful terrace.

I also want to thank all my non-academic friends for their unconditional support. They are tremendously proud of my accomplishments as if they were their own. They gave me the power to continue every day trying to be better, while they also were a great refuge when not everything was pleasant. Many thanks to my unconditional "GPF", the "Familia de sempre" and of course to the political scientists of my dearest "Alba for president" groups. Many, many, many thanks to ALL and to each one of you. With a

special mention, of course, to the two best listeners in the world, Laia and Laura. They were my sanctuary when I only had doubts and fears regardless of where, how and at what time they were in the world. You have been the wind that has pushed me to be brave every day, reminding me that we all must stop from time to time to keep going.

This challenging road would have been impossible without the tremendous support of Alba Rocabert. Our weekly Monday sessions were the will to keep going in the worst times. She has helped me illuminate those moments in this journey when I couldn't find my way. Thanks to you today I have faced my fears, writing these words and flying beyond these walls. Thanks to you today, I love and value myself more, which has helped me gain force for what the rest of my life has in store.

I cannot write these words without my family, who has allowed me to do all this by their hand. Many thanks to all of them, those who have always been there, those who have joined later, and those who can no longer be there. My family is peculiar, like many families, but today Mamá, Jordi and Ester, I thank you for being my support to improve daily. You taught me that nothing is easy in this life, but everything is better when we are together. Clara, Núria and Joan, you are the best in-laws one could wish for. Your unconditional help has always made me feel like one of the family. I especially thank my dad, who, wherever he is, I know he is proud of me and telling everyone I am extraordinary. Wherever you are, papa, thank you very much. All the courage to go through this road is thanks to you.

Finally, I thank my life partner. From the first day to the last, Joan walked beside me. I remember when I told him I wanted to start a Ph.D. I had many doubts, but he took my hand and has never let me go. The tireless work days, the weekends locked up and the sleepless nights on this sinuous road have not overcome him and his great eagerness to love me and take care of me more every day. Especially every time I had news that I was leaving again. He did not waver to strongly support and accompany me on the distance wherever necessary. He is still doing it today, when this road ends and he is leaving everything apart for the future that awaits us. Thank you for blindly believing in me during this adventure and all those to come from now and forever.

## Abstract

This Ph.D. dissertation examines the extent to which the personal characteristics of political leaders affect their political ambition and government formation processes. While the literature shows that government performance and issue preferences depend, to some extent, on leaders' characteristics, such characteristics have received little scholarly attention in the context of government formation. The dissertation's main argument is that leaders' characteristics, especially gender, influence the creation of their preferences and attitudes during negotiations to obtain positions of power. Three empirical chapters test this using the case of Spanish local level politics. In the first chapter, I devise an original conjoint experiment and show that gender plays a role in predicting politicians preferences. They prefer women as government partners because they are perceived as reducers of the cost of communication and as more competent. In the second chapter, I leverage the as-if random assignment of a bargaining advantage in close local elections through a Regression Discontinuity Design. The results show that women are less likely to secure the mayoralty than men when they win elections by narrow margins, although their parties still manage to join governing coalitions. In the third chapter, to explore the mechanisms underlying of the other chapters' results, I explore the attitudes and political ambitions of those who reach those top positions. This project proposes a new way of understanding government negotiations. Moreover, the results highlight the inequalities that certain social groups, such as women, face when attempting to occupy positions of leadership.

## Resum

Aquesta tesi doctoral estudia fins a quin punt les característiques personals dels líders polítics afecten la seva ambició política i els processos de formació de govern. Tot i que la literatura mostra que el rendiment del govern i les preferències depenen, fins a un cert punt, de les característiques dels líders, la formació dels governs és un aspecte que ha despertat menys interès acadèmic. L'argument principal de la tesi és que les característiques dels líders, especialment el gènere, influeixen en la creació de les seves preferències i actituds durant les negociacions per obtenir posicions de poder. Tres capítols empírics, els quals utilitzen el cas de la política local espanyola, ho avalen. En el primer capítol, elaboro un experiment *conjoint* original i demostro que el gènere juga un paper en predir les preferències dels polítics. Els líders prefereixen les dones com a sòcies de govern perquè se les percep com a facilitadores de la comunicació i són més competents. En el segon capítol, es posa el focus en l'assignació quasi aleatòria de tenir avantatge negociadora en eleccions locals mitjançant un disseny de regressió discontínua. La tesi mostra que les dones tenen menys probabilitats d'aconseguir l'alcaldia que els homes quan el resultat és ajustat, és a dir, guanyen les eleccions per marges estrets. Tanmateix, els seus partits aconsegueixen unir-se a coalicions de govern. En el tercer capítol, per explorar els mecanismes subjacents dels altres capítols, exploro les actituds i les ambicions polítiques d'aquells polítics que assoleixen posicions de poder superiors. Amb tot, la tesi doctoral proposa una nova manera d'entendre les negociacions governamentals. A més, els resultats posen de manifest les desigualtats a què s'enfronten determinats col·lectius socials, com les dones, a l'hora de formar part de càrrecs polítics de primera línia.

## Sumari

List of figures							
Li	st of t	ables		xxiv			
1	INT	<b>FRODU</b>	CTION	1			
	1.1	Case s	election and data	4			
		1.1.1	Data collection	7			
	1.2	Object	ives and research designs	13			
2	PAI	PARTNERS IN GOVERNMENT: POLITICIANS' PREFERENCES ABOU					
	COA	ALITIO	<b>N FORMATION</b>	17			
	2.1	Introdu	uction	18			
	2.2	Prefere	ences and personal characteristics	21			
		2.2.1	Why might sociodemographic characteristics matter?	21			
		2.2.2	How do sociodemographic characteristics matter?	23			
	2.3	Resear	ch design	28			
		2.3.1	Background and data: Spanish local elections	28			
		2.3.2	Experimental design	31			
		2.3.3	Empirical models	35			

	2.4	Experi	mental results	36
		2.4.1	Mechanisms: Evaluations of the candidates	41
	2.5	Conclu	ision	45
	2.6	Appen	dix for 'Partners in government: politicians' preferences about	
		coalitio	on formation'	49
		2.6.1	Details of the conjoint experiment	49
		2.6.2	Tables and figures	52
		2.6.3	Descriptive information	52
		2.6.4	Robustness and additional outcomes	56
3	WO	MEN V	WHO WIN BUT DO NOT RULE. THE EFFECT OF GENDER	
	IN T	THE FO	RMATION OF GOVERNMENTS	73
	3.1	Introdu	uction	74
	3.2	Why w	yould gender matter in the formation of a government?	78
		3.2.1	Differences in preferences: Office-seeking vs policy-seeking	
			motivations	80
		3.2.2	Differences in leadership styles: Individualism vs collaboration	81
		3.2.3	Differences in entrenchment: Discrimination and homophily	82
	3.3	Institut	tional background and data	83
	3.4	Identif	ication strategy	86
	3.5	Results	8	89
	3.6	Mecha	nisms	91
		3.6.1	Effect on other government formation outcomes	91
		3.6.2	Exploration of other party differences as a mechanism	99
	3.7	Conclu	isions	101

	3.8	Appen	dix for "Women who win but do not rule. The effect of gender in	
		the for	mation of governments"	105
		3.8.1	External validity	105
		3.8.2	Descriptive information	107
		3.8.3	The most voted party advantage	114
		3.8.4	Continuity assumption	116
		3.8.5	Robustness checks	119
		3.8.6	Heterogeneous effect by gender of third parties	127
4	WO	MEN'S	S POLITICAL AMBITION: NEW EVIDENCE FROM A SUR	-
	VEY	OF PO	OLITICAL ELITES	129
	4.1	Introdu	uction	130
	4.2	Wome	n's Political Ambition	133
		4.2.1	Progressive ambition	136
		4.2.2	Women running for re-election	138
	4.3	The Co	ontext: Spanish Local Elections	139
	4.4	The su	rvey	142
		4.4.1	Survey Questions	143
		4.4.2	Summary Statistics	148
	4.5	Result	S	150
		4.5.1	Gender and Political Ambition	150
		4.5.2	Political ambition and Re-running	160
	4.6	Conclu	usion	164
	4.7	Appen	dix for "Women's Political Ambition: New evidence from a sur-	
		vey of	political elites"	167

RE	FERENCES	5											204
5	CONCLUS	SIONS											177
	4.7.2	Regression analyses	 	•	•••		•	 	 •	••	• •	•••	173
	4.7.1	Descriptive analysis	 	•	•••	•••	•	 	 •		• •	•••	167

# Índex de figures

1.1	Share of women in European national parliaments	8
1.2	Share of councillors and mayors in European local institutions	8
2.1	Average treatment effects in the conjoint experiment	37
2.2	Treatment effects in the conjoint experiment by Respondents' characte-	
	ristics	38
2.3	Mechanisms: treatment effects over the profiles rating	43
2.A1	Conjoint Experiment Example	50
2.B1	Perceived Similarity of Political Preferences by Respondents' Charac-	
		57
2.B2	Ease of Communication Evaluation by Respondents' Characteristics	57
2.B2 2.B3	teristics	57 58 59
2.B2 2.B3 2.B4	teristics	57 58 59 60
2.B2 2.B3 2.B4 2.C1	teristics	<ul> <li>57</li> <li>58</li> <li>59</li> <li>60</li> <li>61</li> </ul>
2.B2 2.B3 2.B4 2.C1 2.C2	teristics	57 58 59 60 61
2.B2 2.B3 2.B4 2.C1 2.C2	teristics	<ul> <li>57</li> <li>58</li> <li>59</li> <li>60</li> <li>61</li> <li>62</li> </ul>

2.C4	Treatment effects in the conjoint experiment by white and blue collar
	mayors
2.C5	Treatment effects in the conjoint experiment by Dishonest vs. Honest
	politicians
2.C6	Treatment effects in the conjoint experiment by Political Party 69
2.C7	Treatment effects in the conjoint experiment by municipality population 70
2.C8	Treatment effects in the conjoint experiment by type of government 7
3.1	RD plots on the effect of gender on winning the mayor's office 9
3.2	Policy vs office
3.3	Consensualism vs individualism
3.4	Discrimination
3.A1	External validity check: Spain (2003-2007) and Western Europe (1945-
	1998)
3.B1	Share of women in European national parliaments
3.B2	Share of councilors and mayors in European local institutions 108
3.B3	Share of female politicians by population, year, and party
3.B4	Mayor by party and party rank
3.C1	RD plot of the most voted advantage
3.D1	Continuity of the forcing variable
3.E1	RD plot of the most voted advantage
3.E2	RD plot of the most voted advantage
3.E3	RD estimate difference 2003-2007: Contrasts
4.1	Women's proportion by position in the city council in Spain from 1979
	to 2015

4.2	Political ambition by gender: Would you like to run for the next local	
	elections?	145
4.3	Political ambition by gender: If you had a choice, where would you like	
	to work in 5/10 years from now?	146
4.4	Predicted Probabilities of Out of Politics by Gender and Number of	
	Children	159

# Índex de taules

2.1	Descriptive statistics for the survey respondents vs the whole population	31
2.2	List of random treatments in conjoint experiment	32
2.B1	Characteristics of mayors who answered the survey compared to the	
	whole population	53
2.B2	The effect of candidates' attributes on profile selection	54
2.B3	The effect of candidates' attributes on profiles rating	55
2 1	Effect of conder on the most voted party attaining the mayor's office	20
5.1	Effect of gender on the most-voted party attaining the mayor's office	10
3.2	Effect of gender on government participation	<del>)</del> 2
3.3	Discontinuities in pretreatment covariates (Local linear regression esti-	
	mates)	)0
3.B1	Descriptive statistics by municipal council	10
3.B2	Descriptive statistics by party	11
3.B3	Descriptive statistics of mayoral parties	12
3.C1	Linear probability models of becoming the mayor party	14
3.D1	Discontinuities in pretreatment covariates (Local linear regression esti-	
	mates)	16
3.E1	Robust bias corrected inference	19

3.E2	Multiple kernels for observations within the bandwidth	120
3.E3	The effect of gender quotas	123
3.F1	Heterogeneous effect by gender of the leader of parties ranked third	127
4.1	Descriptive statistics divided by gender	149
4.2	OLS Regression results for Political ambition by Gender	152
4.3	Multinomial Logisitic Regression Results by Gender	154
4.4	OLS Regression including outside options by gender	156
4.5	Effect of outside options on political ambition: Multinomial by gender .	158
4.6	Effect of political ambition and gender on rerunning	160
4.7	Effect of political ambition on rerunning by gender	162
4.8	Effect of political ambition on rerunning by gender	163
4.A1	Descriptive statistics for the survey respondents	167
4.A2	Descriptive statistics for the whole population	168
4.A3	Characteristics of mayors who answered the survey compared to the	
	whole population	169
4.A4	Sociodemographic and political variables	170
4.A5	Attitudes	171
4.A6	Occupations	171
4.A7	Outside Options	171
<b>4.B</b> 1	Effect of gender on political ambition: Sociodemographic variables	173
4.B2	Effect of gender on political ambition: Political variables	174
4.B3	Multinomial Logisitic Regression Results	175
4.B4	Multinomial Logistic Regression with outside options	176

## Capítol 1

# **INTRODUCTION**

Who governs is, evidently, one of the oldest questions in political science to understand government performance. Political leaders are selected based on characteristics that make them more likely to reach power. Around these characteristics, it is well documented how voters select their representatives. But in parliamentary democracies, where politicians are not directly elected, this political selection faces multiple steps in which the importance of trait differences may arise. Even after the election, certain individual traits can be assets and others liabilities in the attempt to attain government office. If not all politicians have equal opportunities to reach top political office, homogeneity of the political class may emerge – in terms of gender, race, age or social class – in which not everyone is equally represented. However, we know little about whether and how leaders' characteristics are relevant to understanding political decisions or the formation of governments.

A growing body of research shows that the personal characteristics of rulers are critical to understanding their performance and policy preferences (Washington, 2008; Jones and Olken, 2005). Recent theoretical contributions study the motives and consequences

of selecting effective politicians (Caselli and Morelli, 2004; Mattozzi and Merlo, 2008). They try to establish whether politicians' characteristics (e.g., gender, education, ethnicity or age) affect the quality of the leader and her decisions as a legislator. For example, focusing on gender, Anzia and Berry (2011) find that women do better at securing more spending and sponsoring legislation. Other studies examine the effect of education (Besley et al., 2011; Martinez-Bravo, 2017), ethnic minorities (Bhalotra et al., 2014) or age (Alesina et al., 2019).

Another strand of this empirical literature focuses on whether politicians implement policies preferred or favoured by the groups to which they belong. Studies on gender (Chattopadhyay and Duflo, 2004; Bhalotra and Clots-Figueras, 2014), ethnicity (Pande, 2003; Kramon and Posner, 2012) or social class (Carnes and Lupu, 2016b) suggest that politicians' descriptive characteristics affect their probability to prioritise policies differently and predictably based on their personal traits. An unexplored debate, however, is the causal effects of politicians' characteristics on the bargaining processes employed in the formation of governments.

In addition, undoubtedly, personal characteristics directly affect the political behaviour of the general population. Studies regarding citizens as decision-makers are frequently used to explain heterogeneity in their opinion formation, voting choices, turnout, and receptivity to political messages (e.g. Druckman, 2004; Gerber et al., 2013; Clayton et al., 2019). It is, therefore, sensible to expect that these individual differences may also affect politicians' behaviour. For these reasons, there is a need for new research that shifts the focus of study from the traditional focus on the party to the politician as the object of study.

Politicians leading government formation processes have rarely been the focus of analy-

sis. Instead, most existing work considers party motivations and institutional factors as the main determinants of participation in coalition governments (e.g. Bäck and Dumont, 2008; Laver and Schofield, 1998). A set of theories has argued that parties have officeseeking motivations and mainly strive to gain a place in government (e.g. Riker, 1962). Party size – i.e., the number of seats in the legislative chamber – is the key determinant of party's bargaining power in the formation process. The largest party has the highest chance of reaching office, joined by one or more parties that can form a minimal winning coalition (e.g. Tavits, 2008; Glasgow and Golder, 2015). A second set of theories focuses on parties' policy-seeking motivations (e.g. Axelrod, 1970; Bäck and Dumont, 2008). They claim that parties must be ideologically aligned to reduce the political costs of bargaining and produce desirable policies. Parties, therefore, prefer to build a government that is ideologically homogeneous and survives as long as they remain ideologically similar (e.g. Baron, 1991).

The literature has also dedicated significant attention to analysing the impact of institutions on coalition bargaining. Aspects such as the existence of investiture requirements or the *formateur* role give parties an advantage in the negotiation over who gets access to political power (e.g. Ansolabehere et al., 2005; Indridason, 2011b). Moreover, incumbency and other cultural and social norms have been shown to be a source of power in these processes (e.g. Fujiwara and Sanz, 2020; Glasgow et al., 2011). Though we know a great deal about how institutions, party size, and ideology affect the coalition formation process, the preferences or personal characteristics of the political leaders involved in coalition negotiations have received little attention.

The main research question that this dissertation seeks to address is the extent to which the processes of government formation are defined by the attitudes and personal characteristics of political leaders. Political settlements are established for reasons beyond those mentioned above. In democratic bargaining and decision-making processes, the characteristics of politicians are likely to play an important role. If there are variations in the ability of different social groups to penetrate entrenched political dynamics, there is reason to believe that their ability to succeed in negotiations over government formation will differ. Similarly, if different social groups differ in their preferences, then there is no basis for ignoring the potential influence such groups may have on politicians when it comes to political bargaining.

In this dissertation, therefore, I argue that personal characteristics have an effect on both the formation of politicians' preferences and on negotiation processes of government formation. In particular, I focus on the gender of politicians as it proves to be one of the characteristics that has the greatest effect on the social behaviour of team formation and negotiation. The socialisation of men and women leads to differences in the behaviour of female politicians and their male counterparts in the political arena, thus generating different outcomes depending on gender. These arguments also offer an alternative explanation as to why there is still a large gender gap in the top political positions. Moreover, they open up new research debates on the position that women occupy within governments. Thus, in this dissertation, I also explore the attitudes of female politicians when it comes to pursuing or climbing the political ladder.

#### **1.1** Case selection and data

This dissertation uses local politicians in Spain. This is one of the best settings to understand the leaders' effects on government negotiations for three main reasons. First, focusing on the local Spanish level provides me with a large number of observations, which is necessary and sufficient to causally analyze my arguments. This case study, including its approximately 8000 municipalities, provides ample new and useful data to study the phenomenon in question. Moreover, by selecting a single country, as opposed to the commonly used approach of comparing several countries at once, this project can hold the electoral rules and country context constant. This allows me to hold constant potential confounding factors that vary from country to country and that might be relevant in explaining politicians' decisions in choosing their coalition partners. Party systems and patterns of electoral competition may not be homogeneous across Spain. However, the experimental and quasi-experimental approaches ensure that these differences do not affect my findings on the effect of politicians' characteristics on government formation.

Second, the Spanish electoral system is an excellent setting, as it generates many incentives for government negotiations. These negotiations are determined by two aspects: the mayor's election by the city council and her designation of the councillors who will join the government team. Spain has a decentralised political system, in which citizens elect city councils every four years. Spain has closed-list proportional representation (PR) systems applied to two-thirds of its municipalities (around 5,500), which generate government formation processes similar to many national parliamentary democracies. This system generates considerable party fragmentation, an ideal scenario for the formation of coalitions. Of the legislatures analysed in the following chapters, in about 30% to 70% of the municipalities, none of the parties obtained an absolute majority. In most of these municipalities, therefore, negotiations for the formation of governments probably took place.

Mayors are important political players in the Spanish electoral system with a key role

in municipal government formation. After the elections, the mayor is elected by the absolute majority in the city council, but if no agreement is reached, the councillor heading the list of the most voted party becomes mayor. After being elected by the city council, the mayor appoints an executive committee akin to governments at other administrative levels. They lead the portfolio allocation to councillors who may or may not belong to the mayor's party. In coalition governments, parties with different bargaining power reach agreements to distribute the policy areas created, like most governments in parliamentary democracies.

Finally, the presence of women in Spanish politics has increased rapidly in recent decades, while it has stagnated in the top positions. Spain is one of the highest -ranked countries in the global ranking of gender equality in politics (World Economic Forum, 2021). Currently, almost half of the seats in the Spanish Parliament are held by female politicians, but only men have held the position of prime minister. In Spanish municipalities, the representation of female councillors is almost equal, while the number of female mayors is far from parity, remaining below 20% for the last ten years. This scenario offers a great opportunity to explore to what extent government formation processes contribute to widening this leadership gender gap.

Spanish municipalities, therefore, are an excellent testbed for the questions this dissertation aims to address. However, focusing on a single case study may compromise the external validity in two ways. On the one hand, at the local level, the decision-making process is assumed to be pragmatic and consensual and is conditioned by high levels of personification. Given that local political practices are usually considered less politicised, it could be that the factors defining government formations in Spanish municipalities are different from those in other countries and other levels of government. To verify the external validity of the Spanish case, therefore, Chapter 3 contains a comparative analysis of the determinants of government formation outcomes in Spanish municipalities and Western European countries at the national level. This analysis confirms that there is nothing notably idiosyncratic in the processes of local government formation in Spain, neither as due to being municipal nor as due to being Spanish.<sup>1</sup>

On the other hand, women's representation in municipalities may differ in other countries and other levels of government. However, Figure 1.1 shows that the presence of women in the Spanish Parliament over the last three decades has increased at a similar rate to most European countries.<sup>2</sup> Today, it is clearly above the average but still lower than in, for instance, Sweden. Furthermore, focusing on the representation of women at the local level, as shown in Figure 1.2 Spain sits in an average position among European countries. The graph shows how the large gender gap between the proportion of female councillors and female mayors is similar, between 10 and 15 percentage points. This manifests that women may face similar barriers in accessing top positions in other political contexts.

#### **1.1.1 Data collection**

One of the key features of this dissertation is the novelty of the data I use as a result of the extensive data collection work I have carried out. The lack of data on the personal characteristics of politicians and government formations has limited this research so far. For the development of this dissertation, Therefore, the collection of two databases has been crucial.

<sup>&</sup>lt;sup>1</sup>subsection 3.8.1 provides a comparison between Spanish municipalities (2003–2007) and Western European countries (1945–1998, data from Glasgow and Golder (2015)).

<sup>&</sup>lt;sup>2</sup>subsection 3.8.2 shows detailed descriptive information on the presence of women in local politics, along with other characteristics of the Spanish local elections and governments.



Figura 1.1: Share of women in European national parliaments

Data Source: Inter-Parliamentary Union (IPU).

Figura 1.2: Share of councillors and mayors in European local institutions



Data Source: European Institute of Gender Equality (EIGE).

First, I conducted a survey of Spanish mayors with questions about their personal characteristics and political preferences. A sample of mayors is a great opportunity to advance our understanding of attitudes and decision-making of those who are more likely to reach higher levels of government. The survey was sent through a personalised invitation to mayors' official email addresses. To get these, I collected the official e-mail addresses by consulting websites and contacted municipalities. I emphasised in the accompanying e-mail and on the first page of the survey that the survey was to be carried out by the mayors themselves. To ensure mayors were honest in their answers, the total anonymity of their responses was guaranteed, as well as the commitment that they would only be used for academic purposes. The social desirability bias is a concern to be aware of since this is a survey of politician. Thus, the following chapters of this dissertation consider this social desirability bias when interpreting the results.

The approximate duration of the survey, the objective, and the project in which it was framed were also specified. Participation in the survey was not economically compensated. Instead participation was voluntary. As a small incentive for participation, mayors were offered the possibility of receiving a report with the results obtained. The questionnaire was programmed and administered online, lasting about 15 minutes on average. A pretest was conducted through cognitive interviews with 12 politicians who were not in our sample (including retired mayors, deputy mayors, members of parliaments, and party leaders). In order to maximise control and privacy over the data, I did not outsource the fieldwork to a polling firm but conducted it in-house.

In June 2018, I launched a pilot study with mailings to two autonomous communities. I adjusted the questionnaire based on analyses of the 80 initial responses and comments received from participants via e-mail. I know from the comments received that some

questions could be phrased in alternative ways, but sometimes I relied on questionnaires conducted in other countries, and in order to be able to compare with other studies, it was necessary to keep the wording. The fieldwork was conducted between July 2018 and February 2019. I sent up to four e-mail reminders. In addition to e-mails, I made phone calls to all municipalities that had not responded. I tried to speak to the mayor and if that was not possible with their administrative assistants. I sent personalised e-mails after these conversations. Obtaining a high response rate was essential for the validity of the results.

The survey contained different sections related to the political attitudes and sociodemographic characteristics of the respondents. In addition, I included experiments on their preferences for best-suited profiles to serve as part of a coalition. All of these have been used to test my arguments in chapters 2 and 4 of the dissertation. Surveys are the most appropriate method to assess the mechanisms through which politicians' characteristics can affect government formation. Asking politicians directly about their preferences, attitudes and motivations is the best way to fully understand their decision-making.

This survey is one of the largest ever conducted on political elites in Spain. The survey was sent to a total of 2,287 mayors of municipalities with more than 2,000 inhabitants. Of these, a total of 979 completed the survey, representing a response rate of 42.8%. One of the main objectives in collecting mayors' data was to achieve a high response rate such as this while ensuring the representativeness of the target population. Chapters 2 and 4 offer descriptive information on the sample compared to the entire population. This information confirms that the sample results are pretty representative. Even so, there is a slight underrepresentation of mayors of major national parties in Spain and large municipalities. However, the following chapters of this dissertation attempt to

deal with the possible bias which that could generate.

The second database compiles the governments of Spanish municipalities in the 2003-2007 and 2007-2011 terms, plus the personal characteristics of local politicians elected in these terms. This is an original and exhaustive database that contains information on which parties supported the formation of governments in each municipality. Three different possible situations have been considered for its elaboration: absolute majorities, support pacts in the formation of the government, and solitary governments (in the minority).

It covers a total of 3,168 municipalities in 2003 and 3,217 in 2007, 39% and 40% of the municipalities in Spain, respectively. The terms analysed are of special interest because they refer to periods of time when digitalised information was not yet fully available and, if it was available, it was difficult to access and distribute. Likewise, it was deemed necessary to focus efforts on these periods so that subsequent studies could focus on more recent terms, whose information is expected to be easier to obtain.

Municipalities with less than 250 inhabitants (between 31% and 32% of Spanish municipalities) are discarded because they are governed by a different electoral law and should be analysed separately. Although there are a large number of municipalities in Spain with between 250 and 1000 inhabitants, which represent between 28% and 29% of the total number of municipalities, they are not included in the database due to different reasons. This limitation is due to the complexity of finding this information for small municipalities, which in many cases do not have web pages or public e-mail addresses with which to contact them. For these populations, it is also difficult to have information on other types of control variables (such as economic and sociodemographic variables that are not available for municipalities of less than 1,000 inhabitants in many statistical yearbooks) in order to be able to perform analyses using these data. Finally, considering that the number of councillors chosen is very small for smaller populations and, therefore, limits the formation of coalition governments, I decided to focus the efforts on the exhaustive analysis of larger populations.

Information on municipal electoral results in which a party had won more than 50% of the seats on the council was leveraged to establish how many municipalities required information of negotiations for the formation of a government. These were coded in the category "absolute majority". For the remaining cases, "no absolute majority", information was sought. Out of a total of 3,168 municipalities in 2003 and 3,217 in 2007, a single party obtained an absolute majority in 66.5% of the cases after the 2003 elections and 62.4% in 2007.

This database is complemented with detailed information on electoral results at the municipal level. These data are obtained from official information collected by the Spanish Ministry of the Interior, published on its web page. Finally, I also include a database with the characteristics of the politicians provided by the Spanish Ministry of Territorial Policy and Public Function on its Local Entities web portal. This drew information from more than 65,000 politicians elected during the legislative period analysed. I used these databases to carry out the empirical strategy of Chapter 3 of the dissertation.

The two databases created in the frame of this dissertation have been pivotal to deepen our knowledge of political elites and how they come to govern, which has been essential to resolving the research questions posed by this dissertation.
# **1.2** Objectives and research designs

In order to answer to what extent the attitudes and personal characteristics of political leaders define government formations, this dissertation is organised around three broad objectives, divided into three different chapters. First, in Chapter 2, I answer whether and how the personal characteristics of the potential government partners shape a politician's preferences to form coalitions. I argue that characteristics such as gender, age or education could potentially offer informational shortcuts of others' behaviour that reduce uncertainty when selecting coalition partners. To test this, I devised an original conjoint experiment and administered it to Spanish mayors, who selected and rated hypothetical candidates based on whom they might prefer to form a coalition. I show that, although the main drivers of coalition-building decisions seem to be ideology and party seats, politicians' characteristics also play a role in predicting their preferences. More specifically, women appear to be more desired by leaders as government partners because they are perceived as reducers of the cost of communication and more competent in government.

Second, the preference for women highlighted in Chapter 2 suggests that, albeit from a junior position, women can be very successful in government formations. This is an a priori counter-intuitive conclusion since although the presence of women in politics is increasing, those who occupy the highest positions of power are still few. There are more women than ever in politics, but a glass ceiling remains: women still face major barriers to attaining leadership positions in political institutions. Understanding how political elites reach these positions and the pitfalls they affront along the way is particularly important in the light of decreasing worldwide gender gaps in politics. Then, in Chapter 3, therefore, my co-author Albert Falcó-Gimeno and I explored the effect of party leaders' gender on their ability to capitalise on political power in negotiations to form governments following elections. The specific question this chapter seeks to answer is whether there is a gender gap in the likelihood of party leaders obtaining favourable outcomes in government formation processes. Using the personal characteristics and government formations databases, we leverage the as-if random assignment of a bargaining advantage in close local elections in Spain through a Regression Discontinuity Design. We show that women are less likely to secure the mayoralty than men are when they win elections by narrow margins and we demonstrate that this is not determined by female-led party characteristics. However, their parties still manage to join governing coalitions.

Third, Chapters 2 and 3 suggest that women are valued as good government partners and tend to remain in junior positions in governments. These chapters open many unknowns related to the mechanisms of the findings. If I pay attention to the literature on the gender gap in top political positions, one of the expectations that may first arise is a gender difference in political ambition. Research on women's access to politics reports significantly lower levels of ambition for political office for women relative to men. This evidence, however, is still not entirely clear when we focus on women in the leadership positions. In Chapter 4, therefore, I carry out a thorough exploration of the attitudes and political ambition persists in the front line of power? In this chapter, I argue that it is likely that those women who break the glass ceiling and overcome the barriers to enter top political positions are as ambitious or more than men. To test this argument, I use the Spanish mayors' responses on their willingness to remain in politics. The findings reveal that, although there are gender differences in top politicans' profiles, the gender gap in

political ambition disappears among the political elite. I further investigate mayors' patterns of re-election by combining these results with observational data on electoral candidacies.

The following chapters shed light on the relationship between the personal characteristics of politicians and the processes of government formation in which they participate. In doing so, this dissertation attempts to propose new mechanisms by which political selection may have implications for the quality of democracy. Understanding the determinants and consequences of political selection for government formation can help inform institutional designs that encourage competent politicians to run for office, leading to an improvement in government performance and rebuilding the legitimacy and credibility of democratic institutions.

# Capítol 2

# PARTNERS IN GOVERNMENT: POLITICIANS' PREFERENCES ABOUT COALITION FORMATION

#### Alba Huidobro

Which factors do politicians consider when selecting government partners? When politicians choose between several potential partners to form a government, they must consider different aspects such as ideology, the number of seats, compatibility, or ability. Little is known about which characteristics of potential government partners are most valued by politicians. In addition to well-established party-level factors, this article examines whether some politicians' personal characteristics make them more desirable as government partners. I conduct a conjoint experiment with 979 Spanish mayors. I find that mayors prefer to form coalition governments with women, who are perceived as easier to communicate with; middle-aged candidates, who are seen as more competent to govern; and candidates with similar education levels. Ideology and the number of seats are also relevant. The findings expand our understanding of the mechanisms behind partner selection preferences and reveal the importance of considering personal characteristics.

# 2.1 Introduction

Comprehending why those who enter governments do so is crucial in understanding their performance and survival. In parliamentary democracies, political selection occurs at different stages, and one of the most important is government formation. Just as voters consider the characteristics of parties and their leaders when choosing whom to vote for, politicians are likely to have preferences regarding the personal characteristics of their peers. Suppose politicians perceive that not all potential partners are equally capable of governing, compatible with them, or likable. In those cases, their individual preferences may affect the likelihood of them choosing one government partner over another. Politicians' preferences regarding the characteristics of those they enter into coalitions with are relevant when attempting to fully understand who forms governments.

A question that remains unanswered in political science is whether and how the sociodemographic characteristics of potential government partners shape a politician's preferences to form coalitions. Researchers from fields such as social psychology and organisational behaviour devote considerable attention to how personal characteristics influence people's choices to collaborate with others (e.g. McPherson et al., 2001; Magee and Galinsky, 2008). This research suggests that sociodemographic characteristics offer information shortcuts and reduce uncertainty about others' behaviour. Thus, politicians probably have preferences over whom to collaborate with beyond party ideology and party seats. These shortcuts may shape their expectations about coalition partners' future behaviour.

This article analyses the preferences of politicians in coalition formation processes for the first time. The analysis of preferences for multiple characteristics raises a methodological challenge because both the preferences of politicians and the characteristics of potential partners often go unobserved. Moreover, since personal characteristics are not randomly distributed between parties or municipalities in the real world, it is difficult to identify their impact in isolation in negotiations between politicians using observational data. To solve this issue, I carried out a conjoint experiment included in an original survey of 979 Spanish Mayors conducted between June 2018 and January 2019. This experiment simultaneously varies six characteristics of two candidate profiles and asks mayors to choose the one with whom they would prefer to form a coalition. Conjoint experiments allow for the comparison on a standard scale of how different individual and party-level characteristics affect preferences for whom to form a coalition with. To examine whether the choice is driven by homophily or competence perception, after the forced choice task, the mayors are asked to rate the hypothetical candidates based on their perception of similarity in political positions, ease of communication, ability to govern and trust. This design allows for measuring politicians' evaluations of the candidates and the study of potential mechanisms.

I find that the sociodemographic characteristics of potential partners affect mayors' preferences when choosing a party leader with whom to form a coalition. Although the main drivers seem to be the traditional variables included in prior studies of coalition formation (ideology and party seats), the characteristics of candidates, such as gender, age, and education, also have a role in predicting choices. The findings indicate that, on average, mayors prefer forming governments with women and middle-aged and welleducated candidates. The mechanisms analysis suggests that women and middle-aged candidates are regarded as more competent profiles. Women are perceived as easier to communicate with than men and middle-aged candidates as more capable of governing than younger or older candidates. However, mayors with the lowest and highest education levels tend to prefer candidates with similar education levels, suggesting that the homophily mechanism drives these preferences.

This experiment makes two contributions. Methodologically, it demonstrates that it is viable to study the logic behind politicians' preferences through surveys and applies a novel way to study mechanisms. Furthermore, to the best of my knowledge, no previous conjoint experiment has analysed the mechanisms driving why some candidates are preferred over others by adding simple follow-up questions. Substantively, this research presents evidence that politicians have meaningful preferences about the personal traits that they look for in potential coalition partners. This finding opens up a new research agenda centred on how politicians' characteristics are relevant to coalition formation.

The findings have significant consequences for the study of political selection and have normative implications for social groups' descriptive and substantive representation. Leaders' preferences when selecting coalition partners can lead to scenarios where government members all have similar profiles (homophily) or where less favoured profiles (seen as less competent) face additional hurdles in accessing positions in government, compromising government representativeness even if they are selected by their parties and by voters.

# 2.2 Preferences and personal characteristics

The inattention paid by past research to politicians' preferences in forming coalition governments is rather striking as fields such as social psychology, and organisational behaviour have long established that personal choice and selection are key determinants of group formation. Studies of the cognitive process we use to make choices about team members have long emphasised the importance of personal characteristics when forming teams in other fields. Such research views organisations as entities created to achieve specific goals (Etzioni and Lehman, 1980). The achievement of such goals is often threatened by the uncertainty surrounding other members' behaviour, which these groups face (Thompson, 2017). Decision-makers use the sociodemographic characteristics of potential team members as informational shortcuts to making guesses about people's future performance and behaviour (Hinds et al., 2000).

Political coalitions are work teams designed to execute government tasks and are created in contexts of high uncertainty, in which potential team members do not know each other well. Considering that politicians must often select coalition partners from a pool of political rivals, they are likely to prefer individuals with whom they feel they are most likely to succeed, trying to minimise the risks of a coalition government. Thus, the paper argues that political leaders hold preferences about the sociodemographic characteristics of potential coalition partners in government formation processes, which they consider along with other factors such as political or ideological ones.

#### 2.2.1 Why might sociodemographic characteristics matter?

It is plausible that sociodemographic characteristics influence the selection of coalition partners since other fields in political science have long emphasised the relevance of both selector and selected politicians' characteristics. Firstly, there is evidence that politicians' gender, age and education levels affect policy outcomes and performance. The groups to which politicians belong affect the policies implemented by governments and their policy priorities (Chattopadhyay and Duflo, 2004; Bhalotra and Clots-Figueras, 2014; Carnes and Lupu, 2015). They also affect the likelihood of specific political outcomes, such as the probability of reelection (Brollo and Nannicini, 2012), differences in levels of spending (Alesina et al., 2019; Anzia and Berry, 2011), or the generation of public goods and employment (Besley et al., 2011).

Politicians' sociodemographics have also proven to be relevant for candidate selection. First, formal and informal political recruitment institutions are defined by party selectors' expectations about candidates' gender, age, marital status, social class and experience (Lovenduski and Norris, 2003; Verge and Wiesehomeier, 2019; Murray, 2015). Second, existing research also shows that voters use these same sociodemographic characteristics as information shortcuts when selecting candidates (e.g. Crowder-Meyer and Cooperman, 2018; Cutler, 2002; Fiske and Taylor, 2013; Kirkland and Coppock, 2018; Sen, 2017; Carnes and Lupu, 2016a). Some of these studies state that selectors prefer candidates who share their characteristics (e.g. Cutler, 2002; Tate, 1994; Terkildsen, 1993; Bjarnegård, 2013). Others argue that selectors use these information shortcuts to evaluate candidates and infer both their personal qualities and their political ideology, usually through a variety of social stereotypes (e.g. Crowder-Meyer and Cooperman, 2018; Lau and Redlawsk, 2001; Norris and Lovenduski, 1995).

Therefore, my main expectation is that sociodemographic characteristics affect politicians' preferences and behaviour in coalition formation processes. Politicians use the characteristics of potential partners as informative shortcuts about their trustworthiness and competence in government, and they take into account these characteristics when deciding whom they want to govern with.

#### 2.2.2 How do sociodemographic characteristics matter?

But how do sociodemographic characteristics increase or decrease the probability of one potential government partner being chosen over another? To answer this question, I focus on two widely used mechanisms to reduce uncertainty in group formation contexts — homophily and the perception of competence. Said mechanisms affect the perceived similarity between the selector and selected, the perceived cost of communication and confidence in one another's competence and trust. Therefore, they can help explain the relationship between sociodemographic characteristics and the probability of being selected as government partners.

#### *Homophily*

Politicians may decide to select specific candidates to form their governments through the principle of homophily. This principle holds that people's networks are formed depending on how similar their characteristics are to others. People are more likely to form group ties with actors with the same sociodemographic, behavioural and interpersonal characteristics (McPherson et al., 2001). Perceived similarity drives our willingness to trust and interact with others (Huston and Levinger, 1978). The argument states that if sociodemographic similarity signals shared knowledge (see Mayhew et al., 1995), people who share knowledge are more likely to interact and establish trust (Liu et al., 2008). Then we can expect people to associate with those most similar to themselves to facilitate communication and coordination (McPherson et al., 2001).

Through the lens of homophily theory, scholars have analysed social groups, voluntary

associations, social movements, political recruitment and various issues affected by these group processes (McPherson et al., 2001; Bjarnegård, 2013). Many also point out the powerful homophily effects evident within our organisational environment. These effects cause us to identify as relevant those we compare ourselves with and whose opinions we consider essential (Lawrence, 2006). They hold that people similar to one another are likely to have better interpersonal communication and care for each other's positions (Burt, 1982; Friedkin, 1993). Building on similar arguments, a political science study about the participation of local governments in regional agreements found that municipalities with similar political and demographic characteristics are more likely to collaborate because similarity reduces the transaction costs associated with bargaining over collective goods (Gerber et al., 2013). Political scientists also discuss the importance of homophily in political recruitment. Bjarnegård (2013) argues that informal institutions in candidate selection are defined by homosocial capital where men tend to create their networks from their homonyms, and women end up being excluded.

Because of this homophily principle, I expect politicians to prefer coalition partners with similar sociodemographic characteristics to their own. Specifically, I argue that politicians perceive potential partners with similar characteristics as their own as having similar political preferences and expect communication with them to be easier.

#### **Competence** Perceptions

Politicians, however, may also prefer certain potential partners over others because of their perceived competence. The expectation states theory claims that individuals tend to pay attention to social cues that pertain to the potential competence of their task partners (Driskell and Mullen, 1990). Scholars in fields such as social psychology, management and organisational studies have devoted a great deal of attention to this mechanism of

team formation. This theory contends that people rely on competence perceptions when selecting potential group members (e.g. Kurzban and Leary, 2001; Magee and Galinsky, 2008). High levels of competence-based trust enable collaboration in groups (Gambetta, 1988) and promote a collaborative transfer of knowledge (Levin and Cross, 2004). Accordingly, individuals' sociodemographic characteristics may signal information about their capacity and intention to engage in successful collaboration (Driskell and Mullen, 1990; Tsai et al., 2020). Political science identifies these mechanisms also from party gatekeepers in the selection of candidates. Party selectors prefer candidates with specific characteristics that determine how much time they will spend in party work (Norris and Lovenduski, 1995) or how they collaborate during legislative activity (Barnes, 2016).

The sociodemographic characteristics of potential partners influence politicians' perceptions of ease of communication, capacity to govern, and trust. Competence perception, therefore, offers an essential source of information that may help reduce uncertainty when politicians select partners in political settings. Consequently, I argue that a candidate is more likely to be preferred as part of a coalition if she is perceived as collaborative and competent in pursuing the group's objectives.

In particular, politicians' gender may affect expectations about how they will perform in teams. For instance, gender stereotypes that pertain to leadership styles suggest that men are more competitive and individualistic while women are more consensual and collaborative (e.g. Huddy and Terkildsen, 1993; Kennedy, 2003; Weikart et al., 2006; Volden et al., 2013). This may contribute to making women a desired profile for potential collaborators. Barnes (2016) notes that female legislators collaborate more than males within their parties and across party lines. Research on party loyalty also states that female politicians are more honest, less corrupt and less rebellious than males (Cowley and Childs, 2003; Escobar-Lemmon and Taylor-Robinson, 2008; Clayton and Zetterberg, 2021; Barnes and Beaulieu, 2014). All this may result from their marginalisation in politics, their socialisation role and their tendency to avoid conflict and competitive environments (Lawless and Fox, 2010a; Barnes, 2016). These qualities may be especially relevant in threatening and competitive contexts, such as coalition formation processes, where commitment and loyalty are highly valued . In addition, analyses of political performance suggest that women produce better welfare outcomes, secure more transfers from other levels of government and are more effective lawmakers than men (Anzia and Berry, 2011; Brollo and Troiano, 2016; Volden et al., 2013). These considerations may make a woman an attractive profile to govern with. She is perceived as a coalition partner who avoids conflict, reduces collaboration costs, and is more competent and trustworthy.

Politicians' age may also affect competence expectations. Studies on management, for instance, find that older leaders are seen as wiser and more respectful than younger ones (Osmani, 2016). Psychological studies have also concluded that age correlates positively with leadership abilities in professions that require a considerable amount of specialised knowledge and experience, such as science, politics and the arts (Van Vugt, 2006). These studies also conclude that younger leaders are less prone than older ones to involve others in decision-making processes (Oshagbemi, 2004). They may also have more difficulties establishing their authority (Kearney, 2008). Research in political economy observes that young politicians have stronger career concerns because they have longer trajectories and a greater likelihood of being re-elected or moving to higher levels of elected government (Alesina et al., 2019). In summary, younger politicians may be seen as more competitive with their partners and less flexible in conforming to

political agreements, suggesting that they are less attractive to forming a coalition than older politicians. I expect older politicians to be perceived as more competent coalition partners, better at improving team communication and more trustworthy.

On the other hand, politicians' level of education may be one of the most vital indicators that people use to evaluate their competence. Reaching higher educational levels tends to be related to having intrinsic qualities such as intelligence and hard work (Almlund et al., 2011), which are highly valued by voters and political elites when evaluating political candidates (Campbell and Cowley, 2013; Broockman et al., 2019). A candidate's higher level of education can convey that she has a good understanding of politics, has more authority over others and is more committed to the well-being of her community (Gaxie and Godmer, 2007). The economics and social psychology research found that high levels of education predict behaviour in the workplace (Cohen et al., 2014) and are related to other personality traits such as openness to experience, awareness and emotional stability (Heckman and Kautz, 2012). In addition, political studies on performance demonstrate that high levels of education in politicians also positively correlates with integrity (Besley, 2006; Mondak, 1995), economic growth (Besley et al., 2011), and public goods provision (Martinez-Bravo, 2017). Although other authors do not find these differences in the actual performance of the highly educated politicians (Carnes and Lupu, 2016b). However, politicians may prefer candidates with higher levels of education because they are seen as more competent, more trustworthy and to generally achieve more favourable results.

Overall, I would posit that decision-making politicians are more likely to prefer women, older or higher educated candidates because they are seen as better partners in a successful government. Specifically, these profiles are more attractive because they reduce interaction costs in a coalition government since they are considered more trustworthy, capable of governing and easier to communicate with.

### 2.3 Research design

No previous research has ever directly asked politicians their preferences when choosing government partners. To find out what these preferences are and assess the impact of individual traits on the selection of government partners, I design a novel conjoint experiment, which is then included in an original survey of mayors in Spain. The experiment has three goals. The first is to study whether the sociodemographic characteristics of potential partners affect politicians' preferences in forming governments, all the while attempting to determine which trait is most relevant. Secondly, the experiment allows me to test the homophily principle against the idea that some sociodemographic characteristics are preferred over others in potential partners. Third, the experimental design makes it possible to investigate the mechanisms that cause sociodemographic characteristics to be important to choose coalition partners.

#### 2.3.1 Background and data: Spanish local elections

Spain has a decentralised political system, where citizens elect local councils every four years in more than 8000 municipalities. Depending on their size, municipalities elect a certain number of councillors using a proportional representation system (PR) with closed party lists. The electoral system and the mayor's decision on who to enter into coalition with determine institutional incentives for local government formation processes.<sup>1</sup> This system generates party fragmentation in municipal councils – an ideal

<sup>&</sup>lt;sup>1</sup>Municipalities below 250 inhabitants use an open-list PR system but are excluded from the analysis.

scenario for the formation of coalitions.

The survey covers the 2,284 municipalities with more than 2000 inhabitants, clearly a sufficient number of cases to conduct a survey and a large-N quantitative analysis. Focusing on the local level provides me with many observations from within a single country, which allows me to hold constant potential confounding factors that vary across countries and might be relevant to explaining mayors' preferences to select coalition partners.

I decide to study mayors because of their role in municipal government formation. Two aspects are known to condition local government negotiation strategies: the council's election of the mayor and the mayor's appointment of the councillors that will join her team in government (Márquez, 2003). The mayor is the person who leads the government formation process and who has the power to propose governments. After the electoral process, the mayor is elected by an absolute majority of the city council. However, if no agreement is reached in the first round, the councillor at the top of the list of the most voted party becomes the mayor. Later, the mayor appoints an executive committee. Spanish mayors, therefore, are important political players with considerable executive power. Thus, selecting between competing candidates for a potential local coalition government during the negotiation process is a familiar situation for mayors.

I received responses from 979 mayors, who represent 42.86% of the all municipalities of over 2000 inhabitants —a high participation rate for a survey administered to elites. The survey was programmed and administered online between September 2018 and January 2019. subsection 2.6.1 includes detailed information about the data collection process. I complement survey data with a database containing politicians' characteristics, assembled with information from the Spanish Ministry of the Treasury and Public

Administration for this study. I also use a database on electoral outcomes compiled by the Spanish Ministry of the Interior comprising detailed information on local election results.

Table 2.1 compares the mayors who completed the survey to the whole population of mayors (all Spanish municipalities with more than 2,000 citizens), respectively. This table shows descriptive information for the observations by the mayor and council. The response rates were consistent between the sample and the population for all the main indicators under examination (gender, age group, education level).<sup>2</sup> The proportion of female mayors was around 22%, on average they were 50 years old and had 16 years of education. Looking at the city council, the average size of local parliaments was around 14 seats and the number of parties that obtain at least one seat is close to four. Concerning the last elections before the experiment, no party obtained the absolute majority in 68.59% of the municipalities, making government negotiation processes necessary.

To ensure the representativeness of respondents, one potential concern is that the most ideologically polarized mayors would self-select into taking the survey. Table 2.1 shows that this does not appear to be the case, as evidenced by the respondents' reported personal ideology. However, I observed a slight difference between the responsiveness of mayors from local parties as opposed to the main national ones, which responded less. Finally, another concern was that mayors from smaller municipalities would be more likely to respond. However, Table 2.1 shows that the average number of inhabitants is reasonably similar to the Spanish municipalities' actual number.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup>Table 4.A3 of subsection 3.8.2 shows more detailed descriptive information on the survey respondents, the whole population of mayors and councillors of the municipalities analysed.

<sup>&</sup>lt;sup>3</sup>To rule out any bias of respondents' self-selection, in subsection 3.8.5, I check for potential heterogeneous effects. Thus, I do not find that any causal effects of candidate characteristics vary systematically by respondents' type of party (Figure 2.C6) or size of their municipality (Figure 2.C7).

	Respondents				Population			
	Mean	SD	Median	Ν	Mean	SD	Median	Ν
By mayor								
Female	.215	.411	0	979	.221	.415	0	2285
Age	49.10	9.36	49	902	50.80	9.52	51	1680
Education	16.49	3.28	18	913	16.04	3.65	17	1550
Ideology	3.70	1.58	3	920	3.75	2.34	2	2265
Seat Share	.471	.149	.461	971	.475	.149	.470	2265
Vote Share	.427	.137	.425	971	.430	.137	.433	2265
PP	.150	.357	0	979	.218	.413	0	2287
PSOE	.338	.473	0	979	.406	.491	0	2287
Others	.511	.500	1	979	.376	.484	0	2287
By council								
Population	14094.71	39467.89	5210	977	19129.42	85645.40	5883	2285
Turnout	.693	.085	.700	977	.693	.085	.696	2283
N. of seats	13.96	4.19	13	977	14.48	4.59	13	2283
N. of parties	3.793	1.35	4	977	3.840	1.36	4	2283
Minority	.687	.464	0	979	.682	.465	1	2287

Taula 2.1: Descriptive statistics for the survey respondents vs the whole population

Note: *Education* refers to average years of education. *Seniority* refers to the average years in the city council. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain. *Minority* refers to the average number of municipalities without an absolute majority.

#### 2.3.2 Experimental design

Selecting coalition partners is a complex task since competing possible partners differ on various dimensions, including sociodemographic characteristics, ideological positions and bargaining power. In order to examine the relative weight of different considerations, I use a candidate choice conjoint experiment. By asking mayors to choose from and rate hypothetical profiles that combine multiple attributes, it is possible to estimate the relative influence of each attribute on the resulting choice or rating (Hainmueller et al., 2014). This design reduces the social desirability bias implicit in asking politicians since sensitive attributes are mixed with non sensitive ones and make the respondent less aware of which profile is violating the social norm (Horiuchi et al., 2021).

I measure partner selection using a standard conjoint approach. The experiment read as follows: "Imagine that you have obtained 5 councillors after the elections out of a

Dimensions	Attributes				
Sociodemographic Characteristics					
Gender	Man				
	Woman				
Age	27				
C C C C C C C C C C C C C C C C C C C	36				
	45				
	54				
	66				
Education Level	Primary				
	Secondary				
	University				
	Doctorate				
Terms in the City Council	None				
	One				
	Two				
Other Characteristics					
Ideology	Extreme Left				
	Centre Left				
	Centre				
	Centre Right				
	Extreme Right				
Number of Seats of the Candidate's Party	1				
	2				
	3				
	4				

Taula 2.2: List of random treatments in conjoint experiment

Note: Each potential candidate had one attribute randomly assigned from the listed options for each dimension.

total of 13 seats. If you could choose between two partners to form a government coalition with the following two leaders, which one would you choose?" The survey then described a pair of hypothetical government partners. Table 2.2 lists the potential attributes of six dimensions of the hypothetical candidates. The experiment supplied each candidate's gender, age, and education level independently generated at random.<sup>4</sup> I also provided the candidate's previous political experience — worded as the number of terms in the city council – to avoid confounding the effect of age. Each profile also contained information on the ideology and the number of seats (main predictors of coalition formation) of the party to which the leader belongs in order to be able to compare the effect of individual level characteristics to the effects of these two established predictors. Providing this information also made the scenario more realistic. The dimensions were presented in a randomised order fixed across the two pairings for each respondent. Each mayor was shown two conjoint matchups, each on a separate screen, so that each respondent made two choices.

Additionally, I designed a novel way to test the mechanisms of the mayor's decision by asking them to rate substantive evaluations of the candidates' profiles. This allows me to explore the aforementioned mechanisms (those that drive the decision to choose a candidate): the perception of similarity in political positions, ease of communication, capacity to govern and trust. After the mayors viewed the candidates, I asked a "forced-choice" question to force mayors to decide between the two candidates. After the forced-choice question, and for each candidate profile, I asked mayors to what extent they agreed with four statements about the similarity of the candidate's political

<sup>&</sup>lt;sup>4</sup>I theorised that gender, age, and education level affect the selection of government partners by defining expectations and beliefs about them. These traits are among the most important factors in determining the relationship between candidate selection and heuristics. Moreover, in my case, it is unrealistic to include other salient characteristics such as ethnicity or religion due to the homogeneity of the political class in Spain.

preferences to their own, how easy it would be to communicate with this person, how capable of governing this person is and how much they would trust this person. When evaluating the statements, mayors had to place themselves on a five-point scale, where 1 indicated that the respondents "Strongly disagreed" with the statement and 5 indicated that they "Strongly agreed."<sup>5</sup> subsection 2.6.1 shows the full text of each question and how the survey was shown to respondents.

To carry out the analysis of the conjoint experiment, I reshape the data matrix so that each candidate proposed per k of task j presented to respondent i is a different row. The respondents were presented with two tasks and there were two alternative candidates proposed per task, hence generating a total of 3,324 observations.<sup>6</sup>

I use a simple ordinary least squares (OLS) linear regression to estimate elasticities. I use two methods to test my hypotheses: the Average Marginal Component Effect (AM-CE) and the interaction effects of the candidates' attributes with the respondents' characteristics (see Hainmueller et al., 2014). First, I regress the chosen candidate on a series of dummy variables that take a value of one if respondents were exposed to the respective attribute. Second, I regress the responses to the questions on mechanisms with the same variables. Third, I check whether the relative importance of different candidate attributes varies across respondents depending on their individual-level characteristics. I include cluster-robust standard errors in all models to correct for within-respondent clustering.

<sup>&</sup>lt;sup>5</sup>Considering the difficulty of a conjoint experiment and the time constraints associated with the subjects' status as mayors, these questions were only asked in the second round of the experiment.

<sup>&</sup>lt;sup>6</sup>Taking into account that in this kind of experiment subjects' attention to the profiles and questions is crucial, those subjects who take less than 30 seconds (mean="96 seconds) in the first round and 70 seconds in the second round (mean="250 seconds) answering the task are removed. A total of 22 observations in the first round and 126 observations in the second round are deleted. subsection 3.8.5 shows the results for the entire sample.

#### 2.3.3 Empirical models

First, I am interested in the marginal effect of an attribute on the decision to choose a candidate. I estimate the Average Marginal Component Effect (AMCE), which represents the marginal effect of a specific attribute over the joint distribution of all other attributes. If respondents take intensely into account one dimension compared to others, these attributes will be stronger predictors than the baseline level. I use a simple ordinary least squares (OLS) linear regression to estimate elasticities. I include clusterrobust standard errors to correct for within-respondent clustering. I regress the dependent variable (the chosen candidate) on a series of dummy variables that take a value of one if respondents were exposed to the respective attribute. Whether respondent *i* chooses candidate presented to the respondent in that task, included as dummy variables. The model takes the following form:

$$y_{ijk} = X_{ijk}\beta + e_{ijk} \tag{2.1}$$

To analyse the mechanisms, I again use ordinary least squares (OLS) linear regression with the same specification, but with responses to the questions on mechanisms as the dependent variable. I cluster the standard errors by respondent, to account for the possible non-independence of ratings from the same respondent.

Second, I check whether the relative importance of different candidate attributes varies across respondents depending on their own individual-level characteristics. Using the conditional AMCE, I interact the causal effect of each candidate attribute with respondents' own characteristics. The interactions are useful to examine if homophily affects decisions by assessing if the respondents prefer candidates who are similar to themselves (i.e. if male mayors prefer male candidates, female mayors prefer female candidates, young mayors prefer young candidates, etc.). The interacted variables are: the respondents' gender; their age group, divided into young (less than 50 years old) and old (more than 50 years old); their level of education in terms of primary, secondary or university levels of achievement; and the respondents' self-reported ideology, on a 0-10 scale, with 0 being extreme left and 10 being extreme right. From this scale, I use three categories of ideology: Left (0 - 4), Centre (5) and Right (6 - 10).

I run four different models in which, in addition to the full vector of attributes, I include one individual-level characteristic ( $Z_i$ ) at a time and the interaction of this moderating variable with each other attribute. The respondent's choice of candidate is modelled as a function of a vector X of attributes, one individual-level characteristic  $Z_i$ , and the interaction between  $Z_i$  and this attribute. More formally, I estimate the following empirical specification:

$$y_{ijk} = X_{ijk}\beta + Z_i\gamma + X_{ijk} \times Z_i\gamma + e_{ijk}$$
(2.2)

## 2.4 Experimental results

The paper argues that politicians consider candidates' characteristics when choosing government partners. The conjoint experiment confirms my expectation that mayors prefer potential partners with specific sociodemographic characteristics over other candidates. Moreover, mayors have different preferences depending on their own characteristics.

Figure 2.1 graphically presents which characteristics mayors prefer when they choose their partners, including all responses from mayors in the sample. Figure 2.2 also graphically presents the preferred characteristics, including the interaction between the

mayors' responses and their gender, age, educational level, and ideology. Both figures show the estimated effect of each attribute on the probability of being selected to form a coalition, with 95% confidence intervals.



Figura 2.1: Average treatment effects in the conjoint experiment

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

Firstly, a few findings from the experiment are worth highlighting as they are consistent with classical theories of government formation, thus giving me confidence in the validity of the design. The results reveal that what drives mayors' preference to govern with



Figura 2.2: Treatment effects in the conjoint experiment by Respondents' characteristics

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

a candidate are the latter's party's size and ideology. Mayors avoid choosing candidates with whom they do not reach an absolute majority of seats, but they are indifferent between forming a minimal-winning coalition or larger coalitions. As expected, ideology is also a fundamental factor in choosing a candidate to form a government with. The fourth panel in Figure 2.2 displays the results with the sample divided according to the mayors' ideology and suggests that mayors prefer to form a government with candidates who are ideologically closer to them. These results are consistent with prior analyses of party motivations, implying that similar considerations also drive politicians' preferences.

In addition to confirming the importance of ideology and the number of seats, the results show that mayors, on average, prefer female, middle-aged and educated candidates. First, a female candidate is about 8 percentage points (p.p.) [b = 0.082 (SE = 1.6)] more likely to be selected as a partner in government than a male candidate. This result has similar-sized effects to the party's size, although slightly different in the case of ideology.

Dividing the sample by the respondents' gender, the first panel in Figure 2.2 shows that both female and male mayors prefer women candidates to form governments with. The estimate for female mayors is slightly higher. Contrary to the expectation of homophily, then, mayors generally prefer women candidates over men. Observing the second panel of Figure 2.2 reveals that older mayors strongly drive the preference for women. This could be explained by the fact that older adults tend to be more influenced by gender stereotypes due to their socialisation both inside and outside of politics. This result appears to be in line with the literature's expectations. However, the lower panels of Figure 2.2 also show a strong influence of mayors' educational level and ideology on preferring a woman as a coalition partner. Mayors with higher levels of education prefer women to form a coalition with, while for those with primary education, this characteristic is not essential. For the right-wing mayors, the gender of the candidate is not important, while those in the centre and on the left prefer to choose a woman to form a coalition with. These results may be the consequence of women being perceived as more liberal than men because of their gender, as suggested by previous studies (e.g. Huddy and Terkildsen, 1993; Koch, 2000). An alternative explanation may be that left-wing politicians show more concern and commitment to gender parity in selecting their government partners, as left-wing parties have demonstrated in the representation of women's interests (Campbell, 2016; Campbell and Childs, 2015).

Second, a smaller positive effect for age emerges. Candidates in their forties and fifties are about 4 p.p. [b =0.049 SE=2.5)] and 5 p.p. [b = 0.053 (SE=2.6)] respectively more likely to be selected than candidates of the maximum (66 years old) and minimum age (27 years old). Although age may simply represent a preference for experienced candidates, I also find that candidates' previous experience in the city council does not matter. This result could be consistent with the presence of homophily since most of the mayors are part of those age groups. However, the second panel of Figure 2.2 shows that mayors from all age groups give similar importance to the candidates' age when choosing a partner. Again, contradicting the homophily hypothesis, there seems to be a general predilection for middle-aged candidates among mayors from all age groups, not just by those in a similar age group. But the first panel of Figure 2.2 shows that it is actually women who are driving the age results, de-emphasising the importance of party's size in shaping their preferences.

Finally, university-educated candidates are about 6 p.p. [b= 0.649 (SE=2.3)] more

likely to be selected. At first glance, one could think that this result suggests that mayors identify with such candidates with better capabilities and a deeper understanding of politics. However, the university level of education is not a general preference. The third panel of Figure 2.2 contains the results when the sample of mayors is divided into groups based on educational achievement. In line with my expectations, the graph shows that educational level amounts to a source of homophily when choosing a government partner, as I discern a tendency for mayors to prefer candidates with the same level of education as themselves.<sup>7</sup>

Taken together, the results reveal that sociodemographic traits are causally relevant to understanding the preferences of politicians in the process of coalition formation. These effects are strong, with similar size to the number of seats, one of the longest-lived explanations for coalition formation negotiations. They show that sociodemographic characteristics affect politicians' preferences in two ways, both for the decision-maker and for the selected candidate. I find that, on average, mayors prefer women and middleaged candidates. The results also suggest that homophily in political teams only applies to the educational level.

#### 2.4.1 Mechanisms: Evaluations of the candidates

Central to my argument is that politicians use sociodemographic characteristics as information shortcuts about potential partners' future behaviour. I delve into the motives for selecting specific coalition partners by analysing mayors' evaluations of each candidate profile. The dependent variable is now a 5-point scale of support for four statements, which relate to a perceived similarity in political preference, ease of communication,

<sup>&</sup>lt;sup>7</sup>subsection 3.8.5 shows the analysis of heterogeneous effects considering the politicians' social class to rule out confounding effects with the educational level variable.

capacity to govern and trust. Figure 2.3 displays the estimated effect of each attribute on the candidates' rating on each of the mechanisms graphically. Now that we know which candidates are preferred when selecting partners and by whom, I turn to the following question: why is it precisely that women, middle-age candidates and those with similar education levels are seen as more attractive to govern with?

Suppose the main reason underlying mayors' preference for women candidates as coalition partners is that they are perceived as good colleagues. In that case, I should see a positive assessment of women's abilities to be part of a team. Figure 2.3 shows that female candidates, on average, receive higher marks in the evaluation for communication and capacity to govern. Mayors feel that communication is easier with a female candidate than with a male candidate. subsection 3.8.2 Figure 2.B2 shows the estimates for the evaluation of ease of communication with the sample divided by gender and confirms that male mayors are the ones driving the results of this mechanism. Thus, the preference for female candidates is likely caused by gender stereotypes regarding women's leadership styles, which are portrayed as more consensual and collaborative. An alternative reason that could explain the preference for women candidates may be that male mayors may perceive them as more honest and trustworthy through the lens of gender stereotypes. Consistent with this claim, Figure 2.B3 in the appendix shows nearsignificant results for the interaction between mayors' gender and their responses for trust in the candidates. Male mayors seem to consider female partners as more honest and less likely to betray them.

On the other hand, it looks like the good evaluation of women's competence in government is mainly predicted by mayors' level of education. Figure 2.B4 in the appendix shows the evaluation of the capacity to govern within the divided sample. In line with



Figura 2.3: Mechanisms: treatment effects over the profiles rating

Notes: The dots represent the effect of an attribute on the rating of candidates for each of the four statements, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 90 per cent confidence intervals. A point without a bar indicates the baseline category for each dimension.

my expectations, gender seems to provide an informational shortcut with regard to women's abilities to be part of a government, though this result is mainly driven by the more educated respondents.

A plausible argument as to why middle-aged candidates are preferred as coalition partners over younger candidates is that the latter may be perceived as more ambitious and competitive, thus posing a larger threat in the next election, as well as less able to establish their authority. I do not find, however, enough evidence to determine the mechanisms that drive mayors' preference for middle-aged candidates. The results are less robust and generally more ambiguous. I observe that middle-aged candidates receive a better assessment of their capacity to govern than candidates from other categories do, although the results are not statistically significant. Analysing the results by age group, subsection 3.8.2 Figure 2.B4 shows that older mayors are more likely to evaluate middle-aged candidates positively. As I theorise above, the result may be due to older candidates being seen as having better leadership skills than younger ones, given that it is more difficult for the latter to establish their authority within a team. The results, however, are unclear in this regard.

The results discussed above suggest that homophily is only important when it comes to the level of education and ideology of the mayors. Regarding education, my argument holds that this may be because politicians perceive potential partners with similar education levels as being closer on certain issue positions and they expect this to improve communication and reduce the transaction costs of collaboration. This trend is more evident for mayors with a primary or university education, thus reinforcing my assertion that mayors with educational levels located at the extremes of the distribution assume that they communicate better with those on their same level. Analysing the results of the communication mechanism (subsection 3.8.2 Figure 2.B2), I detect a slight tendency for mayors to evaluate candidates with the same educational level as easier to communicate with, but the results are not robust.

The homophily mechanism is much clearer when looking at the results for ideology. When asked whether the mayors perceive similarities in political preferences through the individual characteristics of the candidates, Figure 2.3 shows that none of the candidates' characteristics is important in defining the perception of the mayors, with the exception of ideology. As one might expect, ideology affects perceptions about other crucial sources of team selection. The ideological extremes present the most evident results in each model. Mayors consider that communication with the candidates whose ideology is at one of the two extremes would be more difficult, that they could trust them less and that they would have an inferior capacity to govern. All of the above, then, confirms that a candidate's ideology is one of the strongest information shortcuts available to mayors when evaluating competence in general and, more specifically, when attempting to decide whether a candidate would make for a good coalition partner.

# 2.5 Conclusion

In parliamentary democracies, governments are often selected through bargaining processes between representatives. These negotiations constitute another step in the political selection process where the preferences and traits of the actors involved can play a determining role that may end up compromising the representativeness of the governments formed. While scholars have long considered party motivations and institutional rules, the individual preferences and biases of the politicians involved in these processes have typically been ignored. To address this gap in the literature, I theorise that politicians' preferences about coalition partners are shaped using sociodemographic traits as information shortcuts about potential coalition partners' future behaviour. To test this intuition, I ran a conjoint experiment in an extensive survey administered to mayors in Spain. The experiment uses six different dimensions of hypothetical candidates, including newly considered sociodemographic characteristics as well as long-studied government formation determinants. The findings suggest not only that said characteristics are relevant at the level of the potential partner being evaluated but also that the decision makers' own characteristics have an important effect on their selection. The results suggest that, mostly, what drives a leader's preference to form a coalition with another party leader is the latter's ideology and her party's size. However, the analysis also reveals sociodemographic characteristics such as gender, age and education are important predictors of preferences. Spanish mayors prefer to form governments with women, middle-aged candidates and candidates with a similar level of education to their own.

Mayors' preferences for female candidates are the most important personal characteristic, being at the same level as the party's size. This preference seems to be driven by the former's perception of a reduction in the cost of communication and a good impression of women's competence in government. The greater support received by women from men and older mayors supports the idea that this result may be a behavioural consequence of stereotyping women's leadership styles. One potential explanation is that mayors prefer them as more collaborative and less threatening political profiles, which do not spoil the coalition consensus or threaten their leadership. Future research should make in-depth assessments of the leaders of their government partners and analyse whether the political leaders of these governments actually behave in a more honest, loyal and less threatening way.

These findings may be crucial to expanding our knowledge about women's participation in politics in two ways. On the one hand, the results illustrate a political process that helps increase women's presence in government positions as coalition partners and an explanation for why this occurs. On the other hand, the research also suggests a new mechanism through which women are underrepresented in the top political position. Indeed, it could be surmised that they are evaluated through stereotyped lenses, which favour women in becoming junior partners but hinders their advancement to the first position.

Most research using conjoint experiments to evaluate women's underrepresentation from voters' demands has also shown the same preferences for women (Schwarz and Coppock, 2022). But, like them, this finding seems counterintuitive in explaining discrimination against women in high positions of power. Although conjoint experiments are good at avoiding social desirability bias, they have some limitations in explaining discrimination against certain groups, such as women. They may be capturing respondents' attitudes toward these groups in general rather than in the context of coalition formation, and the comparison may not be realistic because the profiles of men and women who become party leaders can be very different in real life (Clayton and Anderson-Nilsson, 2021). However, those women who reach that position likely have more competitive profiles for governing. So, it is plausible to think that politicians' preferences toward the general population of women, as I show them here, are essential when politicians are forming their teams.

Anyway, further research should be directed at collecting observational information and interviews from actual governments formed to delve further into why women are regar-

ded as better teammates and explore whether this affects their probability of reaching the highest position. Chapter 3 of the dissertation takes its first steps in this direction, trying to capture with observational data whether there are situations of gender inequality in this type of governmental negotiation.

Given the age and education findings, the paper also contains important implications for the literature on descriptive representation. The results support the hypothesis that age may represent an information shortcut that politicians use to reduce uncertainty about candidates' abilities. Moreover, the results support the argument that decisionmakers tend to feel more secure by forming groups with partners with a similar level of education to their own, as this reduces uncertainty with regard to possible threats. The conclusions suggest that some profiles are widely perceived as better governors. This may reflect a stereotype of the profile of politicians who hold power, promoting the survival of a homogeneous political class that does not reflect the composition of its constituents.

The research highlights the need for us to pay greater attention to the role of leaders' preferences and their personal traits in political processes, which may be crucial in relevant decisions and for the quality of representation in our democracies. Learning about our political leaders and their behaviour can help us design optimal electoral rules and implement selection procedures that lead to the most suitable leaders. Given the importance of improving political selection, the study of leaders' traits should attract more attention in years to come.
# 2.6 Appendix for 'Partners in government: politicians' preferences about coalition formation'

#### 2.6.1 Details of the conjoint experiment

#### Details of conjoint experiment survey instrument

Figure 2.A1 illustrates the experimental design for the conjoint analysis. It shows how a respondent on the online survey would have seen the experiment. Attributes were fully randomized, as well as the order in which the dimensions and the statements were presented.

#### Figura 2.A1: Conjoint Experiment Example

Imagine that after the elections you have obtained 5 councillors out of a total of 13. If you could choose between two government partners to form a government coalition with the following list leaders, which one would you choose?

	Candidate 1	Candidate 2	
Gender	Woman	Man	
Age	36	54	
Education	Secondary	University	
Terms	One	Two	
Ideology	Centre-Right	Centre	
Seats	2	3	

Note: This figure shows an example of one set of candidate profiles that was presented to a respondent in the conjoint experiment. The content has been translated from Spanish to English for the reader's convenience.

You would choose...

- Candidate 1
- Candidate 2

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
We have similar political preferences	1	2	3	4	5
It would be easy for me to communicate with the candidate	1	2	3	4	5
I trust the candidate	1	2	3	4	5
The candidate is capable to govern	1	2	3	4	5

*Thinking about Candidate 1 (left column): To what extent do you agree or disagree with the following statements?* 

And now Thinking about Candidate 2 (in the right column): To what extent do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
We have similar political preferences	1	2	3	4	5
It would be easy for me to communicate with the candidate	1	2	3	4	5
I trust the candidate	1	2	3	4	5
The candidate is capable to govern	1	2	3	4	5

#### 2.6.2 Tables and figures

Due to space constraints, I place several Figures and Tables referenced in the main text in the appendix.

#### 2.6.3 Descriptive information

Table 4.A3 shows descriptive information about the characteristics of respondents compared to the totality of the mayors and councillors of the municipalities targeted in the study.

	Respondents		Total N	Total Mayors		Total Councilors	
	Freq.	%	Freq.	%	Freq.	%	
Total	979	-	2,287	-	29,316	-	
Gender							
Male	768	78.45	1,779	77.79	16,916	58.17	
Female	211	21.55	505	22.08	12,164	41.83	
Age							
<30	13	1.44	18	0.97	1,608	8.34	
30 - 45	325	35.95	585	31.60	8,891	46.09	
46 - 65	533	58.96	1,138	61.48	8,280	42.92	
>65	33	3.65	110	5.94	513	2.66	
Education							
Primary	57	6.24	189	12.19	3,092	18.71	
Secondary	259	28.37	369	23.81	4,121	24.94	
University	597	65.39	992	64.00	9,311	56.35	
Ideology							
Left	578	59.53	1277	56.38	15,978	55.15	
Centre	112	11.53	231	10.20	3,523	12.16	
Right	281	28.94	757	33.42	9,472	32.69	
Party							
PP	121	14.77	517	22.61	9,390	28.33	
PSOE	282	34.43	923	40.36	9,965	30.06	
Far left	40	4.88	154	6.73	1,680	5.07	
Nationalist	84	10.26	270	11.81	2,477	7.47	
Other	292	35.65	421	18.41	9,637	29.07	
Population size							
2000 to 4999	398	48.60	985	43.07	10,813	32.62	
5000 to 9999	197	24.05	550	24.05	7,176	21.65	
10000 to 19999	111	13.55	350	15.3	6,001	18.10	
20000 to 49999	80	9.77	255	11.15	5,334	16.09	
50000 or more	33	4.03	144	6.3	3 825	11 54	

Taula 2.B1: Characteristics of mayors who answered the survey compared to the whole population

Note: PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

#### Numerical results

Variables	Forced-Choice
Gender	
Woman	0.0820 (0.016)***
Age	
36	0.0264
45	(0.0251) 0.0493 (0.0257)*
54	0.0533
66	0.0030 (0.0259)
Education	
Secondary	0.0126
University	(0.0236) 0.0649
Doctorate	0.0221 (0.0228)
Terms	
One	0.0246
Two	(0.0195) 0.0123 (0.0203)
Ideology	
Centre-Right	-0.1823
Centre-Left	(0.0266)*** 0.0933
Extreme Right	(0.0258)*** -0.5044
Extreme Left	(0.0229)*** -0.2468 (0.0265)***
Seats Number	
2	0.0845
3	(0.0234)*** 0.1065
4	$(0.0239)^{***}$ 0.0968 $(0.0233)^{***}$
Constant	0.4863 (0.0344)***
Observations R-squared	3,080 0.1909

Taula 2.B2: The effect of candidates' attributes on profile selection

Notes: Robust standard errors in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

			1	e
Variables	(1) Similar Political Pref.	(2) Easy Communication	(3) Trustworthy	(4) Capacity to Govern
Gender				
Woman	0.013 (0.063)	0.098 (0.057)*	0.043 (0.062)	0.107 (0.061)*
Age				
36	-0.105	-0.185	-0.026	-0.106
50	(0.097)	(0.091)***	(0.097)	(0.094)
45	0.001	-0.016	-0.053	-0.110
<i>- 4</i>	(0.098)	(0.094)	(0.094)	(0.097)
54	-0.009	-0.032	-0.017	0.105
66	(0.098)	(0.091)	(0.092)	(0.093) 0.078
00	(0.100)	(0.093)	(0.096)	(0.096)
Education				
Secondary	0.029	0.044	0.096	0.055
<b>TT T</b>	(0.085)	(0.081)	(0.087)	(0.089)
University	-0.0143	-0.020	-0.043	(0.034)
Doctorate	(0.089)	-0.102	(0.088)	(0.083)
Doctorate	(0.086)	(0.081)	(0.085)	(0.087)
Terms				
One	-0.055	-0.016	-0.015	0.019
	(0.074)	(0.072)	(0.076)	(0.077)
Two	0.007	0.024	0.043	-0.013
	(0.077)	(0.070)	(0.076)	(0.077)
Ideology				
Centre-Right	-0.684	-0.106	-0.186	-0.190
<b>a b b</b>	$(0.106)^{***}$	(0.082)	(0.093)**	$(0.089)^{**}$
Centre-Left	0.1/6	-0.024	-0.058	-0.094
Extreme Right	-1 647	-0.961	(0.083)	-0.647
Extreme Right	(0.099)***	$(0.098)^{***}$	(0.106)***	(0.104)***
Extreme Left	-0.355	-0.305	-0.333	-0.263
	$(0.106)^{***}$	(0.085)***	(0.089)***	(0.092)**
Seats Number				
2	0.017	-0.033	0.010	0.070
	(0.083)	(0.083)	(0.087)	(0.087)
3	0.004	0.017	0.061	0.050
4	(0.085)	(0.085)	(0.089)	(0.086)
4	(0.018)	(0.083)	(0.093)	(0.085)
Constant	3 200	3 752	3 627	3 612
Constant	(0.134)***	(0.114)***	(0.121)***	(0.121)***
Observations	1 545	1 542	1 531	1 524
R-squared	0.2244	0.095	0.1262	0.042
	0.2211	0.070	0.1202	0.012

Taula 2.B3: The effect of candidates' attributes on profiles rating

Notes: Robust standard errors in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

#### 2.6.4 Robustness and additional outcomes

This section shows the results of the conjoint experiments for the full sample, the interaction with seniority, types of parties, and municipality characteristics —population size and type of government.

#### Main results of the conjoint experiment for the full sample

Because in conjoint experiments subjects' attention to the profiles and question is crucial, I have drooped some observations from subjects who take a short time to look at the candidates' profiles. However, to test the robustness of my results, Figure 2.C1 and Figure 2.C2 show the main results of the experiment for the full sample.



Figura 2.B1: Perceived Similarity of Political Preferences by Respondents' Characteristics

Notes: The dots represent the effect of an attribute on the rating of ease of communication, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 90 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.



Figura 2.B2: Ease of Communication Evaluation by Respondents' Characteristics

Notes: The dots represent the effect of an attribute on the rating of ease of communication, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 90 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.



Figura 2.B3: Trustworthiness Evaluation by Respondents' Characteristics

Notes: The dots represent the effect of an attribute on the rating of capacity to govern, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 90 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.



Figura 2.B4: Capacity to Govern Evaluation by Respondents' Characteristics

Notes: The dots represent the effect of an attribute on the rating of capacity to govern, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 90 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.



#### Figura 2.C1: Average treatment effects in the conjoint experiment for the full sample

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

Gender Age Gender Man Gender Man Woman Woman Age 27 Age 27 36 45 36 4554 5466 66 Education Education Primary Secondary Primary Secondary University University Doctorate Doctorate Terms Terms None None One One Two Two Ideology Centre Centre-Right Ideology Centre Centre-Right Centre-Left Extreme Right Centre-Left Extreme Right Extreme Left Extreme Left Seats Seats 1 2 3  $\mathbf{3}$ 4 4 -.4 -.2 -.4 -.2 -.6 -.6 • Young • Men • Women • Old Education Ideology Gender Man Gender Man Woman Woman Age 27 Age 27  $\frac{36}{45}$  $\frac{36}{45}$ 545466 66 Education Education Primary Secondary University Doctorate Primary Secondary University Doctorate Terms Terms None One None One Two Two Ideology Ideology Centre Centre Centre-Right Centre-Right Centre-Left Centre-Left Extreme Right Extreme Left Extreme Right Extreme Left Seats Seats 2 2 3 4 3 4 -.4 -.2 -.6 -.4 -.2 • Primary • University Secondary • Left Center • Right

Figura 2.C2: Treatment effects in the conjoint experiment by Respondents' characteristics for the full sample

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate for the full sample, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

#### Heterogeneous treatment effects

Figure 2.C3 shows the results when dividing the sample by mayors' seniority, represented by a dummy variable that identifies whether the respondents had already been elected the last term or not.



Figura 2.C3: Treatment effects in the conjoint experiment by Mayors' Seniority

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate for the full sample, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

One of the potential concerns is that the education variable has no confounding effect on the politicians' social class. The literature reveals an underrepresentation of working class politicians (Carnes and Lupu, 2015). Moreover, this inequality is even more noticeable in the intersectionality between being female and working-class (Barnes et al., 2021). This could bring different interpretations of my findings, especially with the homophily effect that seems to be observed in educational level results. An alternative explanation may be that this result captures a homophily effect between social classes. On the other hand, this confounding might have implications for the evaluation of female politicians. Thus, as a proxy of social class, in Figure 2.C4 I compare the main conjoint experiment results dividing the mayors' sample by white- or blue-collar workers, considering their occupation before holding their political positions.

Figure 2.C4 illustrates no significant differences between the preferences of these two groups of mayors in any of the attributes. There does not even seem to be the tendency of homophily observed with the educational level variable, nor a clear preference of either group for female politicians.





White collar vs Blue collar

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate for the full sample, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

In addition, certain politicians' profiles likely want to be more politically correct when choosing between potential partners. Although the design of the conjoint experiment largely avoids the social desirability bias by hiding the characteristics that are more sensitive among those that are not likely, some politicians may not be completely honest when answering the experiment. For example, Janezic and Gallego (2020) evaluating politicians' honesty using an experimental game found that a large and statistically significant proportion of the mayors of this same sample lied. They found that members of the two major political parties lied significantly more but found no gender differences between men and women.

Thus, it is essential to carry out an analysis of heterogeneous effects that can rule out that there are differences in the results between those that Janezic and Gallego (2020) identify as more or less honest. The game offered a non-monetary incentive (a personalised report) that mayors would only get if they flipped a coin and got heads. The vast majority claimed to want this report (88%) and to have gotten heads (68%). Although we cannot know exactly who is lying, by probability the authors claim that a significant portion of the latter was lying.

Figure 2.C5 shows how there are no significant differences between the preferences of the politicians who were supposedly more dishonest and the honest ones. Although I cannot completely rule out the existence of political profiles trying to be more politically correct when choosing potential government partners, these results reinforce the idea that the experiment is robust, even considering the most dishonest politicians.





Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

Another potential concern is that the mayors who responded to the survey were more from minority parties at the municipal level than from major parties at the national level. In this sense, Figure 2.C6 shows the results by dividing the sample by the type of the mayors' parties, representing a variable that identifies whether the respondents are part of the two main parties at the national level (PP and PSOE) or minor parties at the municipality level (Others). This graph shows us that although there may be an over-representation of mayors from minor parties, there does not seem to be much of a difference between the effect of each characteristic on their elections compared to those of mayors from major parties.



Figura 2.C6: Treatment effects in the conjoint experiment by Political Party

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

Along the same line of reasoning, there could be differences between the characteristics of the municipalities that can drive the results and the interpretation of this results. For this reason, I carried out the following analyses, which show the differences in the results when dividing the sample by population size and type of government. First, Figure 2.C7 shows the results when dividing the sample into three groups of population size: small (<3,000), medium (3,000 - 10,000), and large (>10,000).



Figura 2.C7: Treatment effects in the conjoint experiment by municipality population

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

Second, Figure 2.C8 shows the results by type of government: Absolute majority, when the mayor's party obtained an absolute majority of the votes, and minority when not. In none of these cases do I find significant differences between the results of the different subsamples.



Figura 2.C8: Treatment effects in the conjoint experiment by type of government

Notes: The dots represent the effect of an attribute on the probability of choosing a candidate, as estimated from a linear probability model with clustered standard errors at the respondent level. The bars are 95 per cent confidence intervals. A point without a bar indicates the baseline category of each dimension.

### **Capítol 3**

## WOMEN WHO WIN BUT DO NOT RULE. THE EFFECT OF GENDER IN THE FORMATION OF GOVERNMENTS

Alba Huidobro and Albert Falcó-Gimeno

Why are women strongly underrepresented in top political positions? We analyse the effect of party leaders' gender on their ability to capitalise on political power during negotiations to form new governments after elections. We leverage the as-if random assignment of a bargaining advantage in close local elections in Spain through a regression discontinuity design and find that women are less likely than men to secure the mayor's position when they win elections by a narrow margin, even when their parties manage to join the governing coalition. We further investigate whether this is a

result of discrimination toward female politicians, or whether it reflects differences in policy-seeking motivations or leadership style across genders. This chapter contributes to the understanding of the role of personal characteristics in the political process and has far-reaching implications for gender equality and quality of representation.

#### 3.1 Introduction

Why do so few women occupy top political positions? There are more women than ever in politics, but a glass ceiling appears to remain : women still face major barriers to attain leadership positions in political institutions. According to the 2021 Global Gender Gap Report (World Economic Forum, 2021), which examines the gender gap in 149 countries around the world, while gender parity has almost been achieved in some areas like health or education, this is far from the case in other domains like economy or politics. Both in economic and in political institutions there is ample evidence of the existence of a glass ceiling, showing that although there is an increase in female participation, women still face major barriers to attaining top leadership positions.

In politics, in particular, the gender gap remains wide: it has shrunk in terms of numbers of representatives (Wängnerud, 2009) but not in terms of number of leaders. While women's representation in national parliaments has increased to 26% of all available seats across the globe, women lead just 22% of ministerial departments worldwide. The situation is even more unequal further up the hierarchy: in 2018, only 17 women were heads of state or prime ministers across the 149 countries covered by the report (World Economic Forum, 2021).

Previous studies on women's access to top political positions have underscored the importance of various political institutions in several steps of the political process. These include the electoral system, which regulates the election of women to legislatures (Tremblay, 2012); the structure and rules of legislative committees, which condition committee assignments to women (Heath et al., 2005; O'Brien, 2012); the system of government, which shapes the supply of female candidates for executive appointments (Krook and O'Brien, 2012); the types of ministerial systems, which limit the relevance of seniority in political recruitment (Claveria, 2014); or political parties' formal and informal practices, which affect the unequal distribution of power between men and women (Folke and Rickne, 2016b; Fox and Lawless, 2010; O'Brien and Rickne, 2016; Verge and De la Fuente, 2014). However, despite our growing understanding of the reasons underlying women's limited participation in high-ranking political positions, we still know little about the role of gender in one of the milestones of the political process that determines access to top executive positions: the bargaining process that leads to the formation of a new government following elections. In this chapter, we ask whether and how government formation processes can explain why still few women hold top offices.

Our knowledge of how leaders come to hold the reins of power has advanced significantly over the past decades. In the case of parliamentary democracies, a prolific stream of literature has crystallised into a whole subfield of government formation studies (Martin and Stevenson, 2001). Leading explanations of these processes have traditionally focused on the role of political parties' power position and ideological stance (e.g. Laver and Shepsle, 1996; Warwick, 1996; Mattila and Raunio, 2004; Indridason, 2011a) as well as institutional rules (e.g. Baron, 1998; Laver and Schofield, 1990; Strøm, 1990). Most of the remaining variation in how alliances are forged to select who governs might be seen as the result of mostly unobservable factors coloured by the idiosyncratic traits of politicians (Besley et al., 2005).

We know from other research fields that different social groups have different goals, pursue different means, and face different hurdles to achieve them. Hence, beyond partisanship, differences in the preferences and capabilities of elected representatives should spill over into negotiations over the formation of a government. Chapter 2 of this dissertation shows that personal characteristics, especially gender, may play an important role in defining the preferences of politicians who are involved in government formation processes. The chapter suggests that there is a clear preference for female candidates when politicians assess their ability to collaborate and perform as potential government partners. Despite this apparent advantage for women, the perpetuation of a gender gap in the highest government positions leaves many questions unanswered.

The specific question that this chapter seeks to answer, therefore, is whether there is an actual gender gap in the likelihood of party leaders obtaining favourable outcomes in government formation processes. Specifically, we examine whether female politicians find it more difficult to navigate those processes that would lead them to hold the reins of government. We conjecture that this can operate through gender differences in political ambition, leadership styles, and discrimination.

Normally, it would be difficult to find the appropriate data and research design to identify the causal effect of gender on processes of government formation. Negotiations between politicians in these contexts typically take the form of free-style interactions behind closed doors, in which it is difficult to think of identification strategies that would allow the impact of individual traits to be isolated. To address this, we leverage a convenient institutional rule in the process for forming governments in Spanish local elections, according to which the first-most-voted party takes control of the mayor's office just twenty days after the election unless the rest of parties are able to coordinate around a different candidate in an investiture vote that is held on the same date. This gives the first-most-voted party an obvious and sizable bargaining advantage in the government formation process, which is nonetheless not always taken advantage of. Close elections under these circumstances assign this advantageous position to politicians belonging to one social group or another in an almost random way. This quasi-experimental situation allows us to test whether or not gender has a causal effect on politicians' capacity to capitalise on bargaining advantages to secure positions of leadership in local government.

This study draws on a rich novel dataset of around 2,000 local governments in Spain between the years of 2003 and 2011, including personal information on the politicians involved in the government formation processes in question. We apply a regression discontinuity design (RDD) to compare the likelihood of the first-most-voted party winning the mayor's office in localities where parties win by a narrow margin of votes irrespective of the party leader's gender. We find that women are significantly less likely than men to capitalise on holding the bargaining advantage described above and be appointed mayor when their party comes first in elections, and that this is not driven by differences in the kinds of parties they lead. We also find that although parties led by women are more prone to missing out the mayor's office, they are nonetheless just as likely as those led by men to get their party into government. However, we find no clear evidence to claim that these patterns result from discrimination against female politicians or differences in policy-seeking motivations or leadership style.

These findings suggest the negotiation dynamics that take place between political parties when it is time to form a new government can also help explain a significant share of the gender gap in top political positions. The fact that women are less able to translate the power vested in them by voters into actual executive power is of great importance to understanding the discrepancy between gender equality in politics and other social domains and has crucial implications for the quality of democratic representation.

# **3.2** Why would gender matter in the formation of a government?

The formation of a government is one of the key junctures in the process by which democratic rulers are selected and one of the cornerstones of the political game. In the case of parliamentary democracies, after election results are made public, it is very commonly the case that parties engage in intense negotiations over selecting who is to hold the reins of government. Our knowledge of the main determinants of these processes has advanced significantly over the past decades, the most important of which relate to parties' size, ideological position, and institutional rules (e.g. Martin and Stevenson, 2001). And yet, the share of unexplained variation is still massive. Other factors coloured by the personal traits of politicians also shape political agreements (Besley, 2005). If politicians from different social groups have different preferences, then there is no basis for ignoring the potential influence this may have when it comes to political bargaining. Similarly, if politicians' capacity for penetrating entrenched political dynamics is not the same, then there are reasons to believe that their probability to succeed in negotiations over the formation of a government will differ. Gender differences are clearly likely to be relevant in this regard.

Beyond the formation of governments, previous studies have analysed the role of gender differences in other aspects of political life. Issue priorities, for instance, differ between male and female politicians, and this has been shown to condition the provision of public goods like drinking water (Chattopadhyay and Duflo, 2004) or health facilities and services (Bhalotra and Clots-Figueras, 2014). Many other political outcomes appear to be affected by the gender of political representatives (Wängnerud, 2009). Female politicians, for instance, seem to produce better welfare outcomes, generate lower levels of corruption, secure more transfers from other levels of government, and be more effective lawmakers than men (Brollo and Troiano, 2016; Anzia and Berry, 2011; Volden et al., 2013).

The question this chapter seeks to answer is whether or not these differences also emerge at a crucial stage in the political process that precedes most of the aforementioned outcomes: the formation of a government. This may be highly significant because it could explain why so few women still reach top political positions.

There are several possible explanations as to why women may perform differently in government formation processes. Findings from previous research suggest that there are significant differences between men and women in terms of their political goals, leadership styles, and capacities to penetrate entrenched political networks. All these are likely to have an effect on the performance of women in political bargaining processes and, thus, should be reflected in government formation outcomes. Next, we consider each of these possible mechanisms in turn.

Finally, perhaps the most obvious mechanism through which the gender of party leaders could be related to the outcomes of government formation processes is differences between women-led and men-led parties. Parties with female leaders may have distinct characteristics that could also affect their goals and results in political negotiations (O'Brien, 2015).

## 3.2.1 Differences in preferences: Office-seeking vs policy-seeking motivations

Research on gender differences in the context of politics reports significantly lower levels of aspiration to political office for women, relative to men (e.g. Clark et al., 1989). These differences have been attributed to other gender disparities in familial responsibilities (Sapiro, 1982; Bledsoe and Herring, 1990; Fulton et al., 2006), socialisation in gender roles (Fox and Lawless, 2003, 2004; Moore, 2005; Fox and Lawless, 2014), and differences in the support received by political parties (Sanbonmatsu, 2006a; Fox and Lawless, 2010).

Despite mounting evidence that women have lower levels of political ambition than men at the onset of their political careers (e.g. Fox and Lawless, 2010; Niederle and Vesterlund, 2007), this is unlikely to be relevant later once holding elected office, when they could be involved in the negotiation for the formation of a new government, and have the same ambition as their male counterparts (Folke and Rickne, 2016b). What could still be true, though, is that women's decisions to seek office were more motivated by a desire to change public policy (Carroll and Sanbonmatsu, 2013), and thus be willing to trade some perks of office in exchange for more policy influence.

Along the same lines, on the traditional trade-off of office-vs-policy, Carroll and Sanbonmatsu (2013) found that female mayors are more motivated by a desire to change public policy than men, and this played a much larger role in women's decisions to seek office. In other words, women's level of "office-seekingness" tends to be both lower than men's and also to function as a means to achieve the loftier end of shaping policy.

Other recent studies have suggested that self-confidence and aversion to risk and competitive environments are also important factors in determining levels of political ambition and office-seeking motivations. Lawless and Fox (2005, 2010b) and Fox and Lawless (2011), for instance, show that women consider themselves as less qualified to run for political office than men, a situation that perpetuates the gender gap in political recruitment patterns. Many other studies suggest that the competitive nature of elections is an important deterrent for women's interest in political office due to their stronger aversion to risk, conflict, and competitive environments (Niederle and Vesterlund, 2007; Eckel and Grossman, 2008; Preece and Stoddard, 2015; Schneider et al., 2016). Kanthak and Woon (2015), for instance, concluded that while there are no gender differences in the decision to become a candidate in situations where the representative is chosen at random, a gender gap emerges once the representative is selected through a competitive election process.

### 3.2.2 Differences in leadership styles: Individualism vs collaboration

Previous research has found that women tend to adopt a more democratic or participative leadership style than men, who prefer to lead organisations more directively (Eagly and Johnson, 1990). In politics, specifically, Carey et al. (1998) found that women invest more time than men in building within-party and cross-party agreements and are more involved in negotiations, and that these differences are larger when more communication and compromise are required. Similarly, other studies have concluded that female mayors are more likely to address community life issues through teamwork that emphasises inclusiveness (Weikart et al., 2006). In the same vein, experimental evidence suggests that women are more likely to strive for universal outcomes and group cooperation in committee decision-making processes, whereas men prefer more competitive solutions (Kennedy, 2003).

The source of these gender differences in bargaining behaviour is widely debated. Recent literature has shifted its focus from biological traits to early differential socialisation (Maccoby, 1988). Other contributions, however, highlight the different route women have travelled to make their way into politics: women have been found to be more prone to engage in organisations that are involved in community activism, which tend to have collaborative organisation styles (e.g. Darcy et al., 1994; Thomas, 1994; Rosenthal, 1998).

#### **3.2.3** Differences in entrenchment: Discrimination and homophily

Another mechanism through which female politicians may obtain different outcomes to their male counterparts in political bargaining relates to the behaviour of the other negotiating parties rather than their own. The development of informal norms and networks, even beyond the public sphere, might lead to patterns of homophily and forms of discrimination or isolation that undermine the chances of those who are perceived to be outsiders of the dominant social group.

The fact that women have arrived more recently in institutional politics could lead to their being seen as strangers who pose a potential threat to the long-established rules of a "man's world". For instance, there is evidence that an aversion to having female leaders exists in some contexts such as management, as does the belief that women are less competent at leadership (e.g. O'Leary, 1974; Riger and Galligan, 1980). Related to this, there are other studies that argue that it is the precisely the paucity of women in leadership positions that may have a number of negative implications for how they are perceived and treated in professional interactions (Crocker and Mcgraw, 1984).

Taken together, the different mechanisms outlined above lead to various, mostly contradictory, expectations about the outcomes of government formation processes. On the one hand, it appears that the path women take to participate in institutional politics provides them with a series of coping tools and consensual and cooperative skills that should be useful in leveraging bargaining advantages in negotiations over the formation of a government. On the other hand, if, as some research suggests, women are less eager for office and not keen on competitive environments, they may thus be less willing to do whatever it takes to exploit their bargaining position in a high-stakes situation like that of forming a government. Likewise, besides their own inclinations, women may also face more obstacles to perform successfully in these sorts of negotiations because an entrenched, mostly masculine environment may be difficult to penetrate as an outsider. In any case, the empirical question remains as to what, if any, is the causal effect of gender on the outcomes of government formation processes in particular, and on the capacity to exploit political bargaining advantages more generally. In the next sections, we present the data and identification strategy that this chapter uses to adjudicate between these conflicting expectations.

#### 3.3 Institutional background and data

To examine the impact of gender on the formation of governments, we focus on Spanish local governments. The study of local government formation in a single country provides a large number of observations while keeping many potentially confounding factors constant. These are mostly institutional and cultural factors that might play a part in explaining government formation outcomes (Laver et al., 1987).

We selected Spain because the unique characteristics of its local political context make

it a suitable testbed for our research question. Spain has a decentralised political system in which citizens elect local councils for more than 8,000 municipalities every four years for a fixed term. Most of these municipalities use a closed party-list proportional representation system (PR) that routinely generates minority situations where no single party commands an absolute majority of seats. This is clearly a favourable scenario for this study, as negotiations between parties over the course of the government formation process are inescapable. Twenty days after the local elections, a vote of investiture takes place to elect the mayor, who will have considerable executive and agenda-setting powers. Crucially, if no candidate receives the absolute majority of favourable votes from the council in that vote, the candidate who ranks first on the list of the party that received the largest number of votes in the election becomes mayor without needing any further support from other parties. Right after the mayor is elected, she appoints an executive committee akin to governments at other administrative levels, with portfolios allocated to councillors who may or may not belong to the mayor's party. Therefore, mayors create and distribute the different cabinet positions that they deem necessary, just like most governments in parliamentary democracies. In coalition governments, they have to come to an agreement with the rest of the partners on the policy areas that will be created. Politicians holding these areas have then an important influence on the sectoral policies under their jurisdiction.

Local politics in Spain therefore combines a traditional PR system that generates government formation processes subject to political bargaining between parties in a context of fragmentation and gives a clear advantage to the most-voted party. In close elections, where the first and second-ranked party obtain a similar number of votes, the assignment of this bargaining advantage to a party leader (with a specific gender) may
be as good as random (see section 3.4 for a detailed explanation of our identification strategy).

There is a risk, though, that these internal validity returns come at the expense of external validity. However, Spanish local councils and governments greatly resemble parliaments and executives at other administrative levels and in other countries in terms of how they function and the type and importance of their policy remits. There are thus reasons to believe that the conclusions of this study apply far beyond Spain and are not simply idiosyncratic to its local institutions (Solé-Ollé, 2006; Falcó-Gimeno, 2018). In fact, as we show in the Appendix, an observational analysis of government formation processes in our sample of Spanish local governments (2003–2007) and in a sample of Western European national governments (1945–1998) reveals that the determinants of government formation processes in these two very different contexts are remarkably alike. Also, just like in many other places around the globe, there is still an important gender gap in the presence of women in Spanish local politics, which becomes largest for the case of party leaders and local mayors (see subsection 3.8.2).

Because good data on local government formation is usually scarce, this chapter uses its own novel and exhaustive dataset of governments formed after the 2003 and 2007 local elections in 3,338 Spanish municipalities with more than 1,000 inhabitants that identifies which parties participated in the executive. This provides a unique opportunity to test the effect of gender on the outcomes of government formation processes. This chapter's identification strategy draws on a subsample of elections from this larger dataset where no single party obtained the absolute majority of seats, which ushered in the possibility of interparty bargaining in the shadow of an upcoming vote of investiture. This is complemented with data on electoral outcomes compiled by the Spanish Ministry of the Interior, which includes detailed local election results such as votes received, seat allocation, the number of represented parties, which party the mayor came from, census data and turnout rates. Finally, in order to observe the effect of gender on government formation processes, we also use a database on politicians' individual characteristics. It draws on information from the Spanish Ministry of the Treasury and Public Administration on every councillor elected in Spain. For 2003 and 2007 in particular, the database includes information for over 65,000 politicians: the party they ran for, where they ranked in the list, and their age, gender, education level, and occupation. subsection 3.8.2 shows descriptive information of our case, including data on the presence of women in local politics, along with other characteristics of the Spanish local elections and governments, with a zoom in on our effective sample of contexts where no single party obtained the majority of seats.

# **3.4 Identification strategy**

This chapter's identification strategy is based on the as-if random assignment of a bargaining advantage in the formation process for Spanish local governments. According to Spanish electoral law, if the first round of negotiations to form a local government fails — that is, if no mayoral candidate obtains an absolute majority in the sole investiture vote twenty days after election day — the leader of the party that obtained the largest number of votes is automatically appointed mayor. In other words, the reservation value of the first-most-voted party is its candidate becoming the head of local government. The only way to prevent this candidate from occupying the mayor's office is that other parties coordinate to attain the majority of votes to appoint an alternative candidate. This institutional arrangement obviously gives a major advantage to the first-most-voted party.<sup>1</sup>

An empirical assessment of this advantage reveals that, in our sample of local elections in which no single party obtained the absolute majority of seats, the party that comes first in an election secures the mayor's office 63% of the time, while parties that rank lower only have a 14% chance of doing so, on average. The difference is therefore almost 50 percentage points (p.p.). Being the most-voted party continues to exert a substantial influence on gaining the mayor's office even after controlling for the share of votes (+27 p.p.). Furthermore, preliminary naive observational analysis also shows that the most-voted-party advantage is perceptibly lower when the party leader is a woman.<sup>2</sup>

Of course, this observational analysis can only be taken as a description, as various other observable and unobservable contextual factors that correlate with the fact that the winner of a local election is a woman may, in turn, affect the outcome of government formation negotiations. For instance, municipalities that prefer female candidates on election day may be more open-minded, less averse to change, and keener on consensual politics, and this, for a number of reasons, might make it easier for parties to compromise and affect coalition formation.

For causal identification, the crucial feature of the institutional arrangement that we leverage is the fact that, at the cut-off point where there is a near-tie between the most voted female candidate and the most-voted male candidate, the only difference between the government formation process in a municipality where the winner is male and one where the winner is female is who enjoys the bargaining advantage. At one extreme, being in this position depends on a single vote. So, even if most studies that exploit close

<sup>&</sup>lt;sup>1</sup>Fujiwara and Sanz (2020) attribute this advantage to a "norm" stating that the most voted party in a democracy, even in PR systems, should govern. In any case, the fact is that a sizable advantage exists, regardless of its underpinnings.

<sup>&</sup>lt;sup>2</sup>See Appendix for the observational results.

elections focus on majoritarian electoral systems because incumbency is directly contingent on obtaining the largest number of votes, the Spanish local PR election system also gives a substantial advantage that discontinuously depends on a numerical threshold that can be exploited in an RDD: having more votes than the party ranked second. This design has already been applied by Fujiwara and Sanz (2020) to Spanish local elections. The authors estimate that being the most-voted party has a causal effect of 20.3 p.p. on becoming mayor during the government formation process relative to coming second. In our own more restricted sample, we find a comparable RDD figure: a 15.3 p.p. advantage (see Appendix).

In this chapter, we match this advantage to politicians' gender. To do so, we define our forcing variable as the margin of victory of the first female-led party. We first identify whether the leader of each party – that is, the candidate that tops the party list – is male or female. We then single out the share of votes of the most-voted female-led party and subtract the vote share of the most-voted male-led party.<sup>3</sup> Formally, for municipality *i* in year *t*, this is described in Equation 3.1:

$$Woman's margin of victory_{it} = \nu_{first-woman} - \nu_{first-man}$$
(3.1)

where  $\nu_{first-woman}$  and  $\nu_{first-man}$  refer to the vote shares of the most-voted female-led and most-voted male-led party represented in the local council, respectively.

This forcing variable gives each municipality a score. Positive values imply that a municipality has awarded the bargaining advantage to a female-led party, instead of a maleled one. Negative values imply that the former has fallen short of enjoying such an

<sup>&</sup>lt;sup>3</sup>Note that, according to this specification, cases in which the leaders of both the first and secondmost-voted parties were the same gender are not close to the threshold. Also, if none of the parties in the council had a woman at the top of their candidate list, the forcing variable takes the negative value of the vote share of the (male-led) most-voted party. In other words, we subtract this value from zero.

advantage. This is the variation in the treatment status in our setting. The key comparison is between municipalities that only just gave the most-voted position to a female party leader (treatment group) with municipalities that only just allocated the highest number of votes to a male party leader (control group). The question is whether this bargaining advantage has the same consequences depending on whether the party leader in this position is male or female.<sup>4</sup>

# 3.5 Results

Table 3.1 presents the regression discontinuity estimates of the effect of gender on winning the mayor's office using (Calonico et al., 2014) optimal bandwidth selector and a triangular kernel.<sup>5</sup> The magnitude of the treatment effects is substantial. When a female-led party only just wins an election (right of the threshold), it is 24 p.p. less likely to obtain the mayor's office than when a male-led party does (left of the threshold). In other words, women seem to face far more difficulties (or be less willing) than men to secure the mayor's office when they come first in elections. This treatment effect reaches conventional levels of statistical significance that are not contingent on the size of the bandwidth.<sup>6</sup>

Figure 3.1 shows the discontinuities in the probability of the first-most-voted party becoming mayor at the threshold of our forcing variable. The plot on the left uses a fourth-order polynomial on each side of the threshold to approximate the conditional probability of the mayor belonging to the election winning party, while the plot on

<sup>&</sup>lt;sup>4</sup>Covariate balance and manipulation tests confirm the validity of the continuity assumption of our RD strategy in subsection 3.8.4.

<sup>&</sup>lt;sup>5</sup>Computed with the rdrobust Stata program (Calonico et al., 2017).

<sup>&</sup>lt;sup>6</sup>A wider variety of bandwidth choices is offered in Figure 3.E1 in the Appendix, showing largely similar results.

	All parties	No 3rd parties	No 3rd parties & gender-mixed
Female leader	-0.241	-0.259	-0.358
	(0.108)	(0.114)	(0.143)
P-value	0.026	0.023	0.012
Bandwidth	0.091	0.095	0.061
Effective N (left, right)	345 (209, 136)	319 (193, 126)	230 (133, 97)
Ν	1781	1556	456

Toulo 2 1. Effort of	ander on	the most voted	norty attaining	the mover's office
Taula J.T. Effect of	genuel on	the most-voted	party attaining	the mayor some

Standard errors in parentheses

Note: Outcome variable takes value 1 when the first-most voted party obtained the mayor's office and 0 otherwise. Local linear regression estimates are computed with (Calonico et al., 2017) rdrobust Stata program and use (Calonico et al., 2014) optimal bandwidth and the (default) triangular kernel. Standard errors in parentheses. Effective N (left, right) refers to the effective number of observations at each side of the threshold.

the right fits two regression lines assigning larger weights to observations that are close to the threshold.<sup>7</sup> To the right of the cut-off, female-led most-voted parties reach the mayor's office less than 40% of the time, while male-led most-voted parties do so around 60% of the time.

A series of tests in the Appendix confirm the robustness of these results. In Table 3.E1 we show that they do not hinge on using conventional or robust, bias-corrected estimates. Nor does the choice of weights for observations within the bandwidth seem to alter the main findings (Table 3.E2). Figure 3.E1 shows the sensitivity of the RD estimate to the size of the bandwidth: it tends to increase with smaller bandwidths, but even with large bandwidths the magnitude of the treatment effect is close to -20 p.p. In addition, placebo tests using other arbitrary cut-offs confirm that discontinuity in our outcome variable only appears at the expected threshold (Figure 3.E2). Finally, Table 3.E3 shows that results are not driven by the introduction of gender quotas in the 2007 Spanish local

<sup>&</sup>lt;sup>7</sup>The plot on the right graphically represents the local linear regression estimates with a triangular kernel presented in the first model of Table 3.1.



Figura 3.1: RD plots on the effect of gender on winning the mayor's office

Note: The solid lines in the left plot are fourth-order polynomials fitted separately on the common bandwidths of each side of the threshold. The right plot fits first-order polynomials with smaller weights to observations that are far from the threshold (triangular kernel) and graphically represents the first model of Table 3.1. The dots represent bin averages of the outcome variable. Average bin sizes: Women's margin of victory=.008.

elections.

# 3.6 Mechanisms

In this section, we first delve into further outcomes of government formation negotiations to shed light on what is driving gender differences in the performance of parties in these bargaining processes. After going through the government formation outcomes, we explore whether or not our results are driven by differences in the kinds of parties men and women tend to lead.

#### **3.6.1** Effect on other government formation outcomes

What are the consequences of losing the mayor's office for government participation? On the one hand, the inability to become mayor may push the party to the opposition. On the other, it may not necessarily imply losing access to office, as the party could still serve as a junior partner in the governing coalition. The difference between these outcomes is crucial as it may shed light on the circumstances surrounding the fact that female-led parties are more likely to lose the key position in the cabinet even when they hold a clear bargaining advantage to attain it.

Table 3.2 evaluates the continuity of the probability of staying in opposition or in the government as a junior partner for our forcing variable, using three different bandwidths. Interestingly, female-led parties are just as likely to reach office as parties led by male politicians, even though the former are less likely to win the mayor's office. Therefore, their inability or unwillingness to capitalise on a bargaining advantage to become mayor does not imply losing access to government once and for all, they just happen to forgo cabinet leadership.

	1st in gov.	2nd in gov.	3rd+ in gov.	Mayor 2nd	Mayor 3rd+
Female leader	-0.025 (0.111)	0.129 (0.111)	-0.038 (0.108)	0.084 (0.113)	0.158 (0.076)
P-value	0.821	0.245	0.722	0.457	0.039
Bandwidth	0.091	0.091	0.091	0.091	0.091
Effective N	344	344	344	344	344
Ν	1781	1781	1781	1781	1781

Taula 3.2: Effect of gender on government participation

Standard errors in parentheses

Note: Local linear regression estimates use Calonico et al. (2014) optimal bandwidth of the main models in Table 3.1 and Calonico et al. (2017) default (triangular) kernel. Standard errors in parentheses below.

That implies that narrowly winning female-led parties are about 16 p.p. more likely to be junior partners in the governing coalitions than male-led parties are, and that they can advance policy through other cabinet positions that have influence on sectoral policies. It is also the case that both runner-up parties and parties in lower positions are equally likely to participate in government regardless of who enjoys the first position advantage. Therefore, the capacity of male-led parties to secure the mayorship is apparently not based on them being in a better position to turn to third+ parties to build a coalition.

However, the absence of differences in government participation masks another important variation. In the last two columns of Table 3.2 we can see that when a female-led party narrowly wins elections it is significantly more likely that parties ranked third or lower – not the runner-up – take the mayor's office. That, coupled with the fact that winning female-led parties are as likely to be included in the governing coalition as male-led parties, implies that female leaders are more prone to concede the leadership of the cabinet to third+ parties in exchange for access to office.<sup>8</sup>

The fact that female-led parties are more prone to losing the mayor's position but equally likely to gain access to office is compatible with quite a few different explanations. One possible interpretation would be that women are more policy-seeking and less concerned with certain spoils of office than men, as they are willing to forgo the highest-ranked position in the government in exchange for policy influence through other cabinet positions. In parallel, the more consensual and cooperative leadership style traditionally associated with women also squares with this empirical pattern: women are more willing to share certain perks of office with other partners if this is important for greasing the wheels of coalition-building. It could also be a matter of discrimination, in that the rest of the parties in the council might be more averse to having a female leader in government and thus force her party out of the mayor's position. Likewise, it may simply be the case that women are either more averse to competitive bargaining environments or are less self-confident, which prevents them from obtaining a better deal out of the government formation process.

While our data do not allow for an exhaustive test of all these competitive mechanisms,

<sup>&</sup>lt;sup>8</sup>In subsection 3.8.6 we show that this effect seems to be even larger when third parties are led by women.

some of them have observable implications that can be tested using the kind of information we have available. To do so, we restrict our samples to the conventional RDD bandwidths of the forcing variable obtained in our main analyses ( $\pm$ .091 for the femaleled party margin of victory), and estimate OLS models of the following form,

$$Y_{it} = \beta_0 + \beta_1 d_{it} + \beta_2 M V_{it} + \beta_3 (d_{it} \times M V_{it}) + \beta_4 MayorWinner_{it} + \beta_5 (d_{it} \times MayorWinner_{it}) + \beta_6 (M V_{it} \times MayorWinner_{it}) + \beta_7 (d_{it} \times M V_{it} \times MayorWinner_{it}) + \beta_8 MayorSecond_{it} + \beta_9 (d_{it} \times MayorSecond_{it}) + \beta_{10} (M V_{it} \times MayorSecond_{it}) + \beta_{11} (d_{it} \times M V_{it} \times MayorSecond_{it}) + \epsilon_{it}$$

$$(3.2)$$

where  $Y_{it}$  accounts for a government characteristic in municipality *i* and election *t*,  $MV_{it}$  refers to the forcing variable – women's margin of victory –, and  $d_{it}$  is an indicator variable that equals one when  $MV_{it} > 0$  and zero when the value of the forcing variable is negative.  $MayorWinner_{it}$  and  $MayorSecond_{it}$  are two dummy variables that indicate whether the mayor's office was occupied specifically by the first- or second-most-voted parties, respectively. Note that we need to include the latter two because it is the gender of the mayor, rather than that of the winner of elections, that should shape the characteristics of the government effectively formed.

Different combinations of values of the above variables allow for an appropriate test of the implications of various mechanisms at the cut-off point for the forcing variable, depending on the gender of the mayor and whether their party came first or second in the election. The results we will show are linear predicted values of the outcome variables, along with 95% confidence intervals,<sup>9</sup> at different values of the indicator variables, at the left and right of the cut-off ( $d_{it} = 0$ ,  $MV_{it} = 0$  and  $d_{it} = 1$ ,  $MV_{it} = 0$ , respectively).

<sup>&</sup>lt;sup>9</sup>Standard errors clustered by municipality.

#### Is it a matter of preference? Policy concessions in exchange for access to office

If the main reason underlying the empirical patterns above is that female politicians are more policy-seeking than male politicians, then in close elections we should observe male mayors tending to form coalitions that are more ideologically polarised than female mayors do. That is, if female-led parties lose the mayor's office because female politicians are less willing to make policy concessions in exchange for certain perks of office, then we should observe that male politicians are comparatively more willing to build coalitions with parties that are further away from them in the ideological spectrum.





The graph on the left of Figure 3.2 shows that in close elections the predicted ideological range of the government – the difference in the position on the left-right spectrum between the rightmost and leftmost parties in the governing coalition – is very similar regardless of the gender of the mayor. The government that allows a party that has won elections by a narrow margin to secure the mayor's office has an average ideological range of around 1 point on a 0 to 10 scale, regardless of whether it is a female-led party or a male-led one. It is not the case, therefore, that parties led by a man are more willing than those led by a woman to build ideologically incoherent coalitions in exchange for securing the highest prize in government, which would be one possible implication of the policy-vs-office mechanism outlined above.

Interestingly, the panels on the right of each of these two graphs (mayor from the second-most-voted party) show larger differences. Not surprisingly, when the party that has lost elections by a narrow margin manages to seize the mayor's office despite having a bargaining disadvantage, the coalition needed to do so is on average more polarised than when the leader of the first-most-voted party becomes mayor. However, the left-right range of the resulting coalition is slightly larger, though not statistically significant, when the leader of the party is a woman. Contrary to the above conjectures, therefore, it is not the case that male mayors whose parties come second in elections reach this position through more polarised coalitions than female mayors in the same circumstances.

The graph on the right of Figure 3.2 shows similar patterns using a slightly different measure: the average distance between the mayor's party's position on the left-right spectrum and those of the rest of the parties in the government. Once again, female and male leaders tend to choose partners that are similarly distant to them to reach the mayor's office. If anything, female mayors that lost elections by a narrow margin seem to build coalitions with partners that are slightly more ideologically distant than male leaders under the same circumstances. This clearly runs counter to the hypothesis that female politicians are less willing to trade policy for office.

# Is it a matter of leadership style? Participative leadership promoting multiparty cabinets

In line with previous studies, female politicians might be more willing to adopt a participative leadership style than men and thus be more prone to share the spoils of office to facilitate coalition-building. A possible observable implication of this argument is that differences in politicians' leadership styles will spill over into the type of governments that they promote: either coalition or single-party.



Figura 3.3: Consensualism vs individualism

Figure 3.3 shows that there are scant differences in both the probability of a coalition government (graph on the left) and the expected number of parties in government (graph on the right) according to the gender of the politicians involved in the negotiation process. In close races where the first-most-voted party manages to secure the mayor's office, the likelihood that it has done so through a coalition government is between 60%–70%, whether the leader of the party was a man or a woman. Indeed, the probability of a coalition soars to almost 100% when it is the second most-voted party that obtains the top position in office. Again, this is regardless of the party leader's gender.

In the same vein, the graph on the right shows that the average number of parties in government when the first-most-voted party holds the mayor's position is around 1.7, while it is over 2 when it was the second-most-voted party that won the mayor's office. However, no differences between gender emerge within these two circumstances either.

#### Is it a matter of discrimination? Choosing the gender of partners

An additional plausible argument as to why female politicians perform worse in government formation processes despite having a bargaining advantage is that they are simply prevented from obtaining a better deal by their male counterparts. This might be due to homophily – the tendency of individuals to bond with others who are similar to them – or outright discrimination – in this case, disliking having a female mayor. A direct test of these arguments is not feasible, but one testable implication that conflates both mechanisms is that, under the same circumstances, male leaders will tend to avoid forming coalitions with other female-led parties to a larger extent than female leaders.



Figura 3.4: Discrimination

Figure 3.4 shows the predicted number of female-led parties in government when the mayor is a woman whose party came first in the elections compared to the same circumstances under a male mayor (the count of female-led parties in office excludes the first- and second-most-voted parties). While statistical power is weak for these analyses, a simple comparison of the predicted values reveals that male mayors tend to settle

coalition agreements with female leaders equally often as female mayors. Male mayors, therefore, do not seem to systematically exclude female politicians from their coalition deals.

#### **3.6.2** Exploration of other party differences as a mechanism

Although the previous results hint at several possible rationales behind the behaviour of female politicians in government formation processes, it is still difficult to draw conclusions as to why they perform differently. The fact that female-led parties are more prone to losing the mayor's position but equally likely to gain access to office is compatible with quite a few different interpretations. One of the possible plausible explanations would be that women were more policy-seeking and less concerned with certain spoils from office than men, as they are willing to forgo the highest-ranked position in the government in exchange for policy influence through other cabinet positions. It could also be a matter of discrimination, in that the rest of the parties in the council might be more averse to having a female leader in the government and thus force her party out of the mayor's position.

Another perhaps simpler story relates to the fact that various characteristics other than gender could differ between marginally winning female-led and male-led party lists. Continuity tests can thus be useful to characterise such compound treatments in RDD applications that use close elections to isolate effects of a given predetermined characteristic of the winning candidate (Marshall, 2019). Table 3.3 examines potential discontinuities among observable candidate and party differentials that may plausibly affect either vote shares that put women in a close race position and/or performance in government formation processes.

	RD Estimate	S.E.	P-value	Effective N	Ν
Most voted party average age	-1.645	(1.311)	0.209	332	1728
Most voted party average education level	-0.493	(0.584)	0.399	319	1653
Most voted party incumbent mayor	-0.155	(0.126)	0.218	328	1710
Most voted party left-right placement	0.509	(0.322)	0.114	344	1781
Most voted party = PP	0.107	(0.101)	0.288	344	1781
Most voted party = PSOE	0.013	(0.120)	0.913	344	1781
Most voted party = Others	-0.120	(0.105)	0.250	344	1781

Taula 3.3: Discontinuities in pretreatment covariates (Local linear regression estimates)

Note: PP and PSOE refer to the main conservative and social-democratic party in Spain, respectively.refers to the the main conservative party and PSOE refers to the the main social-democratic party in Spain. Bandwidth is fixed at the level of the main analyses (.091) and observations are weighted with a triangular Kernel.

In our close elections it is not the case that female leaders are more common in party lists with younger councillors or that female-led parties have members with different average education levels than members of male-led parties. It may also be the case that the gender of the leader and incumbency status are bundled together, as female-led parties may come from the opposition more often (O'Brien, 2015), and have a lower tendency to contest for re-election (Bhalotra et al., 2018), or, in the opposite direction, incumbency status may act as a compensating differential that allows female-led parties to achieve a competitive electoral position in the face of anti-women biases. However, as shown in Table 3.3, the frequency with which narrowly winning female-led and male-led parties held the mayor's office in the previous term was similar. Likewise, no discontinuities appear with respect to the ideology or partisanship of the most-voted party, which implies that a change in the gender of the leader of the most-voted party at the cut-off point is not bundled with a change in these two party characteristics.

Of course, gender may still correlate with other observable and unobservable characteristics of the party or candidate. But, importantly, with the information available we are able to show that the fact that female-led parties are less likely to leverage their bargaining power in government formation processes is not driven by parties' experience in office, seniority or education of their members or their platforms.

# 3.7 Conclusions

The gender gap in top political positions is still critical around the world. While the number of female political representatives has grown relatively quickly, this increase has not trickled up at the same rate to high-ranking positions like heads of state, prime ministers or mayors. There are more women than ever in politics, but a glass ceiling prevents them from reaching top executive positions. In this chapter, we have shown that the bargaining process of government formation is also contributing to this gender gap.

To do so, we applied a regression discontinuity design to an original dataset on Spanish local governments and representatives, avoiding the potentially confounding effects of the characteristics of politicians and municipalities. The Spanish local electoral system grants the first-most-voted party a substantial advantage in negotiations around forming a government: if the rest of parties do not coordinate around an alternative candidate who obtains the absolute majority of favourable votes during the vote of investiture, the leader of the most-voted party is automatically appointed head of government, that is, mayor. In close elections, enjoying this advantage is assigned as-if random to parties, and thus, potentially, to male and female party leaders.

We found that the gender of the politicians involved in these bargaining processes significantly shapes various government formation outcomes. Female leaders are less likely to capitalise on their bargaining advantage and are more likely to lose the mayor's position when they win elections by small margins. We also analysed other government formation outcomes to explore the mechanisms behind this difference. Interestingly, while women's probability of becoming mayor is lower, female-led parties are equally likely to reach office: female politicians seem to make sure that their parties are represented in the executive even if this is at the expense of becoming the head of government.

These results suggest a few different potential interpretations. One plausible explanation is that male and female politicians differ in how far they prioritise office and policy as outcomes, so women are less willing to make policy concessions in exchange for winning office. Another story revolves around differences in leadership and bargaining styles. Certain politicians push for consensual solutions while others opt for more competitive outcomes, which might explain why female party leaders are less likely to become mayors but are equally likely to form part of the government coalition as male leaders. Finally, a third possibility is that a strong in-group vs out-group dynamic exists within the political elite. Due to homophily or outright discrimination, politicians who are arguably outsiders to the entrenched local political dynamics, such as women, would be prevented from leading local governments.

We have tested some observable implications of these mechanisms using our data on coalition formation outcomes. We found no clear indication in favour of any particular mechanism. Female politicians do not seem to result in there being less ideological distance between their party and the partners they form coalitions with to gain access to office than their male counterparts. The tendency to opt for more consensual solutions that include more parties sharing office is also similar regardless of gender. We found nothing to indicate that male leaders prefer to exclude female politicians from the governments they form. Ultimately, the exploration of party characteristics as a mechanism for our results indicates that they are not explained by differences between maleand female-led parties.

Chapters 2 and 3 together suggest that women are highly valued in coalition governments, but it is likely that what makes them valuable also confines them to junior government positions. These results provide a convincing explanation for the glass ceiling still perpetuated in politics, which does not allow women to advance to positions of power. This can be extrapolated to what happens in most organisations worldwide, perpetuating women in middle-management positions and preventing them from reaching top positions. However, the mechanisms underlying these results are still unclear. These analyses do not rule out the possibility that these mechanisms are at work in alternative guises. It might also be the case that female politicians perform differently in these negotiation processes for reasons that are simply more difficult to test, such as self-confidence, aversion to these competitive environments, or myriad forms of discrimination. However, further confirmatory evidence, such as in-depth interviews, would be needed to reach a sound conclusion.

In any case, we believe the chapters' findings to be important to our understanding of the role of personal characteristics in the political process and of how bargaining in politics works. Insofar as our results can help understand part of the gender gap that remains in top political positions, they may have major policy implications: Quota systems have demonstrated their effectiveness in increasing the number of women in politics, but this does not seem to map onto women's likelihood of winning the highest political positions; existing gender quotas might just not be enough and may need to be supplemented by others that target top political positions.

These results also have implications for other levels of government. At all levels of

government in parliamentary democracies, there are government formation processes in which particular social groups' preferences, qualities and advantages may be mediating the negotiations. The analysis of external validity shows us that nothing notably idiosyncratic occurs in the processes of local government formation in Spain compared to higher levels of government in other contexts. Moreover, although local politics is considered more personified, personal characteristics have also been demonstrated to affect politicians' attitudes and performance at diverse government levels (e.g. Anzia and Berry, 2011; Carnes and Lupu, 2015).

Future research should aim to expand the scope of this research to incorporate a broader range of national contexts and other levels of government. In addition, future works must focus on broadening the elected legislatures to observe whether the results persist with the emergence of new parties and changes in gender equality.

More broadly, this research has far-reaching implications for the quality of representation in parliamentary democracies, where citizens do not elect rulers directly. We have shown that personal traits such as gender condition the choice of governments above and beyond election results. If these characteristics matter for the selection of political rulers in ways that are not foreseeable by citizens, the chain of representation is impaired, and so is democracy as a representative system.

# **3.8** Appendix for "Women who win but do not rule. The effect of gender in the formation of governments"

#### **3.8.1** External validity

Figure 3.A1 provides a comparison of the determinants of government formation outcomes in Spanish municipalities (2003–2007, our data) and Western European countries (1945–1998, data from Glasgow and Golder (2015)). Estimates are conditional logit coefficients with 95% confidence intervals.

Remarkably, all but one of the point estimates of the two plots have the same signs, indicating that the determinants of government formation at the local level in Spain are very similar to those at the national level in Western Europe. The only sign that flips is that of the dummy variable identifying the presence of the party of the previous head of government (mayor/PM) in the potential coalition. However, the magnitude of the estimates is small and is not statistically significant in either case.

Overall, the figure confirms that there is nothing terribly idiosyncratic in Spanish local politics that compromises the external validity of the analysis of the effect of gender on government formation processes.



Figura 3.A1: External validity check: Spain (2003-2007) and Western Europe (1945-1998)

## **3.8.2** Descriptive information

#### Presence of female politicians

Spain is one of the countries that ranks highest in the global index of gender equality in politics (World Economic Forum, 2021). Today, almost half of the the seats in the Spanish Parliament are held by female politicians, and as much as 61% of cabinet ministers are women. However, this has not always been the case. As of 1989, only 6% of Spanish MPs were women, and still in 2003, the first year for which we have data in our sample, they only occupied about a quarter of all seats in Parliament. This appendix offers descriptive information about the relatively weak presence of female politicians in Spanish local governments in 2003 and 2007 in municipalities with more than 1,000 inhabitants.



Data Source: Inter-Parliamentary Union (IPU).

However, women's representation in local political institutions in Spain has been we-

aker. As shown in Figure 3.B2, the proportion of women among councilors and mayors has been relatively stable over the last decade, just like in most European countries. The difference between councilors and mayors also stands out: while the share of women in Spanish local councils is close to a third, it is below 20% for mayors. Again, Spain scores somewhat above the average but lower than other countries where gender equality has been higher for a longer period of time.



Figura 3.B2: Share of councilors and mayors in European local institutions

Data Source: European Institute of Gender Equality (EIGE).

The presence of female politicians in Spanish local governments is also relatively weak in the sample we use in the analyses, which focuses on the period 2003-2007 for municipalities over 1,000 inhabitants. Figure 3.B3 shows that, on average, 36% of local candidates in Spain are women, but their presence systematically decreases the higher up we move in the political hierarchy: 29% among elected councilors, 18% of party leaders (candidates ranked 1st in the list), and only 12% of mayors. The same kind of pattern is observed regardless of the size of the municipality, year, or party. However, in general we can see that the share of female politicians is higher in larger municipalities, it substantially increased from 2003 to 2007, and, although the difference is not large, the share of women in the PSOE local branches is slightly higher than in the PP or other parties.



Figura 3.B3: Share of female politicians by population, year, and party

#### Descriptive statistics by municipality and party

Table 3.B1 offers descriptive information of various attributes of local politics in the municipalities that are included in our sample. First, in around a third of all cases, no single party obtains the absolute majority of seats. These are in fact the cases that belong to our effective sample. Also, the average size of local parliaments is of around 13 seats. The number of parties that obtain at least one seat is close to three, although it climbs to 3.7 in minority situations (and, as expected, is lower if one counts the *effective* number of parties instead). With regards to elections, it bears mentioning that turnout is over 70%, which indicates that local elections in Spain are perceived as important by Spanish voters.

	Full sample	Minority
Minority situation (share)	0.324	
	(0.468)	
N. of parties	3.030	3.687
	(0.879)	(0.802)
Effective n. of parties	2.351	2.957
	(0.567)	(0.486)
N. of seats in council	12.550	13.617
	(4.398)	(4.862)
Turnout	0.741	0.719
	(0.093)	(0.093)
Ν	5,500	1,780

Taula 3.B1: Descriptive statistics by municipal council

Standard deviations in parentheses.

Table 3.B2, on the other hand, shows descriptive information at the party level. As seen above, the share of female party leaders is below 20%, while that rises to more than a third if we look at all candidates, irrespective of their rank. With respect to their age, our local candidates average around 43 years of age. Looking at the full sample, the

average vote share and seat share is over 30%, but it exceeds 50% for election winners. Not surprisingly, these shares go down to around 25% and 40%, respectively, if we exclude majority situations. Finally, Table 3.B2 also shows that in our sample we have slightly more local PSOE than PP party lists.

	Full sample			Minority				
	All parties	Winner	Runner-up	Third+	All parties	Winner	Runner-up	Third+
Female leader (share)	0.180	0.128	0.208	0.201	0.191	0.156	0.204	0.204
	(0.384)	(0.334)	(0.406)	(0.401)	(0.393)	(0.363)	(0.403)	(0.403)
Average share of women	0.363	0.364	0.365	0.359	0.373	0.380	0.375	0.368
	(0.131)	(0.127)	(0.130)	(0.135)	(0.124)	(0.120)	(0.119)	(0.128)
Average age of councilors	43.262	42.853	42.565	44.413	43.902	43.500	43.278	44.550
	(7.103)	(5.441)	(6.466)	(8.909)	(7.112)	(5.718)	(5.982)	(8.404)
Average seat share	0.330	0.552	0.321	0.123	0.271	0.428	0.342	0.136
	(0.198)	(0.114)	(0.094)	(0.059)	(0.143)	(0.047)	(0.072)	(0.066)
Average vote share	0.315	0.507	0.312	0.133	0.259	0.399	0.317	0.142
	(0.174)	(0.103)	(0.084)	(0.053)	(0.126)	(0.050)	(0.062)	(0.059)
PP share	0.285	0.352	0.328	0.179	0.239	0.280	0.272	0.195
	(0.451)	(0.478)	(0.469)	(0.383)	(0.426)	(0.449)	(0.445)	(0.396)
PSOE share	0.311	0.428	0.387	0.122	0.263	0.410	0.358	0.121
	(0.463)	(0.495)	(0.487)	(0.328)	(0.441)	(0.492)	(0.480)	(0.326)
Ν	16,675	5,501	5,499	5,668	6,570	1,781	1780	3004

Taula 3.B2: Descriptive statistics by party

Standard deviations in parentheses.

#### Mayors by party rank

Table 3.B3 and Figure 3.B4 show information on the outcome we are interested in: which party is able to secure the mayor's office. First, we can see that the party the mayor belongs to obtains an average share of around 50% of the votes, which goes down to 36.5% if one focuses on minority contexts only (our effective sample). In the full sample of municipalities the mayor belongs to the first-most-voted party in the vast majority of cases (88%), but this changes dramatically in those situations in which no single party obtained the majority of seats: the party that won elections still appoints the mayor 63% of the time, but as much as 31% of mayors belong to the runner-up party and even more than 6% of them come from parties that were ranked third or lower in elections.

	Full sample	Minority
Mayor party vote share	0.496	0.365
	(0.120)	(0.074)
Mayor from most voted party (share)	0.880	0.629
	(0.325)	(0.483)
Mayor from runner-up party (share)	0.099	0.307
	(0.299)	(0.461)
Mayor from parties ranked third or more (share)	0.021	0.064
	(0.142)	(0.245)
N	5,500	1,780

Taula 3.B3: Descriptive statistics of mayoral parties

Standard deviations in parentheses.

Figure 3.B4 plots the relative distribution of parties in each of the above cases (under minority situations). In general, the PSOE appoints the mayor in most instances, both if it ranked first or second in elections. However, in those cases in which the mayor's office goes to parties ranked third or lower, it is seldom the case that these are the PSOE

or the PP, but are more often other smaller, less traditional parties.



Figura 3.B4: Mayor by party and party rank

# 3.8.3 The most voted party advantage

Table 3.C1 shows estimates from linear probability models on the determinants of securing the mayor's office (data from Spanish local governments, 2003–2007).

	(1)	(2)	(3)
Most Voted Party	0.490***	0.266***	0.498***
	(0.011)	(0.014)	(0.012)
Share of Votes		1.166***	
		(0.050)	
Woman Leader			-0.003
			(0.014)
Most Voted * Woman Leader			-0.051*
			(0.029)
Constant	0.138***	-0.104***	0.139***
	(0.006)	(0.012)	(0.006)
Observations	6567	6567	6566
R-squared	0.241	0.299	0.241

Taula 3.C1: Linear probability models of becoming the mayor party

Note: Standard errors in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Being the most-voted party has a large positive average effect on the likelihood of winning the mayor's office in situations where no single party obtained the majority of seats in the local council. Most-voted parties are on average around 50 p.p. more likely to secure the mayor's office than the rest of the parties involved in the government formation process. After controlling for the confounding effect of party size – share of votes – the advantage is still substantial: around 27 p.p. The interactions also show that the most-voted party advantage is smaller for parties with a woman leader.

Graphically, Figure 3.C1 shows that the probability of becoming mayor at the cut-off point for the margin of victory is around 54% for the first-most-voted party and around

39% for the second-most-voted party. The jump in probability is therefore roughly 15 percentage points. Conventional RD estimator: 15.3 (t=2.70). Bias-corrected RD estimator with robust bias-corrected confidence interval: 13.7 (t=2.04).





## 3.8.4 Continuity assumption

#### Covariate balance: continuity of pre-treatment covariates.

In this section, we validate the continuity assumption of our RD strategy that requires that the only change that occurs at the point of discontinuity is the shift in the treatment status (De la Cuesta and Imai, 2016).

Various municipal characteristics could differ between marginally winning female-led party lists and marginally winning male-led party lists. Table 3.D1, therefore, examines balance in a number of possibly important covariates at the municipality level and lists local linear regression estimates of discontinuities at the threshold of the forcing variable.

Taula 3.D1: Discontinuities in pretreatment covariates (Local linear regression estimates)

	RD Estimate	S.E.	P-value	Effective N	Ν
Number of parties represented	0.222	(0.160)	0.167	344	1781
Number of seats in local council	1.534	(1.100)	0.167	344	1781
Turnout	-0.025	(0.021)	0.247	344	1781
Population (absolute)	7153	(9784)	0.465	344	1781
Population (log)	0.311	(0.278)	0.263	344	1781
Population density	368.0	(234.1)	0.116	344	1781
Total pre-election expenditures per cap.	-33.71	(88.56)	0.703	344	1781
Unemployment rate (2001)	-3.999	(2.753)	0.146	344	1781
Tertiary sector share (2001)	5.375	(3.177)	0.091	344	1781
Municipal average education level (2001)	0.048	(0.055)	0.379	344	1781
Municipal average age (2001)	-0.580	(0.854)	0.497	344	1781
Share of non-EU immigrants (2001)	0.030	(0.606)	0.960	344	1781
Coastline municipality	-0.111	(0.085)	0.187	344	1781
Distance to the coast	4729	(23615)	0.841	344	1781

Note: p<0.1; p<0.05; p<0.05; p<0.01. Bandwidth is fixed at the level of the main analyses (.091) and observations are weighted with a triangular Kernel.

We check for several contextual aspects of the municipality. The number of parties, size of the council, turnout, population, population density, and budget size are measured at

the election year, while the remaining covariates come from the 2001 Spanish census (except, of course, the coastline indicator, that is a time-invariant characteristic of the municipality). None of the latter reveal substantial discontinuities. The weight of the tertiary sector in the economy is the only factor that is slightly larger when the leader of the most-voted party is a woman, but it is only statistically significant at the 10% level (p=.09). Overall, the effect of the gender of the leader of the first-most-voted party on our outcome variable does not seem compromised by other potential confounders.

#### **Continuity of the forcing variable**

The validation of the crucial continuity assumption of our identification strategy is further bolstered by Figure 3.D1, which shows a McCrary (2008) test that confirms the continuity of the density function of our forcing variable, indicating the absence of sorting. The estimated discontinuity in the density of the margin of victory of the first female-led party is -.27 (s.e.=.19). Despite there being a slight jump at the threshold, the difference is not statistically significant.



Figura 3.D1: Continuity of the forcing variable

Note: The panel on the left displays a frequency histogram of the forcing variable with various preset bin widths. The panel on the right presents weighted kernel estimations of the log density, performed separately on either side of the zero threshold, where dots represent bin averages of the density of the forcing variable, computed with (McCrary, 2008) Stata program.

#### 3.8.5 Robustness checks

#### **Robust bias correction**

Table 3.E1 presents the bias-corrected versions of the RD estimates in the main text along with robust confidence intervals (Calonico et al., 2014) using the optimal bandwidth for robust bias-corrected inference. It can be seen that the estimates are, if anything, slightly larger than in the baseline models.

	Tudu 5.11. Robust blus confected interence						
	All parties	No 3rd parties	No 3rd parties & gender-mixed				
Female leader	-0.272	-0.291	-0.414				
	(0.128)	(0.135)	(0.162)				
P-value	0.034	0.031	0.010				
Bandwidth	0.157	0.162	0.120				
Effective N	506	458	348				
Ν	1781	1556	456				

Taula 3.E1: Robust bias corrected inference

Standard errors in parentheses

Note: The outcome variable takes value 1 when the first-most-voted party obtained the mayor's office and 0 otherwise. Bias-corrected RD estimates use a robust variance estimator, Calonico et al. (2018)'s optimal bandwidth for robust bias-corrected inference as a baseline, and Calonico et al. (2017)'s default (triangular) kernel. Standard errors are presented in the parentheses below. Effective N refers to the effective number of observations.

#### Sensitivity to other kernels

The local linear regression estimates in the main text are produced using the triangular kernel weights for observations within the bandwidth, the default in Stata's rdrobust command (Calonico et al., 2017). In Table 3.E2 we present the estimates obtained using other kernels. In the first three columns, observations closer to the threshold are given more weight to fit the local linear regressions: just like the triangular kernel but using a parabolic (Epanechnikov) function. Columns four to six, by contrast, give the same (uniform) weight to all observations within the selected bandwidth. The resulting RD estimates are similar to the baseline analyses, although slightly smaller using the uniform kernel. Once again, treatment effects seem to be stronger the nearer the bandwidths are to the cut-off point, which is consistent with the fact that kernels that weigh observations by distance to the threshold generate larger estimates.

	Kernel epanechnikov			Kernel uniform		
	All parties	No 3rd parties	No 3rd parties & gender-mixed	All parties	No 3rd parties	No 3rd parties & gender-mixed
Female leader	-0.219	-0.236	-0.358	-0.170	-0.144	-0.318
	(0.105)	(0.111)	(0.137)	(0.101)	(0.106)	(0.131)
P-value	0.037	0.033	0.009	0.092	0.172	0.015
Bandwidth	0.091	0.095	0.061	0.091	0.095	0.061
Effective N	344	319	230	344	319	230
N	1781	1556	456	1781	1556	456

Taula 3.E2: Multiple kernels for observations within the bandwidth

Standard errors in parentheses

Note: The outcome variable takes value 1 when the first-most-voted party obtained the mayor's office and 0 otherwise. For the sake of comparability, local linear regression estimates use Calonico et al. (2014)'s optimal bandwidth for the main models in Table 3.1 as a baseline. Standard errors are presented in the parentheses below.
#### Sensitivity to multiple bandwidths

Figure 3.E1 shows the RD estimates using different bandwidths. The differences between the point estimates are noticeable. Interestingly, their magnitude increases almost monotonically as the size of the bandwidth decreases. Hence, the effect of gender on government formation seems to be even stronger if we focus on especially close elections. Not surprisingly, standard errors increase with smaller bandwidths, but this is compensated by the increase in magnitude to maintain mostly conventional levels of statistical significance (except for the shortest bandwidth). Overall, the effect of politicians' gender on the formation of governments seems to be robust to the choice of bandwidths.



Figura 3.E1: RD plot of the most voted advantage

Note: Outcome variable takes value 1 when the first-most voted party obtained the mayor's office and 0 otherwise. Local linear regression estimates use a triangular kernel.

#### Placebo test: Multiple cutoffs

In this section, we run several placebo tests changing the cut-offs to different values of the forcing variable. Reassuringly, all RD estimates using the placebo thresholds are, as expected, closer to zero than the baseline estimate c(0), with arbitrary changes in the direction of the signs.



Figura 3.E2: RD plot of the most voted advantage

Note: The outcome variable takes value 1 when the first-most-voted party obtained the mayor's office and 0 otherwise. Local linear regression estimates use Calonico et al. (2014)'s optimal bandwidth and a triangular kernel.

#### The effect of gender quotas

In March 2007 the Spanish Equality Act modified the Spanish electoral law so that there must be at at least 40% of candidates of each gender in the lists of local elections. These quotas were implemented for the first time in the 2007 local elections in all municipalities with more than 5,000 inhabitants, and were later extended to more municipalities. This institutional change could pose a threat to our design because the compulsory inclusion of more women in the lists could affect the selection of types of local politicians, including women with characteristics that would have made them unlikely to run otherwise. Despite Bagues and Campa (2021) find that the implementation of these quotas did not increase the number of female party leaders or female mayors (it only had an effect on the selection of candidates ranked 2 or lower in the list), we run a robustness test to show that the introduction of gender quotas is not driving our results.

	All parties		No 3rd	parties	No 3rd parties & gender-mixed	
	2003	2007	2003	2007	2003	2007
Female leader	-0.358 (0.169)	-0.133 (0.157)	-0.298 (0.180)	-0.227 (0.162)	-0.294 (0.180)	-0.234 (0.163)
P-value Bandwidth Effective N	0.035 0.091 149	0.398 0.091 195	0.097 0.091 137	0.163 0.091 174	0.102 0.091 131	0.151 0.091 167
Ν	839	942	735	821	197	259

Taula 3.E3: The effect of gender quotas

Standard errors in parentheses

If it had been the supply of different types of women what made winner female party leaders more unlikely to become mayors, the effect of gender on government formati-

Note: The outcome variable takes value 1 when the first-most-voted party obtained the mayor's office and 0 otherwise. For the sake of comparability, local linear regression estimates use Calonico et al. (2014)'s optimal bandwidth for the main models in Table 3.1 as a baseline. Standard errors are presented in the parentheses below.

on should be concentrated in 2007, when the quotas were already in place. However, Table 3.E3 shows that the main RD estimate *is not* larger in the 2007 elections (with quotas) than in 2003 (without quotas). In fact, our RD estimate is large and has the expected negative sign in both years, and it is even larger in 2003, in the absence of quotas. That increases our confidence that our results were not driven by this specific institutional change in Spanish local elections.

We further analyze the robustness of our results in Figure 3.E3, where we show the differences between 2003 and 2007 of our key discontinuity estimates, along with confidence intervals of the contrast between the two years. In the two top panels we can see that the difference between 2003 and 2007 is not statistically significant for our main outcome variable (Table 3.1 in the main text) or the other outcome variables we show in Table 3.2.

With respect to the test of the mechanisms shown in the bottom-left panel (see Table 3.3 in the main text where we saw that party differences were unlikely to be driving the gender effect), we can see that, in general, the differences between 2003 and 2007 are small. The only statistically significant difference is with respect to age: narrowwinning female leaders are slightly younger than male narrow winners in 2007 (not in 2003). Despite the difference being only borderline statistically significant, that might be one possible explanation for why the gender effect is slightly smaller in 2007 than in 2003: the entrance of a new, younger cohorts of female politicians thanks to the implementation of quotas might be compensating women's traditional disadvantage in political negotiations.

Finally, the bottom-right panel shows that there are no significant differences in the discontinuity of pre-treatment variables between 2003 and 2007 (see Table 3.D1 for the



Figura 3.E3: RD estimate difference 2003-2007: Contrasts

Note: For illustration purposes, all non-binary measures have been rescaled to a minimum value of 0 and a maximum value of 1.

full sample tests), increasing our confidence that covariate balance is met in both years.

#### 3.8.6 Heterogeneous effect by gender of third parties

subsection 3.8.6 further explores the conditions under which female-led party leaders that won elections are willing to relinquish the mayor's position to parties that ranked third or lower (see Table 3.2 in the main text). Specifically, Table 3.F1 shows that winner parties led by women are more likely to offer the mayor's office to parties that ended up third in elections than male-led parties in the same position, and that happens both whether the leader of the third party is a woman or a man. However, the magnitude of the effect is clearly larger when the third party is led by a woman (a striking 38% jump) than by a man (13% increase). That hints at the presence of possible patterns of gender homophily in political negotiations, where women might be more willing to make concessions to other female politicians than to men.

			-
	All cases	3rd female leader	3rd male leader
Female leader	0.167	0.382	0.125
	(0.076)	(0.239)	(0.072)
P-value	0.028	0.110	0.083
Bandwidth	0.091	0.091	0.091
Effective N	344	80	264
Ν	1781	358	1423

Taula 3.F1: Heterogeneous effect by gender of the leader of parties ranked third

Note: The outcome variable takes value 1 when the party ranked third in elections obtained the mayor's office and 0 otherwise. For the sake of comparability, local linear regression estimates use Calonico et al. (2014)'s optimal bandwidth for the main models in Table 3.1 and Table 3.2 as a baseline. Standard errors are presented in the parentheses below.

# Capítol 4

# WOMEN'S POLITICAL AMBITION: NEW EVIDENCE FROM A SURVEY OF POLITICAL ELITES

#### Alba Huidobro

The underrepresentation of women at the forefront of politics continues to prevent democracies from reaching gender equality to this day. Research on women's access to politics reports significantly lower levels of ambition for political office among women relative to men, but the evidence gathered so far has not dealt with the ambition of women to attain top-level political positions specifically. To what extent does the gender gap in political ambition persist at the front lines of power? Based on data from an original survey administered to around 1,000 Spanish mayors, I provide a thorough analysis of the attitudes and political ambitions of those who reach these top positions. The findings reveal that, the gender gap on political ambition to remain in politics disappears among the political elite. The differences reappear when it comes to their ambition to remain in or leave politics with women more aware of their family responsibilities when deciding whether to leave politics. I further investigate mayors' patterns of re-election by combining these results with observational data on electoral candidacies. The findings suggest that re-election patterns are skewed in favour of male politicians. The chapter thus contributes to the understanding of the mechanisms underlying the underrepresentation of women in top political positions, focusing on women's motivations to reach and remain in positions of power.

# 4.1 Introduction

The presence of women in powerful political roles is increasingly notable. Even so, the top positions seem to still be monopolised by men. While women's representation in national parliaments has increased to 26.1% of all available seats across the globe and women lead 22.6% of ministerial departments worldwide, the situation is still more unequal further up the hierarchy: in 2021, only 14 women are heads of state or prime ministers across the 193 countries analysed (World Economic Forum, 2021). Understanding how political elites reach these positions, and the pitfalls they encounter along the way, is particularly important in light of ongoing decreases in gender gaps in politics across the world.

Politicians' ambition may affect their likelihood of attaining those positions of power. If politicians with certain demographic profiles are found to have a greater preference for remaining in politics, reaching higher positions or quitting politics, this may ultimately result in the over or underrepresentation of certain groups. The political ambition of different social groups, such as women, is relevant when attempting to fully understand

who decides to stay in the political field. Despite this importance, female politicians' own career desires and the consequences of their decisions, once they are in office, are rarely studied empirically (Gulzar, 2021).

The literature on women's political ambition focuses mainly on their willingness to run for office in the first place. Previous studies on women's access to politics report significantly lower levels of aspiration to political office for women, relative to men (e.g. Fox and Lawless, 2004). Along the same lines, many other studies suggest that the competitive nature of elections is an important deterrent for women's interest in political office due to their stronger aversion to risk, conflict, and competitive environments (Niederle and Vesterlund, 2007; Eckel and Grossman, 2008; Preece and Stoddard, 2015; Schneider et al., 2016). However, these studies focus on the general population; thus, it is unclear how we should expect women who are already in politics to behave.

Although scholars have previously analysed gender differences in political ambition among candidates, the evidence to date is mixed. On the one hand, Folke and Rickne (2016a) find that the gender differences in access to politics are unlikely to be relevant once in elected office. Fulton et al. (2006), on the other, analysing a survey of state legislators, find evidence that gender influences ambition and the decision to run for higher office.

This chapter aims to bring clarity to this discrepancy in results by providing an in-depth analysis of the profiles, attitudes and perceptions of politicians in powerful positions and their prospects of leaving, staying and/or rising in politics. I argue that there are no gender differences in the ambition of remaining in politics among those who have already acceded to positions of power because their self-confidence, socialisation and risk aversion are already similarly high a priori. Things are different, however, when we focus on the progressive ambition to move up the political ladder. Previous analyses have found that women are more sensitive to the cost-benefit calculus when it comes to entering and staying in politics (Fulton et al., 2006; Bernhard et al., 2021). I therefore argue that there are gender differences in politicians' progressive ambition through a different cost benefit calculation of remaining in politics. This chapter contributes to this literature by contrasting politicians' decisions to stay in local politics with the decisions to move towards higher office or leave politics, in an innovative design that includes politicians' perceptions of outside options.

I administered a survey to 979 Spanish mayors (with a response rate of over 40%) asking them about their willingness to remain in politics, to seek higher office or to leave politics. This real-life sample of politicians in top local positions offers new insight into the factors that help them express progressive ambition, controlling for their office-holding status. The survey is among the largest ever conducted on political elites in Spain. It contains a significant number of questions about their sociodemographic information and political attitudes, as well as about their perceptions of their labour market opportunities outside politics. I then explore patterns in their likelihood to run again in subsequent elections by combining the survey results with observational data on mayors' actual electoral behaviour in the following election. A sample of mayors is a good opportunity to advance our understanding of attitudes and decision-making of those who are more likely to reach higher levels of government.

I use two measures of political ambition. First, the politicians' own statements on whether they want to run for office again. Second, a more detailed measure that captures where politicians see themselves in the future, including options for other levels of government or outside politics. The survey and observational data suggest that although there are gender differences in top politicians' profiles, these do not exist in their level of political ambition. However, when it comes to moving up to higher positions or leaving politics, the cost calculation made by men and women seems to differ. The results suggest that women tend to stay in their positions instead of going outside politics due to income and family responsibilities. For promotion to higher levels of government, individual attitudes seem to matter more, although the results are less clear. Moreover, the political ambition of candidates does not seem to be a positive factor in encouraging women to run again in the next election on equal terms with men. The results suggest that patterns of repeat elections are somewhat biased by politicians' gender.

This paper contributes to the understanding of the mechanisms underlying the underrepresentation of women in top political positions, with a new exploration of women's motivations to reach and remain in them. The paper also contributes by presenting evidence of no difference in political ambition between men and women, using a new and rich data source, with a large sample of politicians aimed at analysing political ambition. Finally, this chapter's findings are important in understanding part of the mechanisms of politicians' negotiation strategies examined in Chapters 2 and 3 of this dissertation.

# 4.2 Women's Political Ambition

A large amount of literature explains the underrepresentation of women in politics from both the demand and supply sides. The latter focuses mainly on women's political ambition. Research on female candidate emergence reports significantly lower levels of aspiration to political office for women, relative to men (Fox and Lawless, 2010; Sanbonmatsu, 2006b; Fulton et al., 2006). These differences in political ambition have been attributed to other gender disparities, such as socialised personal perceptions (Bernhard and de Benedictis-Kessner, 2021).

Women's individual perceptions of their ability and qualifications help to perpetuate the gender gap in political recruitment patterns. Fox and Lawless (2010), for instance, show that women see themselves as less qualified to run for political office than men. In addition, they demonstrate that the gender gap may be reduced as women begin to perceive themselves as more suitable for a political career. Elected female politicians, with some political experience already behind them, are more likely to feel confident and prepared to continue their political careers and aim for promotion to higher office.

It is well accepted that different gender role socialisation between girls and boys has an effect on their level of political engagement (Clark et al., 1989; Fox et al., 2001; Moore, 2005). Fox and Lawless (2014), for instance, focus on gender differences in political socialisation. Using a sample of school and college students, their findings reveal that parental encouragement, politicised educational and peer experiences, particularly during higher education, drive interest in running for office. Other papers also emphasise the importance of the presence of female role models in women's lives and find that this increases the intention of being more politically active (Campbell and Wolbrecht, 2006; Foos and Gilardi, 2020).

At the same time, other studies have suggested that self-confidence and aversion to competitive environments are other important factors in determining the levels of political ambition. Carroll and Sanbonmatsu (2013) argue that self-confidence is even more important to women than men, as shown by the fact that women think they need to acquire more experience before running. Many other studies suggest that the competitive nature of elections is an important deterrent of women's interest in political office, because of their stronger aversion to conflict and competitive environments (Schneider et al., 2016; Preece and Stoddard, 2015). Kanthak and Woon (2015), for instance, conclude that, while there are no gender differences in the decision to become a candidate in situations where the representative is chosen at random, they emerge once the representative is selected thorough a competitive election process.

Since these personal differences are important when it comes to entering politics, my expectation is that women who occupy top political positions have similar profiles to men and are at least as politically ambitious as they are. There are several reasons why we might expect gender differences on political ambition to fade beyond the glass ceiling. First, given that one of the main factors that has an effect on women entering politics is women's own belief that they are qualified, prepared and experienced enough, those who do enter are likely to be more prepared to play the political game and reach such a high position of power. Second, women selected to be in high positions are likely to have had a strong socialisation in politics, in addition to having built a large enough social network to be able to lead a party. Third, it is likely that those women who have broken the glass ceiling in the most competitive environments are a highly select sample of female politicians who are likely to be at least as risk acceptant as their male counterparts.

In political science, there is an increasing literature analysing whether gender differences in elected politicians' ambition actually exist. For instance, research suggests that these gender differences in access to politics are unlikely to be relevant once in office. Folke and Rickne (2016a), analysing a sample of local politicians in Sweden, find no gender differences in their political ambition to remain in local politics. Similarly, Schwindt-Bayer (2011) argues that female and male elected national legislators in three Latin American countries are quite similar in terms of social background, pathways to

power and political ambition. Thus, women in these countries who gain elected office do so by playing the traditional political game, defined by men. Fulton et al. (2006), however, using survey data from a survey of U.S. state legislators, find evidence that gender influences ambition and the decision to run for higher office. Women are less ambitious in general, as they are more sensitive to their prospects of victory.

Given the difference between these findings, the extent of the gender gap in the ambition of elected politicians remains unclear, and even less so among politicians in top political positions with real executive power and prospects of advancing in politics. In this chapter, I attempt to go further than the literature has to date, examining politicians' progressive ambition.

#### 4.2.1 **Progressive ambition**

Progressive ambition refers to one's willingness to progress up the political ladder, as opposed to nascent ambition, which is the ambition associated with the decision of entering politics. Along these lines, Fulton et al. (2006) conduct the first systematic analysis of progressive ambition that includes a gender perspective. They highlight that the cost-benefit calculus that men and women politicians make when it comes to progressive ambition is not the same. They find that women are more sensitive to these calculations. Moreover, recent studies have suggested that what motivates women's progressive ambition may be distinct from earlier levels of ambition (Windett, 2014).

Politicians already in elected office, are likely to evaluate themselves differently than those who decide to run for office for the first time. It is likely that the factors that the literature has associated with nascent ambition do not fully explain politicians' desires to move up in or out of politics. Empirical evidence on gender differences in progressive ambition remains scarce, especially as pertains to women's willingness to leave politics and their perceptions of their opportunities outside of it. My argument revolves around the idea that women's calculus for running for higher office is very much related to its costs, rather than to their personal self-assessment.

The literature has long emphasised the higher costs that women tend to bear for participating in politics, which can involve anything from personal to partisan circumstances. Family responsibilities, for example, can be decisive in deciding whether or not to run for office (Sapiro, 1982; Bledsoe and Herring, 1990; Fox and Lawless, 2004). In recent years, however, some studies demonstrate that roles within the household and marital status do not have an effect on the gender representation gap (Fox and Lawless, 2014). Even so, some doubts remain since the study does not fully explain the perpetuation of differences in household composition between male and female politicians (Carroll and Sanbonmatsu, 2013). A recent study by Bernhard et al. (2021) explores the effect of income and household composition on women's political ambition. Although they do not find any effects for income, they provide evidence that being the breadwinner negatively affects the ambition of women, especially mothers. In other words, their expressed political ambition is affected by their economic situation outside of politics.

In line with these results, I argue that women may also be influenced in their calculations by their perceptions of opportunities outside of politics. As of now, research that includes outside options in the analysis of political ambition remains rare (Gulzar, 2021). That said, empirical claims have been made that aspects such as prosocial benefits, salary or prosocial reasons can define the profiles of politicians who run for election (Gulzar and Khan, 2021; Bénabou and Tirole, 2003). Thus, it is plausible to expect that there is a relationship between a lack of outside options and political ambition. If politicians perceive that their situation outside of politics would be worse in terms of salary, time constraints or satisfaction, the incentives to leave politics may be much lower. Given that women seem to be more sensitive to these costs, it is likely that they will incorporate these expectations into their calculations.

A second expectation, therefore, is that women are likely to be more sensitive to different family and work situations when deciding whether to progress in or leave politics. Furthermore, these calculations are affected by women's perceptions of their options if they were to leave politics.

#### 4.2.2 Women running for re-election

The question of whether political ambition materialises into staying or progressing in politics remains unanswered. Moreover, if the gender gap in political ambition is non-existent, is there a gender gap in the realisation of this ambition in the actual behaviour of male and female politicians? Or is it also individual factors that define the effect of their ambition to stay on or move up the political ladder? From the literature on the demand for female politicians, we have ample evidence of the barriers women face in participating in the first place. There is less empirical evidence, though, to explain how much of their willingness to remain in politics results from the materialisation of their desires.

Recent research analyses the women's decisions to remain in politics, both when they win and when they lose. Sevi (2022) analysing the election of Canadian candidates, finds that female incumbents are just as likely as male incumbents to persist in politics. Peveri and Sangnier (2021) on the other hand, show that losing an election may decrease women's likelihood of running again. However, they find no gender differences among

those politicians who win. Women are as or more persistent in political competition as winning men. Finally, Bernhard et al. (2021) find that women who narrowly lose elections are no more likely to quit politics than men who narrowly lose. In other words, once women overcome the barriers and enter politics, they tend to want to stay, regardless of whether they win or not. These results suggest women who are already in politics are more confident, have gained experience in the political arena and have overcome social barriers, thus reducing the costs of running.

My expectation, then, is that if gender differences in self-declared political ambition do not exist, neither should a differential effect of political ambition on women's likelihood of running again. However, given my expectations of women being more sensitive to cost-calculations, these may also be important at this stage. Family responsibilities especially may have an effect on women's political outlook and on differential outcomes in career progression in politics between female and male politicians, even at similar levels of political ambition. In other words, whilst for men political ambition is positively and strongly related to staying in politics or moving up the political ladder, for women this is not the case.

# 4.3 The Context: Spanish Local Elections

Many authors have encountered challenges in analysing the political ambition of politicians and its effect on running for re-election, mostly because there is no large-scale data that captures the ambition of politicians combined with electoral data. To tackle this problem, I use an original survey of Spanish local politicians, as this allows me to greatly increase my sample, all the while maintaining enough variation in gender.

I focus on the 2,284 Spanish municipalities with more than 2000 inhabitants, a sufficient

number of cases to conduct a survey and large-N quantitative analysis. Focusing on the local level provides me with a large number of observations within a single country, which allows me to hold constant potentially relevant confounding factors that vary across countries. I interview mayors because they are important political players with significant executive power, and I control for office-holding status. Mayors are in charge of appointing governments among elected councillors.

Spain has a decentralised political system, where citizens elect local councils every four years in more than 8000 municipalities. Depending on their size, municipalities elect a certain number of councillors using a proportional representation system (PR) with closed party lists.<sup>1</sup> The order in which the candidates appear on the party lists may determine the composition of the city council. The candidate who heads the list is usually the leader of the local branch of the party. After local elections, a vote of investiture takes place to elect the mayor between these heads of list.<sup>2</sup> Right after mayors are elected, they appoint an executive committee akin to a government in other administrative layers.

The presence of women in Spanish city councils has been increasing over the years. Spanish law imposes a gender quota system for electoral lists. This system ensures that at least 40% of the candidates on the list are women, also specifying that for every 5 candidates, 2 must be women. This system was implemented in 2007 for those muni-cipalities with more than 5000 inhabitants, and in 2011 the ones with more than 3000 inhabitants. This includes approximately 20% of the Spanish municipalities; most of the municipalities are still not affected by this system.

<sup>&</sup>lt;sup>1</sup>Municipalities below 250 inhabitants use an open-list PR system, but are excluded from the analysis. <sup>2</sup>The Spanish law (Ley Orgánica del Régimen Electoral General) stipulates that only those Councillors who head their corresponding list can be candidates for mayor.



Figura 4.1: Women's proportion by position in the city council in Spain from 1979 to 2015

The evolution of gender parity in Spanish city councils has been quite positive. Figure 4.1 shows the proportion of women by position, across all the local elections in Spain, from 1979 to 2015. The figure reveals that the proportion of women across different positions has seen a strong growth in recent years. The Spanish case provides the gender variation I require for such an analysis, as a significant number of women is currently in office. It is also an interesting case since, as Figure 4.1 shows, there is still a very large gap between the number of women who enter politics and the number of those who manage to break the glass ceiling and become mayors.

### 4.4 The survey

To obtain direct evidence on political ambition, I conducted an original survey of Spain's mayors. To maximise control over data collection, I conducted this in-house with a dedicated team of research assistants. I was able to collect each mayor's official email address by consulting their websites and calling municipalities. To prevent mayors from delegating their responses to their subordinates, I sent the invitations to their official email addresses instead of to the generic institutional ones. In addition, both the invitation and the first page of the survey stressed the importance of the mayors responding for themselves.

I collected responses from 979 Spanish mayors (response rate of 42.86%), from June of 2018 to January of 2019. The survey was programmed and administered online.<sup>3</sup> Respondents gave their informed written consent to participate in the research prior to the commencement of the survey. In conformity with the content of the Spanish Organic

<sup>&</sup>lt;sup>3</sup>It was pretested through cognitive interviews with 12 politicians who were not in the sample (including retired mayors, deputy mayors, member of parliaments, and party leaders).

Law December 15/1999 of the Protección de Datos de Carácter Personal (Protection of Personal Data), the written consent included information on the confidentiality of the data, as well as information on the person in charge and the objectives of the study.

The main fieldwork was conducted between September 2018 and January 2019.<sup>4</sup> I sent up to four reminders per respondent and made phone-calls to all the municipalities that had not responded. I tried to talk to the mayor or (when this was not possible) to their assistants and sent personalised invitation emails after each conversation. Participation was not motivated by economic compensation, but the emails and reminders appealed to public service concerns. They mentioned that other mayors had already participated; and explained that the study was funded by the Spanish Ministry of the Economy.

I completed this information with administrative data on election results compiled by the Spanish Ministry of the Interior and comprising detailed information on the official elections from which these mayors were elected (2015). In addition, this database contains information on the actual candidacy of the respondents in the following elections (2019).

#### 4.4.1 Survey Questions

#### Dependent Variable

The main dependent variable is the decision to run for office or not in the next election. I asked politicians: *Would you like to run for Mayor in the next local elections?*. This is a scale question where the possible responses were: *Surely Not, Probably Not, Probably Yes, Surely Yes.* For the analysis, I treat this variable as a continuous variable

<sup>&</sup>lt;sup>4</sup>In June 2018, a pilot study was launched with mailings to three regions. Later, some of the questions were adjusted based on an analysis of the initial 80 responses and the feedback received from participants by email.

that captures from lowest to highest the willingness to run again in the next election. From this question, I create a four-point scale of political ambition, where 1 is assigned for the less ambitious responses, and 4 is assigned to the most ambitious. Other studies that analyse political ambition also use this variable to explore people's willingness to enter politics (e.g. Folke and Rickne, 2016a; Fox and Lawless, 2010). Figure 4.2 shows the percentages of each of these categories by gender of respondents. At first glance, it does not appear that there are gender differences in the willingness to remain in local politics for the next election with all percentages being about the same between men and women.

In addition, I included another measure of political ambition where candidates were asked more detailed questions about their future in politics. The question was: *If you had a choice, where would you like to work in the future?*. The potential answers to this question were: *Continue in the city council; In the parliament or autonomous or national government; In EU institutions or international positions; For the party but not in public office; Outside of politics (private, public or third sector); or retire. Figure 4.3 shows that there are no significant gender differences in ambition to advance to higher levels of politics either. Figure 4.3 also shows the percentages for each of the categories. Again, the figure suggests that both male and female mayors had very similar responses. However, women on average seem to be less clear about their future situation, suggesting less confidence in remaining in politics.* 

To better understand if these differences really exist, I then turn to the determinants of having aspirations other than remaining in local politics, using multinomial logistic models.<sup>5</sup> The dependent variable is categorical (*Future position*), taking the value of

<sup>&</sup>lt;sup>5</sup>All models include the number of population as a control variable. In addition, in all models the standard errors are clustered by province.

1 for remaining in local politics, 2 for promoting up to other levels such as regional, national or European governments, and 3 for being out of politics and 4 for being retired.



#### Independent Variables

First, to explore whether gender differences in political ambition persist among mayors, I included the respondents' sociodemographic, attitudinal and political characteristics as IVs in my models. To try to capture the differences in political ambition that exist between different social groups the survey covers politicians' gender, age, educational level and number of children.

The literature generally finds that socialised personal perceptions are important in determining women's political ambition (e.g. Fox and Lawless, 2010; Carroll and Sanbonmatsu, 2013). In the models, therefore, I also include attitudinal variables that aim to capture attitudes toward risk, perceptions of achievement and competitiveness. To



Figura 4.3: Political ambition by gender: If you had a choice, where would you like to work in 5/10 years from now?

obtain direct evidence from politicians on their risk preferences, I use a self-reported question on the subject (*Risk acceptance*). The question was: *Are you generally very willing to take risks or do you try to avoid risks*? Respondents had to place themselves on a scale of 0 to 10, where 0 represented *Not at all willing to take risks* and 10 *Very willing to take risks*. Perception of how success is achieved as a result of early socialisation may discourage women from moving up the political ladder. To capture this, I use a direct question about the perception of the determinants of socio-economic situation (*Effort vs Luck*).<sup>6</sup>

This variable is also on a 0-10 scale, where 0 indicates that they believe more in the importance of effort, education, and professionalism, and 10 indicates that family origin, social capital and luck are more important. To understand the effect that the competitiveness of the municipality may have on politicians' decision to run in the next election, I include the number of parties competing in the last elections as a proxy (*Competitiveness*).

Women often encounter further barriers to entry driven by differences in the support they receive from political parties (Fox and Lawless, 2010; Karpowitz et al., 2017). This makes women think that they will receive less support from party leaders and discourages them from participating and advancing in politics (Butler and Preece, 2016). Furthermore, gender quotas have been found to have a merely symbolic positive effect on women's career prospects (Beaman et al., 2009). It is therefore important to include political variables in the model to control for changing differences in ambition. Thus, I include previous political experience (*Seniority*)<sup>7</sup>, dedication to the position — whether

<sup>&</sup>lt;sup>6</sup>The question on *Effort vs Luck* as determinants of social positions is taken from the governmental Center for Sociological Research (CIS), one of the most well-known and prolific survey institutes in Spain.

<sup>&</sup>lt;sup>7</sup>Seniority refers to the average years in the city council.

it is exclusive or not (*Exclusiveness*)<sup>8</sup> and ideology and party affiliation. To control for ideology, mayors were asked to place themselves on a scale of 0-10, where 0 refers to extreme left and 10 to extreme right. For party affiliation, I differentiate between the two main parties in Spain (*PSOE* and *PP*) and other smaller parties (*Others*).<sup>9</sup> It is crucial to include these variables to control for the possible self-selection effect due to the slight over-representation of small municipal parties versus the leading national parties (see section 4.7.1).

Next, after checking whether there are differences in political ambition taking into account all the above individual variables, I analyse whether politicians' situations outside politics can determine their political ambition through a cost-benefit calculation they make about staying in politics or going out into the labour market. For this purpose, I mainly take into account whether politicians have been exposed to unemployment before becoming mayors (*Unemployment*), whether their last job was a white collar job (*White collar*) and what their options are outside politics. Outside options variables are calculated by asking: *If I were to leave politics now, I would look for a new job, yes or no.* Only those who answered yes were then asked whether they believe that they would have a better salary outside of politics (*Salary*), spend more time working than now (*Time spent*), and would attain greater satisfaction (*Satisfaction*).

#### 4.4.2 Summary Statistics

Table 4.1 shows the descriptive statistics for the main variables in the study, dividing the sample by the mayors' gender. Female mayors represent 21.5% of respondents.

<sup>&</sup>lt;sup>8</sup>*Exclusiveness* means that the respondents have no other job besides being mayors.

<sup>&</sup>lt;sup>9</sup>PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

On average, they have similar profiles to their male counterparts. The average age, education, and number of children in both groups are similar. The attitudinal variables such as risk acceptance and the effort-luck preference also display close means, although women are slightly more risk-acceptant and men value luck higher as an explanatory factor for achievement. With regard to the political variables, female and male mayors are very similar in terms of previous experience and ideology, although more women belong to the Spanish socialist party. The share of seats and votes of female mayors are slightly smaller. However, this may be because -according to the results by average population- women tend to be mayors in larger cities, with a greater number of seats and parties.

	Total				Women			Men		
	Mean	Std. dev.	Ν	Mean	Std. dev.	Ν	Mean	Std. dev.	Ν	
By Mayor										
Female	.215	.411	979							
Age	49.09	9.36	902	48.56	8.71	200	49.38	9.54	734	
Education	16.00	3.09	913	16.60	2.21	191	15.85	3.26	722	
Children	2.55	.979	913	2.42	1.02	191	2.59	.964	722	
Risk acceptance	6.57	2.03	921	6.70	1.87	195	6.53	2.07	726	
Effort vs Luck	4.58	2.60	915	4.19	2.63	192	4.69	2.59	723	
Seniority	8.35	5.07	816	8.42	5.19	166	8.33	5.05	650	
Exclusiveness	.772	.420	921	.836	.371	195	.755	.430	726	
Ideology	3.70	1.58	920	3.65	1.60	195	3.72	1.58	725	
Seat Share	.471	.149	971	.436	.132	219	.482	.152	650	
Vote Share	.427	.137	971	.396	.124	219	.437	.140	791	
PP	.165	.372	979	.145	.353	220	.178	.383	791	
PSOE	.405	.491	979	.45	.499	220	.388	.488	798	
Others	.429	.495	979	.404	.492	220	.433	.496	798	
By council										
Population	14094.71	39467.89	977	15920.44	29034.22	220	13530.57	41526.27	796	
Turnout	.693	.085	977	.687	.088	220	.695	.084	796	
N. of seats	13.96	4.19	977	14.5	4.60	220	13.80	4.04	796	
N. of parties	3.79	1.35	977	4.1	1.46	220	3.71	1.32	796	

Taula 4.1: Descriptive statistics divided by gender

Appendix section 4.7.1 documents how female mayors differ from their male counterparts by comparing their sociodemographic and political characteristics, their attitudes towards different aspects, and their occupations and outside options. Although most of the variables included in the models do not show any differences between the genders, some, such as educational level, having children or time spent in politics do so. Women are more educated, have fewer children and dedicate more time to the position they hold than men.

Appendix section 4.7.1 compare the mayors who completed the survey to the whole population of mayors (all Spanish municipalities with more than 2,000 citizens), respectively. These tables show descriptive information for the observations, by mayor and council. Looking at sociodemographic characteristics, there is practically no difference between those who answered the survey and the whole population. Looking at all the councils, the average number of parties is around three, and no single party obtains the absolute majority of seats in about 68.7% of cases.

## 4.5 Results

I first use mayors' responses on political ambition to define whether a gender gap continues to exist in the top position. Second, I include mayors' perceptions about their outside options in the models. Finally, I explore what the effects of mayors' political ambition are on running for reelection, and whether these effects are different depending on the mayors' gender.

#### 4.5.1 Gender and Political Ambition

Do differences exist between male and female mayors in terms of their political ambition? Figure 4.2 does not reveal any significant gender difference in desire to run again. That said, in order to fully understand whether there is a gender gap in politicians' ambition, and whether this gap is constant across different women's profiles, I investigate whether the political ambition of those who reach the top positions has a similar relationship with the classical explanations of this gender gap. I exploit the results of the mayors' survey to observe the effects of personal and political characteristics, and outside options on political ambition. The results come from linear OLS regressions, with and without taking any other factors into account. I divide the sample between male and female mayors to examine whether their gender has different effects according to their other characteristics. Table 4.2 shows the regression results with the full sample, then women and men separately.

Table 4.2 shows that there is a null effect of politicians gender on their political ambition and this is consistent even taking into account other sociodemographic, attitudinal and political variables that have been highlighted in the literature on women's access to politics. Focusing on sociodemographic characteristics, age appears to be the only variable that has a strong correlation with wanting to run again. For both men and women, being older is related to being unsure about running again, though this is only statistically significant for men. This is less important for female, but this result probably is due to the fact that male mayors are generally older than female ones.<sup>10</sup> The only gender differences I observe are in income and number of children. Although neither correlation is statistically significant, it is interesting to note that their relationships with political ambition are the opposite for men and women.

The attitudinal variables shown on Table 4.2 aim to capture one of the largest effects discussed in the literature on the gender gap in political ambition. Previous studies conclude that women have less political ambition since they are more averse to risk and

<sup>&</sup>lt;sup>10</sup>Appendix section 4.7.1 shows how there is a negative correlation between being a woman and politicians' age.

All	Women	Men
-0.0903		
(0.0786)		
-0.0142***	-0.0002	-0.0186***
(0.0033)	(0.0084)	(0.0042)
-0.0543	-0.0901	-0.0463
(0.0337)	(0.1168)	(0.0304)
0.0013	-0.0133	0.0062
(0.0292)	(0.0614)	(0.0349)
-0.0105	-0.0665	0.0119
(0.0333)	(0.0794)	(0.0362)
0.0139	-0.0284	0.0230
(0.0142)	(0.0412)	(0.0171)
-0.0233	0.0044	-0.0340*
(0.0145)	(0.0406)	(0.0171)
0.0546**	0.0055	0.0620**
(0.0232)	(0.1050)	(0.0291)
-0.0153**	-0.0304	-0.0110
(0.0072)	(0.0196)	(0.0067)
0.1389	0.5553*	0.0688
(0.0928)	(0.2802)	(0.1003)
0.0307	0.0620	0.0258
(0.0218)	(0.0821)	(0.0267)
0.2615***	0.2453	0.2763***
(0.0806)	(0.1745)	(0.0939)
0.0623	0.1881	0.0099
(0.1125)	(0.3492)	(0.1190)
ĺ √	$\checkmark$	ĺ √ ĺ
3.7677***	3.4371***	3.8522***
(0.3138)	(0.8198)	(0.4046)
701	137	564
0.0826	0.0996	0.1010
	All -0.0903 (0.0786) -0.0142*** (0.0033) -0.0543 (0.0337) 0.0013 (0.0292) -0.0105 (0.0333) 0.0139 (0.0142) -0.0233 (0.0145) 0.0546** (0.00232) -0.0153** (0.0072) 0.1389 (0.0928) 0.0307 (0.0218) 0.2615*** (0.0806) 0.0623 (0.1125) $\checkmark$ 3.7677*** (0.3138) 701 0.0826	All         Women $-0.0903$ (0.0786) $-0.0002$ $-0.0142^{***}$ $-0.0002$ $(0.0033)$ $(0.0084)$ $-0.0543$ $-0.0901$ $(0.0337)$ $(0.1168)$ $0.0013$ $-0.0133$ $(0.0292)$ $(0.0614)$ $-0.0105$ $-0.0665$ $(0.0333)$ $(0.0794)$ $0.0139$ $-0.0284$ $(0.0142)$ $(0.0412)$ $-0.0233$ $0.0044$ $(0.0145)$ $(0.0406)$ $0.0546^{**}$ $0.0055$ $(0.0232)$ $(0.1050)$ $-0.0153^{**}$ $-0.0304$ $(0.0072)$ $(0.0196)$ $0.1389$ $0.5553^{**}$ $(0.0218)$ $(0.2802)$ $0.0307$ $0.6620$ $(0.0218)$ $(0.2802)$ $0.0623$ $0.1881$ $(0.1125)$ $(0.3492)$ $\checkmark$ $\checkmark$ $3.7677^{***}$ $3.4371^{***}$ $(0.3138)$ $(0.8198)$ $701$ <

Taula 4.2: OLS Regression results for Political ambition by Gender

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

competitive environments, and receive different socialization. In this case, I also note some gender differences, though these tend to no be statistically significant. Men who tend to think that future success depends more on effort than luck also tend to want to stay in politics. For women, however, the opposite is true. Regarding risk aversion and competitive environments, I can only conclude that, among men, the more competitive one is the more willing he is to stay in local politics. This result is in line with previous results in the political ambition literature showing that men tend to be more competitive. This aspect, on the other hand, seems to be of little importance for women. Finally, regarding the political variables, although seniority, working extensively in politics and the party to which you belong seem to be somewhat related to the decision to run again, there are no gender differences for any of the variables.

Although these results show that there are no gender differences when it comes to staying in local politics, the results look different when I ask about progressive ambition and the likelihood of leaving politics. Table 4.3 shows the estimates for the multinomial logistic regression, where the reference category is remaining in politics. In this case, clear differences between female and male politicians appear. These are found in the effects of age, income and having children. Older women with less income and children are the ones who tend to seek higher office. On the other hand, men who want to be promoted tend to be younger, as well as having more income and children.

The table suggests that, although the relationship between educational level and willingness to rise to higher levels of politics move in the same direction, the estimate is higher for women. This suggests that women place more importance on their educational level when it comes to seeing themselves at higher levels of politics. This may occur because women underestimate their abilities to carry out certain tasks and only the most educated believe they can succeed. These results are more in line with the literature that argues that women's ambition is diminished because they tend to underestimate and have less confidence in their own abilities. In the case of men, it seems that this is also important, although the relationship is much weaker.

		Women			Men	
	Promote	Out Politics	Retire	Promote	Out Politics	Retire
Sociodemographic Variables						
Age	0.0630	-0.0201	0.2156***	-0.0069	-0.0282*	0.2104***
	(0.0560)	(0.0301)	(0.0799)	(0.0210)	(0.0155)	(0.0289)
Education	1.1020**	0.4993	-0.5216	0.2686**	0.2524***	0.0867
	(0.5548)	(0.3292)	(0.5748)	(0.1224)	(0.0972)	(0.1133)
Income	-0.1917	0.2167	-0.7404	0.1269	0.2030**	0.0479
	(0.3935)	(0.2768)	(0.6678)	(0.1308)	(0.0993)	(0.1213)
Children	-0.1336	-0.8666***	-0.3161	0.0442	0.1053	0.0459
	(0.4170)	(0.3122)	(0.4968)	(0.1342)	(0.1277)	(0.2008)
Attitudinal Variables						
Risk acceptance	-0.2374	0.0964	0.1989	0.0226	-0.0564	-0.1229
	(0.2083)	(0.1609)	(0.2719)	(0.0694)	(0.0550)	(0.0928)
Effort vs. Luck	-0.3741***	-0.1208	0.2648	-0.0734	0.0299	-0.0345
	(0.1383)	(0.0898)	(0.1699)	(0.0782)	(0.0626)	(0.0675)
Competitiveness	0.1754	0.0765	0.2444	0.1530	0.0387	0.1296
	(0.3071)	(0.2243)	(0.2836)	(0.1299)	(0.1061)	(0.2018)
Political Variables						
Seniority	-0.0555	0.0729	-0.1150	-0.0012	0.0337	-0.0050
-	(0.0841)	(0.0576)	(0.0723)	(0.0296)	(0.0304)	(0.0368)
Exclusiveness	-0.5527	-2.0307**	0.1239	-0.3183	-1.0318**	-0.7144
	(1.2369)	(0.9095)	(0.8165)	(0.4250)	(0.4427)	(0.5045)
Ideology	0.3932	-0.2023	1.0057**	0.1834	-0.0174	-0.1967
	(0.2757)	(0.2264)	(0.4774)	(0.1266)	(0.1054)	(0.1786)
PSOE	0.3705	-0.0278	0.0290	-0.5504	-0.7763***	-0.4585
	(0.9659)	(0.5353)	(0.7947)	(0.3936)	(0.2984)	(0.3851)
PP	-0.6194	-0.5035	-16.2651***	-0.3003	-0.7190	-1.8647**
	(1.3284)	(1.1521)	(2.3073)	(0.5969)	(0.4974)	(0.8042)
Controls	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Constant	-6.9670	1.7322	-11.4382*	-2.6605	0.7831	-10.0723***
	(6.4093)	(4.1645)	(5.8472)	(1.7563)	(1.3122)	(1.8282)
Observations	111	111	111	496	496	496

Taula 4.3: Multinomial Logisitic Regression Results by Gender

Note: Baseline category is remaining in local politics. Robust standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

On the other hand, the profile of mayors who want to leave politics is quite similar across both men and women, except for having children and risk acceptance. For women, having children seems to be negatively related to seeing themselves working outside of politics, while for men this shows a positive relationship and, in any case, seems to be unimportant. This is in line with my argument that women tend to be more sensitive to family costs when it comes to changing their position. In addition, although the estimate is not statistically significant, women who want to get out of politics seem to be the most risk-taking, unlike men.

To further understand these results, however, it is important to keep in mind that it is likely that not all women have the same perspective on what they can afford. Those who think they are worse off outside of politics are likely to prefer to keep their seat secure. Thus, I analyze the relationship between political ambition and the outside options that politicians perceive they have. Much remains to be understood about the effect of politicians' job opportunities outside of politics (Gulzar, 2021). Moreover, to the best of my knowledge, there are no previous studies that explore gender differences on the relationship between perceived outside options and getting top positions and remaining in politics.

Table 4.4 shows the estimates from an OLS model regressing outside options onto the following independent variables: politicians' exposure to unemployment before becoming mayors (*Unemployment*); and their estimate of a) having a better salary (*Salary*), b) spending more time working (*Time spent*) and having higher job satisfaction (*Satisfaction*) outside of politics. Finally, I also measure the effect having a white collar background (*White collar*). The models also include all of the variables mentioned above, though the table only shows those that previous research has identified as determinants of running for election when considering outside options.

Table 4.4 shows that, once all variables are included, the gender variable becomes statistically significant. Being a woman is negatively correlated with staying in local politics

	All	Women	Men
Woman	-0 1935*		
() official	(0.1009)		
Unemployed	0.0942	-0.2610	0.1749*
••••••••••••••••••••••••••••••••••••••	(0.0896)	(0.2488)	(0.1029)
Salary	0.0512	0.0954	0.0522
	(0.0409)	(0.1131)	(0.0357)
Time employed	0.0284	-0.0768	0.0381
I J	(0.0429)	(0.1216)	(0.0446)
Satisfaction	-0.1998***	-0.3193***	-0.1717***
	(0.0364)	(0.0908)	(0.0417)
White collar	-0.0161	0.1406	-0.0655
	(0.1023)	(0.2480)	(0.1270)
Risk acceptance	-0.0396	-0.1006	-0.0360
1	(0.0175)	(0.0397)	(0.0216)
Effort vs. Luck	-0.0122	0.0117	-0.0201
	(0.0169)	(0.0406)	(0.0169)
Income	-0.0396	-0.1006	-0.0360
	(0.0405)	(0.0838)	(0.0447)
Children	0.0148	0.1446*	-0.0083
	(0.0392)	(0.0764)	(0.0457)
Controls	$\checkmark$	$\checkmark$	$\checkmark$
<b>G</b> ( )	2 027(***	4 520 4***	2 721 4***
Constant	5.85/6***	4.5394***	3./314***
	(0.2907)	(0.8/53)	(0.4307)
Observations	495	97	398
R-squared	0.1309	0.2516	0.1259

Taula 4.4: OLS Regression including outside options by gender

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1
when I include the work status variables in the model. Upon dividing the sample, I observe that, among women, the positive correlation between having children and wanting to remain in politics in the next legislature is clearer. On the other hand, the opposite is true for men, although the correlation is not significant. At first this result seems rather counterintuitive, however, what it may suggest is that women with children prefer to remain stable once they are in a good position and not go out into the labour market. The results of the Appendix section 4.7.1 on the relationship between gender and responses suggest that female mayors tend to think that outside of politics they would be paid less.

Women, therefore, may prefer to stay in politics since they believe that outside they would have less opportunities and a lower salary. In addition, although not statistically significant, when comparing risk acceptance estimates, the results for men and women are opposite. This suggests that those women who accepts more risks tend to be less willing to remain in politics. These results are in the line with Bernhard et al. (2021)'s paper, which argues that those who choose to enter politics the least are mothers who are breadwinners in their households. In this case, however, once women overcome the barriers to entering politics in their cost-benefit calculation, leaving politics is to upset this stability.

For more detail on these results, Table 4.5 shows the multinomial model dividing the sample by gender. Examining the coefficients for promotion to higher policy positions also tells us interesting things about progressive ambition. For male mayors, it seems important to have previously been unemployed. This variable is negatively correlated with expressing a desire to move up or out of politics in the next election. In the case of female mayors, the variables that are most related to their ambition to climb to other levels of politics are attitudinal. Women who tend to think that what is achieved is done

by luck and are more risk-acceptant tend to prefer to remain in local politics rather than moving up to other levels.

	Women				Men			
	Promote	Out Politics	Retire	Promote	Out Politics	Retire		
Unemployment	-1.9440	0.6736	105.7769***	-0.6554*	-1.0353***	-0.6690		
	(1.6342)	(1.0188)	(3.1976)	(0.3886)	(0.3244)	(0.7181)		
Salary	-0.0562	-0.0053	5.7879***	0.0982	0.0921	0.1562		
-	(0.4396)	(0.4193)	(0.5906)	(0.1839)	(0.1441)	(0.2773)		
Time employed	1.0211	0.4495	-13.8019***	-0.2976	-0.1318	-0.1534		
	(0.7624)	(0.3270)	(1.7063)	(0.2108)	(0.1638)	(0.1964)		
Satisfaction	-0.4640	0.9841***	31.3069***	0.0006	0.5685***	0.2909		
	(0.7560)	(0.3173)	(1.1710)	(0.2534)	(0.1732)	(0.2776)		
White collar	-1.1989	1.4577	-8.7368***	1.5442***	0.3565	-0.2809		
	(1.5509)	(1.1691)	(2.4462)	(0.5228)	(0.3197)	(0.5014)		
Risk acceptance	-0.5331*	0.1725	16.8028***	0.0137	-0.0813	-0.2111		
	(0.2793)	(0.2156)	(0.6802)	(0.0797)	(0.0762)	(0.1629)		
Effort vs. Luck	-0.4467***	-0.0445	11.9266***	-0.0603	0.0824	-0.0681		
	(0.1541)	(0.1625)	(0.4943)	(0.0835)	(0.0730)	(0.1006)		
Income	0.2004	0.5681**	-31.9294***	0.2040	0.2322**	0.3668*		
	(0.4569)	(0.2823)	(0.7678)	(0.1713)	(0.1102)	(0.2087)		
Children	-0.8155	-1.5643**	-32.1981***	-0.0015	0.0753	-0.1155		
	(0.7744)	(0.7965)	(0.9317)	(0.1875)	(0.1624)	(0.2724)		
Controls	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Constant	-8.4103	-1.5843	-717.2652***	-2.6276	-0.3720	-10.1855***		
	(7.1515)	(5.7138)	(19.6947)	(2.6875)	(1.9098)	(2.9493)		
Observations	81	81	81	347	347	347		

Taula 4.5: Effect of outside options on political ambition: Multinomial by gender

Note: Baseline category is remaining in local politics. Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

In the case of wanting to get out of politics, there is a strong correlation between wanting to leave politics and family context, specifically income and number of children. Those women with higher incomes are the ones who are actually more likely to want to leave politics when outside options are taken into account. This result is similar to the one found for men, although weaker. However, the negative relationship with the number of children is even stronger when perception of their options outside politics is included.

Figure 4.4 shows the predicted probability of having children and wanting to leave politics, divided by male (green) and female mayors (purple). The figure shows that, whilst among men the number of children makes no difference to desire leave politics, among women each additional child predicts a decrease in this willingness.



Figura 4.4: Predicted Probabilities of Out of Politics by Gender and Number of Children

As expected, gender differences in political ambition disappear beyond the glass ceiling. It can be intuited, however, that there are certain costs of staying or rising in politics that female and male politicians perceive differently. Family responsibilities such as having children are clearly more important to women when they declare that they want to stay or leave politics. However, against my expectation, only attitudinal aspects such as risk aversion have influence on women's progressive ambition. These descriptive results help us to better understand politicians when they make the decision to run again. However, an important question remains. Does the political ambition of women and men have a different effect on their decision to run for re-election? Do the different factors that seem to be valued differently between groups have an effect on this decision?

## 4.5.2 Political ambition and Re-running

The questions that remain particularly unexplored relate to tracing politicians from ambition to formal candidacy. I study the relationship between stated political ambition and running for re-election, with a particular focus on gender differences. The argument is that, even if male and female politicians have similar political ambitions, the effects of barriers persist when it comes to standing for re-election.

Table 4.6 shows the effect that the two measures of political ambition and gender have on running again in the next election. In Models 2 and 3, I use the simple continuous measure which captures the desire to run again for local office. In Models 4 and 5, I use a detailed measure of political ambition to other levels of government. I also include the sociodemographic and political characteristics of the mayors as control variables.

	(1)	(2)	(3)	(4)	(5)
Woman	-0.3485	-0.1790	1.0197	-0.4640*	-1.1593*
	(0.2555)	(0.3064)	(1.0270)	(0.2499)	(0.6625)
Ambition		1.9632***	2.0841***		
		(0.1936)	(0.2290)		
Woman * Ambition			-0.4717		
			(0.3804)		
Ambition Detailed					
Promote				-0.6869*	-0.9829**
				(0.4116)	(0.4924)
Out of Politics				-0.8668**	-1.0886**
				(0.3791)	(0.4875)
Retire				-0.9672**	-1.1890**
				(0.4738)	(0.5642)
Woman * Promote					1.1705
					(1.0017)
Woman * Out of Politics					0.7324
					(0.8500)
Woman * Retire					0.9292
					(1.0797)
Controls	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Constant	3.9191***	-2.3326	-2.6128	4.8818***	5.1315***
	(1.2933)	(1.6101)	(1.6918)	(1.3826)	(1.3884)
Observations	706	695	695	602	602

Taula 4.6: Effect of political ambition and gender on rerunning

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

The results suggest that mayors' political ambition affects the decision to run again for the next elections. Gender differences, however, are unclear. Model 3, which contains the interaction between politicians' ambition and gender, shows a negative effect on the decision of women to run again, but this result is not statistically significant. On the other hand, in the models containing the more detailed variable of political ambition, I observe a negative relationship between being a female politician and running for office again. In Model 5, the interaction shows a negative relationship between being a woman who wants to remain in local politics and running for re-election. The interaction results between gender and future options suggest that there is no significant effect between these variables. Overall, this may suggest that political ambition itself has a stronger effect on men's subsequent behaviour than on women's.

For a better assessment of this suggestion, I check the estimates by dividing the sample between male and female mayors. Table 4.7 and Table 4.8 display these results and include some variables to understand whether gender differences exist.

Table 4.7 demonstrates that, once again, there are no gender differences in the positive and significant relationship between political ambition and running again in subsequent elections. I find differences, however, in the variables that come into play in determining to run again in the next election. Whilst among men there are significant relationships with running again only for the explicitly political variables, for women other variables related to the barriers they have to face have weight. For female politicians, variables such as age, educational level, having children or previous experience are negatively related to running again.

Table 4.8 shows how some of these results are robust when I use the more detailed political ambition variable. The most telling result is again having children. Although

	Women	Men
Ambition	2.9280***	2.1807***
	(0.6336)	(0.2205)
Age	-0.1686***	-0.0145
C	(0.0568)	(0.0195)
Education	-0.8612*	0.0189
	(0.4518)	(0.1259)
Income	0.4033	-0.1245
	(0.2856)	(0.1339)
Children	-0.9378***	0.1321
	(0.3458)	(0.1670)
Seniority	-0.4232***	-0.0040
	(0.1232)	(0.0428)
Exclusiveness	1.0420	0.5210
	(1.1734)	(0.4209)
Ideology	1.4245***	0.2790**
	(0.4354)	(0.1313)
PSOE	1.6072	-0.7150*
	(1.2695)	(0.4034)
PP	-0.9790	-2.0947***
	(1.7213)	(0.4303)
Risk acceptance	0.2542	0.0430
	(0.2225)	(0.0898)
Effort vs. Luck	0.5002**	-0.0382
	(0.2433)	(0.0712)
Competitiveness	0.7848	-0.4087***
	(0.4882)	(0.1408)
Controls	$\checkmark$	$\checkmark$
Constant	-0.6087	-2.8446
	(4.1662)	(1.8892)
	(	(1.00)2)
Observations	137	563

Taula 4.7: Effect of political ambition on rerunning by gender

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

for men this variable is not significant, it is the opposite for women. While having family responsibilities may hinder women from continuing in politics, for men this relationship is positive. The estimates for the different categories of ambition suggest that men who want to move on to higher levels of politics are less likely to run again for local elections, whilst for women this correlation goes in the opposite direction. This may mean that those men who claim to want to move up in politics succeed (and do not run for local politics again), while women are more likely to remain regardless of their ambition. This result aligns with previous studies, which demonstrate that female politicians are less likely to be promoted than male politicians with the same productivity and career

	Women	Men
Ambition detailed		
Promote	0.4959	-0.8505*
	(1.0553)	(0.4821)
Out of Politics	-0.7674	-0.9566**
	(0.6538)	(0.4609)
Retire	1.2604	-1.1858**
	(1.1032)	(0.5223)
Age	-0.1310***	-0.0385**
	(0.0439)	(0.0168)
Education	-0.2972	-0.0985
	(0.4435)	(0.1339)
Income	0.3760	-0.0632
	(0.3502)	(0.1131)
Children	-0.8155*	0.0569
	(0.4655)	(0.1253)
Seniority	-0.2355***	-0.0234
	(0.0764)	(0.0246)
Exclusiveness	1.0691	0.2368
	(0.8974)	(0.3410)
Ideology	0.4871	0.2562**
	(0.3512)	(0.1055)
PSOE	0.8476	-0.0530
	(0.9433)	(0.2886)
PP	-0.5052	-1.5242***
	(1.4715)	(0.4268)
Risk acceptance	0.0391	0.0426
	(0.1699)	(0.0592)
Effort vs. Luck	0.0018	-0.0754
	(0.1708)	(0.0549)
Competitiveness	0.4189	-0.1603
	(0.4798)	(0.0992)
Controls	$\checkmark$	$\checkmark$
Constant	7.7592*	4.9353***
	(4.2301)	(1.4826)
Observations	111	495

Taula 4.8: Effect of political ambition on rerunning by gender

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

profiles (e.g. Antecol et al., 2018; Hospido et al., 2020; Pekkarinen and Vartiainen, 2006).

As expected, the findings do not reveal a differential effect of political ambition on women's likelihood of running again. However, considering other factors, such as family responsibilities, age or experience, the probability of women running again decreases, even at similar levels of political ambition. Moreover, while men's progressive ambition is strongly related to not staying in minor positions, it is not for women.

## 4.6 Conclusion

Research on women's access to politics has largely demonstrated lower levels of ambition to political office for women relative to men. Factors such as women's selfconfidence, socialisation away from political roles, and aversion to risky and competitive situations are decisive in understanding the lower levels of political ambition that women report. In addition, social and economic barriers also determine the gender gap in their participation in politics. The findings for the political class, however, are still unclear. Studies exploring these differences in ambition between male and female politicians draw contradictory conclusions (e.g. Fulton et al., 2006; Folke and Rickne, 2016a). These studies do not clarify whether or not these exist and what determines them.

To shed light on this, this paper explores whether the gender gap in political ambition is perpetuated among political elites. Through an original survey of 979 Spanish mayors, I provide a thorough analysis of the attitudes and political ambitions of those who reach top positions. Unlike previous studies, the sample focuses on currently elected politicians with considerable executive power, in high positions of power and with a high probability both of staying in politics and of progressing to higher levels.

The findings reveal that, although there are gender differences in top politicians' profiles, the gender gap on political ambition disappears among the political elite. This result is consistent taking into account other determinants of women's political selection such as age, educational level or family responsibilities, among others. Women's progressive ambition seems to be more related to aspects that have previously been shown to be important for the decision to enter politics. Traits such as educational level, risk acceptance, and the value of effort are significantly related to women's decisions to move to higher positions of power. My results suggest, however, that factors such as income and number of children are important for the desire to get out of politics. Above all, the number of children is a clear determinant of women's decision to remain in local politics, while for men it is not and the reverse is actually true.

The results suggest that women's cost calculations, as opposed to men's, take into account other factors, such as responsibilities. This calculation makes them desire to remain in politics but reject other scenarios such as promotion in politics or going into the private job market. Moreover, unlike men, their perception of luck as a determinant of socio-economic position discourages them from attempting to progress in politics. These results associated with rational-choice theory arguments, are in line with what previous studies have shown (Fulton et al., 2006; Bernhard et al., 2021). However, this chapter shows the differences we can find when comparing the ambition to stay, move upwards or leave politics. In addition, these results also take into account the politicians' perspective on their opportunities outside politics.

I further investigate mayors' patterns of re-election by combining these results with observational data on electoral candidacies. The similarities in political ambition do not equally encourage running for re-election and progression of candidates in the next elections across genders. It seems that for men their own ambition has more weight on whether they actually decide to run again. For women, what most determines this is their level of education, age and experience and number of children. However, many other factors may be influencing how women are able to express their willingness to stay in politics, such as aspects related to the demand for female politicians, which have

been shown to display a clear gender bias.

This survey data can only shed light on the differences between self-reported ambition among women and men who choose to run for office and to be mayor. That said, it is a key contribution towards understanding that differences in negotiations for government or promotions in politics between men and women who have already decided to enter politics may not be related to their attitudes of political ambition or risk aversion. My results present a new correlation between these variables for those who self-select into important positions in politics. These results may help future research on political ambition to explore causally whether other barriers keep women from running for re-election or progressing to higher positions in politics.

This paper contributes to the understanding of the mechanisms underlying the underrepresentation of women in top political positions, focusing on women's motivations to reach and remain in positions of power. For democracy to be as representative as possible, including across genders, we still need to focus on motivating women's participation in politics. These results demonstrate that such an effort should also needs to address other barriers than ambition that women face in reaching higher positions.

# 4.7 Appendix for "Women's Political Ambition: New evidence from a survey of political elites"

## 4.7.1 Descriptive analysis

#### Sample Representativeness

	-		• •	
	Mean	Std. dev.	Median	Ν
By mayor				
Female	.215	.411	0	979
Age	49.10	9.36	49	902
Education	16.49	3.28	18	913
Ideology	3.70	1.58	3	920
Seat Share	.471	.149	.461	971
Vote Share	.427	.137	.425	971
PP	.150	.357	0	979
PSOE	.338	.473	0	979
Others	.511	.500	1	979
By council				
Population	14094.71	39467.89	5210	977
Turnout	.693	.085	.700	977
N. of seats	13.96	4.19	13	977
N. of parties	3.793	1.35	4	977

Taula 4.A1: Descriptive statistics for the survey respondents

Note: *Education* refers to average years of education. *Seniority* refers to the average years in the city council. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

Table 4.A3 shows descriptive information about the characteristics of respondents compared to the totality of the mayors targeted in the study.

	I			
	Mean	Std. dev.	Median	Ν
By mayor				
Female	.221	.415	0	2285
Age	50.80	9.52	51	1680
Education	16.04	3.65	17	1550
Ideology	3.75	2.34	2	2265
Seat Share	.475	.149	.470	2265
Vote Share	.430	.137	.433	2265
PP	.218	.413	0	2287
PSOE	.406	.491	0	2287
Others	.376	.484	0	2287
By council				
Population	19129.42	85645.40	5883	2285
Turnout	.693	.085	.696	2283
N. of seats	14.48	4.59	13	2283
N. of parties	3.840	1.36	4	2283

Taula 4.A2: Descriptive statistics for the whole population

Note: *Education* refers to average years of education. *Seniority* refers to the average years in the city council. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

	Total N	Mayors	Respondents	
	Freq.	%	Freq.	%
Total	2287	-	979	-
Gender				
Male	1779	77.79	768	78.45
Female	505	22.08	211	21.55
Age				
<30	18	0.97	13	1.44
30 - 45	585	31.60	325	35.95
46 - 65	1,138	61.48	533	58.96
>65	110	5.94	33	3.65
Education				
Primary	189	12.19	57	6.24
Secondary	369	23.81	259	28.37
University	992	64.00	597	65.39
Seniority				
None	1121	49.12	530	52.06
One	1161	50.88	488	47.94
Ideology				
Left	1277	56.38	578	59.53
Centre	231	10.20	112	11.53
Right	757	33.42	281	28.94
Party				
PP	517	22.61	121	14.77
PSOE	923	40.36	282	34.43
Far left	154	6.73	40	4.88
Nationalist	270	11.81	84	10.26
Other	421	18.41	292	35.65
Population size				
2000 to 4999	985	43.07	398	48.60
5000 to 9999	550	24.05	197	24.05
10000 to 19999	350	15.3	111	13.55
20000 to 49999	255	11.15	80	9.77
50000 or more	144	6.3	33	4.03

Taula 4.A3: Characteristics of mayors who answered the survey compared to the whole population

Note: PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain.

#### What are the women who get this position like?

Table 4.A4 demonstrates that female and male mayors differ in some of sociodemographic and political characteristics. Female mayors are more educated and have less children. Surprisingly, there are no differences in their seniority and ideology. Political exclusiveness, however, is a characteristic that differentiates men and women.

	Sociodemographic					Political	
	Age	Education	Income	Children	Seniority	Exclusiveness	Ideology
Female	-0.8192	0.2632***	0.0049	-0.1593**	0.0863	0.0811**	-0.0725
	(0.7472)	(0.0982)	(0.1246)	(0.0795)	(0.4417)	(0.0338)	(0.1279)
Constant	49.3842***	5.5222***	5.2726***	2.5886***	8.3354***	0.7548***	3.7186***
	(0.3458)	(0.0449)	(0.0571)	(0.0364)	(0.1992)	(0.0155)	(0.0589)
Observations	934	913	910	913	816	921	920
R-squared	0.0013	0.0078	0.0000	0.0044	0.0000	0.0062	0.0003

Taula 4.A4: Sociodemographic and political variables

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Regarding the measurements of attitudes included in the survey, I highlight two interesting results. First, there is a gender difference in the perception about what influences people's economic positions. Female mayors attribute more importance to effort, education and professional worth than family origin, social capital, and luck. Second, there are no gender differences in mayors' attitudes to risk. Traditionally, women's risk aversion has been stated as one of the main drivers of their lesser political ambition. This first result suggests that among the women who reach the top position this difference disappears.

On the other hand, I observe gender differences in the labour market related to some types of occupation, as well as in the perceptions of their options outside politics. Table 4.A6 shows that female mayors tend to hold positions in the public sector or in law more than male ones. They also tend to have less technical or blue-collar jobs. These results also show a gender gap in being inactive before entering politics. In turn,

	Attitudes					
	Risk Acceptance	Taxes	Public Spending	Effort - Luck		
Female	0.1668	0.0904	-0.0259	-0.4999**		
	(0.1638)	(0.1696)	(0.1960)	(0.2109)		
Constant	6.5358***	3.3943***	6.1243***	4.6874***		
	(0.0754)	(0.0779)	(0.0899)	(0.0966)		
Observations	921	929	917	915		
R-squared	0.0011	0.0003	0.0000	0.0061		

Taula 4.A5: Attitudes

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Table 4.A7 suggests that there is also a positive tendency for women to have been unemployed at some point in their lives. Regarding outside options, female mayors seem to perceive that outside politics they would have worse salaries, but less working hours. However, there are no gender differences in the satisfaction they perceive they would have.

Taula 4 A6.	Occupations
1auia + .A0.	Occupations

	Occupations						
	Politics	Inactive	Blue Collar	Public Sector	Administrative	Technical	Law
Female	0.0120	0.0248**	-0.1173***	0.0472**	0.0680***	-0.0467**	0.0283*
	(0.0162)	(0.0112)	(0.0282)	(0.0206)	(0.0191)	(0.0191)	(0.0167)
Constant	0.0369***	0.0133**	0.1608***	0.0560***	0.0505***	0.0751***	0.0427***
	(0.0075)	(0.0052)	(0.0130)	(0.0095)	(0.0088)	(0.0089)	(0.0078)
Observations	862	862	862	862	083	083	083
R-squared	0.0006	0.0057	0.0197	0.0061	0.0128	0.0060	0.0029

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Taula 4.A7: Outside Options

	Outside Options					
	Unemployed	Salary	Time Employed	Satisfaction		
Female	0.0700**	-0.3487***	-0.2918***	0.0573		
	(0.0283)	(0.0963)	(0.0860)	(0.0917)		
Constant	0.1300***	3.3737***	1.7692***	2.6960***		
	(0.0131)	(0.0446)	(0.0397)	(0.0423)		
Observations	918	746	727	723		
R-squared	0.0066	0.0173	0.0156	0.0005		

Note: Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

This evidence suggests that some gender differences, such as age, household income, seniority and ideology tend to disappear beyond the glass ceiling. Others, such as educational level or having children, however, remain. I also note the significant differences in the type of jobs that they held before, as well as their perception of the options they might have outside of politics.

### 4.7.2 Regression analyses

#### Simple OLS Regressions

Table 4.B1 displays the effect of sociodemographic factors on respondents' political ambition. In addition, the table shows the interactions of these with their gender. Two general conclusions can be drawn from these results. First, I observe that the null effect of politicians' gender on their political ambition is consistent even taking into account other sociodemographic variables that have been highlighted in the literature on women's access to politics. Second, age is the only factor that seems to have an effect on political ambition. Age is negatively related to political ambition, which means that the older one gets, the less ambitious one becomes.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.0428	-0.5414	-0.0119	0.6245 (0.4321)	-0.0140	-0.0591	-0.0123	-0.0833
Age	-0.0173*** (0.0034)	-0.0191*** (0.0037)	(0.0703)	(0.4321)	(0.0775)	(0.5052)	(0.0701)	(0.2010)
Female*Age		0.0103 (0.0089)						
Education			-0.0203 (0.0258)	-0.0047 (0.0278)				
Female*Education				-0.1107 (0.0740)				
Inome					0.0013 (0.0243)	-0.0008 (0.0277)		
Female*Income						0.0089 (0.0579)		
Children							-0.0449 (0.0317)	-0.0515 (0.0361)
Female*Children								0.0287 (0.0755)
Constant	3.9922*** (0.1692)	4.0810*** (0.1855)	3.2453*** (0.1466)	3.1589*** (0.1575)	3.1417*** (0.1286)	3.1521*** (0.1453)	3.2481*** (0.0891)	3.2651*** (0.0997)
Observations R-squared	839	839	904 0.0007	904	854	854	903	903
R-squared	0.0306	0.0322	0.0007	0.0032	0.0000	0.0001	0.0022	0.0024

Taula 4.B1: Effect of gender on political ambition: Sociodemographic variables

Note: *Education* refers to average years of education. Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.0110 (0.0805)	-0.0035 (0.1539)	-0.0336 (0.0753)	-0.2409 (0.1802)	-0.0113 (0.0753)	-0.0186 (0.1895)	-0.0344 $(0.0748)$	0.0105 (0.1199)
Seniority	-0.0136** (0.0064)	-0.0134* (0.0072)	0.2396***	()	()	(,	(	(
Female*Seniority	(,	-0.0009	()					
Exclusiveness		()		0.1983** (0.0804)				
Female*Exclusiveness				0.2511 (0.1984)				
Ideology				(	0.0027 (0.0194)	0.0023 (0.0220)		
Female*Ideology					(0.000)	0.0020 (0.0473)		
PSOE						(010172)	0.2703***	0.2957*** (0.0757)
PP							0.0877	0.0788
Female*PSOE							(0.0001)	-0.1138
Female*PP								0.0454 (0.2251)
Constant	3.2587*** (0.0643)	3.2572*** (0.0701)	2.9517*** (0.0655)	2.9829*** (0.0699)	3.1259*** (0.0803)	3.1275*** (0.0888)	3.0117*** (0.0489)	3.0032*** (0.0521)
Observations R squared	809	809	909	909	907	907	911	911
K-squareu	0.0050	0.0050	0.0110	0.0134	0.0000	0.0000	0.0160	0.0100

Taula 4.B2: Effect of gender on political ambition: Political variables

Note: *Seniority* refers to the average years in the city council. PP refers to the *Partido Popular*, the main conservative party in Spain. PSOE refers to the *Partido Socialista Obrero Español*, the main social-democratic party in Spain. Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Table 4.B2 shows the results of political factors, and their interactions with gender. In this case, the clearest result is that of politicians' seniority. This is negatively related to political ambition, which is also likely to explain the effect of age on the previous table. Again, this result does not generate a gender difference in ambition. The table also shows that when I introduce the variable that compares the main Spanish parties (PP and PSOE) with the regional or local ones, I observe that there is a positive effect of being from the Spanish social-democratic party on the ambition of politicians. This effect does not translate to gender differences in ambition.

#### Multinomial logistic regressions with the entire sample

Table 4.B3 shows the estimates for the multinomial logistic regression, where the reference category is remaining in local politics. I observe that gender does not correlate to any of the future position categories either. Female mayors are no more likely than men to state a preference for a specific position in the future. Other sociodemographic variables, such as age, educational level, or income, are more strongly related to willingness to be in politics, to want to stay out of politics or to retire.

	Promote	Out Politics	Retire
Sociodemographic Variables			
Woman	-0.4308	-0.0638	-0.7010*
	(0.3420)	(0.2749)	(0.3705)
Age	0.0010	-0.0244	0.2090***
0	(0.0179)	(0.0151)	(0.0302)
Education	0.3564***	0.2859***	0.0960
	(0.1252)	(0.0824)	(0.1149)
Income	0.0503	0.1719*	-0.0203
	(0.1183)	(0.1025)	(0.1154)
Children	0.0147	-0.0505	0.0726
	(0.1379)	(0.1221)	(0.2001)
Attitudinal Variables			
Risk acceptance	0.0043	-0.0321	-0.0552
-	(0.0647)	(0.0489)	(0.0812)
Effort vs. Luck	-0.1136	-0.0121	-0.0612
	(0.0744)	(0.0582)	(0.0565)
Competitiveness	0.1479	0.0211	0.1129
Political Variables			
Seniority	-0.0093	0.0391	-0.0138
	(0.0278)	(0.0264)	(0.0331)
Exclusiveness	-0.3769	-1.1166***	-0.7581*
	(0.3897)	(0.3891)	(0.4457)
Ideology	0.1933	-0.0515	-0.1125
	(0.1186)	(0.0923)	(0.1453)
PSOE	-0.4349	-0.6359***	-0.4620
	(0.3527)	(0.2394)	(0.3584)
PP	-0.4222	-0.7182	-2.1433***
	(0.5323)	(0.4530)	(0.7419)
	(0.1247)	(0.0949)	(0.1765)
Controls	$\checkmark$	$\checkmark$	$\checkmark$
Constant	-2.6511*	1.1711	-10.1463***
	(1.5402)	(1.2544)	(1.7632)
Observations	607	607	607
Cost / utions	007	007	007

Taula 4.B3: Multinomial Logisitic Regression Results

Note: Baseline category is remaining in local politics. Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

	Promote	Out Politics	Retire
Woman	-0.4571	-0.0327	-0.7690
	(0.5146)	(0.3370)	(0.5954)
Unemployment	-0.7114*	-0.9152***	-0.2680
	(0.3672)	(0.3091)	(0.7636)
Salary	0.0690	0.1065	-0.0268
	(0.1632)	(0.1183)	(0.2235)
Time employed	-0.1787	-0.0703	-0.1566
	(0.2099)	(0.1502)	(0.1613)
Satisfaction	-0.0372	0.5795***	0.4038**
	(0.2148)	(0.1368)	(0.2056)
White collar	1.2817***	0.4451	-0.1001
	(0.4976)	(0.3088)	(0.4216)
Risk acceptance	-0.0231	-0.0516	-0.0603
*	(0.0742)	(0.0707)	(0.1386)
Effort vs. Luck	-0.0732	0.0454	-0.1018
	(0.0719)	(0.0671)	(0.0752)
Income	0.1431	0.2185**	0.2132
	(0.1536)	(0.1042)	(0.1582)
Children	-0.0714	-0.1079	0.0849
	(0.1637)	(0.1478)	(0.2907)
Controls	$\checkmark$	$\checkmark$	$\checkmark$
Constant	-2.4316	0.1059	-8.7802***
	(2.2829)	(1.6545)	(2.6001)
Observations	428	428	428

Taula 4.B4: Multinomial Logistic Regression with outside options

Table 4.B4 shows the multinomial model for all cases. In this case, the willingness to progress seems to be related to being "white collar". However, the most interesting result is that having lived through a situation of unemployment is also negatively correlated with wanting to progress. In relation to the previous results, it may mean that politicians who have been at risk prefer to maintain their position in local politics as a more stable situation. Similarly, it seems that there may be a fear on the part of politicians to go out into the labour market if they have suffered a situation of unemployment. But greater satisfaction and higher income do have a relationship with preferring to leave politics.

Note: Baseline category is remaining in local politics. Standard errors in parentheses. \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

# Capítol 5

# CONCLUSIONS

Candidate selection is one of the central pieces to understanding who governs and how they perform. When voters choose among candidates, they focus on personal characteristics in elections. However, in indirect representation systems, voters' choices may be blurred by other steps that lead to power. One of these steps is the formation of governments. This literature has primarily debated the determinants of this formation, focusing mainly on the motivations of the parties and institutions. However, the motivations of the politicians involved in these processes have been ignored. This dissertation attempts to resolve this unknown by asking how political leaders' characteristics and attitudes influence government formation processes. I test these questions in a set of chapters that apply experimental and quasi-experimental methods, taking advantage of original data sources.

By addressing these questions, this dissertation yields several contributions. Substantively, this research presents evidence that politicians have meaningful preferences about the personal characteristics of politicians, especially gender, that they look for in potential government partners. From a theoretical perspective, this research has important implications for the literature on political selection. Beyond politicians' characteristics defining what voters and parties select, it adds another step where these personal characteristics may affect political selection. It contributes to shifting the focus of attention from the study of parties' and voters' motivations to the leaders' characteristics. This opens up a new research agenda centred on how politicians' personal characteristics are relevant in forming governments.

First, Chapter 2 displays the conjoint experiment results to determine the effects of sociodemographic characteristics on politicians' preferences when choosing government partners. By surveying about 1,000 Spanish mayors, I demonstrate that political leaders have substantive preferences for specific candidates' profiles. The findings of this dissertation also have important implications for the literature on descriptive representation. It gives us some insights into profiles that are widely perceived as better governors. This may have implications not only for who is elected but also for who ends up representing us. Therefore, leaders' preferences in political selection processes may lead to scenarios in which specific profiles face additional obstacles to accessing government positions, compromising the representativeness of governments even though they are selected by their parties and by voters. For example, on average, Spanish mayors prefer women, middle-aged and high-educated partners. Candidates' age seems more important for female mayors, while education is understood through the homophily mechanism. Mayors prefer candidates with education levels similar to themselves, regardless of what that may be. The results, however, are still unclear. It is, therefore, crucial to study how these preferences for some profiles are formed. Suppose this works through stereotypes or discrimination processes regarding some politicians' profiles. In that case, this preference may be promoting the survival of a homogeneous political class that does not reflect the composition of its constituents.

The most groundbreaking result is the preference for female candidates expressed by particular mayors' profiles. In the mechanism analysis, I find that women are more valued by mayors for their ability to communicate and govern. This result is determined mainly by male and older mayors, who may be more likely to evaluate these profiles from a stereotypical view of their female partners. Considering that mayors evaluate their preferences from a winning perspective, this preference may suggest that women's profiles are perceived positively when it comes to the qualities of a junior partner. Decision-makers' preferences shaped by candidates' gender may have important implications for women's descriptive and substantive representation. If these results are in the right direction, I should observe more women in governments as junior partners.

This dissertation has been able to prove the gender divergence in the translation of government formation negotiations into office positions. In Chapter 3, my co-author Albert Falcó-Gimeno and I explored the effect of party leaders' gender on their ability to capitalise on political power in negotiations to form governments following elections. Using a Regression Discontinuity Design, in this chapter we find results in line of my findings in Chapter 2. Women find it more challenging to get into power even if they have won the elections. A key result is that they tend to participate in the resulting government regardless of whether they have to cede the mayoralty to third parties. This may also leave women in junior partner conditions that may keep them out of top political positions. We demonstrate, therefore, that bargaining dynamics in governments formation may contribute to explaining the gender gap in top political positions.

Chapters 2 and 3, therefore, suggest through empirical evidence that there are gender roles assigned along the lines explained by the role congruity theory (Eagly and Karau,

2002). The preference for women conveyed by gender stereotypes and how they fit the qualities of a good coalition partner is likely to generate a gender bias in how men and women manage in negotiations of governments formation. Thus, women are likely to be anchored to a junior role where governance efficiency or good communication skills are pivotal to coalition survival. However, given the lack of data, it is impossible to find out how these preferences translate into reality. Future research should invest time and resources in creating more comprehensive databases on the government formations process of these mayors to test the link between their preferences and actual behaviour.

The analysis of the mechanisms of these results leaves unresolved explanations for future research. Women being considered better junior partners and ending up in these positions within governments may be due to several explanations. Those that emerge throughout the dissertation range from gender-stereotypical or discriminatory attitudes that negotiation partners may have to the ambitions and leadership styles that female politicians may adopt in these negotiations. Further confirmatory evidence should be directed along these lines to reach a sound conclusion in this regard. For the time being, this dissertation has set a framework and begun clarifying some of these matters. Thus, Chapter 4 provides the first comprehensive analysis of the political attitudes and ambitions of those who reach top office.

The descriptive results of the mayors' survey and observational data from their electoral candidacies show that gender differences in political ambition disappear among those who reach the top. Even though they do show divergence in why politicians prefer to remain in politics. Women with more family responsibilities prefer to stay in politics for longer, suggesting that they perhaps prioritise stability rather than moving up to other levels or going into the private job market. If I extrapolate these results to the

previous ones, perhaps what I found is the result of the women's willingness to secure certain positions of stability. The results also show that women have more difficulties in remaining in or promoting in politics beyond their will.

Unfortunately, these results are only testable for those women who have successfully negotiated with a government and reached the mayor's office. Although they only capture the political ambition of those women who managed to break the glass ceiling, these results provide a first approximation to explore politicians' profiles and attitudes in high positions of power. Attitudes of second-line women remain unexplained to understand whether and why they are confined to the role of junior government partners. Therefore, future research should attempt to explain who these women are, to understand their political ambition and explore whether this affects their probability of reaching the highest leadership position.

However, often the focus is placed primarily on women. We still know very little about the actual decision-making processes of leaders in creating a party and government nominations. Nevertheless, an alternative explanation may be that leaders or gatekeepers of the governments drive these results. As Chapter 2 suggests, the key may lie in how decision-makers generate their preferences for women as junior partners. Future research should then delve deeper into why women are considered better teammates, paying particular attention to leaders' motivations and their incentives when appointing their teams.

Moreover, less attention has been paid to the relationship between leaders and the effect they have on the appointment of women to high office (O'Brien, 2015; Goddard, 2019). This is somewhat surprising, given the role that party leaders play in power allocation and political promotion. Perhaps what may explain part of the results of this dissertation is that party leaders select among potential government partners through gender dynamics. This decision process shapes leaders' motivations to remain in power, choosing a priori less ambitious profiles, which at the same time may report them better electoral results.

This dissertation then suggests a new explanation for why women have been consistently underrepresented in high political office. The findings on women's representation advance knowledge about gender inequalities among political elites. Future research should identify the motivational and institutional causes of women's selection for top leadership positions. Additionally, the normative implications for descriptive and substantive representation can also be extrapolated to other social groups not covered by this research. Future research should also focus on testing these findings with other groups that are also socially underrepresented in politics based on their ethnicity, sexuality or social class. In any case, these findings contribute to an increased understanding of the mechanisms underlying women's underrepresentation in high political office by focusing on women's motivations for attaining and remaining in positions of power.

This research provides new evidence for the growing literature on the effect of personal characteristics on leaders' performance and issue priorities. This helps to increase our understanding of how leaders' profiles affect behaviour in the negotiation of government formation and how selectors and selected characteristics affect the establishment of their preferences. The dissertation generates a fundamental contribution to the literature on the effects of politicians' personal characteristics on their behaviour.

The dissertation also provides innovative methodological contributions. One of the crucial aspects of this research is the building of two databases, which was essential to come up with the findings. Since no one has collected Spanish local governments' formation data, these two novel databases represent a breakthrough. Specifically, the mayors' database is one of the political elites' surveys with the highest response rates ever conducted in Spain. In addition, given that political selection occurs over multiple steps, this dissertation finds clean research designs which approach natural experiments to identify the effect of a single intervening personal characteristic in this process.

To the best of my knowledge, no previous research added follow-up questions to substantially analyse the mechanisms of respondents' preferences. First, I evidence that it is feasible to study the role of these features on politicians' preferences through experiments. I also contribute methodologically by designing a new way to identify the mechanisms of a conjoint experiment. This innovation has been fundamental in understanding why women are preferred as coalition partners. Second, this dissertation also helps spread cutting-edge methodologies, such as Regression Discontinuity Designs, to the study of proportional representations systems where these methodologies have been much less used.

One of the main methodological strengths of this dissertation is the internal validity generated by these research designs. Studying a single country and government level has helped me hold constant important determinants of government formation and the presence of women in politics, such as the electoral and contextual system of my case study. However, the lesser extent of external validity in some cases could be seen as a limitation. Future research should focus on expanding the scope to incorporate a broader range of national contexts and other levels of government to test whether these studies can transcend the boundaries of a single case study.

Finally, from a social and political perspective, this dissertation has implications for representative democracies where certain groups may be underrepresented. It highlights the need to pay more attention to the role of personal traits and leaders' preferences in political processes. If homophily or discrimination mechanisms are leading politicians' selection, this may result in the survival of a normative homogeneity. This selection process can compromise governments' representativeness and the quality of representation. Knowledge on the subject of political leaders can help make institutional decisions on the optimal design of electoral rules and selection procedures to choose the most appropriate leaders. Governments are one of the most important institutions in society, and the selection of politicians through elections is one of the most important contributions of citizens to democratic politics. Understanding how to improve political selection is therefore central to making democracies work.

Understanding how political leaders and their characteristics define their political behaviour is fundamental to know who comes to power and how. If not everyone can access office in the same way, we will find inequalities in the representation of certain social groups, such as women. Increasing knowledge of these inequalities can help institutions create fairer and more egalitarian process designs to ensure that everyone has equal access to power. For instance, adopting gender quotas for governments or more transparent government negotiation processes can help make gender representation more equitable in top political positions. Democracies should avoid perpetuating specific roles in governments that are more closely linked to certain social groups. Research on these topics helps ensure fair representation for all types of citizens.

# Bibliografia

- Alesina, A., Cassidy, T., and Troiano, U. (2019). Old and Young Politicians. *Economica*, 86(344):689–727.
- Almlund, M., Duckworth, A. L., Heckman, J., and Kautz, T. (2011). Personality Psychology and Economics. In Hanushek, E. A., Machin, S., and Woessmann, L., editors, *Handbook of the Economics of Education*, Handbook of The Economics of Education, pages 1–181. Elsevier.
- Ansolabehere, S., Snyder, J. M., Strauss, A. B., and Ting, M. M. (2005). Voting weights and formateur advantages in the formation of coalition governments. *American Journal of Political Science*, 49(3):550–563.
- Antecol, H., Bedard, K., and Stearns, J. (2018). Equal but Inequitable: Who Benefits from Gender-Neutral Tenure Clock Stopping Policies? *American Economic Review*, 108(9):2420–2441.
- Anzia, S. F. and Berry, C. R. (2011). The Jackie (and Jill) Robinson Effect: Why Do Congresswomen Outperform Congressmen? *American Journal of Political Science*, 55(3):478–493.

- Axelrod, R. M. (1970). Conflict of Interest: A Theory of Divergent Goals with Applications to Politics. Chicago, IL: Markham.
- Bäck, H. and Dumont, P. (2008). Making the first move: A two-stage analysis of the role of formateurs in parliamentary government formation. *Public Choice*, 135(3-4):353–373.
- Bagues, M. and Campa, P. (2021). Can gender quotas in candidate lists empower women? Evidence from a regression discontinuity design. *Journal of Public Economics*, 194:104315.
- Barnes, T. (2016). Gendering legislative behavior. Cambridge University Press.
- Barnes, T. D., Beall, V. D., and Holman, M. R. (2021). Pink-collar representation and budgetary outcomes in us states. *Legislative Studies Quarterly*, 46(1):119–154.
- Barnes, T. D. and Beaulieu, E. (2014). Gender stereotypes and corruption: How candidates affect perceptions of election fraud. *Politics & Gender*, 10(3):365–391.
- Baron, D. P. (1991). A Spatial Bargaining Theory of Government Formation in Parliamentary Systems. *American Political Science Review*, 85(1):137–164.
- Baron, D. P. (1998). Comparative Dynamics of Parliamentary Governments. American Political Science Review, 92(3):593–609.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., and Topalova, P. (2009). Powerful Women: Does Exposure Reduce Bias?\*. *The Quarterly Journal of Economics*, 124(4):1497–1540.
- Bénabou, R. and Tirole, J. (2003). Intrinsic and extrinsic motivation. *The review of economic studies*, 70(3):489–520.

- Bernhard, R. and de Benedictis-Kessner, J. (2021). Men and women candidates are similarly persistent after losing elections. *Proceedings of the National Academy of Sciences*, 118(26):e2026726118. Publisher: Proceedings of the National Academy of Sciences.
- Bernhard, R., Shames, S., and Teele, D. L. (2021). To emerge? Breadwinning, motherhood, and women's decisions to run for office. *American Political Science Review*, 115(2):379–394. Publisher: Cambridge University Press.
- Besley, T. (2005). Political selection. Journal of Economic Perspectives, 19(3):43-60.
- Besley, T. (2006). Principled Agents: Motivation and Incentives in Politics. Oxford: Oxford University Press.
- Besley, T., Montalvo, J. G., and Reynal-Querol, M. (2011). Do Educated Leaders Matter? *The Economic Journal*, 121(554):F205–227.
- Besley, T., Persson, T., and Sturm, D. (2005). Political Competition and Economic Performance: Theory and Evidence from the United States. Working Paper 11484, National Bureau of Economic Research.
- Bhalotra, S. and Clots-Figueras, I. (2014). Health and the Political Agency of Women. *American Economic Journal: Economic Policy*, 6(2):164–197.
- Bhalotra, S., Clots-Figueras, I., Cassan, G., and Iyer, L. (2014). Religion, politician identity and development outcomes: Evidence from India. *Journal of Economic Behavior & Organization*, 104:4–17.
- Bhalotra, S., Clots-Figueras, I., and Iyer, L. (2018). Pathbreakers? women's electoral

success and future political participation. *The Economic Journal*, 128(613):1844–1878.

- Bjarnegård, E. (2013). Gender, informal institutions and political recruitment: Explaining male dominance in parliamentary representation. Springer.
- Bledsoe, T. and Herring, M. (1990). Victims of Circumstances: Women in Pursuit of Political Office. *American Political Science Review*, 84(1):213–223.
- Brollo, F. and Nannicini, T. (2012). Tying Your Enemy's Hands in Close Races: The Politics of Federal Transfers in Brazil. *American Political Science Review*, 106(4):742– 761.
- Brollo, F. and Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122:28–45.
- Broockman, D. E., Carnes, N., Crowder-Meyer, M., and Skovron, C. (2019). Why Local Party Leaders Don't Support Nominating Centrists. *British Journal of Political Science*, pages 1–26.
- Burt, R. (1982). *Toward a structural theory of action : network models of social Structure, Perception, and Action.* Academic Press.
- Butler, D. M. and Preece, J. R. (2016). Recruitment and Perceptions of Gender Bias in Party Leader Support. *Political Research Quarterly*, 69(4):842–851. Publisher: SAGE Publications Inc.
- Bäck, H. and Dumont, P. (2008). Making the first move. *Public Choice*, 135(3):353–373.

- Calonico, S., Cattaneo, M. D., and Farrell, M. H. (2018). Optimal bandwidth choice for robust bias corrected inference in regression discontinuity designs. *arXiv preprint arXiv:1809.00236*.
- Calonico, S., Cattaneo, M. D., Farrell, M. H., and Titiunik, R. (2017). rdrobust: Software for regression-discontinuity designs. *The Stata Journal*, 17(2):372–404.
- Calonico, S., Cattaneo, M. D., and Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, 82(6):2295–2326.
- Campbell, D. E. and Wolbrecht, C. (2006). See Jane Run: Women Politicians as Role Models for Adolescents. *The Journal of Politics*, 68(2):233–247. Publisher: The University of Chicago Press.
- Campbell, R. (2016). Representing women voters: The role of the gender gap and the response of political parties. *Party Politics*, 22(5):587–597.
- Campbell, R. and Childs, S. (2015). 'what the coalition did for women': a new gender consensus, coalition division and gendered austerity.
- Campbell, R. and Cowley, P. (2013). What Voters Want: Reactions to Candidate Characteristics in a Survey Experiment. *Political Studies*.
- Carey, J. M., Niemi, R. G., and Powell, L. W. (1998). The Effects of Term Limits on State Legislatures. *Legislative Studies Quarterly*, 23(2):271–300.
- Carnes, N. and Lupu, N. (2015). Rethinking the Comparative Perspective on Class and Representation: Evidence from Latin America. *American Journal of Political Science*, 59(1):1–18.

- Carnes, N. and Lupu, N. (2016a). Do voters dislike working-class candidates? voter biases and the descriptive underrepresentation of the working class. *American Political Science Review*, 110(4):832–844.
- Carnes, N. and Lupu, N. (2016b). What good is a college degree? education and leader quality reconsidered. *The Journal of Politics*, 78(1):35–49.
- Carroll, S. J. and Sanbonmatsu, K. (2013). *More women can run: Gender and pathways to the state legislatures*. Oxford University Press.
- Caselli, F. and Morelli, M. (2004). Bad politicians. *Journal of public economics*, 88(3-4):759–782.
- Chattopadhyay, R. and Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*, 72(5):1409–1443.
- Clark, J., Hadley, C. D., and Darcy, R. (1989). Political Ambition Among Men and Women State Party Leaders: Testing the Countersocialization Perspective. *American Politics Quarterly*, 17(2):194–207.
- Claveria, S. (2014). Still a 'Male Business'? Explaining Women's Presence in Executive Office. *West European Politics*, 37(5):1156–1176.
- Clayton, A. and Anderson-Nilsson, G. (2021). Gender experiments in comparative politics. *Advances in Experimental Political Science*.
- Clayton, A., O'Brien, D. Z., and Piscopo, J. M. (2019). All Male Panels? Representation and Democratic Legitimacy. *American Journal of Political Science*, 63(1):113–129.

- Clayton, A. and Zetterberg, P. (2021). Gender and party discipline: Evidence from africa's emerging party systems. *American Political Science Review*, 115(3):869–884.
- Cohen, T. R., Panter, A. T., Turan, N., Morse, L., and Kim, Y. (2014). Moral character in the workplace. *Journal of Personality and Social Psychology*, 107(5):943–963.
- Cowley, P. and Childs, S. (2003). Too spineless to rebel? new labour's women mps. *British Journal of Political Science*, 33(3):345–365.
- Crocker, J. and Mcgraw, K. (1984). What's Good for the Goose Is Not Good for the Gander: Solo Status as an Obstacle to Occupational Achievement for Males and Females. *American Behavioral Scientist*, 27(3):357–369.
- Crowder-Meyer, M. and Cooperman, R. (2018). Can't Buy Them Love: How Party Culture among Donors Contributes to the Party Gap in Women's Representation. *The Journal of Politics*, 80(4):1211–1224.
- Cutler, F. (2002). The Simplest Shortcut of All: Sociodemographic Characteristics and Electoral Choice. *Journal of Politics*, 64(2):466–490.
- Darcy, R., Welch, S., and Clark, J. (1994). *Women, elections, and representation*. Lincoln: University of Nebraska Press.
- De la Cuesta, B. and Imai, K. (2016). Misunderstandings about the regression discontinuity design in the study of close elections. *Annual Review of Political Science*, 19:375–396.
- Driskell, J. E. and Mullen, B. (1990). Status, expectations, and behavior: A meta-

analytic review and test of the theory. *Personality and Social Psychology Bulletin*, 16(3):541–553.

- Druckman, J. N. (2004). Political preference formation: Competition, deliberation, and the (ir) relevance of framing effects. *American political science review*, 98(4):671–686.
- Eagly, A. H. and Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, 108(2):233–256.
- Eagly, A. H. and Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological review*, 109(3):573.
- Eckel, C. C. and Grossman, P. J. (2008). Forecasting risk attitudes: An experimental study using actual and forecast gamble choices. *Journal of Economic Behavior & Organization*, 68(1):1–17.
- Escobar-Lemmon, M. and Taylor-Robinson, M. M. (2008). How do candidate recruitment and selection processes affect the representation of women? *Pathways to power: Political recruitment and candidate selection in Latin America*, pages 345–68.
- Etzioni, A. and Lehman, E. W. (1980). A sociological reader on complex organizations.Holt, Rinehart and Winston.
- Falcó-Gimeno, A. (2018). The political geography of government formation: Why regional parties join coalitions. *Party Politics*, page 1354068817750865.
- Fiske, S. T. and Taylor, S. E. (2013). Social Cognition: From Brains to Culture. SAGE.
- Folke, O. and Rickne, J. (2016a). Electoral Competition and Gender Differences in Political Careers. *Quarterly Journal of Political Science*, 11(1):59–102.
- Folke, O. and Rickne, J. (2016b). The Glass Ceiling in Politics: Formalization and Empirical Tests. *Comparative Political Studies*, 49(5):567–599.
- Foos, F. and Gilardi, F. (2020). Does Exposure to Gender Role Models Increase Women's Political Ambition? A Field Experiment with Politicians. *Journal of Experimental Political Science*, 7(3):157–166. Publisher: Cambridge University Press.
- Fox, R. L. and Lawless, J. L. (2003). Family Structure, Sex-Role Socialization, and the Decision to Run for Office. *Women & Politics*, 24(4):19–48.
- Fox, R. L. and Lawless, J. L. (2004). Entering the Arena? Gender and the Decision to Run for Office. *American Journal of Political Science*, 48(2):264–280.
- Fox, R. L. and Lawless, J. L. (2010). If Only They'd Ask: Gender, Recruitment, and Political Ambition. *The Journal of Politics*, 72(2):310–326.
- Fox, R. L. and Lawless, J. L. (2011). Gendered Perceptions and Political Candidacies: A Central Barrier to Women's Equality in Electoral Politics. *American Journal of Political Science*, 55(1):59–73.
- Fox, R. L. and Lawless, J. L. (2014). Uncovering the Origins of the Gender Gap in Political Ambition. *American Political Science Review*, 108(3):499–519.
- Fox, R. L., Lawless, J. L., and Feeley, C. (2001). Gender and the Decision to Run for Office. *Legislative Studies Quarterly*, 26(3):411–435.
- Friedkin, N. E. (1993). Structural Bases of Interpersonal Influence in Groups: A Longitudinal Case Study. American Sociological Review, 58(6):861–872.
- Fujiwara, T. and Sanz, C. (2020). Rank effects in bargaining: Evidence from government formation. *The Review of Economic Studies*, 87(3):1261–1295.

- Fulton, S. A., Maestas, C. D., Maisel, L. S., and Stone, W. J. (2006). The Sense of a Woman: Gender, Ambition, and the Decision to Run for Congress. *Political Research Quarterly*, 59(2):235–248.
- Gambetta, D. (1988). *Trust: Making and breaking cooperative relations*. New York, NY: Basil Blackwell.
- Gaxie, D. and Godmer, L. (2007). Cultural capital and political selection: educational backgrounds of parliamentarians. *Democratic representation in Europe: Diversity, change, and convergence*, pages 106–135.
- Gerber, E. R., Henry, A. D., and Lubell, M. (2013). Political Homophily and Collaboration in Regional Planning Networks. *American Journal of Political Science*, 57(3):598–610.
- Glasgow, G., Golder, M., and Golder, S. N. (2011). Who "wins"? determining the party of the prime minister. *American Journal of Political Science*, 55(4):937–954.
- Glasgow, G. and Golder, S. N. (2015). A new approach to the study of parties entering government. *British Journal of Political Science*, 45(4):739–754.
- Goddard, D. (2019). Entering the men's domain? gender and portfolio allocation in european governments. *European Journal of Political Research*, 58(2):631–655.
- Gulzar, S. (2021). Who Enters Politics and Why? *Annual Review of Political Science*, 24(1):253–275. \_eprint: https://doi.org/10.1146/annurev-polisci-051418-051214.
- Gulzar, S. and Khan, M. (2021). Social motivation, political candidacy, and performance: experimental evidence from pakistan. Technical report, Working Paper.

- Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2014). Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis*, 22(1):1–30.
- Heath, R. M., Schwindt-Bayer, L. A., and Taylor-Robinson, M. M. (2005). Women on the Sidelines: Women's Representation on Committees in Latin American Legislatures. *American Journal of Political Science*, 49(2):420–436.
- Heckman, J. J. and Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19(4):451–464.
- Hinds, P. J., Carley, K. M., Krackhardt, D., and Wholey, D. (2000). Choosing work group members: Balancing similarity, competence, and familiarity. *Organizational behavior and human decision processes*, 81(2):226–251.
- Horiuchi, Y., Markovich, Z., and Yamamoto, T. (2021). Does conjoint analysis mitigate social desirability bias? *Political Analysis*, pages 1–15.
- Hospido, L., Laeven, L., and Lamo, A. (2020). The Gender Promotion Gap: Evidence from Central Banking. *The Review of Economics and Statistics*, pages 1–45.
- Huddy, L. and Terkildsen, N. (1993). Gender Stereotypes and the Perception of Male and Female Candidates. *American Journal of Political Science*, 37(1):119–147.
- Huston, T. L. and Levinger, G. (1978). Interpersonal Attraction and Relationships. Annual Review of Psychology, 29(1):115–156.
- Indridason, I. H. (2011a). Coalition formation and polarisation. European Journal of Political Research, 50(5):689–718.

- Indridason, I. H. (2011b). Proportional Representation, Majoritarian Legislatures, and Coalitional Voting. *American Journal of Political Science*, 55(4):955–971.
- Janezic, K. A. and Gallego, A. (2020). Eliciting preferences for truth-telling in a survey of politicians. *Proceedings of the National Academy of Sciences*, 117(36):22002– 22008.
- Jones, B. F. and Olken, B. A. (2005). Do Leaders Matter? National Leadership and Growth Since World War II. *The Quarterly Journal of Economics*, 120(3):835–864.
- Kanthak, K. and Woon, J. (2015). Women Don't Run? Election Aversion and Candidate Entry. *American Journal of Political Science*, 59(3):595–612.
- Karpowitz, C. F., Monson, J. Q., and Preece, J. R. (2017). How to Elect More Women: Gender and Candidate Success in a Field Experiment. *American Journal of Political Science*, 61(4):927–943. \_eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12300.
- Kearney, E. (2008). Age differences between leader and followers as a moderator of the relationship between transformational leadership and team performance. *Journal of Occupational and Organizational Psychology*, 81(4):803–811.
- Kennedy, C. (2003). Gender Differences in Committee Decision-Making. *Women & Politics*, 25(3):27–45.
- Kirkland, P. A. and Coppock, A. (2018). Candidate Choice Without Party Labels. *Political Behavior*, 40(3):571–591.
- Koch, J. W. (2000). Do citizens apply gender stereotypes to infer candidates' ideological orientations? *The Journal of Politics*, 62(2):414–429.

- Kramon, E. J. and Posner, D. N. (2012). Ethnic Favoritism in Primary Education in Kenya. page 46.
- Krook, M. L. and O'Brien, D. Z. (2012). All the President's Men? The Appointment of Female Cabinet Ministers Worldwide. *The Journal of Politics*, 74(3):840–855.
- Kurzban, R. and Leary, M. R. (2001). Evolutionary origins of stigmatization: the functions of social exclusion. *Psychological bulletin*, 127(2):187.
- Lau, R. R. and Redlawsk, D. P. (2001). Advantages and Disadvantages of Cognitive Heuristics in Political Decision Making. *American Journal of Political Science*, 45(4):951–971.
- Laver, M., Rallings, C., and Thrasher, M. (1987). Coalition theory and local government: Coalition payoffs in britain. *British Journal of Political Science*, 17(4):501– 509.
- Laver, M. and Schofield, N. (1998). *Multiparty Government: The Politics of Coalition in Europe*. University of Michigan Press.
- Laver, M. J. and Schofield, N. (1990). *Multiparty Government*. University of Michigan Press, Ann Arbor, MI.
- Laver, M. J. and Shepsle, K. A. (1996). *Making and breaking governments: Cabinets and legislatures in parliamentary democracies*. Cambridge University Press, Cambridge.
- Lawless, J. L. and Fox, R. L. (2005). *It takes a candidate: Why women don't run for office*. Cambridge University Press.

- Lawless, J. L. and Fox, R. L. (2010a). *It Still Takes A Candidate: Why Women Don't Run for Office*. Cambridge University Press. Google-Books-ID: X3PkMhfHxM8C.
- Lawless, J. L. and Fox, R. L. (2010b). *It still takes a candidate: Why women don't run for office*. Cambridge University Press.
- Lawrence, B. S. (2006). Organizational reference groups: A missing perspective on social context. *Organization Science*, 17(1):80–100.
- Levin, D. Z. and Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management science*, 50(11):1477– 1490.
- Liu, H., Lim, E.-P., Lauw, H. W., Le, M.-T., Sun, A., Srivastava, J., and Kim, Y. (2008).
  Predicting trusts among users of online communities: an epinions case study. In *Proceedings of the 9th ACM conference on Electronic commerce*, pages 310–319.
  ACM.
- Lovenduski, J. and Norris, P. (2003). Westminster Women: The Politics of Presence. *Political Studies*, 51(1):84–102.
- Maccoby, E. E. (1988). Gender as a social category. *Developmental psychology*, 24(6):755.
- Magee, J. C. and Galinsky, A. D. (2008). 8 social hierarchy: The self-reinforcing nature of power and status. *Academy of Management annals*, 2(1):351–398.
- Márquez, G. M. (2003). Marco metodológico para el estudio de las coaliciones políticas en los gobiernos locales en españa. *Política y sociedad*, 40(2):157–178.

- Marshall, J. (2019). When election rdds idencan close tify effects of characteristics. the winning politician https://scholar.harvard.edu/files/jmarshall/files/election\_rd\_paper.pdf.
- Martin, L. W. and Stevenson, R. T. (2001). Government Formation in Parliamentary Democracies. *American Journal of Political Science*, 45(1):33–50.
- Martinez-Bravo, M. (2017). The Local Political Economy Effects of School Construction in Indonesia. *American Economic Journal: Applied Economics*, 9(2):256–289.
- Mattila, M. and Raunio, T. (2004). Does winning pay? Electoral success and government formation in 15 West European countries. *European Journal of Political Research*, 43(2):263–285.
- Mattozzi, A. and Merlo, A. (2008). Political careers or career politicians? *Journal of Public Economics*, 92(3-4):597–608.
- Mayhew, B. H., McPherson, J. M., Rotolo, T., and Smith-Lovin, L. (1995). Sex and Race Homogeneity in Naturally Occurring Groups. *Social Forces*, 74(1):15–52.
- McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of econometrics*, 142(2):698–714.
- McPherson, M., Smith-Lovin, L., and Cook, J. M. (2001). Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology*, 27(1):415–444.
- Mondak, J. J. (1995). Competence, Integrity, and the Electoral Success of Congressional Incumbents. *The Journal of Politics*, 57(4):1043–1069.
- Moore, R. G. (2005). Religion, Race, and Gender Differences in Political Ambition. *Politics & Gender*, 1(04).

- Murray, R. (2015). What makes a good politician? reassessing the criteria used for political recruitment. *Politics & Gender*, 11(4):770–776.
- Niederle, M. and Vesterlund, L. (2007). Do Women Shy Away From Competition? Do Men Compete Too Much? *The Quarterly Journal of Economics*, 122(3):1067–1101.
- Norris, P. and Lovenduski, J. (1995). *Political recruitment: Gender, race and class in the British Parliament*. Cambridge University Press.
- O'Brien, D. Z. (2012). Gender and Select Committee Elections in the British House of Commons. *Politics & Gender*, 8(2):178–204.
- O'Brien, D. Z. (2015). Rising to the top: Gender, political performance, and party leadership in parliamentary democracies. *American Journal of Political Science*, 59(4):1022–1039.
- O'Brien, D. Z. and Rickne, J. (2016). Gender quotas and women's political leadership. *American Political Science Review*, 110(1):112–126.
- O'Leary, V. E. (1974). Some attitudinal barriers to occupational aspirations in women. *Psychological Bulletin*, 81(11):809–826.
- Oshagbemi, T. (2004). Age influences on the leadership styles and behaviour of managers. *Employee Relations*, 26(1):14–29.
- Osmani, J. (2016). The impact of age on the perception of cognitive abilities and decision-making skills. *European Journal of Social Science Education and Research*, 3(4):114–125.

- Pande, R. (2003). Can Mandated Political Representation Increase Policy Influence for Disadvantaged Minorities? Theory and Evidence from India. *American Economic Review*, 93(4):1132–1151.
- Pekkarinen, T. and Vartiainen, J. (2006). Gender Differences in Promotion on a Job Ladder: Evidence from Finnish Metalworkers. *ILR Review*, 59(2):285–301. Publisher: SAGE Publications Inc.
- Peveri, J. and Sangnier, M. (2021). Gender differences in re-contesting decisions: New evidence from French municipal elections.
- Preece, J. and Stoddard, O. (2015). Why women don't run: Experimental evidence on gender differences in political competition aversion. *Journal of Economic Behavior* & Organization, 117:296–308.
- Riger, S. and Galligan, P. (1980). Women in management: An exploration of competing paradigms. *American Psychologist*, 35(10):902–910.
- Riker, W. H. (1962). The theory of political coalitions. Yale University Press.
- Rosenthal, C. S. (1998). Determinants of Collaborative Leadership: Civic Engagement, Gender or Organizational Norms? *Political Research Quarterly*, 51(4):847–868.
- Sanbonmatsu, K. (2006a). Do Parties Know That "Women Win"? Party Leader Beliefs about Women's Electoral Chances. *Politics & Gender*, 2(4):431–450.
- Sanbonmatsu, K. (2006b). Gender Pools and Puzzles: Charting a "Women's Path" to the Legislature. *Politics & Gender*, 2(3):387–400.

- Sapiro, V. (1982). Private Costs of Public Commitments or Public Costs of Private Commitments? Family Roles versus Political Ambition. *American Journal of Political Science*, 26(2):265–279.
- Schneider, M. C., Holman, M. R., Diekman, A. B., and McAndrew, T. (2016). Power, Conflict, and Community: How Gendered Views of Political Power Influence Women's Political Ambition. *Political Psychology*, 37(4):515–531.
- Schwarz, S. and Coppock, A. (2022). What have we learned about gender from candidate choice experiments? a meta-analysis of sixty-seven factorial survey experiments. *Journal of Politics*, 84(2).
- Schwindt-Bayer, L. A. (2011). Women Who Win: Social Backgrounds, Paths to Power, and Political Ambition in Latin American Legislatures. *Politics & Gender*, 7(01):1– 33.
- Sen, M. (2017). How Political Signals Affect Public Support for Judicial Nominations: Evidence from a Conjoint Experiment. *Political Research Quarterly*, 70(2):374–393.
- Sevi, S. (2022). Is Incumbency Advantage Gendered? *Legislative Studies Quarterly*, n/a(n/a). \_eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/lsq.12376.
- Solé-Ollé, A. (2006). The effects of party competition on budget outcomes: Empirical evidence from local governments in spain. *Public Choice*, 126(1-2):145–176.
- Strøm, K. (1990). Minority government and majority rule. Cambridge University Press.
- Tate, K. (1994). From protest to politics: The new black voters in American elections.Harvard University Press.

- Tavits, M. (2008). The Role of Parties' Past Behavior in Coalition Formation. American Political Science Review, 102(4):495–507.
- Terkildsen, N. (1993). When White Voters Evaluate Black Candidates: The Processing Implications of Candidate Skin Color, Prejudice, and Self-Monitoring. *American Journal of Political Science*, 37(4):1032–1053.
- Thomas, S. (1994). How women legislate. Oxford University Press on Demand.
- Thompson, J. D. (2017). Organizations in action: Social science bases of administrative theory. Routledge.
- Tremblay, M. (2012). Women and legislative representation: Electoral systems, political parties, and sex quotas. Basingstoke, Hampshire, UK: Palgrave Macmillan.
- Tsai, M.-H., Melia, N. V., and Hinsz, V. B. (2020). The effects of perceived decisionmaking styles on evaluations of openness and competence that elicit collaboration. *Personality and Social Psychology Bulletin*, 46(1):124–139.
- Van Vugt, M. (2006). Evolutionary Origins of Leadership and Followership. *Personality* and Social Psychology Review, 10(4):354–371.
- Verge, T. and De la Fuente, M. (2014). Playing with different cards: Party politics, gender quotas and women's empowerment. *International Political Science Review*, 35(1):67–79.
- Verge, T. and Wiesehomeier, N. (2019). Parties, candidates, and gendered political recruitment in closed-list proportional representation systems: The case of spain. *Political Research Quarterly*, 72(4):805–820.

- Volden, C., Wiseman, A. E., and Wittmer, D. E. (2013). When Are Women More Effective Lawmakers Than Men? *American Journal of Political Science*, 57(2):326– 341.
- Wängnerud, L. (2009). Women in parliaments: Descriptive and substantive representation. Annual Review of Political Science, 12:51–69.
- Warwick, P. V. (1996). Coalition Government Membership in West European Parliamentary Democracies. *British Journal of Political Science*, 26(4):471–499.
- Washington, E. L. (2008). Female Socialization: How Daughters Affect Their Legislator Fathers. *American Economic Review*, 98(1):311–332.
- Weikart, L. A., Chen, G., Williams, D. W., and Hromic, H. (2006). The Democratic Sex: Gender Differences and the Exercise of Power. *Journal of Women, Politics & Policy*, 28(1):119–140.
- Windett, J. (2014). Differing Paths to the Top: Gender, Ambition, and Running for Governor. *Journal of Women, Politics & Policy*, 35(4):287–314. Publisher: Routledge \_eprint: https://doi.org/10.1080/1554477X.2014.955403.

World Economic Forum (2021). The Global Gender Gap Report 2021.