

Gendered Candidate Turnover?: Relationship among Candidates' Gender, Ideology, and Reelection Bids

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Abstract

Female representation depends on female legislative turnover: no matter how many women enter parliament, the level of representation remains low unless they continue their legislative careers. We seek to theorize and analyze the relationship between legislators' gender and turnover, focusing on those newly elected with little political experience ("novices"). Specifically, we analyze reelection bids of novices of "La Republique en Marche!" (LREM) in the 2022 election for the French National Assembly. We find that female novices are as likely to rerun as male ones and that this result holds conditional on their ideology and motivation. While there is an accumulation of research on legislators' gender and turnover, most existing works ignore the heterogeneity among female legislators. Our research shows that female newcomers are as likely to seek reelection as their male counterparts in a balanced environment, implying that level playing fields could promote female representation in the long run.

1 Introduction

More and more women enter parliament in developed democracies, but it does not necessarily mean improved female representation. Scholars of female representation have long studied legislative turnover in the context of descriptive representation (François and Grossman, 2015; Gouglas et al., 2018; Norris, 1997; Matland and Studlar, 2004; Slegten and Heyndels, 2022; Heinsohn and Freitag, 2012; Franceschet and Piscopo, 2014) because women need to replace those already present in the legislature if they wish to enter parliament. Recent studies explore female incumbents’ return to parliament in a similar logic (Hjelmar et al., 2010; Lawless, 2005; Peveri and Sangnier, 2023; Shair-Rosenfield and Hinojosa, 2014; Weber et al., 2023). No matter how many women enter parliament, the level of representation remains low unless they continue their legislative careers.

We seek to theorize and analyze the relationship between legislators’ gender and turnover, focusing on those newly elected with little political experience (“novices”). We first examine whether female novices are less likely to rerun than male ones. Stereotypically, female politicians would experience more considerable social pressure than their male counterparts due to the different roles in society that social norms attribute to them. Thus, they might be less likely to seek reelection even if they enter politics once. We also test if this relationship holds conditional on other factors, namely ideology and motivation.

To test our hypotheses, we analyze the novices of “La Republique en Marche!” (LREM) in the 15th French National Assembly (2017 - 2022), examining their reelection bids in the 2022 election. About 55 % of the LREM novices were women, providing a balanced setting in terms of gender. In addition, the election itself laid out a favorable

environment for newcomers. Almost 90 % of the winners and about 65 % of the LREM winners were first-timers.

We find that female novices are as likely to rerun as male ones and that this result holds conditional on their ideology and motivation. Using logistic regression models, we first show that female legislators seek reelection as much as their male counterparts. This relationship holds conditional on ideology: female extremists are no more likely to exit at the next election than male extremists. Female legislators also seem as motivated as male legislators, which refutes a traditional argument that female ideological outliers lose their motivation toward legislative activities and decide not to rerun.

While there is an accumulation of research on the gender difference in legislative turnover, most existing works ignore the heterogeneity among female legislators. Previous research has asked, “Are female legislators more likely to retire?” while they differ in seniority, ideology, and motivation. Our research provides additional evidence on the absence of gendered turnover and, importantly, evidence that suggests the absence of the *conditional* relationship between gender and turnover.

Previous research has also been unaware of the contextual factors likely to affect female turnover. In other words, scholars have been unaware of whether the contexts of the studies would promote or inhibit female legislators’ attempts at reelection. Our result implies that “level playing fields” could promote female representation in the long run. Recent research has pointed to the necessity of studying the source of the gender difference in political career ([Martínez-Cantó and Verge, 2023](#); [Muriaas and Stavenes, 2023](#)). Our research suggests that an improved environment at the point of entry to parliament may reduce the difference in the probability of re-candidacy between men and

women at the next election, the first step in continuing a political career.

2 Lack of Attention on Female Heterogeneity

Two variants of candidate turnover exist in the context of female descriptive representation. First, women must enter the parliament for the first time. The literature discusses whether and how male incumbency hinders women's entry into the Parliament ([Schwindt-Bayer, 2005](#)). In parliaments with many male members, the question is how male careers end and are taken over in the form of female candidacies ([Norris et al., 1992](#)). Still, a question remains whether new female legislators will run again in the next election. Advanced liberal democratic countries introduce novel institutional designs, such as quotas, to improve female descriptive representation. When they start to function and more women enter parliament, the question would be whether the new female legislators are as willing to continue their political careers as their male counterparts.

No matter how many women enter parliament, the level of female representation will remain low unless they continue their legislative careers. Recent studies are examining gender differences in senior legislators as well as the entry of women. It is noted that even with the increased entry of women, the gap still exists between men and women in senior, but the difference is diminishing ([Muriaas and Stavenes, 2023](#)).

This raises an important research question on candidate turnover: are female legislators more likely to retire? Researchers have not agreed on this question because they are discussing cases that are distinct in context. Since the level of female representation depends on the institutional setting in each country ([Muyters and Maddens, 2023](#); [Weber et al., 2023](#); [Norris, 2006](#)) and has been increasing over time, the gender difference in

candidate turnover may vary from case to case. Studies in the U.S. context have found that congresswomen are less willing to continue their careers than congressmen (Lawless, 2005; Lazarus et al., 2023). However, in other countries with different institutional settings and cultural backgrounds, the effect of gender on turnover is mixed. For example, Shair-Rosenfield and Hinojosa (2014) finds that female incumbents in Chile are as likely to be renominated and reelected as male incumbents. In a stark contrast, Weber et al. (2023), analyzing finds that women are more likely to retire in a cross-national setting across three Westminster systems of Australia, Canada, and New Zealand.

Another question is a conditional one: is there a gender difference in candidate turnover *conditional on* some other variable? This question has been underexplored in the literature, although some exceptions exist. For example, Muyters et al. (2022); Peveri and Sangnier (2023) discusses the impact of electoral performance on reelection bids conditional on gender. Muyters et al. (2022) reveals that electoral performance positively affected re-candidacy only for men in the Belgian legislative election. Similarly, Peveri and Sangnier (2023) finds a positive causal relationship between female legislators' recontesting decisions and their winning margin in the past election. On the other hand, Folke and Rickne (2016) shows that higher party competition promotes female career and decreases gender gap in Swedish municipal election. Away from electoral performance, Smrek (2020) suggest in the context of Czech Republic that female politicians benefit from incumbency advantage only if they are legislatively active. However, away from those works, little is known about the conditional relationship between legislators' gender and turnover.

In sum, previous research has ignored the heterogeneity among female legislators in

considering their turnover. Heterogeneity is not just about electoral performance. Among women, there may be differences between new and senior legislators and ideologies and motivations held by each individual. Regarding career heterogeneity, senior legislators may be more likely to rerun than newcomers in light of their political resources and previous electoral performances. There may be other differences among women in what ideologies and motivations they hold, and it is necessary to examine how they affect their re-candidacy.

3 Theoretical Expectations on the Gendered Turnover among Novices

Given the problem in the literature, we ask “are female first-timers with little political experience (“novices”¹) less likely to rerun than their male counterparts?”. We consider politically inexperienced first-time legislators because they constitute a “least-likely case” regarding the probability of continuing legislative careers. First, first-timers have fewer political resources than more senior legislators because politicians become more financially stable and accumulate social networks as they get elected multiple times (Norris and Lovenduski, 1995). Among such newcomers, novices, in particular, are weaker than others regarding resources. While those with prior contacts with politics are expected to possess motivation and are likely to develop knowledge and networks on the way, novices would enter parliament with lower levels of those assets. We expect male and female novices to differ in the level of retention rates; however, if there should be no evidence of gender differences, we may rightly suppose that other variants of female incumbents would be

as likely to seek reelection as their male counterparts.

We first consider the unconditional relationship between candidates' gender and turnover, hypothesizing that female novices are less likely to rerun than male novices. Previous research claiming that female politicians are more likely to retire than male politicians suggests that women are more likely than men to be punished for being away from their households (Hjelmar et al., 2010). Certainly, women in parliament seem to be in harsher conditions than men experience. Female legislators report a larger number of work-family conflicts than male legislators (Johansson Sevä and Öun, 2019) and are more reluctant to commute to offices further from cities (Silbermann, 2015); Parliaments tend to underrepresent mothers (Campbell and Childs, 2014). Expectations about such difficulties for female politicians in maintaining their work-life balance are also shared among non-politicians (Silbermann, 2015). Given those societal factors that are more likely to affect women than men, female novices might be less likely to rerun than male novices, even if the political environment is balanced. Legislatures would be less like a "boys' club" as more women enter parliament, decreasing the amount of pressure female legislators experience from within politics. However, they would still be under pressure from the outside due to the roles they are expected to play. Thus,

Hypothesis 1 (H1): *Female novices are less likely to rerun than male novices.*

We then turn to the conditional relationships between gender and turnover, mediated by the third variable. Our second hypothesis is that female novices who ideologically

¹Note that our definition of "novices" differs from those in previous works in limiting the amount of political experience they possess. For example, Meserve et al. (2020) contrasts novices with incumbents in discussing that "left-leaning parties and parties in countries with high levels of female labor force participation value novice women more than novice men" (Meserve et al., 2020, 2). Here, the term "novice" represents those who have never run for the office before.

deviate within the party are less likely to rerun than their male counterpart. We expect such a relationship because deviations from the group one belongs to have different consequences for men and women. Previous research suggests that female legislators emphasize consensus building among peers more than male legislators (Volden et al., 2013). Women generally tend to be more altruistic than men (Kennedy, 2003), which applies to their behaviors in parliament. Specifically, for example, Dingler and Ramstetter (2023) finds that women defect from their party on minimal occasions, namely, where they have sufficient electoral safety and deal with so-called “female issues”. Ideological extremists would become outliers within the party as they cast dissenting votes or toe the party line in other manners. While such legislators have larger incentives to exit from the legislature, we expect those incentives to be even larger for women, who are, on average, more conformable than men. Thus,

Hypothesis 2 (H2): *Female extremists among novices are less likely to rerun than their male counterparts.*

We also hypothesize that female novices who are less active in parliament are less likely to rerun than such male novices. Legislators are active in parliament during the inter-election periods, and their house activities would affect their career decisions. Previous research has consistently found that women and men differ critically in the quantity or quality of legislative activities, measured by involvement in parliamentary debates, development of legislative agendas (Schmitt and Brant, 2019), and style in dealing with interruptions to speeches (Vallejo Vera and Gómez Vidal, 2022). We expect female novices who become less active in parliament to be alienated, eventually choosing to exit from the house. Thus,

Hypothesis 3 (H3): *Female novices who are less active in parliament are less likely to rerun than their male counterparts.*

4 Data and Method

4.1 Case Selection: French National Assembly

To test our hypotheses, we analyze the reelection bids of novices of “La Republique en Marche!” (LREM) in the 2022 election for the French National Assembly. France is one of the advanced liberal democratic countries with an SMD two-round system and parity law. Novices are defined as people who have never held an elective office or worked in politics (Boelaert et al., 2018); in other words, they are new to career in politics and have no political resources.² France introduced the parity law in 2000, which forces each party to nominate female candidates in equal numbers with male counterparts. However, almost all parties tried to seek ways around this law. For example, many female legislators are forced to compete in tough constituencies (swing seats). It took time for this law to take effect (Murray, 2004, 2009, 2010a,b; Southwell, 2014).

The novices who entered the National Assembly in the 2017 election constitute an ideal case to study the relationship between candidates’ gender and turnover. In previous France, the entry of female legislators mattered because of the lack of effect of the parity law (as mentioned above). However, in the 2017 election, the number of novice legislators dramatically increased and the gender of the novices was balanced. Therefore, the renomination in 2022 is critically important.

²Being a political novice does not necessarily mean being a first-time legislator in France because there is a practice of “cumul des mandats” (concurrent holding of public office) in the country.

In the 2017 general election, Emmanuel Macron, elected president the same year, advocated political renewal when he campaigned ([Ollion, 2019, 2021](#))—as a result of this campaign, the LREM, Macron’s new centrist party, won the majority. In this party, the novice legislator is the majority (63%). Moreover, the gender balance in the novice of this party was balanced. Female novices are 55% of the LREM novice legislators ³.

In France, even though political parties had hampered the entry of female legislators, many women suddenly entered parliament in the 2017 election. Moreover, women comprised a majority in LREM, the ruling party of the time. In this situation, it is essential to consider how they reran in the following 2022 election when considering the continuation of their political careers.

4.2 Data and Modeling

We use two types of individual data related to the French National Assembly. The first is the election data, covering two elections, 2017 and 2022. We first specify LREM winners in the 2017 election, match them with the list of novices that appears in [Ollion \(2019, 2021\)](#), and retain only those who won the second round election. We match those individuals with the list of candidates in the 2022 election using their full names. The second data is the legislative data, which is made public in [DATA.ASSEMBLEE-NATIONALE.FR](#). We first match legislators’ names with those appearing in the election data, collect IDs related to individual legislators, and retrieve all their voting records in the 15th legislature. Those records are used to estimate legislators’ ideology and calculate attendance records.

³The overall political career of the French general assembly was also rejuvenated, with 46% of them being novices.

We model the relationship among the variables of interest using multiple logistic regression models. We have two versions of the dependent variable. The first version is the dummy variable that takes the value of one if the candidate ran for the 2022 election regardless of party. The second variation slightly modifies this operationalization by designating the party from which candidates ran. Specifically, this version takes the value of one if the candidate ran in the election as a candidate of ENS, an electoral coalition that includes LREM. We leave the dependent variable missing for those who died during the term, as we cannot observe their decisions after completing the term.⁴

We have three key independent variables: gender dummy, ideology estimate, and total number of attendance in the 15th legislature. To measure the intra-party ideological extremity of legislators, we estimate legislators' ideologies using the voting records of all LREM legislators in the legislature, standardize, and take their absolute values.⁵

We rely on the ideal point estimation literature to calculate legislators' ideologies.⁶ The attendance number is a proxy of legislators' motivation. We signify legislators as absent if the following four patterns are not recorded: "Pour", "Non", "Abstention", and "NonVotant". For each of Hypotheses 2 and 3, we include the interaction terms of gender and ideology and gender and attendance.

We include four control variables. First, we control for candidates' age at the time of the 2022 election because MPs are expected to become more likely to retire as they get older (Lawless, 2005; Weber et al., 2023). We also control for the winning margin at the

⁴This treatment of the missingness equals the listwise deletion in the missing data literature.

⁵Note that we impute missing voting records of those who held governmental appointments during the term due to the *suppléant* system in the French National Assembly (Andrews, 1962). As legislators in the house are not allowed to hold governmental appointments while in office, they are replaced by their pre-designated *suppléants* (deputies) once appointed to government. We impute governmental office holders' missing voting records with those of their suppléants, assuming that the latter's ideological preferences reflect those of the former.

⁶We use R's **emIRT** package in estimating legislators' ideologies (Imai et al., 2016).

2017 election, operationalized as the difference in vote share between each legislator and the runner-up in the same district in the second round. Previous research suggests that electoral performances in the past elections would affect MPs’ decision to rerun in the next election (Muyters et al., 2022; Peveri and Sangnier, 2023), although we are unsure of the gender difference.⁷ Lastly, we control for the department in which novices ran in 2017 to account for the unobservable, region-level confounding factors.⁸

5 Result

5.1 Descriptive Result

We first present the descriptive statistics of our samples. Table 1 presents the descriptive statistics of the dataset we used in the analysis. We have 197 LREM novices, of which 87 are men and 110 are women. We can see little gender difference in any of the variables used in the analysis. Regardless of gender, about 80 % of the novices reran in the 2022 election. Male and female novices are not so different in age, level of attendance, or performance in the previous election.

One may be interested in looking more at the gender differences in our key independent variables. Figure 1 shows the distributions of ideology (left panel) and attendance (right panel) among our samples (LREM novices). The colors of both panels’ bars mostly overlap, showing that our samples are gender-balanced in terms of ideology and motivation.

⁷At this step, we exclude one LREM novice from our analysis who won in the first round.

⁸We cluster our standard errors at the department level because the sampling process of legislators resembles cluster sampling (Abadie et al., 2022) Specifically, candidates running in each department are chosen by parties so that they are “best fits” to the department. This nomination process is approximated by cluster sampling, where individuals are sampled from clusters first taken from the population.

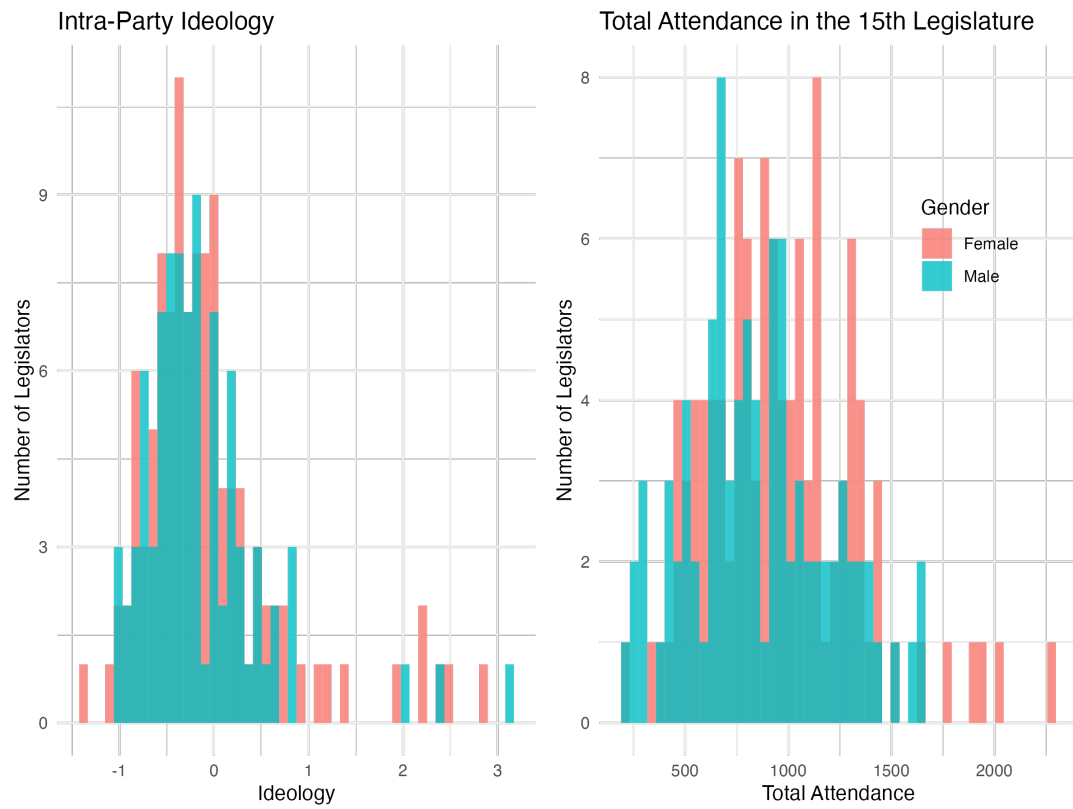


Figure 1: Distribution of Ideology and Attendance by Gender

Note. Distributions of the absolute value of standardized ideology and the number of total attendance for the LREM novices.

	Type	Statistic			
		Mean	Std. Dev.	Min	Max
Reelection Bid	All (197)	0.8	0.4	0	1
	Male (87)	0.8	0.4	0	1
	Female (110)	0.8	0.4	0	1
Ideology	All	0.6	0.6	0.002	3.6
	Male	0.6	0.6	0.002	3.6
	Female	0.6	0.6	0.01	3.3
Age	All	43.9	10.3	24	70
	Male	43.2	10.3	25	67
	Female	44.5	10.2	24	70
Attendance	All	917.9	361.2	213	2280
	Male	854.8	339.8	229	1644
	Female	967.9	371.1	213	2280
Margin	All	15.8	10.6	0.2	59.5
	Male	16.4	12.2	0.2	59.5
	Female	15.2	9.1	1.4	43.4

Note. Summary statistics for the LREM novices elected in the second round of the 2017 election. Ideology is the absolute value of the standardized estimate. Margin of victory is the difference in vote share with the runner-up.

Table 1: Summary Statistics

5.2 Statistical Analysis on Unconditional and Conditional Hypotheses

Next, we present the result of our statistical analysis. Table 2 represents the estimation result of four logistic regression models. The dependent variable is the dummy for reelection bid in the 2022 election regardless of the party ((1) and (2)) and that for reelection bid for LREM ((3) and (4)). We consider the baseline and control models for each dependent variable, while we do not include interaction terms. Hypothesis 1 is not supported. The coefficients of the female dummy are indistinguishable from zero in all models, leading to the failure to reject the null hypothesis that there is no gender difference in the probability of rerunning.

To test our conditional hypotheses, we estimate the same set of models as Table 2

	Any party		Same party	
	(1)	(2)	(3)	(4)
Intercept	1.28*** (0.26)	17.85*** (1.82)	0.97*** (0.24)	-20.96*** (1.60)
Female	-0.15 (0.34)	-0.06 (0.66)	-0.07 (0.32)	-0.19 (0.67)
Ideology		-0.72 (0.45)		-1.88* (0.85)
Age		-0.04 (0.04)		-0.04 (0.04)
Attendance		0.00 (0.00)		0.00* (0.00)
Winning Margin		0.09* (0.04)		0.07 (0.04)
Department Dummy	No	Yes	No	Yes
AIC	217.93	271.91	239.14	279.57
BIC	224.50	534.56	245.70	542.22
Log Likelihood	-106.96	-55.95	-117.57	-59.78
Deviance	213.93		235.14	
Num. obs.	197		197	

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Note. Standard errors are clustered at department when including department FE. Dependent variables are dummy variables indicating whether the legislator reran from any party (columns 1-2) or the same party (columns 3-4).

Table 2: Regression Results for Hypothesis 1

while additionally including interaction terms. Figure 2 presents the average marginal effects (AMEs) of ideology on the probability of rerunning for each gender. Each panel in the figure corresponds to one logistic regression model. Control models include the interaction between the female dummy and ideology, in addition to the usual set of independent and control variables. The result does not support our Hypothesis 2. While ideological outliers within the LREM are estimated to have been less likely to run from the same party in the 2022 election, we see little gender difference in the AMEs. Deviation within the party, the figure suggests, has an equal effect on legislators' rerunning bids.⁹

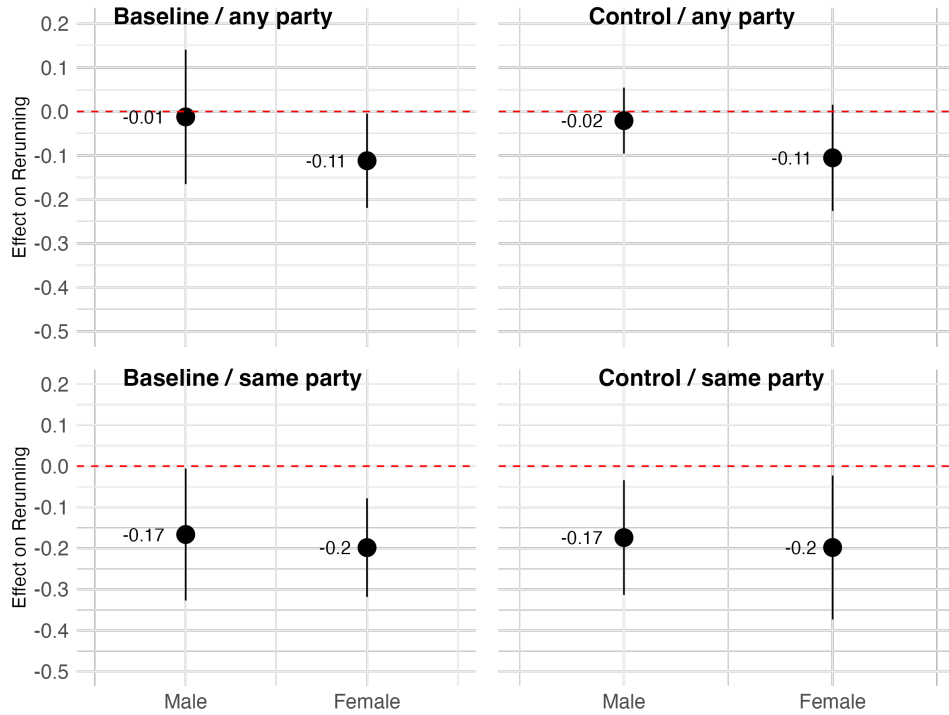


Figure 2: Marginal Effect Plot for Hypothesis 2

Note. Average marginal effects of intra-party ideological extremity on the probability of rerunning. Each panel corresponds to the model in Table 2. Created by authors.

Figure 3 presents the AMEs of attendance on the probability of rerunning, showing no support for our Hypothesis 3. To begin with, attendance seems to affect legislators'

⁹Deviation by one standard deviation from the party mean is correlated with a decrease in the probability of rerunning by about 10 - 20 %.

decisions to seek reelection moderately. A one-SD increase in the number of attendance is related to a 10 % increase in the probability of rerunning. Most importantly, there is no gender difference in the AMEs, leading us to the failure to reject the null. This result is consistent with some research claiming the absence of gender difference in legislative activities (Murray, 2010a). Legislators with less motivation might be more likely to exit, but this relationship seems not gendered.

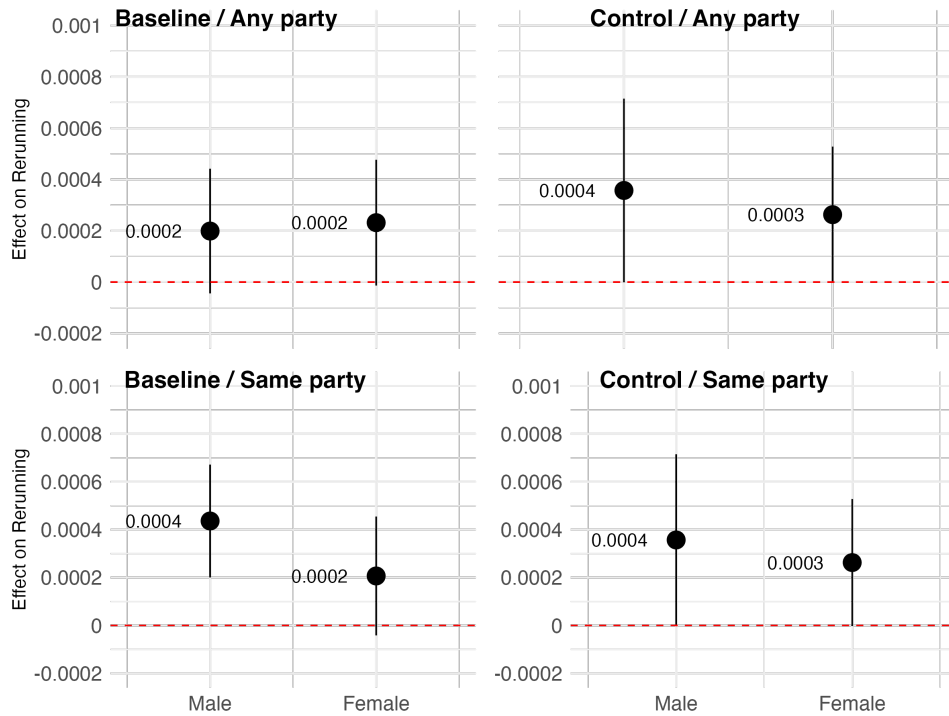


Figure 3: Marginal Effect Plot for Hypothesis 3

Note. Average marginal effects of attendance on the probability of rerunning. Each panel corresponds to the model in Table 2. Created by authors.

In sum, we did not find any support for our three hypotheses. There is no evidence for the relationship between novices' gender and their decision to seek reelection, and it holds conditional on their ideology or attendance in the legislature. The result suggests the absence of the gendered candidate turnover for novices in a balanced environment: that is, male and female legislators might be equally likely to continue their legislative

careers if they have a politically balanced environment at the time of their entry into parliament.

6 Discussion and Conclusion

6.1 Mechanism

The results of the statistical analysis did not support not only H 1 but also H 2 and H 3. It indicates that there is no gender difference in the influence of ideology and motivation on Novices' likelihood of seeking reelection. Why do we observe such results? While H 2 and 3 hypothesize that novices' reelection bids are related to their ideology and attendance level, we have not considered the correlation between them. One might be interested in modeling this relationship explicitly. We assume the following mechanism: when ideologically extreme legislators voluntarily withdraw, they initially lose motivation for parliamentary participation, lower their level of participation, and finally decide not to rerun. In other words, we predict that there is an interaction between ideology and motivation.

To test the correlation, we first check the descriptive result. Figure 4 plots the average annual attendance rates for novice legislators whose ideology estimates deviate from the intra-party mean by more than one standard deviation. The figure does not show a noticeable gender difference in attendance as the years progress on the x-axis. It suggests that ideologically distinctive female legislators among novices are not necessarily less active in parliamentary activities compared to their male counterparts. In other words, while ideology might potentially lower the probability of novice legislators stand-

ing for reelection for their parties, it doesn't imply that women, in particular, become less engaged in parliamentary activities.

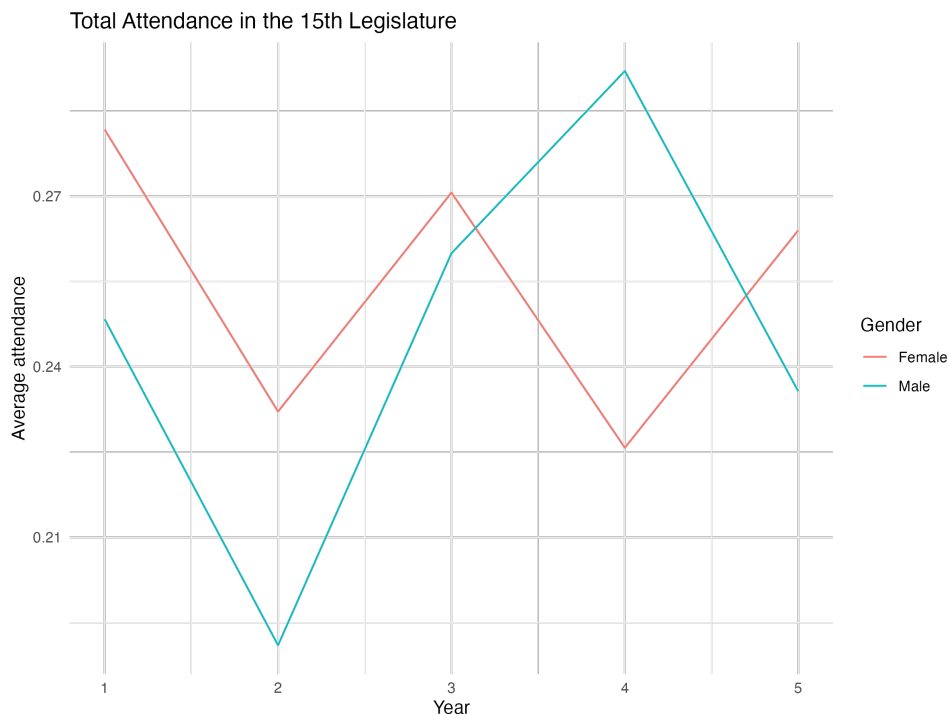


Figure 4: Descriptive Gender Difference in the Level of Attendance

Note. The proportion of the votes attended by LREM novices with the absolute ideologies 1 standard deviation higher than the mean. Each line denotes female and male novices, spanning five one-year periods. Created by authors.

We also take a modeling approach, adding a three-way interaction to our control model. The resulting model includes the three-way interaction and the interaction between ideology and attendance, in addition to the usual set of covariates. Figure 5 plots the coefficient of attendance conditional on ideology separately for each gender. The figure shows no gender difference when conditioning the relationship between attendance and reelection bids on ideology. We do not see the two colors of lines diverge across the range of ideology, with the confidence intervals around them overlapping. This result refutes the claim that having an extreme ideology leads to the voluntary withdrawal from parliament, resulting in the cessation of reelection attempts.

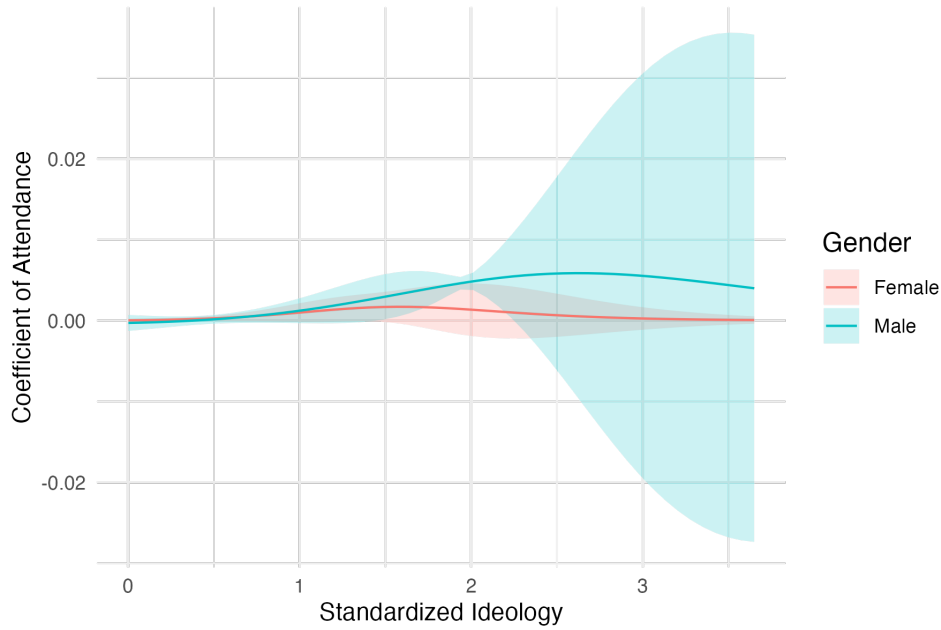


Figure 5: Difference in the Effect of Attendance, Conditional on Ideology

Note. Average marginal effects of attendance on the probability of rerunning, conditional on intra-party ideological extremity.

6.2 Discussion

The impact of country-specific systems on candidate turnover has been discussed in the literature (Muyters and Maddens, 2023; Weber et al., 2023). Although there is no explicit examination of the gender gap in electoral systems and candidate turnover, previous research posits that female legislators are as likely to secure incumbency advantage as male ones under proportional representation (PR) (Smrek, 2020). On the other hand, prior studies focusing on SMDs predict that, with some exceptions such as Canada, female politicians are generally expected to have shorter legislative careers (Lawless, 2005; Lazarus et al., 2023; Weber et al., 2023). In contrast, our research suggests that SMD systems might not work against female politicians' reelection. Instead, female legislators might seek reelection as much as male legislators, even in SMDs, given that they have a gender-balanced environment at the beginning of their legislative career.

Additionally, one might be interested in discussing the specialty of LREM in France, suspecting the lack of external validity of the result. While previous research posits that left-leaning parties tend to nominate more women (Wängnerud, 2009; Meserve et al., 2020), LREM is rather a centrist party (Gil, 2019). Therefore, our argument does not present an ideological bias at the level of political party. Another contextual criticism may point to President Macron’s disregard for parliament, who considered it to automatically approve the government’s decisions (Ollion, 2021).¹⁰ Consequently, even if female novices were as willing to continue their legislative career as male novices, it might not have led to their increased influence on policy formation. Nevertheless, considering the various mechanisms concerning the relationship between the parliament and the executive, if women can sustain their careers in parliament, it might resolve the issue of substantial influence through alternative mechanisms.

Our research examined whether gender influences the probability of reelection bids among novice legislators in the French 2022 general election, utilizing a gender-balanced environment in the 2017 election where an equal number of women and men entered parliament. Using voting records in the National Assembly and election data, we reveal that being female among novices did not have a negative impact on the likelihood of their seeking reelection. It should be emphasized that even when factors believed to differ among new female legislators, such as ideology and motivation, are considered, no gender difference is observed.

Our findings suggest that having a balanced ratio of male and female newcomers in the political sphere could lead to an increased female entry without negatively affecting the continuity of female legislative careers. Women generally desire to continue their

¹⁰In fact, it is pointed that Macron increased the number of novices within his party for this purpose.

political careers when they are not placed in an inherently disadvantageous environment for political competition. While women are reported to be more election-averse than men (Kanthak and Woon, 2015), they might not be more “reelection-averse” than men. In other words, if women are provided an environment conducive to political competition, it is anticipated that they will persist in the political sphere once they enter. As the proportion of female legislators is increasing in advanced democracies, attention should be paid to the turnover of new female entrants in each election and the continuity of women’s careers.

Additionally, our study examined the mechanism behind why women seek reelection as much as men, specifically focusing on the influence of ideology and motivation in parliament. We did not observe a mechanism where having extreme ideologies leads female legislators to withdraw from parliament voluntarily and eventually give up reelection. In essence, there is no gender difference in the voluntary withdrawal process. These results align with the previous research trend indicating a diminishing gender gap in parliamentary activity styles over time (Hargrave and Blumenau, 2022). The outcome of our study suggests a convergence in gender differences in political activity within advanced democratic nations from the perspective of career continuity.

7 Bibliography

- Abadie, A., Athey, S., Imbens, G. W., and Wooldridge, J. M. (2022). When should you adjust standard errors for clustering?*. *Q. J. Econ.*, 138(1):1–35.
- Andrews, W. G. (1962). The suppleant system for the french national assembly. *Parliamentary Affairs.*, XVI(3):274–278.
- Boelaert, J., Michon, S., and Ollion, É. (2018). Le temps des élites. *Revue française de science politique.*, 68(5):677.
- Campbell, R. and Childs, S. (2014). Parents in Parliament: ‘Where’s mum?’. *The Political Quarterly.*
- Dingler, S. C. and Ramstetter, L. (2023). When does she rebel? how gender affects deviating legislative behaviour. *Government and Opposition*, 58(3):437–455.
- Folke, O. and Rickne, J. (2016). Electoral competition and gender differences in political careers. *Quarterly Journal of Political Science.*, 11:59–102.
- Franceschet, S. and Piscopo, J. M. (2014). Sustaining gendered practices? power, parties, and elite political networks in argentina. *Comparative Political Studies.*, 47(1):85–110.
- François, A. and Grossman, E. (2015). How to define legislative turnover? the incidence of measures of renewal and levels of analysis. *The Journal of Legislative Studies*, 21(4):457–475.
- Gil, C. M. (2019). Spatial analysis of la république en marche and french parties, 2002–2017. *French Politics*, 17(2):184–210.

- Gouglas, A., Maddens, B., and Brans, M. (2018). Determinants of legislative turnover in western europe, 1945-2015. *European Journal of Political Research.*, 57(3):637–661.
- Hargrave, L. and Blumenau, J. (2022). No longer conforming to stereotypes? gender, political style and parliamentary debate in the UK. *British Journal of Political Science*, 52(4):1584–1601.
- Heinsohn, T. and Freitag, M. (2012). Institutional foundations of legislative turnover: A comparative analysis of the swiss cantons. *Swiss Political Science Review.*, 18(3):352–370.
- Hjelmar, U., Olsen, A. L., and Pedersen, L. H. (2010). Should I stay or should I go now? voluntary retirement from danish local government. *Scandinavian Political Studies.*, 33(4):402–416.
- Imai, K., Lo, J., and Olmsted, J. (2016). Fast estimation of ideal points with massive data. *American Political Science Review.*, 110(4):631–656.
- Johansson Sevä, I. and Öun, I. (2019). Conditional representation: Gendered experiences of combining work and family among local politicians. *Journal of Women, Politics & Policy*, 40(3):367–384.
- Kanthak, K. and Woon, J. (2015). Women don’t run? election aversion and candidate entry. *American Journal of Political Science.*, 59(3):595–612.
- Kennedy, C. (2003). Gender differences in committee decision-making. *Women Politics.*, 25(3):27–45.

- Lawless, J. L. (2005). Will she stay or will she go? career ceilings and women’s retirement from the US congress. *Legislative Studies Quarterly.*, 30(4).
- Lazarus, J., Steigerwalt, A., and Clark, M. (2023). Time spent in the house: Gender and the political careers of U.S. house members. *Politics & Gender*, 19(1):97–132.
- Martínez-Cantó, J. and Verge, T. (2023). Interpersonal resources and Insider/Outsider dynamics in party office. *Comparative Political Studies.*, 56(1):131–157.
- Matland, R. E. and Studlar, D. T. (2004). Determinants of legislative turnover: A Cross-National analysis. *British Journal of Political Science.*, 34:87–108.
- Meserve, S. A., Pemstein, D., and Bernhard, W. T. (2020). Gender, incumbency and party list nominations. *British Journal of Political Science.*, 50(1):1–15.
- Muriaas, R. and Stavenes, T. (2023). Gender and political seniority: Three measures. *Politics & Gender*, pages 1–25.
- Murray, R. (2004). Why didn’t parity work? a closer examination of the 2002 election results. *French Politics*.
- Murray, R. (2009). Was 2007 a landmark or a let-down for womens’ political representation in france? *Representations*, 45(1):29–38.
- Murray, R. (2010a). *Parties, Gender Quotas and Candidate Selection in France*. Springer.
- Murray, R. (2010b). Second among unequals? a study of whether france’s “quota women” are up to the job – ERRATUM. *Politics & Gender*, 6(4):643–669.

- Muyters, G. and Maddens, B. (2023). Explaining candidate turnover. evidence from a comparative analysis in 10 european established democracies with a list-PR system. *European Political Science Review*, pages 1–20.
- Muyters, G., Put, G.-J., and Maddens, B. (2022). Gender bias in candidate turnover: A longitudinal analysis of legislative elections in Flanders/Belgium (1987–2019). *Party Politics*, 28(6):1058–1068.
- Norris, P. (1997). *Passages to Power: Legislative Recruitment in Advanced Democracies*. Cambridge University Press.
- Norris, P. (2006). The impact of electoral reform on women’s representation. *Acta Politica*, 41(2):197–213.
- Norris, P. and Lovenduski, J. (1995). *Political Recruitment: Gender, Race and Class in the British Parliament*. Cambridge University Press.
- Norris, P., Vallance, E., and Lovenduski, J. (1992). Do candidates make a difference? gender, race, ideology and incumbency. *Parliamentary Affairs.*, 45(4):496–517.
- Ollion, É. (2019). Changer de vie. les députés novices et la condition politique au XXI^e siècle. *Politix*, 128(4):91–114.
- Ollion, É. (2021). *Les candidats: novices et professionnels en politique*. PUF.
- Peveri, J. and Sangnier, M. (2023). Gender differences in re-contesting decisions: New evidence from french municipal elections. *Journal of Economic Behavior Organization.*, 214:574–594.

- Schmitt, C. and Brant, H. K. (2019). Gender, ambition, and legislative behavior in the united states house. *Journal of Women, Politics & Policy*, 40(2):286–308.
- Schwindt-Bayer, L. A. (2005). The incumbency disadvantage and women’s election to legislative office. *Elect. Stud.*, 24(2):227–244.
- Shair-Rosenfield, S. and Hinojosa, M. (2014). Does female incumbency reduce gender bias in elections? evidence from chile. *Political Research Quarterly.*, 67(4):837–850.
- Silbermann, R. (2015). Gender roles, Work-Life balance, and running for office. *Quarterly Journal of Political Science.*, 10(2):123–153.
- Slegten, C. and Heyndels, B. (2022). Sex differences in incumbents’ turnover odds: the role of preference vote performance and the party leader’s sex. *Acta Politica*, 57(4):667–686.
- Smrek, M. (2020). Do female legislators benefit from incumbency advantage? incumbent renomination in a flexible-list PR system. *Electoral Studies*, 66:102189.
- Southwell, P. (2014). How to become a députée – lean to the left: Party differences and gender parity in the 2012 national assembly elections. *French Politics*, 12(4):348–356.
- Vallejo Vera, S. and Gómez Vidal, A. (2022). The politics of interruptions: Gendered disruptions of legislative speeches. *Journal of Politics*, 84(3):1384–1402.
- 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(1):51–69.

Weber, A., Bodet, M. A., Gélinau, F., and Blais, A. (2023). An election too far: Why do MPs leave politics before an election? *Party Politics*, page 13540688231159864.

8 Appendix

Below are the regression tables presenting the estimation results, each corresponding to Hypotheses 2 and 3.

	Any party		Same party	
	(5)	(6)	(7)	(8)
Intercept	1.32*** (0.37)	18.77*** (1.80)	1.49*** (0.37)	-20.99*** (1.60)
Female	0.23 (0.49)	0.62 (0.87)	0.11 (0.50)	-0.09 (1.09)
Ideology	-0.07 (0.46)	-0.22 (0.40)	-0.88 (0.47)	-1.76* (0.83)
Female*Ideology	-0.56 (0.56)	-0.92 (0.83)	-0.19 (0.60)	-0.18 (1.18)
Age		-0.04 (0.05)		-0.04 (0.04)
Attendance		0.00 (0.00)		0.00* (0.00)
Winning Margin		0.08 (0.04)		0.07 (0.04)
Department Dummy	No	Yes	No	Yes
AIC	218.19	272.60	228.95	281.55
BIC	231.32	538.53	242.08	547.49
Log Likelihood	-105.09	-55.30	-110.48	-59.77
Deviance	210.19		220.95	
Num. obs.	197		197	

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Note. Standard errors are clustered at department when including department FE. Dependent variables are dummy variables indicating whether the legislator reran from any party (columns 1-2) or the same party (columns 3-4).

Table 3: Regression Results for Hypothesis 2

	Any party		Same party	
	(9)	(10)	(11)	(12)
Intercept	0.26 (0.70)	19.36*** (2.16)	-1.11 (0.71)	-21.32*** (1.84)
Female	-0.30 (0.95)	-1.37 (2.15)	1.06 (0.94)	0.88 (2.27)
Attendance	0.00 (0.00)	0.00 (0.00)	0.00** (0.00)	0.00 (0.00)
Female*Attendance	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Ideology		-0.80 (0.45)		-1.86* (0.87)
Age		-0.05 (0.04)		-0.04 (0.05)
Winning Margin		0.09 (0.04)		0.08 (0.04)
Department Dummy	No	Yes	No	Yes
AIC	215.84	273.14	229.80	281.09
BIC	228.97	539.08	242.93	547.03
Log Likelihood	-103.92	-55.57	-110.90	-59.55
Deviance	207.84		221.80	
Num. obs.	197		197	

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Note. Standard errors are clustered at department when including department FE. Dependent variables are dummy variables indicating whether the legislator reran from any party (columns 1-2) or the same party (columns 3-4).

Table 4: Regression Results for Hypothesis 3