When Women Run Against Men: Evidence from Political Platforms

Marli Fernandes*

Università Degli Studi di Padova

December 2, 2025

Abstract

Do female and male candidates campaign differently, and why? Using individual political platforms from French legislative elections between 1981 and 2024, I combine computational text analysis with a regression discontinuity design that exploits the two-round structure of French elections to identify the causal impact of candidate gender on campaign content. Between the first and second rounds, female candidates increase the salience of security and foreign policy by 9.2 percentage points relative to male candidates, while differences in other topics are negligible. This strategic shift is concentrated in districts that have never elected a woman or where the gender wage gap is above the median, consistent with women anticipating voter bias. I show that women only adapt to the gender of their opponent in districts where the voters are more biased against women, and that once elected, gender differences disappear.

Keywords: Elections, gender, text as data

JEL classification: D72, J16, P0

*Postdoctoral researcher at Università Degli Studi di Padova. E-mail: marli.fernandes@unipd.it. Orcid id: 0000-0001-8120-5654. Address: Via del Santo 22, 35123 Padova. I am grateful for the comments made by Alex Armand, Vasco Carvalho, Olle Folke, Victoire Girard, Edoardo Grillo, Jonathan Goupille-Lebret, Bishnupriya Gupta, Sophie Hatte, Yves Kläy, Joan Llull, Pedro Martins, Nikita Melnikov, Elisa Mougin, Paola Profeta, Johanna Rickne, Alessia Russo, José Tavares, Andrea Tesei, Orestis Troumpounis, Thomas Walsh, Galina Zudenkova and seminar participants at ENS Lyon, Nova SBE, the Lisbon Micro Group, 1st Verona Early Career Workshop in Economics, NICEP Conference 2024, 3rd Junior Economists Meeting UniMi - JEM24, BoMoPaV Economics Meeting 2024, "Text-as-Data in Economics" Workshop at the University of Liverpool Management School, the 8th Monash-Warwick-Zurich Text-as-Data Workshop, 7th University of Bolzano Workshop on Political Economy, 18th CESifo Workshop on Political Economy and the 18th Annual Meeting of the Portuguese Economic Journal. I thank Odile Gaultier-Voituriez in providing support to access the CEVIPOF 2017 manifestos. I thank Vincent Pons for sharing data on the French political manifestos for the years 2002, 2007 and 2012. I acknowledge financial support from FCT - Fundação para a Ciência e Tecnologia - PD/BD/135298/2017 and COVID/BD/152031/2021. All errors are my own. The author does not have any conflict of interest to disclose.

1 Introduction

The share of women in politics has increased remarkably over the past few decades in almost every country in the world. While in 1988 women accounted for only 8.9% of candidates in US primaries, in 2024 they accounted for 26.2% (the highest share was in 2020, 29.1%).[1] In France, the share increased from 11.5% to 41.1% in the same period. The rising number of women in politics might significantly affect the policies discussed if women and men have different preferences. How do women differ from men during political campaigns and why do such differences arise? Understanding these differences is crucial because candidate communication shapes the information available to voters and can influence which policy areas gain political attention.

This paper studies whether there are gender differences in political campaigns and why they emerge. Several research studies have shown gender differences in preferences (Croson and Gneezy (2009)), and that female politicians prefer to work in health and education (Chattopadhyay and Duflo (2004), Bhalotra and Clots-Figueras (2014), Lippmann (2021)). If campaigns are informative, such preference differences should be signaled in policy communication. On the other hand, it is documented that women respond less favorably to competition than men (Niederle and Vesterlund (2011)) and that they often face voter discrimination (De Paola, Scoppa, and Lombardo (2010), Le Barbanchon and Sauvagnat (2022), Eyméoud and Vertier (2023)). In this environment, female candidates might opt to engage in Bayesian persuasion: they choose which issues to emphasize to maximize the probability that voters update their beliefs in favor of the candidate, while accounting for prior biases.

This tension resonates with role incongruity theory (Eagly and Karau (2002)), which posits that women face prejudice when leadership roles conflict with traditional gender stereotypes. Women leaders are often expected to exhibit traits inconsistent with prevailing conceptions of femininity. Prominent political figures such as Margaret Thatcher, Angela Merkel, Marine Le Pen, or Giorgia Meloni illustrate this dynamic: each cultivated a reputation for toughness and competence in domains such as security, foreign policy, or economic reform — areas conventionally coded as "male." In legislative campaigns, such dynamics suggest that women may strategically emphasize certain policy areas to manage voter perceptions, creating systematic differences in campaign platforms.

Studying these dynamics is methodologically challenging. Female candidacy is endogenous to local electoral conditions, and systematic data on campaign dis-

[1] Source: Center for American Women and Politics.

course are scarce. In most contexts, records of candidates' campaign platforms are either incomplete or limited to those who ultimately win office, leading the literature to focus primarily on behavior once elected.

I overcome these challenges by focusing on French legislative elections, which use a two-round system in which the same electorate votes twice. With an average of nine candidates in the first round and two in the second, candidates face incentives to adjust their messages between rounds, creating a natural setting to observe strategic signaling in response to voter evaluations. To address endogeneity, I exploit quasi-experimental variation in the candidate's gender. Using a regression discontinuity design, I examine whether female (male) candidates shift the topics of their platforms between the first and second rounds. The research design compares a female politician who barely passes to the second round instead of a male in that district, with a male politician who barely was eligible instead of a female. To support the identification strategy, I show that a large set of voters' and districts' characteristics, as well as the candidate's individual characteristics (except gender), are balanced at the threshold.

The empirical analysis draws on a comprehensive dataset of candidates' official campaign platforms, which the French state distributes to all registered voters. Using a semi-supervised machine learning approach (seeded Latent Dirichlet Allocation), I quantify topic salience. I find that between the first and second rounds, women — compared to men — do not shift their emphasis across most topics, but they increase attention to security and foreign policy, a male-stereotyped domain, by 9.2 percentage points.

I provide several pieces of evidence showing that female politicians are strategically responding to voters' biases during political campaigns. First, in districts with above-median gender wage gaps, women raise the salience of security and foreign policy by 19.2 percentage points, whereas no such change occurs in less biased districts. Simultaneously, in districts that never elected a woman, women increase the coverage of male-stereotyped topics by 8.3 percentage points, whereas no significant differences are observed in districts that have elected a woman in the past.

Second, I explore whether women's strategic behavior during campaigns allows them to improve their electoral outcomes. Through a heterogeneity analysis, I provide evidence that changing the salience of security & foreign policy does not seem to have any effect on electoral outcomes. This null result is consistent with politicians optimizing their policy choices by factoring in gender biases in voters' assessments.

Third, I test whether politicians remain committed to their announced policy

platforms after the election. While elected female politicians during political campaigns increase significantly the salience of security & foreign policy between the two rounds compared to male candidates, these differences disappear once in office. I focus on the behavior of politicians in legislative debates, where there is strong party discipline, and in written questions sent to members of the government, where they act as representatives of their constituencies and party discipline is less significant. Once elected, male and female politicians do not differ in their topic choices, reinforcing the interpretation that campaign differences reflect strategic signaling rather than intrinsic preferences.

Fourth, through a regression discontinuity design, I causally show that women do not generally adapt to the gender of their opponent, except in districts with a stronger gender bias against them. I compare how the most-voted woman in the first round behaves when she competes against a barely eligible man in the second round rather than another woman. I conclude that they increase the salience of security & foreign policy by 7.8 percentage points in districts with a gender wage gap above the median, while there are no significant differences in any topic in districts with a gender wage gap below the median.

Finally, I also show that men are responsive to voters' biases. I focus on the most-voted man in the first round and compare how he adjusts his campaign if he competes against a woman barely eligible to the second round, rather than a man barely eligible. When men compete against a woman, compared to when they compete with a man, they only adjust their platforms in districts with a gender wage gap below the median and reduce only the salience of health & education topics.

2 Contribution to the literature

The paper contributes to several strands of the literature. First, it relates to the literature on gender differences in politicians' behavior and the factors shaping these differences. Several studies have shown that women prefer to work on different policies, specifically on health and education (Chattopadhyay and Duflo (2004), Bhalotra and Clots-Figueras (2014), Funk and Gathmann (2015), Lippmann (2021)). In contrast, other studies do not find significant differences (Ferreira and Gyourko (2014), Bagues and Campa (2021), Casarico, Lattanzio, and Profeta (2022)). This literature is concentrated on elected politicians, as it is considerably easier to obtain data. To my knowledge, my paper provides, for the first time, a causal description of gender differences during political campaigns. Studying behavior during political campaigns is equally essential; previous literature has shown that voters

care about information on candidates' platforms and the promises made (Tomz and Van Houweling (2008), Kendall, Nannicini, and Trebbi (2015), Cruz, Labonne, and Trebbi (2024)). Hence, campaign strategies are central to understanding the election prospects of female politicians.

Several studies have also shown that voters tend to be biased against women (De Paola et al. (2010), Le Barbanchon and Sauvagnat (2022), Eyméoud and Vertier (2023)). In addition, voters exhibit gender bias when evaluating politicians' abilities. According to the role congruity theory, it is harder for women to be elected due to two forms of prejudice: (1) women are perceived less favorably than males as potential occupants of leadership roles, (2) women are less perceived as having the necessary abilities of a leadership role (Eagly and Karau (2002)). In accordance with this theory, Lawless (2004) shows that female politicians are evaluated less favorably than male politicians when dealing with male-stereotyped issues, such as national security and military crises. Ash, Krümmel, and Slapin (2025) find that speeches associated with female topics given by a woman in the German parliament receive more positive feedback than the same speeches given by a man and vice versa. The closest papers to mine are those by Chauvin and Tricaud (2023) and Carrer and De Masi (2024), who study how voters' gender bias affects the policy activity of elected politicians in Brazil and Italy, respectively. This paper adds to this literature by examining whether candidates strategically adjust their campaign platforms in response to anticipated voter bias. If female candidates anticipate harsher scrutiny, they may face distinct incentives in deciding whether to emphasize gender-stereotyped issues (health, education, security) or gender-neutral ones (environment, local politics).

Second, the paper connects to the literature on politicians' identity. The Median Voter Theorem (Downs (1957)) assumes the parties' unique objective is winning elections. Consequently, if two parties have the same information about voters' preferences, they will converge on the median voter's viewpoint, ignoring politicians' identities. Le Pennec (2023) and Di Tella, Kotti, Le Pennec, and Pons (2025) empirically demonstrate the convergence mechanism underlying the median voter theorem. However, candidates only converge to a certain extent. Citizen-candidate models highlight that politicians also care about policy implementation, not only victory (Alesina (1988), Osborne and Slivinski (1996), Besley and Coate (1997)). The findings of this paper expand this literature to understand the influence of alternative dimensions of identity, in this case, gender. It helps clarify whether any of the models can predict politicians' behavior in identity situations.

Third, the article contributes to the extensive literature on gender and competition (Niederle and Vesterlund (2011)). A series of laboratory studies documents

that, conditional on performance, women are often more reluctant to compete than men (e.g., Niederle and Vesterlund (2007), Markowsky and Beblo (2022)). This pattern has been confirmed in the case of elections (Kanthak and Woon (2015), Barber, Butler, Preece, et al. (2016)). These differences might reflect social learning (Booth and Nolen (2012)) or culture (Gneezy, Leonard, and List (2009)) rather than inherent gender traits. Importantly, performance and entry depend not only on gender per se, but also on competitors' gender. Some studies show that competition intensifies with rivals of the same sex (Sutter, Bosman, Kocher, and van Winden (2009)), while others find the opposite (Datta Gupta, Poulsen, and Villeval (2013)). Indeed, the literature on how individuals compete, considering opponents' gender, is limited and warrants further exploration. This paper builds on this literature by exploring, for the first time in a political context, how candidates adapt their strategies depending on whether their main opponent is male or female.

3 Institutional context

3.1 French parliamentary elections

The paper focuses on parliamentary elections, which elect all the members of the National Assembly, the lower house of Parliament.

These elections are held under direct universal suffrage with a two-round plurality voting rule. Candidates can directly win in the first round if they receive a number of votes greater than 50 percent of the votes and 25 percent of the registered citizens. However, in 86.62% of the elections, no candidate is elected in the first round, leading to a second round held one week later. The second round is decided by simple plurality: the candidate with the largest vote share wins the election.

Candidates who obtain at least 12.5 percent of the vote share of the eligible voters are qualified for the second round. However, if only one candidate (or none) meets the threshold, the two candidates with the largest vote share can proceed to the second round. This last situation accounts for 26.93% of all elections.

Selection of political candidates It is possible to run for one of the 577 French constituencies without being affiliated to a party as long as the aspiring MP meets all the necessary conditions to enter the race, in particular being at least 18 years old, having the right to vote, and not being ineligible (because of a court decision or a function incompatible with the mandate of an MP, such as being mayor). However, most candidates run under a party label, making them much more visible to voters.

Under the 2000 gender parity law, parties must present an equal fraction of male and female candidates across the electoral districts. If the difference between female and male candidates exceeds 4% (48% females and 52% males, or the reverse), non-compliance with the gender parity rules results in a financial penalty. The financial penalty is calculated as follows: "public funding provided to political parties based on the number of votes they receive in the first round of elections is reduced by a percentage equivalent to one-half of the difference between the total number of candidates of each sex, out of the total number of candidates" (Le Barbanchon and Sauvagnat (2022)). Notice that in France, voters vote for two candidates: the leading candidate, who, if elected, will become an MP, and the substitute. The last one replaces the top candidate only if he leaves office; potential reasons include being nominated to a function incompatible with the mandate of an MP (e.g., minister, secretary of state, or elected as a mayor), or death/health issues. In most cases, the substitute never becomes an MP during the legislative term and only has a symbolic role. After the law's approval, in the 2002 legislative elections, women accounted for 38.8% of the leading candidates, compared to 23% in the 1997 legislative elections.

Ideological classification I use the official party labels provided by the Ministry of the Interior to classify candidates (including independent ones), and following Jolly et al. (2022), I classify them into six partisan families: far-left, left, liberal, right, far-right, and other. The last category refers to politicians who do not fall into any of these traditional ideological categories or who do not classify themselves as belonging to any ideology.

In the rest of the paper, I refer to political orientation as the broader categories "left" (far-left and left) and "right" (liberal, right and far-right), unless specified otherwise. Essentially, I classify "left" parties as the ones that score less than 5 in the left-right dimension of Jolly et al. (2022) and "right" as the ones that score more than 6.[2] Parties classification is available in the Appendix Section A.

3.2 Political platforms

During the legislative campaign, individual candidates can emit one political platform (*trans.* profession de foi) before each election round.[3] The appendix provides one example in the Figure B.1. What is the traditional content of a political platform? The manifesto permits a candidate to present his program and ideas that he

[2]According to Jolly et al. (2022), all liberal parties in the sample have a left-right score between 6 and 7, in a spectrum between 0 and 10.

[3]Throughout the paper, I use the words "political platform" and "manifesto" interchangeably; in this paper, they are synonymous.

plans to commit to when elected. Since they represent an electoral district, candidates might run a campaign by focusing on national policies and/or addressing local issues. They can also run a more partisan program, personalize their campaign, focus on preferred policy topics, or, as expected, appeal to voters and criticize the opposition.

Candidates are responsible for printing these platforms, and the state can reimburse their costs if they gather at least 5% of the votes in one of the rounds (Electoral law, articles R39 and L216). An official local propaganda committee is responsible for mailing the manifestos to voters at least four days before the first round and three days before the second round (if it happens).[4]

According to the Ipsos - CEVIPOF 2022 Presidential electoral survey, the primary sources of candidates' information are: 38% of the electors follow the television, 15% the internet (many candidates share their platforms online), 13% newspapers, 12% the manifestos received in the mailbox, 6% use other sources around them, and 16% do not inform. Relatively to the 1988, 1993, and 1997 manifestos, the internet was yet to be widely available and used. Furthermore, per election, there are 577 constituencies and an average of 5800 candidates, making it impossible for television to cover all of them. Consequently, platforms are likely more important in legislative than presidential elections.

4 Data

4.1 Electoral data

Each data set records the number of registered voters, abstentions, cast votes, valid and invalid votes, and the votes of each candidate in each electoral district. The electoral data for French elections is from the Ministry of the Interior.

4.2 Political platforms

The Archelec project digitized candidate manifestos for the 1988 and 1993 elections (Gaultier-Voituriez (2016)).[5][6] Platforms for the 1997 elections were digitized

[4]These platforms are only mailed if they obey these rules: they must have a maximum size of 210x297 millimeters, weigh between 60 and 80 grams per square meter (Electoral law, article R29) (Le Pennec (2023)).

[5]They are available at `https://archive.org/details/archiveselectoralesducevipof/`

[6]The Archelec project (Gaultier-Voituriez (2016)) includes data since 1958; however, I only start in 1988, since before this period any observation would be included in the regression discontinuity design; there are no women who barely passed to the second round.

from the National Archives. For the 2002, 2007 and 2012 elections, I use data from Di Tella et al. (2025).[7] The data for 2012 are complemented with data from the French National Assembly website, which provides the political platforms of all elected politicians.[8]

For 2017, they come from several sources: during the campaign, the Ministry of Interior shares the manifestos submitted by the candidates on their website[9], and they were web-scraped by a non-profit organization called RegardsCitoyens[10]. In addition, I manually digitized missing manifestos at CEVIPOF (Sciences Po), the National Assembly website also shares the manifestos of all elected MPs[11], some missing manifestos were also found on several local news or candidate websites. For 2022 and 2024, platforms come from the Ministry of Interior website and several local news and candidate websites.

The dataset comprises 33686 political platforms, 26630 for the first round, and 7056 for the second round. Optical character recognition (Tesseract) transformed these platforms from image to text.

4.3 Legislative work

I web-scraped the speeches from the Assemblée Nationale website covering the 1998-2022 period and transformed them into a novel dataset.[12][13] I restrict my analysis to elected politicians, excluding presidents and vice-presidents of the Parliament. The dataset includes a total of 154,980 documents. For further details on this data source and its construction, see the Appendix B.2.

Second, I web-scraped the National Assembly website to obtain the content of the written questions. These questions are directed to a minister to express the MP's concern on a specific topic.[14] The dataset includes a total of 521,630 questions.

[7] Di Tella et al. (2025) have comprehensively collected data for the 2021 local elections. However, each *canton* elects two councilors: a male and a female candidate who campaign on a common platform; therefore, it is not possible to study gender differences in local political campaigns, and the article focuses solely on parliamentary campaigns.

[8] They are available at: `https://www.assemblee-nationale.fr/dyn/decouvrir-l-assemblee/histoire/barodet2/recueil-des-professions-de-foi-de-la-14eme-legislature`.

[9] They are available at: `https://programme-candidats.interieur.gouv.fr/`

[10] They are available at: `https://github.com/regardscitoyens/professions-foi-candidats/tree/master/documents/LG17`

[11] They are available at: `https://www.assemblee-nationale.fr/dyn/decouvrir-l-assemblee/histoire/barodet2/recueil-des-professions-de-foi-de-la-15eme-legislature`

[12] They are available at: https://www.assemblee-nationale.fr/dyn/15/comptes-rendus/seance

[13] I do not include the years 2001 and the end of the 11th legislature (2002) because the website during this period is designed differently and is difficult to web-scrape.

[14] They are available at: https://www2.assemblee-nationale.fr/recherche/questions

5 Methodology

5.1 Topic classification

In this paper, I study gender differences in policies advertised during political campaigns. However, policy topics in the manifestos are not classified as ex-ante, and candidates usually tend to advertise several policies. To overcome this challenge, I rely on topic modeling techniques to identify topics and construct the outcomes of interest, specifically the seeded Latent Dirichlet Allocation (seeded LDA).

LDA (Blei, Ng, and Jordan (2003)) is a generative probabilistic model based on the assumption that each document is a mixture of topics and that latent topics generate the words observed in the document of a corpus. LDA is an unsupervised method, while seeded LDA (Lu, Ott, Cardie, and Tsou (2011), Watanabe, Xuan-Hieu, and Watanabe (2023)) is a semi-supervised machine learning technique. Seeded LDA extracts these topics based on a prior 'seed' of selected words that capture the topic of interest. Watanabe et al. (2023) show that this method improves the inconsistency of topics that LDA generally produces.

The central tuning parameter of an LDA model is the number of topics K to be estimated. If K is too small, documents about different topics will be lumped together in the same estimated topic. If K is too large, documents that belong to the same topic are split. I select K based on a manual inspection of topic coherence and interpretation of the top words in each topic, and choose to use eight topics. I define the following eight topics: economy & employment, environment; health & education; security, justice & foreign policy; local politics, national politics, and the remaining two are other.

I pre-processed platforms' content by removing capitalization, punctuation, stop words, and special characters. I tokenize documents at the single-word level and lemmatize each word using Spacy's French model. In addition, I restrict the vocabulary to words used by at least 1% and 50% of the platforms for the whole sample. I manually reviewed each retained word and assigned the most obvious words to their specific topic. In Appendix C, I provide further details on the method and the seed words for political platforms, legislative debates, and written questions, respectively. To demonstrate the method's validity, I present the top words for each topic.

An alternative to the seeded LDA is the Correlation Explanation (CorEx) method (Gallagher, Reing, Kale, and Ver Steeg (2017)). CorEx is an information-theoretic method for discovering latent factors in data that explain correlations among observed words, and thus it does not provide normalized probabilities. I provide robustness checks for the results using CorEx; however, the seeded LDA topic scores

are probability distributions, which permit measuring "how much" a document is about predefined topics, making them easier to interpret and comparable across documents.

5.1.1 Descriptive statistics

Table 1 presents descriptive statistics relative to gender differences in political platforms. I confirm statistically significant differences at the 1% level for all characteristics analyzed in both the first and second rounds. Interestingly, women focus more on policy topics than men, while men prefer to write more about local and national politics. Nonetheless, it is premature to infer gender differences in political campaigns, given that a female candidate's presence in a race is endogenous.

Table 1: Differences between female and male political candidates - Summary statistics

	1st Round			2nd Round		
	Female	Male	Difference	Female	Male	Different
% votes	4.21	6.74	-2.53***	24.97	29.13	-4.16***
Number words	621.15	593.11	28.03***	559.42	473.19	86.23***
Economy & employment	0.24	0.19	0.05***	0.13	0.10	0.03***
Environment	0.07	0.06	0.01***	0.03	0.02	0.01***
Health & education	0.19	0.14	0.05***	0.21	0.13	0.08***
Security & foreign policy	0.08	0.06	0.02***	0.11	0.06	0.05***
Local politics	0.07	0.12	-0.05***	0.07	0.12	-0.04***
National politics	0.12	0.16	-0.04***	0.22	0.32	-0.10***
Observations	20016	37949	57965	2625	7564	10189

5.2 Empirical strategy

Remember from Section 3.1: in races where only one or no candidate received 12.5% of the votes, only the two most-voted candidates are eligible for the second round. I focus on races in which the vote share of the second candidate was below 12.5% and at least one male candidate was among the two most-voted candidates in the first round. To estimate the causal impact of gender on campaign strategies, I use a sharp regression discontinuity design (RDD) and compare female candidates who narrowly passed to the second round (while a second male was not barely eligible in that electoral district) with male candidates who narrowly passed to the second round (while a female was almost eligible). In Section 5.2.1, I show that at the cutoff, the candidate's gender is orthogonal to several individual, voter, and

electoral district characteristics. [15]

To estimate differences between female and male political platforms in the second round, I use a sharp regression discontinuity design and estimate the following equation:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 R_i + \beta_3 R_i T_i + \mu_i \quad (1)$$

The outcome variable Y_i is the difference in the share of a policy topic between the second and the first round. The treatment variable T is a dummy equal to one if it is a woman and 0 if it is a male in the second round. The running variable R is the difference between the vote shares of the most voted woman and the second most voted man in the first round. The unit of observation is the candidate, and there is one observation per electoral district.

Following Calonico, Cattaneo, Farrell, and Titiunik (2019), I nonparametrically estimate the coefficient of interest using local linear regressions. I use the mean squared error optimal bandwidths (MSERD) selection procedure proposed by Calonico, Cattaneo, and Titiunik (2014). This procedure is data driven, implying that bandwidth size varies with the outcome under consideration.

5.2.1 Internal validity

The validity of the RDD relies on the assumption that first-round candidates of a particular type (e.g., males) do not systematically sort on the right of the qualification threshold. Such manipulation is unlikely since France is a democracy, and international observers qualify the elections as pluralistic, competitive, and respectful of fundamental rights.[16] In addition, manipulation is difficult because it requires predicting the outcome of the first election stage with great accuracy. I test the assumption's validity using the McCrary (2008) test and check if there is a jump in the density of the running variable at the threshold. As Figure C.5 in the Appendix demonstrates, there is no jump at the margin. I also confirm the results with the Cattaneo, Jansson, and Ma (2018) test.

[15] An example of one observation in the treatment group: in 2017, in the department of Ain district 4, the most voted candidate was Stéphane Trompille (male) with 17.33% of the vote share, the second most voted candidate was Blanche Chaussat (female) with 8.91% of the votes, and the third most voted candidate was Guy Billoudet (male) with 8.03% of the vote share; I focus my analysis on Blanche Chaussat, who was barely eligible for the second round, while Guy Billoudet was barely ineligible. An example of one observation in the control group: in 1993, in the department of Aisne district 5, the most voted candidate was André Rossi (male) with 29.2%, the second most voted candidate was Dominique Jourdain (male) with 10.95% of the vote share, and the third most voted candidate was Colette Pinatel (female) with 10.09% of the votes; I focus my analysis on Dominique Jourdain, who barely passed to the second round, while Colette Pinatel barely did not.

[16] *France. Presidential Election 10 and 24 April 2022. ODIHR Election Assessment Mission Final Report* (2022).

Another implication of the identifying assumption is that districts' characteristics are continuous at the threshold. I run balancing tests for: votes, turnout, number of candidates, number of enrolled voters, victory margin, number of candidates per ideology, the sum of votes for left and right-wing candidates in the first round, whether a woman was elected in the past, and the gender wage gap. Table C2 in the Appendix shows the sharp RDD estimates of the effect of having a woman in the second round, instead of a man, on first-round electoral district characteristics. Of the 14 regressions, the coefficient on the treatment variable is statistically significant only for the number of far-left candidates. Reassuringly, the main results are similar when controlling for this covariate (Appendix Table D10).

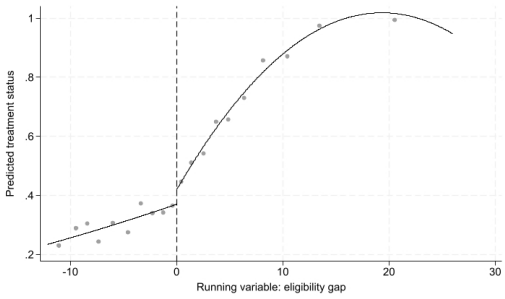
I also test for a jump in individual characteristics. A further concern is the confounding effect of candidates' ideology. Male and female candidates may systematically differ in their ideology. For instance, female candidates may be mainly from left-wing parties. Hence, the results obtained from estimating Equation (1) may be due to the candidate's ideology rather than their gender. However, I do not find significant differences in the ideology of female and male candidates around the cutoff (see Table C3 in the Appendix). I also test whether female and male candidates differ in other individual characteristics, including the number of words in their platforms, incumbency status, and a dummy variable indicating whether they ran in the past. I do not find any significant differences (Appendix Table C4). In addition, I test whether female and male candidates differ in occupation and age; unfortunately, data on these characteristics are available only from 2012. Of the eleven types of occupation explored, only one (agriculture) is statistically significant at the 10 percent level. Regarding age, I explore gender differences across six age brackets and find that women who were barely eligible for the second round are less likely to be over 65 years old than men who were barely eligible (statistically significant at the 5 percent level), and do not find significant differences for the other ages. I test the robustness of the results to the inclusion of these covariates and do not find considerable changes; the results are available in Appendix Table D11.

The analysis can also be affected by endogenous sample selection. Although some candidates are eligible for the second round, they decide not to run; this constitutes only 0.8% of the cases, and column 1 of Table C4 shows that female politicians do not have a lower chance than males of giving up on going to the second round. Another concern is whether a political platform is more observed for one gender than the other. Column 2 of Table C4 shows that this is not the case; there is no significant jump in the probability of having both manifestos available

at the qualification threshold.

Di Tella et al. (2025) demonstrate empirically that candidates strategically adjust their platform to get closer to their opponent. It could be that the results are confounded because the opponents of female candidates are mostly from a specific ideology. In Table C6, I present the balancing tests regarding the opponents' ideology and find that they are balanced.

Figure 1: General balance test



Notes. Dots represent the local averages of the predicted treatment status (vertical axis). Averages are calculated within quantile bins of the running variable (horizontal axis). The outcome is the candidate's predicted treatment status based on observable characteristics listed in the text. The treatment variable is a dummy equal to 1 if a woman qualifies for the second round. The sample is restricted to candidates included in the RDD sample as described in the text. The running variable is the difference between the most-voted woman and the second-most-voted man.

An interesting analysis is whether women and men already differed in the first round in the salience of the topics. I conclude that female politicians give less coverage to security & foreign policy by 9.5 percentage points, significant at 10 percent, and to local politics by 7.8 percentage points and significant at 1 percent (Appendix Table C8). This paper examines how politicians adjust their platforms between the first and second rounds. Focusing on the change between the first and second rounds allows one to distinguish intrinsic policy preferences from strategic signaling and shifts in issue emphasis. This result does not threaten the internal validity of the paper, since, as shown above, at the threshold, a large set of individual, voter, and electoral district characteristics is balanced. Therefore, the differences in the first round must be explained by gender.

6 Results: Gender differences in political platforms

6.1 Topics

In this section, I use the empirical strategy described above to examine gender differences in how politicians adjust the salience of topics between the first and second rounds. Figure 2 shows that the highest jump is in security & foreign policy. For the remaining topics, except health & education, it can be perceived that there are no considerable gender differences in how candidates opt to adjust their policies between rounds. In the figure, each dot represents the average outcome within a given bin of the running variable - that is, the vote share difference between the most-voted woman and the second-most-voted man.

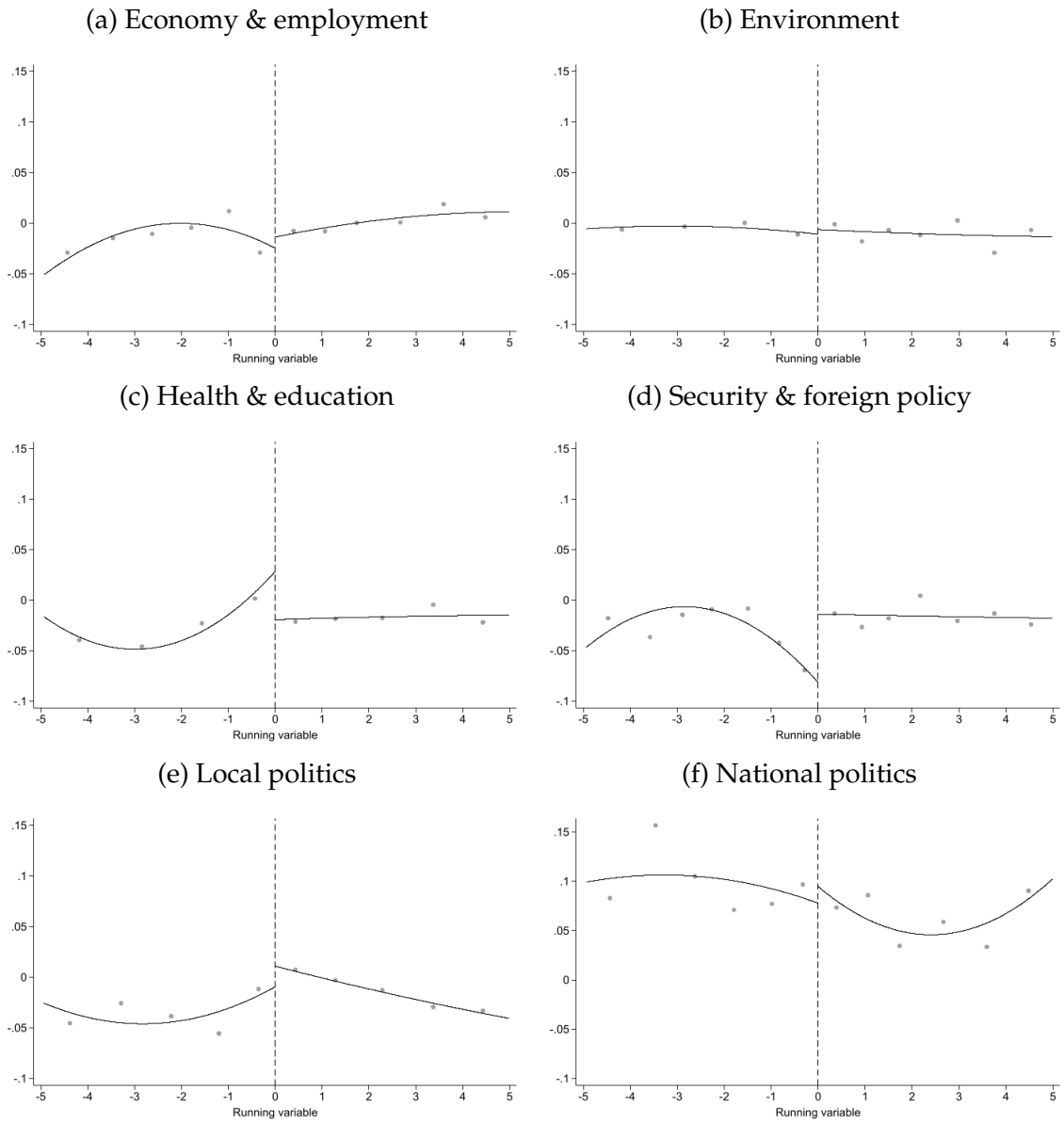
Table 2 complements the graphical analysis and provides the formal estimates of the effects. I do not find significant differences in the coverage of topics, except for security & foreign policy. I conclude that women write 9.2 percentage points more about security & foreign policy than men, statistically significant at 5 percent, topics that traditionally are associated with men. These results are not necessarily surprising. Previous experiments have shown that female candidates try to reverse gender stereotypes by portraying themselves as possessing stereotypical masculine traits (Huddy and Terkildsen (1993), Bauer (2017)).[17]

I show that the results are robust to several specification changes. I first check that they are robust to the choice of bandwidth. The results are robust to other bandwidths, with half and twice the observations (Appendix Tables D12 and D13). They are also robust to the Coverage Error Rate (CER) optimal bandwidth selector proposed by Calonico, Cattaneo, and Farrell (2020). In addition, the conclusions are the same if I test the results in the covariate-adjusted version (Calonico et al. (2019)).

I also test the robustness of the results to a different computation method to build the topic measures, CorEx. In the Appendix Table D16, I show that women do not give different coverage in topics than males, except for security & foreign policy; however, these results only hold when adding covariates.

[17] Herrnson, Lay, and Stokes (2003) refer several situations in the U.S. where women emphasized issues traditionally thought of as best handled by men to downplay differences perceived by voters between male and female candidates. "In her race for governor of California in 1990, Dianne Feinstein emphasized her support for the death penalty, and as a vice presidential candidate in 1984, Geraldine Ferraro accentuated her tough stance on crime."

Figure 2: Gender differences in topics adjustment between 1st and 2nd round



Notes. Dots represent the local averages of the outcome (vertical axis). Averages are calculated within quantile bins of the running variable (horizontal axis). The outcome is the change in the respective topic coverage between the first and the second round. The sample is restricted to candidates included in the RDD sample as described in the text. The running variable is the difference between the most voted woman and the second most voted man.

6.2 Sentiment language of the topics

Studies on the role of emotions in individual-level decision making have shown that emotional appeals can be an effective persuasive tool for politicians to influence how voters process information and respond to their messages (Bakker, Schumacher, and Rooduijn (2021), Osnabrügge, Hobolt, and Rodon (2021)). Voters

Table 2: Differences between female and male 2nd round political candidates

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.004	0.003	-0.032	0.092	0.011	-0.011
	(0.029)	(0.008)	(0.031)	(0.047)	(0.019)	(0.032)
Observations	731	731	731	731	731	731
Eff. number of obs	294	296	252	188	185	324
Robust p-value	0.842	0.578	0.254	0.040	0.923	0.817
Polyn. order	1	1	1	1	1	1
Bandwidth	4.149	4.168	3.488	2.479	2.351	4.813
Mean, left of threshold	-0.013	-0.010	0.017	-0.096	0.002	0.084

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

hold different expectations based on candidates' gender, and these identities can further constrain the range of sentiments candidates choose to express (Boussalis, Coan, Holman, and Müller (2021)). Hence, I compare whether there are gender differences in the sentiment language of the topics.

To compute a sentiment analysis of the topics, I start by applying a topic classification to each paragraph in a manifesto using seeded LDA. I consider that a paragraph is about a specific topic if the score obtained is above 0.4 and it is the maximum value among all topics. For example, if I get a score of 0.4 for the topics of economy and environment, that paragraph is about the economy and the environment. This is plausible, since a paragraph might be about the green economy. Next, I implement a sentiment analysis using a dictionary method. I use the LSDFr dictionary (Duval and Pétry (2016)) to perform the sentiment assessment. The authors show that their dictionary overperforms the LIWC (Piolat, Booth, Chung, Davids, and Pennebaker (2011)). The tone of each paragraph is computed as follows:

$$Sentiment_i = \frac{W_i^P - W_i^N}{W_i^T} \tag{2}$$

where $Sentiment_i$ is the tone of paragraph i, W_i^P is the number of positive words within paragraph i, W_i^N is the number of negative words within paragraph i, W_i^T is the number of total words within paragraph i.[18] Finally, I estimate the average sentiment for each of the seven main topics in each platform.

Table 3 presents the final results. I conclude that women do not use a different

[18] A disadvantage of the dictionary method is that it requires to be reliably specified. To overcome this issue, Gennaro and Ash (2022) use word embeddings in a sample of six million speeches. However, word embeddings are not adequate for the case of small samples, as it is the case of this paper.

emotionality tone than males when they talk about different policy topics, except for environment, in which they use a more negative tone, statistically significant at 10 percent.

Table 3: Differences between female and male 2nd round political candidates on the sentiment language of the topics

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	-0.217	-0.505	0.367	-0.128	-0.343	0.206
	(0.228)	(0.292)	(0.304)	(0.313)	(0.224)	(0.215)
Observations	731	731	731	731	731	731
Eff. number of obs	277	208	186	199	305	232
Robust p-value	0.423	0.089	0.154	0.524	0.173	0.324
Polyn. order	1	1	1	1	1	1
Bandwidth	3.928	2.878	2.437	2.686	4.325	3.200
Mean, left of threshold	-0.072	0.269	-0.256	0.199	-0.089	-0.193

Standard errors in parenthesis are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

7 Potential mechanisms

7.1 Gender differences and voters' gender bias

Gender stereotypes can lead to disadvantages for women wishing to be elected. A broad body of literature has shown that social norms shape individual behavior (e.g., Carrer and De Masi (2024), Bau and Fernández (2023)). I test whether gender differences in the topics covered in political platforms reflect voters' gender bias. To do so, I run a heterogeneity analysis based on the extent of gender discrimination in the electoral district, using the local gender wage gap as a proxy. I follow Le Barbanchon and Sauvagnat (2022), who find that the local gender earnings gap correlates with voters' attitudes toward women. I use the authors' gender bias estimation; they computed the residualized local earnings gaps after controlling for age, industry, and occupation.

Table 4 Panels A and B present the results separately for districts above and below the median value of the residualized local earnings gap, respectively. Panel A shows that in districts where the gender wage gap is above the median, between the first and the second round, women increase the salience of topics of security & foreign policy by 19.1 percentage points in comparison to males. This value is

higher than the gender difference in the first round, which was -9.7 percentage points (Appendix Table E22). Therefore, on average, in the second round, women give this topic greater salience than males. At the same time, they do not change the coverage of the other topics. In districts where the gender wage gap is below the median, there are no gender differences in the adjustment of the other topics. These results support the hypothesis that female candidates respond to voters' bias rather than being driven by their intrinsic preferences.

I run another heterogeneity analysis to reinforce confidence that voters' gender bias is an important mechanism driving women's political platforms. I run a heterogeneity analysis based on whether the electoral district elected a woman in the past; this measure allows me to predict voters' predisposition to support female politicians. As can be observed in Panel C, in districts that never elected a woman, between the first and the second round, women increase the salience of security & foreign policy by 8.5 percentage points, compared to males. Such a difference does not exist in districts that elected a woman in the past, where the magnitude is low.

In Appendix Tables E19 and E20, I check whether splitting the samples between districts above and below the median wage gap yields samples that are unidentical in terms of characteristics. Among the 38 characteristics analyzed, six are unbalanced in districts with a wage gap above the median, and five are unbalanced in districts with a wage gap below the median. In Table E21, I confirm the results controlling for the listed covariates.[19]

7.2 Gender differences and ideology

Studying heterogeneity at the ideological level allows assessing whether the effects are specific to certain parties in the French elections. I present results for left and right-wing politicians in Panels A and B, respectively.

Table 5 shows that the results are driven by right-wing women, who give more salience to security issues & foreign policy than their right-wing male colleagues of the same ideology by 13.8 percentage points. Right-wing voters are usually more conservative than left-wing voters, but these results are still smaller than those obtained for districts with a gender wage gap above the median (19.1 p.p.). Right-wing women also give more coverage to economic topics than right-wing males by 10.4 percentage points and less coverage to local politics by 9 percentage points. I obtain similar conclusions if, in an alternative, I compute the dependent variables using CorEx (Appendix Table E23).

[19]For the variables related to occupation and age, data is only available from 2012. Given that the number of observations for Panel D is very small, I do not test the robustness of the results in that case.

Table 4: Differences between female and male 2nd round political candidates, by district gender discrimination

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: Gender wage gap above median						
Woman	-0.006	0.004	-0.073	0.192	0.030	-0.056
	(0.050)	(0.011)	(0.050)	(0.080)	(0.026)	(0.051)
Observations	336	336	336	336	336	336
Eff. number of obs	124	127	83	71	78	128
Robust p-value	0.980	0.541	0.129	0.016	0.513	0.249
Polyn. order	1	1	1	1	1	1
Bandwidth	4.429	4.506	2.998	2.630	2.862	4.714
Mean, left of threshold	-0.014	-0.007	0.063	-0.145	-0.025	0.109
Panel B: Gender wage gap below median						
Woman	-0.009	0.000	-0.046	0.007	-0.014	0.056
	(0.028)	(0.011)	(0.044)	(0.060)	(0.026)	(0.044)
Observations	336	336	336	336	336	336
Eff. number of obs	176	172	128	105	102	142
Robust p-value	0.793	0.972	0.251	0.710	0.373	0.140
Polyn. order	1	1	1	1	1	1
Bandwidth	5.124	5.046	3.460	2.675	2.556	3.900
Mean, left of threshold	0.010	-0.016	0.007	-0.069	0.016	0.060
Panel C: Districts that never elected a woman						
Woman	0.001	-0.003	-0.036	0.083	0.003	-0.005
	(0.030)	(0.009)	(0.029)	(0.040)	(0.021)	(0.039)
Observations	532	532	532	532	532	532
Eff. number of obs	235	253	193	165	140	196
Robust p-value	0.993	0.936	0.217	0.035	0.760	0.912
Polyn. order	1	1	1	1	1	1
Bandwidth	4.469	5.217	3.611	3.101	2.486	3.711
Mean, left of threshold	-0.005	-0.002	0.026	-0.072	0.004	0.064
Panel D: Districts that elected a woman in the past						
Woman	0.013	0.034	-0.002	0.014	0.041	-0.101
	(0.066)	(0.016)	(0.078)	(0.140)	(0.034)	(0.110)
Observations	199	199	199	199	199	199
Eff. number of obs	67	62	86	52	66	48
Robust p-value	0.734	0.024	0.848	0.814	0.357	0.271
Polyn. order	1	1	1	1	1	1
Bandwidth	3.863	3.075	4.907	2.698	3.518	2.474
Mean, left of threshold	-0.043	-0.039	-0.014	-0.144	-0.018	0.257

In Panel A, the sample is restricted to districts with a gender wage gap above the median, while Panel B restricts the sample to districts with a gender wage gap below the median. Panel C restricts the sample to districts that never elected a woman, and Panel D restricts the sample to districts that elected a woman in the past. Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

7.3 Are candidates just responding to their opponents?

The results might simply be explained by the fact that women are responding to male proposals, as they are more responsive to their opponents. I test this hypothesis by estimating the similarity between candidates' manifestos and their oppo-

Table 5: Differences between female and male 2nd round political candidates, by ideology

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: Left-wing candidates						
Woman	-0.065	0.003	0.009	-0.002	0.020	0.052
	(0.057)	(0.016)	(0.043)	(0.009)	(0.025)	(0.060)
Observations	245	245	245	245	245	245
Eff. number of obs	92	114	100	123	88	90
Robust p-value	0.241	0.584	0.958	0.887	0.714	0.292
Polyn. order	1	1	1	1	1	1
Bandwidth	3.262	4.381	3.835	5.055	3.059	3.166
Mean, left of threshold	0.037	-0.019	-0.027	0.000	-0.023	0.058
Panel B: Right-wing candidates						
Woman	0.103	0.012	-0.050	0.144	0.025	-0.093
	(0.052)	(0.010)	(0.048)	(0.084)	(0.026)	(0.051)
Observations	473	473	473	473	473	473
Eff. number of obs	92	139	133	104	109	133
Robust p-value	0.049	0.239	0.355	0.072	0.578	0.064
Polyn. order	1	1	1	1	1	1
Bandwidth	2.183	3.334	3.145	2.470	2.706	3.180
Mean, left of threshold	-0.077	-0.006	0.043	-0.155	0.003	0.129

In Panel A, the sample is restricted to far-left and left-wing candidates. In Panel B, the sample is restricted to liberal, right-wing, and far-right candidates. Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

nents' using cosine similarity. For any given document vectors x_i and x_j, the cosine similarity is the normalized dot product between the vectors:

$$cosine(x_i, x_j) = \frac{x_i \cdot x_j}{||x_i||||x_j||} \tag{3}$$

Each document contains eight vectors, each representing the estimated probability from the LDA that the document discusses each topic.

I built two measures. The first is the similarity between the candidate's second-round manifesto and her opponent's first-round manifesto. This measure allows for assessing whether candidates in the second round respond to the policy proposals of their opponents in the first round. The second measure is the similarity between the candidate's manifesto and her opponent in the second round.

Table 6 presents the results. In column (1), the dependent variable is a dummy variable, whether the candidate refers to her opponent's name on the platform of the second round or not. I do not find any statistically significant differences

between women and men in referring to their opponents' names, which is a first indication of whether they spend part of their manifesto responding to or criticizing their opponents. In column (2), the dependent variable is the first similarity measure; I do not find that women converge more than men to their opponents' platforms in the first round. Column (3) provides a similar conclusion: women do not converge more than males to their opponent's platform in the second round. These results imply that the gender differences found in Section 6 cannot be explained by the fact that women are more responsive or converge more than males to their opponents.[20] In addition, to provide further support that the results are not driven by the opponent, I show in the Appendix Table E25 that both the opponents of the female and male candidates gave the same salience to the topics in the first round.

Table 6: Gender differences in convergence to the opponent

	(1) Opponent name	(2) Similar to opponent 1st round	(3) Similar to opponent 2nd round
Woman	0.040	-0.036	-0.008
	(0.095)	(0.085)	(0.114)
Observations	731	650	645
Eff. number of obs	210	272	250
Robust p-value	0.602	0.804	0.976
Polyn. order	1	1	1
Bandwidth	2.895	4.169	3.878
Mean, left of threshold	0.070	0.050	0.061

Column (1) is a dummy variable equal to one if the candidate cites at least once her opponent's name, zero otherwise. Column (2) is the cosine similarity between the candidate's platform in the second round and the opponent's platform in the first round. Column (3) is the cosine similarity between the candidate's platform in the second round and the opponent's platform in the second round. Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

[20]The conclusions are the same if the topic measures were built with CorEx (Appendix Table E24).

7.4 Gender differences and electoral outcomes

I showed that women's and men's campaigns differ in the topics covered during campaigns because female politicians respond to the fear that voters are biased in favor of males and they need to give more salience to male-stereotyped topics to convince voters of their ability. These methods raise the question of whether women follow this strategy to mobilize voters and persuade them to vote for them.

I explore whether giving more salience to a specific topic helps women secure a higher vote share. To explore this, I conducted a heterogeneity analysis and split my sample into two groups. I implement the regression discontinuity design and include all males who were barely eligible for the second round, and all women who barely passed to the second round, and give more/less salience than the median to a specific topic than all females. Table 7 presents the results. I do not find any significant results, implying that increasing the salience of specific topics, including security & foreign policy, does not lead candidates to increase their vote share.[21] These results are in line with the findings of Chauvin and Tricaud (2023), who find that Brazilian female mayors were less likely to close nonessential businesses during the Covid-19 pandemic, and this strategy did not increase their chance of being reelected. The non-findings are consistent with female politicians optimizing their policy choices by factoring in the gender biases in voters' assessments.

7.5 Are women behaving strategically during elections or also signaling their type as MPs?

Political campaigns can effectively reduce the problem of asymmetric information, as candidates can send signals to voters, informing them about their types and aiming to adjust voters' beliefs. How reliable is this information? If candidates provide reliable information, political campaigns allow voters to choose their preferred candidates effectively; in this situation, we should expect women to give more salience to security & foreign policy than men both during political campaigns and after being elected. On the other hand, if candidates do not provide reliable information, adverse selection emerges.

In this section of the paper, I examine the reliability of the information candidates provide during elections. I compare female and male candidates in terms of topic salience before and after elections. Table 8 provides the results. In Panel A, I replicate the results of Table **??**, restricting to elected politicians. I conclude

[21] Appendix Table E26 shows similar conclusions, if in an alternative I compute the topics using CorEx.

Table 7: Gender differences in electoral outcomes depending on topic salience

	(1) All	(2) Economy & & employment	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
Panel A: Women who give salience on the topic above the median versus all men							
Woman	-1.597	-3.371	-2.150	-0.605	-2.034	-1.845	-2.512
	(2.272)	(2.656)	(2.492)	(2.190)	(2.416)	(2.493)	(3.222)
Observations	731	570	537	535	541	536	535
Eff. number of obs	281	227	222	225	233	227	173
Robust p-value	0.523	0.265	0.484	0.809	0.500	0.559	0.443
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.959	3.946	4.079	4.000	4.357	4.036	3.271
Mean, left of threshold	43.358	43.350	43.415	43.376	43.553	43.394	43.046
Panel B: Women who give salience on the topic below the median versus all men							
Woman		1.098	-0.984	-2.985	-1.032	-1.075	-0.626
		(2.509)	(2.952)	(3.574)	(3.108)	(3.076)	(2.601)
Observations		499	532	534	528	533	534
Eff. number of obs		181	192	186	175	182	201
Robust p-value		0.740	0.683	0.405	0.682	0.650	0.964
Polyn. order		1	1	1	1	1	1
Bandwidth		3.763	3.796	3.785	3.362	3.637	3.745
Mean, left of threshold		43.254	43.275	43.268	43.083	43.191	43.246

In Panel A, the sample is restricted to all males and women who give salience to the topic above the median (relative to other females). In Panel B, the sample is restricted to all males and women who give less salience to the referred topic than the median (in comparison to other females). For Panels A and B, the dependent variable is the number of votes per enrolled voter. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

that, during political campaigns, between the first and second rounds, female candidates increase the salience of security & foreign policy by 31.4 percentage points and decrease the salience of health & education by 17.6 percentage points. In Panels B and C, I study how female and male candidates who barely make it to the second round differ once elected. I focus on the written questions sent to members of the government, which members of parliament (MPs) usually submit as representatives of their constituencies, and on legislative debates, where there is stronger party discipline. I show that after being elected, women no longer give more salience to security & foreign policy than men. I conclude that women only give less salience to local politics in the written questions; in the legislative debates, there are no significant gender differences in the coverage of topics.[22] These results reinforce the hypothesis that, during political campaigns, women behaved strategically, acted in response to voters' bias rather than being driven by their intrinsic preferences.

[22]In the Appendix Tables E27-E30, I confirm the robustness of the results.

Table 8: Differences between elected female and male politicians during political campaigns and after being elected

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) Questions/ Debates
Panel A: Political platforms						
Woman	-0.015	-0.026	-0.176	0.314	-0.033	
	(0.025)	(0.014)	(0.058)	(0.140)	(0.052)	
Observations	265	265	265	265	265	
Eff. number of obs	69	82	47	43	47	
Robust p-value	0.561	0.043	0.003	0.020	0.365	
Polyn. order	1	1	1	1	1	
Bandwidth	3.928	4.434	2.861	2.296	2.742	
Mean, left of threshold	-0.010	0.012	0.101	-0.201	-0.008	
Panel B: Written questions						
Woman	-0.062	-0.042	0.127	0.079	-0.140	-20.628
	(0.074)	(0.097)	(0.172)	(0.054)	(0.066)	(13.772)
Observations	306	306	306	306	306	306
Eff. number of obs	70	66	78	96	57	69
Robust p-value	0.486	0.870	0.511	0.303	0.028	0.306
Polyn. order	1	1	1	1	1	1
Bandwidth	3.305	3.197	3.786	4.495	2.766	3.236
Mean, left of threshold	0.226	0.224	0.341	0.079	0.156	32.415
Panel C: Legislative debates						
Woman	0.045	0.126	-0.059	-0.032	0.037	-16.956
	(0.074)	(0.104)	(0.111)	(0.119)	(0.044)	(36.986)
Observations	306	306	306	306	306	306
Eff. number of obs	76	54	84	72	79	78
Robust p-value	0.455	0.162	0.455	0.742	0.288	0.851
Polyn. order	1	1	1	1	1	1
Bandwidth	3.661	2.601	4.016	3.399	3.871	3.792
Mean, left of threshold	0.174	0.117	0.252	0.294	0.092	86.176

Panel A restricts the analysis to elected politicians and focuses on the topics covered during the political campaign. Panel B restricts the analysis to elected politicians and focuses on the written questions sent to the members of the Government after being elected. Panel C restricts the analysis to elected politicians and focuses on the topics covered during the legislative debates in the French National Assembly. Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

7.6 Do women strategically adapt to the gender of their opponent?

Several experiments, in contexts other than politics, have shown that women's performance in competitive environments depends on the gender of their opponents (e.g., Gneezy, Niederle, and Rustichini (2003), Gneezy and Rustichini (2004), Iriberri and Rey-Biel (2017)). Women might strategically choose which topics to focus on in their political campaigns, depending on their opponent's gender. As

voters form beliefs about candidates' ability to address specific topics based on gender, women might strategically shift coverage of specific topics to signal their ability.

I start by studying whether women change the coverage of specific topics when competing against a man rather than another woman. To explore this question causally, I implement a sharp regression discontinuity design. I restrict my sample to races in which at least one woman reached the second round and focus on the most-voted woman in each electoral district who advanced to the second round. I try to understand how the most-voted woman in the first round behaves when she competes against a man who barely made it to the second round, rather than against a barely eligible woman. Therefore, the running variable must be the difference between the most-voted man and the second-most-voted woman; the treatment group is women who compete against a man, and the counterfactual is women who compete against another woman.

The validity of the RDD relies on the key assumption that first-round candidates of a particular type (e.g., female candidates) do not systematically sort on the right of the qualification threshold. I implement the tests proposed by McCrary (2008) and Cattaneo et al. (2018) and verify that there is no discontinuity in the density of the running variable at the threshold (Appendix Figure E.6). The main implication of the identifying assumption is that the characteristics of electoral districts and the remaining candidate characteristics are continuous at the threshold. I run balancing tests for first-round election characteristics in the same spirit of Section 5.5.1. Tables E31-E37 in the Appendix show the results. Considering 51 balance tests, three are statistically significant at 5 percent (number of left-wing and far-right candidates in the first round, and working in justice & defense). The conclusions are similar if I control for the unbalanced covariates (Appendix Table E44).

Table 9 shows how women strategically adapt to the gender of their opponent. Panel A presents results for all districts and shows that women do not adapt to their opponent's gender. These two results might differ from the one found in Table 2 for two potential reasons. First, in Section 6.1 we focus on candidates who were barely eligible for the second round; in 78% of the elections, women received a lower share of the vote than their male opponents, and therefore they might have a higher incentive to adjust their program. Second, in Section 7.1 I show that voters' gender bias drives the results; even in districts where voters only have the option to vote for women, they might still opt to focus on male-stereotyped topics, to convince gender biased voters that they can run their job efficiently as male politicians.

In Panels B and C, I provide suggestive evidence that female candidates adapt to the gender of their opponent only in districts with greater gender bias against women, meaning in those with a gender wage gap above the median. In those districts, women who compete against a man give more salience to security & foreign policy by 7.8 percentage points than women who compete against another female candidate. I do not find any significant differences in the other topics or in districts where the gender wage gap is below the median.

These results are robust to using the Calonico et al. (2020) bandwidth (Table E43 or including covariates for the unbalanced characteristics (Table E44). I check the robustness of the results at half and twice the MSERD bandwidth (Tables E41 and E42). I obtain similar estimation effects, although they are not statistically significant due to the small number of observations.

7.7 Do men strategically adapt to the gender of their opponent?

The gender differences in the topics discussed in Section 6 might be explained not only by women's strategic behavior but also by men's. I study whether men change their coverage of specific topics when competing against a woman rather than another man. To explore this, I use the same regression discontinuity design described in Section 5.2 and focus on the most-voted man in the first round. I analyze whether the most-voted man in the first round changes the coverage of topics in the second round when he competes against a woman who barely reached the second round, compared to when he competes against a barely eligible man.

Table 10 presents the results, testing the hypothesis that men change the salience of specific topics when competing against a woman rather than a man. On average, men do not seem to change the salience of the topics in their platforms (Panel A), including in districts where voters may be biased in their favor, meaning districts where the gender wage gap is above the median (Panel B). However, in districts where the gender wage gap is below the median (Panel C), when men compete against a woman, they decrease the salience of health & education by 8.4 percentage points, statistically significant at 5 percent, a topic which is stereotyped as a feminine topic. Interestingly, as women, men also react in districts where they feel less strong, but in the reverse way of women. Through Tables E46-E49, I test the robustness of the results to different bandwidths.

Table 9: Impact of a marginal presence of a man on female candidates in the 2nd round

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: All districts						
Woman competing	0.005	-0.002	-0.003	0.026	0.006	-0.036
against a man	(0.008)	(0.006)	(0.027)	(0.023)	(0.020)	(0.030)
Observations	525	525	525	525	525	525
Eff. number of obs	118	234	194	220	168	193
Robust p-value	0.277	0.774	0.752	0.301	0.915	0.241
Polyn. order	1	1	1	1	1	1
Bandwidth	2.209	4.701	3.737	4.460	3.254	3.699
Mean, left of threshold	0.003	0.002	0.002	-0.035	-0.006	0.065
Panel B: Gender wage gap above median						
Woman competing	0.016	-0.001	-0.030	0.078	0.016	-0.030
against a man	(0.015)	(0.011)	(0.037)	(0.039)	(0.032)	(0.063)
Observations	244	244	244	244	244	244
Eff. number of obs	53	96	94	99	85	71
Robust p-value	0.200	0.912	0.371	0.064	0.807	0.772
Polyn. order	1	1	1	1	1	1
Bandwidth	2.224	3.887	3.785	4.307	3.453	2.981
Mean, left of threshold	-0.005	0.001	0.020	-0.093	-0.003	0.066
Panel C: Gender wage gap below median						
Woman competing	-0.022	0.003	0.027	-0.030	-0.011	-0.043
against a man	(0.016)	(0.007)	(0.041)	(0.017)	(0.020)	(0.037)
Observations	247	247	247	247	247	247
Eff. number of obs	110	100	101	78	83	67
Robust p-value	0.243	0.653	0.586	0.139	0.612	0.192
Polyn. order	1	1	1	1	1	1
Bandwidth	4.745	4.197	4.221	3.180	3.306	2.635
Mean, left of threshold	0.010	0.001	-0.023	0.011	0.010	0.053

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man in the second round, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.

8 Conclusion

Leadership in politics has traditionally been a male domain. Although women have gained visibility in recent decades, they continue to hold a minority of leadership positions. Prior research has largely attributed this pattern to a "glass ceiling," whereby voters discriminate against female candidates (De Paola et al. 2010; Le Barbanchon and Sauvagnat 2022; Eyméoud and Vertier 2023). This paper extends this literature by showing that women and men make systematically different strategic choices during political campaigns and that these choices are shaped by the gender bias of voters.

Table 10: Impact of a marginal presence of a woman on male candidates in the 2nd round

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
			Panel A: All districts			
Man competing	0.022	0.002	-0.005	-0.005	0.018	0.012
against a woman	(0.016)	(0.004)	(0.025)	(0.023)	(0.021)	(0.033)
Observations	836	836	836	836	836	836
Eff. number of obs	315	268	347	462	378	368
Robust p-value	0.144	0.870	0.927	0.759	0.320	0.717
Polyn. order	1	1	1	1	1	1
Bandwidth	3.352	2.809	3.805	5.379	4.108	3.988
Mean, left of threshold	-0.021	-0.001	-0.025	-0.031	-0.018	0.105
			Panel B: Gender wage gap above median			
Man competing	0.026	-0.003	0.043	0.002	0.013	-0.043
against a woman	(0.020)	(0.006)	(0.040)	(0.044)	(0.037)	(0.054)
Observations	382	382	382	382	382	382
Eff. number of obs	128	100	149	163	199	159
Robust p-value	0.159	0.432	0.202	0.916	0.661	0.322
Polyn. order	1	1	1	1	1	1
Bandwidth	3.558	2.852	4.260	4.806	6.342	4.666
Mean, left of threshold	-0.025	0.002	-0.047	-0.041	-0.023	0.150
			Panel C: Gender wage gap below median			
Man competing	0.033	0.003	-0.084	-0.020	0.025	0.043
against a woman	(0.026)	(0.004)	(0.036)	(0.038)	(0.022)	(0.046)
Observations	383	383	383	383	383	383
Eff. number of obs	173	192	135	174	153	159
Robust p-value	0.269	0.486	0.019	0.619	0.223	0.250
Polyn. order	1	1	1	1	1	1
Bandwidth	3.613	4.100	2.563	3.617	3.015	3.165
Mean, left of threshold	-0.023	-0.003	0.009	-0.035	-0.017	0.093

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted man in the first round competes against a woman in the second round, and 0 if he competes against another man. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for men competing against a man at the threshold.

Using a unique dataset covering all French legislative elections from 1981 to 2024, I provide the first causal evidence of gender differences in campaign strategies. The two-round electoral system allows for a regression discontinuity design comparing female candidates who barely qualify for the second round with male candidates in nearly identical electoral environments. The results indicate that women and men devote similar attention to most policy topics, except for security and foreign policy, where female candidates increase their emphasis by about nine percentage points. This strategic adjustment is concentrated in districts with stronger indicators of voter bias — those that have never elected a woman or where the gender wage gap is above the median.

These findings are consistent with the mechanism proposed by role incongruity theory (Eagly and Karau (2002)): when social expectations about leadership conflict with gender stereotypes, women may strategically emphasize male-stereotyped issues to align with voters' perceptions of competence. However, I find no evidence that such adjustments improve electoral outcomes. Their behavior during campaigns is purely strategic; once elected, female politicians do not give these topics greater importance than male politicians.

The analysis further examines how campaign strategies depend on the gender of opponents. Female candidates do not systematically change their platforms when facing male rather than female rivals, except in districts with stronger gender bias, where they again emphasize security and foreign policy. Male candidates, in contrast, respond only in less biased contexts, reducing attention to stereotypically female issues such as health and education when competing against women.

The paper contributes to the political economy literature by documenting how identity interacts with electoral incentives in shaping campaign communication. It also provides empirical evidence that voter bias influences not only electoral outcomes but also the strategic content of political discourse. From a broader perspective, the results highlight the need for models of political competition that incorporate identity-based constraints on signaling and strategic communication.

Future research should explore how female candidates can overcome these signaling constraints. Understanding how voters process campaign messages differently by gender, and whether institutional mechanisms such as gender quotas or visibility-enhancing policies mitigate bias, would offer valuable guidance for policymakers. It would also be important to test whether these dynamics extend beyond France, to countries with different electoral rules or cultural norms.

References

Alesina, A. (1988). Credibility and policy convergence in a two-party system with rational voters. *The American Economic Review*, *78*(4), 796–805.

Ash, E., Krümmel, J., & Slapin, J. B. (2023). Better to be jeered than ignored? gender and reactions during parliamentary debates. *Center for Law & Economics Working Paper Series*, *2*.

Ash, E., Krümmel, J., & Slapin, J. B. (2025). Gender and reactions to speeches in german parliamentary debates. *American Journal of Political Science*, *69*(3), 866–880.

Bagues, M., & Campa, P. (2021). Can gender quotas in candidate lists empower women? evidence from a regression discontinuity design. *Journal of Public Economics*, *194*, 104315.

Bakker, B. N., Schumacher, G., & Rooduijn, M. (2021). Hot politics? affective responses to political rhetoric. *American Political Science Review*, *115*(1), 150–164.

Barber, M., Butler, D. M., Preece, J., et al. (2016). Gender inequalities in campaign finance. *Quarterly Journal of Political Science*, *11*(2), 219–48.

Bau, N., & Fernández, R. (2023). Culture and the family. In *Handbook of the economics of the family* (Vol. 1, pp. 1–48). Elsevier.

Bauer, N. M. (2017). The effects of counterstereotypic gender strategies on candidate evaluations. *Political Psychology*, *38*(2), 279–295.

Besley, T., & Coate, S. (1997). An economic model of representative democracy. *The Quarterly Journal of Economics*, *112*(1), 85–114.

Bhalotra, S., & Clots-Figueras, I. (2014). Health and the political agency of women. *American Economic Journal: Economic Policy*, *6*(2), 164–197.

Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent dirichlet allocation. *Journal of Machine Learning Research*, *3*(Jan), 993–1022.

Booth, A., & Nolen, P. (2012). Choosing to compete: How different are girls and boys? *Journal of Economic Behavior & Organization*, *81*(2), 542–555.

Boussalis, C., Coan, T. G., Holman, M. R., & Müller, S. (2021). Gender, candidate emotional expression, and voter reactions during televised debates. *American Political Science Review*, *115*(4), 1242–1257.

Calonico, S., Cattaneo, M. D., & Farrell, M. H. (2020). Optimal bandwidth choice for robust bias-corrected inference in regression discontinuity designs. *The Econometrics Journal*, *23*(2), 192–210.

Calonico, S., Cattaneo, M. D., Farrell, M. H., & Titiunik, R. (2019). Regression discontinuity designs using covariates. *Review of Economics and Statistics*, *101*(3),

442–451.

Calonico, S., Cattaneo, M. D., & Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, *82*(6), 2295–2326.

Carrer, L., & De Masi, L. (2024). Municipal-level gender norms: Measurement and effects on women in politics.

Casarico, A., Lattanzio, S., & Profeta, P. (2022). Women and local public finance. *European Journal of Political Economy*, *72*, 102096.

Cattaneo, M. D., Jansson, M., & Ma, X. (2018). Manipulation testing based on density discontinuity. *The Stata Journal*, *18*(1), 234–261.

Chattopadhyay, R., & Duflo, E. (2004). Women as policy makers: Evidence from a randomized policy experiment in india. *Econometrica*, *72*(5), 1409–1443.

Chauvin, J. P., & Tricaud, C. (2023). *Gender and electoral incentives: Evidence from crisis response*. Centre for Economic Policy Research.

Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic literature*, *47*(2), 448–474.

Cruz, C., Labonne, J., & Trebbi, F. (2024). *Campaigning against populism emotions and information in real election campaigns* (Tech. Rep.). National Bureau of Economic Research.

Curini, L., & Vignoli, V. (2021). Committed moderates and uncommitted extremists: Ideological leaning and parties' narratives on military interventions in italy. *Foreign Policy Analysis*, *17*(3), orab016.

Datta Gupta, N., Poulsen, A., & Villeval, M. C. (2013). Gender matching and competitiveness: Experimental evidence. *Economic Inquiry*, *51*(1), 816–835.

De Paola, M., Scoppa, V., & Lombardo, R. (2010). Can gender quotas break down negative stereotypes? evidence from changes in electoral rules. *Journal of Public Economics*, *94*(5-6), 344–353.

Di Tella, R., Kotti, R., Le Pennec, C., & Pons, V. (2025). Keep your enemies closer: strategic platform adjustments during us and french elections. *American Economic Review*, *115*(8), 2488–2528.

Djourelova, M. (2023). Persuasion through slanted language: Evidence from the media coverage of immigration. *American Economic Review*, *113*(3), 800–835.

Downs, A. (1957). An economic theory of political action in a democracy. *Journal of Political Economy*, *65*(2), 135–150.

Duval, D., & Pétry, F. (2016). L'analyse automatisée du ton médiatique: construction et utilisation de la version française du lexicoder sentiment dictionary. *Canadian Journal of Political Science/Revue canadienne de science politique*, *49*(2), 197–220.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573.

Eyméoud, J.-B., & Vertier, P. (2023). Gender biases: evidence from a natural experiment in french local elections. *Economic Policy*, *38*(113), 3–56.

Ferreira, F., & Gyourko, J. (2014). Does gender matter for political leadership? the case of us mayors. *Journal of Public Economics*, *112*, 24–39.

Fraccaroli, N., & Pizzigolotto, A. (2021). Credit shocks and populism.

France. presidential election 10 and 24 april 2022. odihr election assessment mission final report. (2022).

Funk, P., & Gathmann, C. (2015). Gender gaps in policy making: Evidence from direct democracy in switzerland. *Economic Policy*, *30*(81), 141–181.

Gallagher, R. J., Reing, K., Kale, D., & Ver Steeg, G. (2017). Anchored correlation explanation: Topic modeling with minimal domain knowledge. *Transactions of the Association for Computational Linguistics*, *5*, 529–542.

Gaultier-Voituriez, O. (2016). Archelec, les archives électorales de la v e république, du papier au numérique. *Histoire@ Politique*, *3*, 213–220.

Gennaro, G., & Ash, E. (2022). Emotion and reason in political language. *The Economic Journal*, *132*(643), 1037–1059.

Gentzkow, M., Shapiro, J. M., & Taddy, M. (2019). Measuring group differences in high-dimensional choices: method and application to congressional speech. *Econometrica*, *87*(4), 1307–1340.

Gneezy, U., Leonard, K. L., & List, J. A. (2009). Gender differences in competition: Evidence from a matrilineal and a patriarchal society. *Econometrica*, *77*(5), 1637–1664.

Gneezy, U., Niederle, M., & Rustichini, A. (2003). Performance in competitive environments: Gender differences. *The Quarterly Journal of Economics*, *118*(3), 1049–1074.

Gneezy, U., & Rustichini, A. (2004). Gender and competition at a young age. *American Economic Review*, *94*(2), 377–381.

Granzier, R., Pons, V., & Tricaud, C. (2023). Coordination and bandwagon effects: How past rankings shape the behavior of voters and candidates. *American Economic Journal: Applied Economics*, *15*(4), 177–217.

Hansen, S., McMahon, M., & Prat, A. (2018). Transparency and deliberation within the fomc: A computational linguistics approach. *The Quarterly Journal of Economics*, *133*(2), 801–870.

Herrnson, P. S., Lay, J. C., & Stokes, A. K. (2003). Women running "as women": Candidate gender, campaign issues, and voter-targeting strategies. *The Journal of Politics*, *65*(1), 244–255.

Huddy, L., & Terkildsen, N. (1993). Gender stereotypes and the perception of male and female candidates. *American journal of political science*, 119–147.

Iriberri, N., & Rey-Biel, P. (2017). Stereotypes are only a threat when beliefs are reinforced: On the sensitivity of gender differences in performance under competition to information provision. *Journal of Economic Behavior & Organization*, *135*, 99–111.

Jolly, S., Bakker, R., Hooghe, L., Marks, G., Polk, J., Rovny, J., ... Vachudova, M. A. (2022). Chapel hill expert survey trend file, 1999–2019. *Electoral studies*, *75*, 102420.

Kanthak, K., & Woon, J. (2015). Women don't run? election aversion and candidate entry. *American journal of political science*, *59*(3), 595–612.

Kendall, C., Nannicini, T., & Trebbi, F. (2015). How do voters respond to information? evidence from a randomized campaign. *American Economic Review*, *105*(1), 322–353.

Lawless, J. L. (2004). Women, war, and winning elections: Gender stereotyping in the post-september 11th era. *Political Research Quarterly*, *57*(3), 479–490.

Le Barbanchon, T., & Sauvagnat, J. (2022). Electoral competition, voter bias, and women in politics. *Journal of the European Economic Association*, *20*(1), 352–394.

Le Pennec, C. (2023). Strategic campaign communication: Evidence from 30,000 candidate manifestos. *The Economic Journal*, uead082.

Lippmann, Q. (2021). Are gender quotas on candidates bound to be ineffective? *Journal of Economic Behavior & Organization*, *191*, 661–678.

Lu, B., Ott, M., Cardie, C., & Tsou, B. K. (2011). Multi-aspect sentiment analysis with topic models. In *2011 ieee 11th international conference on data mining workshops* (pp. 81–88).

Markowsky, E., & Beblo, M. (2022). When do we observe a gender gap in competition entry? a meta-analysis of the experimental literature. *Journal of Economic Behavior & Organization*, *198*, 139–163.

McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of Econometrics*, *142*(2), 698–714.

Niederle, M., & Vesterlund, L. (2007). Do women shy away from competition? do men compete too much? *The Quarterly Journal of Economics*, *122*(3), 1067–1101.

Niederle, M., & Vesterlund, L. (2011). Gender and competition. *Annu. Rev. Econ.*, *3*(1), 601–630.

Osborne, M. J., & Slivinski, A. (1996). A model of political competition with citizen-candidates. *The Quarterly Journal of Economics*, *111*(1), 65–96.

Osnabrügge, M., Hobolt, S. B., & Rodon, T. (2021). Playing to the gallery: Emotive rhetoric in parliaments. *American Political Science Review*, *115*(3), 885–899.

Piolat, A., Booth, R. J., Chung, C. K., Davids, M., & Pennebaker, J. W. (2011). La version française du dictionnaire pour le liwc: modalités de construction et exemples d'utilisation. *Psychologie Française*, *56*(3), 145–159.

Sutter, M., Bosman, R., Kocher, M. G., & van Winden, F. (2009). Gender pairing and bargaining—beware the same sex! *Experimental Economics*, *12*, 318–331.

Tomz, M., & Van Houweling, R. P. (2008). Candidate positioning and voter choice. *American Political Science Review*, *102*(3), 303–318.

Watanabe, K., & Baturo, A. (2023). Seeded sequential lda: A semi-supervised algorithm for topic-specific analysis of sentences. *Social Science Computer Review*, 08944393231178605.

Watanabe, K., Xuan-Hieu, P., & Watanabe, M. K. (2023). Package 'seededlda'.

Weigel, J. L. (2020). The participation dividend of taxation: How citizens in congo engage more with the state when it tries to tax them. *The Quarterly Journal of Economics*, *135*(4), 1849–1903.

A Ideological classification

I allocate candidates into seven political orientations (far-left, left, liberal, right, far-right and other). I use the party classifications from the Chapel Hill Expert Survey (CHES) and when missing from the ParlGov and Granzier, Pons, and Tricaud (2023). I consider the party positioning on a scale between 0 (left) and 1 (right) and family classification.

1981 Parliamentary Elections	
Political label	**Political orientation**
Parti Communiste Français	Far-left
Divers Droite	Right
Divers Gauche	Left
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Indépendants	Other
Non Classés	Other
Rassemblement pour la République	Right
Socialistes	Left
Union pour la Démocratie Française	Right

1988 Parliamentary Elections	
Political label	**Political orientation**
Parti Communiste Français	Far-left
Divers Droite	Right
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front National	Far-right
Majorité Présidentielle	Left
Radicaux de Gauche	Left
Régionalistes	Other
Rassemblement pour la République	Right
Socialistes	Left
Union pour la Démocratie Française	Right

1993 Parliamentary Elections	
Political label	**Political orientation**
Parti Communiste Français	Far-left
Divers	Other
Divers Droite	Right
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front National	Far-right
Génération Ecologie	Left
Majorité Présidentielle	Left
Radicaux de Gauche	Left
Régionalistes	Other
Rassemblement pour la République	Right
Parti Socialiste	Left
Union pour la Démocratie Française	Right
Les Verts	Left

1997 Parliamentary Elections	
Political label	**Political orientation**
Parti Communiste Français	Far-left
Divers	Other
Divers Droite	Right
Divers Gauche	Left
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front National	Far-right
Mouvement Pour la France	Far-right
Parti Radical Socialiste	Left
Rassemblement pour la République	Right
Socialistes	Left
Union pour la Démocratie Française	Right

2002 Parliamentary Elections	
Political label	**Political orientation**
Communistes	Far-left
Chasse, Pêche, Nature et Traditions	Right
Divers	Other
Démocratie Libérale	Right
Divers Droite	Right
Divers Gauche	Left
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front National	Far-right
Ligue Communiste Révolutionnaire	Far-left
Lutte Ouvrière	Far-left
Mouvement des Citoyens	Left
Mouvement National Républicain	Far-right
Mouvement pour la France	Right
Pôle Républicain	Left
Radicaux de Gauche	Left
Régionalistes	Other
Rassemblement pour la France	Right
Socialistes	Left
Union pour la Démocratie Française	Liberal
Union pour un Mouvement Populaire	Right
Les Verts	Left

2007 Parliamentary Elections	
Political label	**Political orientation**
Communistes	Far-left
Chasse, Pêche, Nature et Traditions	Right
Divers	Other
Divers Droite	Right
Divers Gauche	Left
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front National	Far-right
Majorité Présidentielle	Right
Mouvement pour la France	Right
Radicaux de Gauche	Left
Régionalistes	Other
Rassemblement pour la France	Right
Socialistes	Left
Union pour la Démocratie Française - Mouvement Démocrate	Liberal
Union pour un Mouvement Populaire	Right
Les Verts	Left

2012 Parliamentary Elections	
Political label	**Political orientation**
Alliance Centriste	Liberal
Autres	Other
Centre pour la France	Liberal
Communistes	Far-left
Divers Droite	Right
Divers Gauche	Left
Ecologistes	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
Front de Gauche	Far-left
Front National	Far-right
Nouveau Centre	Liberal
Parti Radical	Right
Radicaux de Gauche	Left
Régionalistes	Other
Socialistes	Left
Union pour un Mouvement Populaire	Right
Europe Ecologie - Les Verts	Left

2017 Parliamentary Elections	
Political label	**Political orientation**
Parti Communiste Français	Far-left
Debout la France	Far-right
Divers	Other
Divers Droite	Right
Divers Gauche	Left
Europe Écologie les Verts	Left
Extrême Droite	Far-right
Extrême Gauche	Far-left
France Insoumise	Far-left
Front National	Far-right
Les Républicains	Right
Modem	Liberal
Radicaux de Gauche	Left
Régionalistes	Other
République en Marche	Liberal
Parti Socialiste	Left
Union des Démocrats et Indépendants	Liberal

2022 Parliamentary Elections	
Political label	**Political orientation**
Divers	Other
Divers Centre	Other
Divers Droite	Right
Divers Gauche	Left
Divers Extrême-droite	Far-right
Divers Extrême-gauche	Far-left
Droite Souveraniste	Far-right
Écologiste	Left
Ensemble	Liberal
Extrême-droite	Far-right
Les Républicains	Right
Nupes	Left
Radicaux de Gauche	Left
Réconquête	Far-right
Régionalistes	Other
Rassemblement National	Far-right
Union des Démocrats et Indépendants	Liberal

2024 Parliamentary Elections	
Political label	**Political orientation**
Divers	Other
Divers Centre	Other
Divers Droite	Right
Divers Gauche	Left
Divers Extrême-droite	Far-right
Divers Extrême-gauche	Far-left
Droite Souveraniste	Far-right
Écologiste	Left
Ensemble	Liberal
Extrême-droite	Far-right
Hôrizons	Right
Les Républicains	Right
Nupes	Left
Radicaux de Gauche	Left
Réconquête	Far-right
Régionalistes	Other
Rassemblement National	Far-right
Union des Démocrats et Indépendants	Liberal
Union de Gauche	Left
Union Extrême-droite	Far-right

B Data

B.1 Political platforms

I transform the pdf versions of the manifestos into text using optical character recognition: Tesseract.

For all types of text data, I perform the following pre-processing procedures.

I remove a list of words containing party names, party acronyms, parliamentary titles, and terms describing blocs of parties. I also eliminate first and last names.

I preprocess the corpus following standard practices in natural language processing: remove punctuation and numbers, convert all letters to lowercase, lemmatize each word, and restrict the vocabulary to words used by at least 1% and 50% of the documents, using the Spacy French version 3.5.0. Given that the OCR sometimes fails to detect accents, I convert words from Latin-1 to UTF-8 to reduce errors. After retaining the most frequent words, I create a dictionary to correct the most obvious OCR errors, e.g., "votredepute" becomes "votre depute".

Some politicians opt for using the party platform instead of a personalized platform; this is common in small parties (e.g., Rassemblement National and Green parties) but an infrequent practice among well-established parties (e.g., socialist and republican parties). I do not include manifestos similar to the party platform in the training datasets. Keeping duplicate measures introduces multicollinearity, making these manifestos count more. I include them in the regression model.

B.2 Legislative debates

I web-scraped the speeches from the Assemblée Nationale website covering the 1998-2022 period and transformed them into a novel dataset.[23][24] I restrict my analysis to elected politicians, excluding presidents and vice-presidents of the Parliament. I eliminate procedural words in parliamentary speech because they appear frequently and their use is unlikely to be informative about group differences (Gentzkow, Shapiro, and Taddy (2019)).[25] I also remove speeches of fewer than five words; these tend to be minor reactions to an opponent's speech and are not informative about the group or topic. I aggregate speeches so that a document

[23]They are available at: https://www.assemblee-nationale.fr/dyn/15/comptes-rendus/seance

[24]I do not include the years 2001 and the end of the 11th legislature (2002) because the website during this period is designed differently and is difficult to web-scrape.

[25]I obtain the list of procedural phrases from the following websites: https://www2.assemblee-nationale.fr/decouvrir-l-assemblee/folder/lexique and https://www.assemblee-nationale.fr/connaissance/lexique.asp .

Figure B.1: Florence Blatrix-Contat political platform during 1st round 2017 legislative elections - 1st page

51 ans, mariée, 3 enfants

Je vis dans mon village natal à Drom, au cœur du Revermont.

Mes grands-parents agriculteurs et mes parents m'ont transmis leur attachement à ces terres ; ils m'ont surtout appris que l'école était un moyen d'émancipation et d'ascension sociale.

Après des études comptables, je suis devenue enseignante. Agrégée d'économie-gestion, j'enseigne l'économie et le droit.

Elue depuis 1995 dans ma commune, puis en 2015 à la Région Auvergne-Rhône-Alpes, je suis convaincue que l'action publique et la volonté permettent d'avancer.
Dans nos collectivités, je suis attachée à travailler avec tous, au-delà des clivages partisans ; c'est grâce au rassemblement des élus que les projets peuvent aboutir.

Madame, Monsieur,

Le 7 mai dernier, le peuple français a fait le choix d'un nouveau président de la République.

Les élections législatives des 11 et 18 juin** décideront de l'avenir de la France ; elles seront l'occasion de choisir la République que nous voulons. Je me présente à vos suffrages avec la volonté de faire réussir la France, de faire réussir ce quinquennat. La majorité issue de ce scrutin devra agir pour la justice sociale, la solidarité, l'égalité des chances et la transition écologique. **Pour cela, la gauche doit être forte à l'Assemblée nationale.

*Demain, à l'Assemblée, je veux représenter une gauche constructive et exigeante. **Je veillerai à la défense des acquis sociaux, au respect du dialogue social et me battrai pour un modèle de croissance compatible avec la préservation de la planète.***

*Avec mon suppléant, **Michel FONTAINE, nous vivons, travaillons et sommes investis dans cette circonscription**. Nous mettrons notre expérience à votre service pour développer sur ce territoire : l'emploi, les services publics, la santé, la solidarité, mais aussi les activités culturelles et sportives indispensables au lien social. Élue rurale, je sais à quel point les services publics doivent être préservés dans chaque commune.*

Sur le terrain comme à l'Assemblée, je mettrai toute mon énergie pour accompagner et soutenir les projets de notre territoire et pour aider celles et ceux qui rencontrent des difficultés.

Dimanche 11 juin, je compte sur votre soutien. Vous pouvez compter sur ma détermination et mon dévouement.

Florence Blatrix Contat

Source: RegardsCitoyens (https://github.com/regardscitoyens)

Figure B.2: Florence Blatrix-Contat political platform during 1st round 2017 legislative elections - 2nd page

Michel FONTAINE

Premier-adjoint de la Ville de Bourg-en-Bresse
Président de l'Agglomération de 2008 à fin 2016 et depuis Vice-président au développement économique.

Je vis sur Bourg-en-Bresse depuis plus de 40 ans, j'ai partagé ma vie professionnelle entre le lycée Carriat et ma société FontainePicard.

J'ai deux enfants et vis maritalement. J'ai assumé des responsabilités associatives avant de devenir un élu local.

En m'engageant aux côtés de Florence Blatrix-Contat, je fais le choix de la réussite dans une grande fidélité à mes convictions.

NATIONALEMENT, je serai une députée constructive mais exigeante vis-à-vis des réformes proposées par le président de la République, fidèle aux valeurs qui fondent mon engagement politique à Gauche.

Je soutiendrai

→ **La moralisation de la vie publique et l'interdiction du cumul** de plus de trois mandats successifs pour permettre le renouvellement

→ Les projets visant à concilier **efficacité économique et justice sociale** ainsi qu'une action forte en matière de **formation pour lutter contre le chômage**

→ La priorité donnée à l'école primaire pour que chaque enfant puisse réussir et le soutien à l'autonomie des jeunes par une **revalorisation des bourses**

→ Les mesures en faveur du pouvoir d'achat pour les plus modestes avec **l'augmentation du minimum vieillesse et de la prime d'activité**

→ **La transition écologique et énergétique** : des investissements dans la croissance verte et les économies d'énergie, l'interdiction des perturbateurs endocriniens

Je serai vigilante

→ Sur la justice fiscale : **je m'opposerai à la baisse de l'Impôt Sur la Fortune et à l'augmentation de la CSG** qui entraînera une diminution des pensions pour plus de 8 millions de retraités

→ Sur le dialogue social et les droits des salariés : **le dialogue social doit être renforcé** et le Code du travail doit rester un socle protecteur élevé pour les salariés

→ Sur les services publics : « Ils sont le patrimoine de ceux qui n'en ont pas » ; je m'opposerai à une nouvelle baisse du nombre de fonctionnaires et des **dotations des collectivités**

LOCALEMENT, je défendrai les projets de nos territoires : fibre optique, investissement dans l'université, dans les activités sportives et culturelles, lutte contre les déserts médicaux et maintien des services en milieu rural.

« Ce quinquennat sera réussi si la France n'oublie personne en route. Pour cela, nous avons besoin d'une gauche forte.
Je sais que Florence et Michel portent ces valeurs. Je vous appelle à les soutenir les 11 et 18 juin prochains. » **Jean-François DEBAT**

Vu le candidat - Agence TOUT&POSSIBLE - Imprimerie du Centre - Bourg-en-Bresse

Candidate de la gauche, des démocrates et des écologistes, je compte sur vous dès le 1er tour.

PS Social-Écologie · Europe Écologie les Verts · PRG Parti Radical de Gauche · UDE Union des Démocrates et Écologistes

www.florenceblatrix2017.com - florence.blatrix.contat2017@gmail.com

florenceblatrix · @FlorenceBlatrix

(continuation)

Table B1: Sampling frame

	First round			Second round		
Year	Races	Total candidates	Platforms collected	Races	Total candidates	Platforms collected
1981	491	2650	2459	334	660	652
1988	577	2849	2651	455	899	851
1993	577	5290	4118	497	992	964
1997	577	6359	2908	565	1197	1097
2002	577	8444	201	519	1045	55
2007	577	7634	395	467	933	80
2012	577	6603	867	541	1101	523
2017	577	7877	5765	573	1146	927
2022	577	6289	4516	561	1126	1057
2024	577	4009	2750	501	1094	850

Notes: The table indicates the number of races, total candidates, and the manifestos collected for each legislative election included in the data set.

captures all speeches by a given speaker in a single agenda for a plenary session; I remove aggregate speeches with fewer than 15 words; and I do not consider concise speeches ideal for detecting group differences or topics. I restrict the vocabulary to 0.5% and 50% of the documents. The dataset includes a total of 154,980 documents.

C Methodology

C.1 Topic classification - Seeded LDA

Latent Dirichlet Allocation (LDA) (Blei et al. (2003)) has been the most widely used topic model (e.g. Hansen, McMahon, and Prat (2018), Weigel (2020), Djourelova (2023)). LDA is an unsupervised method that assumes documents are composed of words that help determine topics and maps documents to a list of topics by assigning each word in a document to one or more topics. The assignment is based on conditional probability estimates. Under LDA, a document, d, is generated under the following hierarchical process:

- For each topic k draw a multinomial over words $\phi \sim Dirichlet(\beta)$.
- For each document d:
  - Draw a multinomial over topics $\theta \sim Dirichlet(\alpha)$.
  - For each word w_{N_d}:

* Draw a topic $Z_{N_d} \sim Mult(\theta_D)$,
* Draw a word: $w \sim Mult(\phi_{Z_{d,w}})$.

When the number of documents is not large, the method is not efficient, and topics tend to be difficult to interpret. A potential solution is to transform the method into a semi-supervised one. Seeded LDA (Lu et al. (2011)) allows one to define topics *a priori* through seeded words, before fitting the model.[26] Lu et al. (2011) specify a combined conjugate prior for each seed word, w, in $\phi \sim Dirichlet(\beta+C_w)$, where C_w is a pseudo-count added to the topic to which w belongs. In case there is no prior knowledge for a word w, $C_w = 0$. With a sample obtained via Gibbs sampling, the topic-word distribution phi_k is approximated for each topic k and the document-topic distribution θ_d, for each document d.

The seed words were gathered from a simple LDA fitted on the same corpus. For manifestos, I start printing the list of selected words in the document. Then, I classify the most obvious words into their respective topics and use them as "seeded words".

Seeded LDA was run in RStudio using the "seededlda" package version 0.9.1 (Watanabe et al. (2023)).

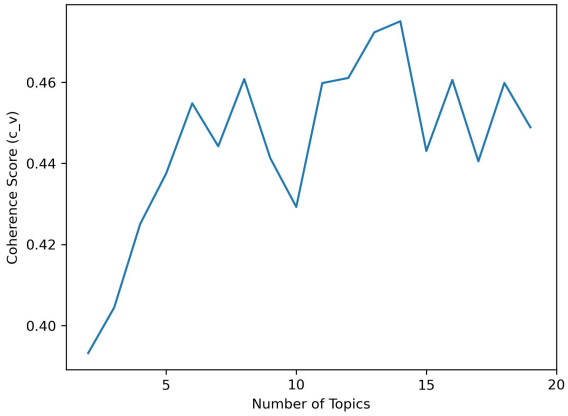
There is no formal procedure to determine the optimal number of topics, and several options may be relevant. Topic coherence is a widely used method for evaluating LDA topics and measures how semantically meaningful the topics are by assessing how strongly their top words tend to co-occur or relate in the text. The coherence score ranges from 0 to 1, with 1 indicating perfect coherence and 0 indicating none. The C_V method is widely adopted and can be readily implemented via the CoherenceModel() function in gensim. Figure C.3 plots the coherence score against the number of topics, although it is not very clear what is the optimal number of topics. I chose 8 topics after testing how interpretable the topics are — how the top words of each topic are related to it; using 14 topics seemed to be clearly excessive. This approach allows for sufficiently detailed categories while keeping the number of topics manageable.

C.1.1 List of seeded words

Economy: austerity (*austérité*), budgetary (*budgétaire*), unemployment (*chômage*), deficit (*déficit*), tax exemption (*défiscalisation*), economy (*économie*), employee (*employée*), employer (*employeur*), entrepreneur, entrepreneurship (*entrepreneuriat*), firm

[26] Some previous applications: Curini and Vignoli (2021), Fraccaroli and Pizzigolotto (2021) and Ash, Krümmel, and Slapin (2023). For a detailed explanation of the differences between the LDA and the seeded LDA, see Watanabe and Baturo (2023).

Figure C.3: Choosing number of topics using total correlation



(*entreprise*), exportation, finance, financing (*financement*), fund (*financer*), financial (*financière*, fiscal, tax (*fiscaliser, fiscalité*), gatt, tax (*impôt*), industry (*industrie*), industrial (*industriel*), inflation, wealth tax (*isf*), monetary (*monetaire*), worker (*ouvrier*), boss (*patron*), employer (*patronal*), employer (*patronat*), poor (*pauvre*), poverty (*pauvreté*), pension, sme (*pme*), small medium industry (*pmi*), precarious (*précaire*), precariousness (*précarité*), privatisation, companies register (*rcs*), reindustrialisation, retirement (*rétraite*), tarif, rate (*taux*), tax, taxation, tax (*taxer*), worker (*travailleur*), vat (*tva*), uberization (*uberisation*).

Environment: agrarian (*agricole*), farmer (*agriculteur*), agriculture (*agriculture*), agro, agribusiness (*agroalimentaire*), animal (*animal*), bio (*bio*), biodiversity (*biodiversité*), biological (*biologique*), fuel (*carburant*), carbide (*carbure*), climat, climatic (*climatique*), water (*eau*), ecology (*écologie*), ecological (*écologique*), environment (*écologiste*), energetic (*énergétique*), energy (*énergie*), environment (*environnement*), green (*environnemental*), wind (*éolien*), forest (*fôret*), nuclear (*nucléaire*), fishing (*pêche*), fisher (*pêcheur*), programme for the endorsement of forest certification (*pefc*), pesticide (*pesticide*), petrol (*petrole*), polluting (*polluant*), pollute (*polluer*), pollution (*pollution*), recycling (*recyclage*), recycle (*recycler*), vegetarian (*végétarien*), winegrower (*viticulteur*), viticulture (*viticulture*).

Health & Education: academic (*académique*), cancer, center for international exchange (*cei*), class (*classe*), college (*collège*), kindergarten (*créche*), doctor (*docteur*), school (*école*), educator (*éducateur*), educational (*éducatif*), education (*éducation*), educate (*éduquer*), establishment of accommodation for dependent old persons (*ehpad*), student (*élève*), childhood (*enfance*), child (*enfant*), confinement (*enfermement*), teacher (*enseignant*), teaching (*enseignement*), teach (*enseigner*), study (*étude*), student (*étudiant*), study (*étudier*), training (*formation*), hospital (*hôpital*), hospitable (*hospitalier*), college (*lycée*), sick (*malade*), disease (*maladie*), maternal (*maternel*), maternity (*maternité*), doctor (*médecin*), medecine (*médecine*), medical (*médicale*), med-

ication (*médicament*), parental, patient, teacher (*professeur*), blood (*sang*), sanitary (*sanitaire*), health (*santé*), science, scientific (*scientifique*), academic (*scolaire*), care (*soin*), universitary (*universitaire*), university (*université*).

Security & foreign policy: algeria (*algérie*), germany (*allemagne*), weapon (*arme*), army (*armée*), armament (*armement*), asylum (*asile*), brigade, brussels (*bruxelle*), cee, clandestin, crime, cybercrime (*cybercriminalité*), delinquency (*délinquance*), offender (*délinquant*), offence (*délit*), disarmament (*désarmement*), diplomacy (*diplomacie*), drug (*drogue*), foreigner (*étranger*), europe, european (*européen*), border (*frontière*), policeman (*gendarme*), police station (*gendarmerie*), war (*guerre*), immigration, immigrant (*immigré*), insecurity (*insécurité*), judiciary (*judiciaire*), legal (*juridique*), jurist (*juriste*), justice, maastricht, magistrat, migratory (*migratoire*), military (*militaire*), nationality (*nationalité*), otan, sentence (*peine*), penal, police, pollice officer (*policier*), prison, security (*sécurité*), over-armament (*surarmement*), terrorism (*terrorisme*), terrorist (*terroriste*), treaty (*traité*), court (*tribunal*), ukraine.

Local politics: canton, cantonal, constituency (*circonscription*), municipal (*communal*), municipality (*commune*), department (*département*), departmental (*départementale*), desert, desertification, intermunicipal (*intercommunal*), intermunicipality (*intercommunalité*), municipal, municipality (*municipalité*), region, regional, rural, rurality (*ruralité*), territory (*territoire*), territorial, village, city (*ville*).

National politics: assembly (*assemblée*), national assembly (*assemblée nationale*, campaign (*campagne*), candidature, centrist (*centriste*), coalition, cohabitation, communist (*communiste*), democrat (*démocrate*), democracy (*démocratie*), democratic (*démocatique*), democratisation, sunday (*dimanche*), dissolution, right (*droite*), voter (*électeur*), electoral, elected (*élu*), inhibit (*empêcher*), gaulle, gaulliste, legislatif, legislative, legislature, majority (*majoritaire*), majority (*majorité*), parlement, parliamentary (*parlementaire*), presidency (présidence), president (président), presidential (présidentiel, présidentielle), reelection, reelect (réelu), republican (républicain), senate (sénat), senator (sénateur), socialism (socialisme), socialist (*socialiste*).

C.1.2 List of top words per topic - Political platforms

Economy, Employment & Social Security: firm (*entreprise*), retirement (*retraite*), unemployment (*chômage*), economy (*économie*), tax (*impôt*), salary (*salaire*), worker (*travailleur*), fiscal, financial (*financier*), industrial (*industriel*).

Environment: environment (*environnement*), ecology (*écologie*), ecologist (*écologiste*), energy (*énergie*), ecologic (*écologiste*), agriculture, farmer (*agriculteur*), agrarian (*agricole*), nuclear (*nucleaire*), water (*eau*).

Health & Education: child (*enfant*), health (*santé*), school (*école*), education, training (*formation*), engage (*engager*), hospital (*hôpital*), support (*soutenir*), class

(*classe*), care (*soin*).

Security, Justice & Foreign Policy: security (*sécurité*), europe, justice, european (*européen*), immigration, foreigner (*étranger*), police, insecurity (*insécurité*), war (*guerre*), sentence (*peine*).

Local politics: territory (*territoire*), municipal, region, department (*département*), regional, rural, municipality (*commune*), councilor, development (*développement*), departmental (*départementale*).

National politics: president, right (*droite*), assembly (*assemblée*), elected (*élu*), national assembly (*assemblée national*), voter (*électeur*), presidential (*présidentiel*), sunday (*dimanche*), democracy (*démocratie*), republican (*républicain*).

Other 1: walk (*marche*), commitment (*engagement*), république en marche, need (*besoin*), construct (*construire*), gather (*rassembler*), believe (*créer*), reduce (*réduire*), very (*très*), additional (*supplementaire*).

Other 2: citizen (*citoyen*), right (*droit*), change (*changer*), society (*société*), woman (*femme*), no (*non*), man (*homme*), movement (*mouvement*), development (*developpement*), put (*mettre*).

Other 3: to need (*falloir*), to want (*vouloir*), good (*bien*), other (*autre*), know (*savoir*), alone (*seul*), today (*aujourd*), freedom (*liberté*), society (*société*), union.

Validation against party classification To validate the topic measure, I regress the prevalence of each topic on candidates' political ideology, controlling for department and year fixed effects. As expected, in France, left-wing parties are more likely to address environmental topics, while far-right parties are more likely to address security & foreign policy (Figure C.4).

C.1.3 Correlation Explanation (CorEx) model

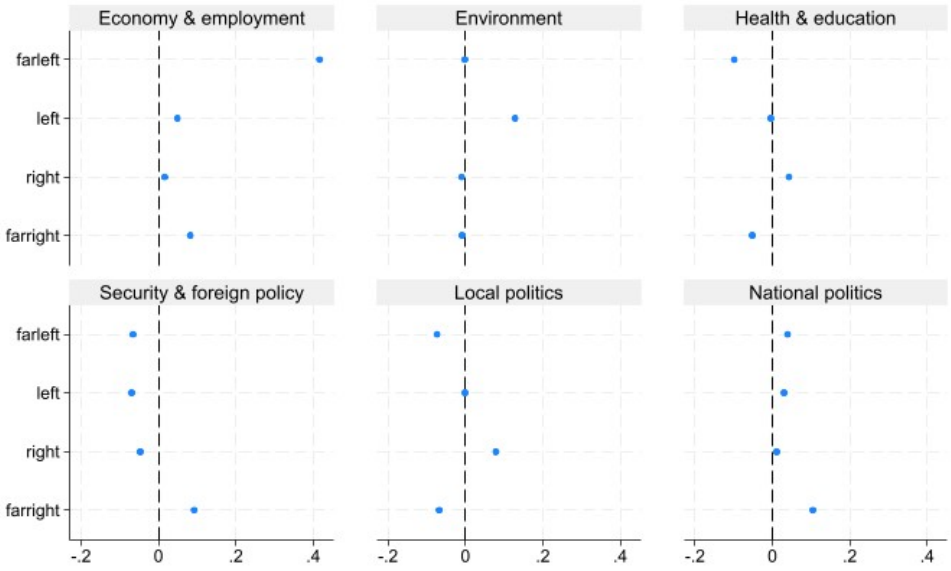
List of anchor words

Economy: austerity (*austérité*), budgetary (*budgétaire*), deficit (*déficit*), tax exemption (*défiscalisation*), economy (*économie*), economic (*économique*), entrepreneur, entrepreneurship (*entrepreneuriat*), firm (*entreprise*), exportation, finance, financing (*financement*), fund (*financer*), financial (*financier*, fiscal, tax (*fiscalité*), gatt, tax (*impôt*), industry (*industrie*), industrial (*industriel*), inflation, wealth tax (*isf*), monetary (*monetaire*), sme (*pme*), small medium industry (*pmi*), privatisation, companies register (*rcs*), reindustrialisation, tarif, rate (*taux*), tax, taxation, tax (*taxer*), vat (*tva*).

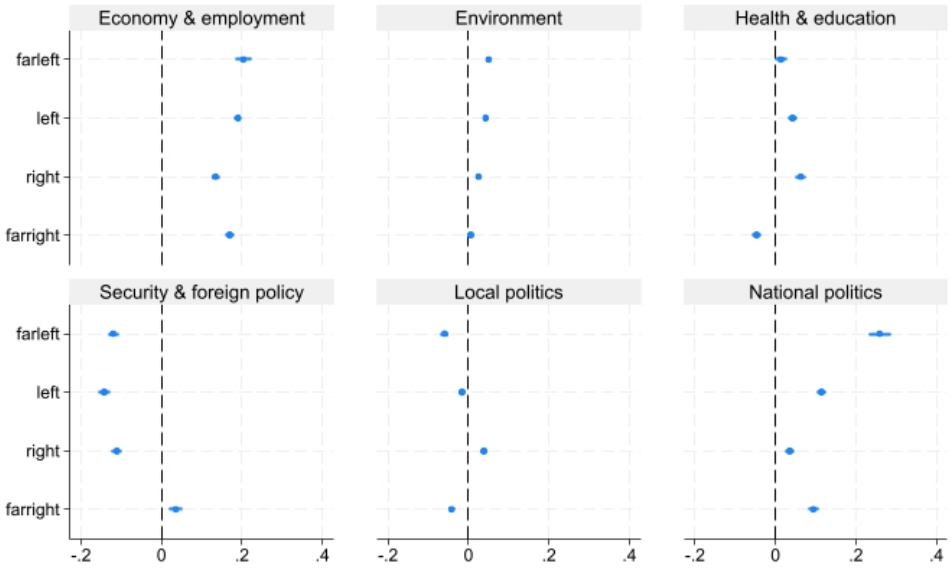
Employment & social security: disability pension (*aah*), unemployment (*chômage*), unemployed (*chômeur*), general social contribution (*csg*), hire (*employer*), employer (*employeur*), khomri, worker (*ouvrier*), boss (*patron*), employer (*patronal*), bosses (*pa-*

Figure C.4: Topics related to candidates' ideology

(a) 1st round



(b) 2nd round



Notes: For each topic, I show the standardized point estimate from a regression of the prevalence of that topic in a candidate manifesto in France considering their party classification, controlling for department and year fixed effects.

tronat), poor (*pauvre*), poverty (*pauvreté*), pension, precarious (*précaire*), precarity (*précarité*), retirement (*rétraite*), income support (*rmi*), income of active solidarity (*rsa*), social security scheme (*rsi*), wage (*salaire*), salary (*salariale*), employee (*salarié)*, minimum wage (*smic*), worker (*travailleur*), *uberisation*.

Environment: agrarian (*agricole*), farmer (*agriculteur*), agriculture (*agriculture*), agro, agribusiness (*agroalimentaire*), animal (*animal*), bio (*bio*), biodiversity (*biodiversité*), biological (*biologique*), fuel (*carburant*), carbide (*carbure*), climat, climatic (*climatique*), water (*eau*), ecology (*écologie*), ecological (*écologique*), environment (*écologiste*), energetic (*énergétique*), energy (*énergie*), environment (*environnement*), green (*environnemental*), wind (*éolien*), forest (*fôret*), nuclear (*nucléaire*), fishing (*pêche*), fisher (*pêcheur*), programme for the endorsement of forest certification (*pefc*), pesticide (*pesticide*), petrol (*petrole*), polluting (*polluant*), pollute (*polluer*), pollution (*pollution*), recycling (*recyclage*), recycle (*recycler*), vegetarian (*végétarien*), winegrower (*viticulteur*), viticulture (*viticulture*).

Health & Education: academic (*académique*), cancer, center for international exchange (*cei*), class (*classe*), college (*collège*), kindergarten (*créche*), doctor (*docteur*), school (*école*), educator (*éducateur*), educational (*éducatif*), education (*éducation*), educate (*éduquer*), establishment of accommodation for dependent old persons (*ehpad*), student (*élève*), childhood (*enfance*), child (*enfant*), confinement (*enfermement*), teacher (*enseignant*), teaching (*enseignement*), teach (*enseigner*), study (*étude*), student (*étudiant*), study (*étudier*), training (*formation*), hospital (*hôpital*), hospitable (*hospitalier*), college (*lycée*), sick (*malade*), disease (*maladie*), maternal (*maternel*), maternity (*maternité*), doctor (*médecin*), medecine (*médecine*), medical (*médicale*), medication (*médicament*), parental, patient, teacher (*professeur*), blood (*sang*), sanitary (*sanitaire*), health (*santé*), science, scientific (*scientifique*), academic (*scolaire*), care (*soin*), universitary (*universitaire*), university (*université*).

Security & foreign policy: algeria (*algérie*), germany (*allemagne*), weapon (*arme*), army (*armée*), armament (*armement*), asylum (*asile*), brigade, brussels (*bruxelle*), cee, clandestin, crime, cybercrime (*cybercriminalité*), delinquency (*délinquance*), offender (*délinquant*), offence (*délit*), disarmament (*désarmement*), diplomacy (*diplomacie*), drug (*drogue*), foreigner (*étranger*), europe, european (*européen*), border (*frontière*), policeman (*gendarme*), police station (*gendarmerie*), war (*guerre*), immigration, immigrant (*immigré*), insecurity (*insécurité*), judiciary (*judiciaire*), legal (*juridique*), jurist (*juriste*), justice, maastricht, magistrat, migratory (*migratoire*), military (*militaire*), nationality (*nationalité*), otan, sentence (*peine*), penal, police, pollice officer (*policier*), prison, security (*sécurité*), over-armament (*surarmement*), terrorism (*terrorisme*), terrorist (*terroriste*), treaty (*traité*), court (*tribunal*), ukraine.

Local politics: canton, cantonal, constituency (*circonscription*), municipal (*com-*

munal), municipality (*commune*), department (*département*), departmental (*départementale*), desert, desertification, intermunicipal (*intercommunal*), intermunicipality (*intercommunalité*), municipal, municipality (*municipalité*), region, regional, rural, rurality (*ruralité*), territory (*territoire*), territorial, village, city (*ville*).

National politics: assembly (*assemblée*), national assembly (*assemblée nationale*, campaign (*campagne*), candidature, centrist (*centriste*), coalition, cohabitation, communist (*communiste*), democrat (*démocrate*), democracy (*démocratie*), democratic (*démocatique*), democratisation, sunday (*dimanche*), dissolution, right (*droite*), voter (*électeur*), electoral, elected (*élu*), inhibit (*empêcher*), gaulle, gaulliste, legislatif, legislative, legislature, majority (*majoritaire*), majority (*majorité*), parlement, parliamentary (*parlementaire*), presidency (présidence), president (président), presidential (présidentiel, présidentielle), reelection, reelect (réelu), republican (républicain), senate (sénat), senator (sénateur), socialism (socialisme), socialist (*socialiste*).

List of top words per topic - Political platforms

Economy: fiscal, tax (*impôt*), firm (*entreprise*), financial (*financier*), sme (*pme*), inflation, economy (*économie*), funding (*financement*), vat (*tva*).

Employment & social security: retirement (*retraite*), wage (*salaire*), pension, minimum wage (*smic*), salary (*salarie*), worker (*travailleur*), social security scheme for self-employed workers (*rsi*), salary (*salarial*), poverty (*pauvreté*), beneficiary (*allocation*).

Environment: ecologic (*écologique*), ecology (*écologie*), energy (*énergie*), nuclear (*nucleaire*), water (*eau*), pollution, ecologist (*écologiste*), climatic (*climatique*), energetic (*énergetique*), animal.

Health & education: health (*santé*), medical, hospital (*hôpital*), care (*soin*), school (*école*), education, school (*scolaire*), class (*classe*), teacher (*enseignant*), student (*élève*).

Security, justice & foreign policy: immigration, clandestin, police, security (*sécurité*), police officer (*policier*), police (*gendarmerie*), border (*frontière*), policeman (*gendarme*), offender (*delinquant*), sentence (*peine*).

Local politics: territory (*territoire*), rural, desert, municipality (*commune*), rurality (*ruralité*), territorial, proximity (*proximité*), local, departmental (*departementale*), accompany (*accompagner*).

National politics: assembly (*assemblée*), president, elected (*élu*), republican (*républicain*), presidential (*présidentiel*), candidacy (*candidature*), right (*droite*), parliamentary (*parliamentaire*), reelect (*reélire*), senator (*sénateur*).

Other 1: cover (*couvrir*), renovate (*renover*), payment (*versement*), prime, house (*maison*), age, protect (*protéger*), identical (*identique*), renewal (*renouvellement*), month (*mois*).

Other 2: law (*loi*), development (*developpement*), average (*moyen*), develop (*developper*), citizen (*citoyen*), young (*jeune*), put (*mettre*), allow (*permettre*), state (*état*), create (*créer*).

Other 3: no (*non*), other (*autre*), party (*parti*), want (*vouloir*), celerate (*céler*), need (*falloir*), actual (*actuel*), money (*argent*), profit, stop (*arrêter*).

C.1.4 Legislative debates

Seeded LDA

List of seeded words

Economy: trade (*commerce*), competition (*concurrence*), economy (*économie*), firm (*entreprise*), finance, fiscal, tax (*impôt*), industry (*industrie*), industrial (*industriel*), market (*marché*), taxation, taxe (*taxe*).

Finance: budget, budgetary (*budgétaire*), deficit, expenditure (*dépense*).

Employment & social security: unemployment (*chômage*), contribution (*cotisation*), employment (*emploi*), employer (*employeur*), pension, retirement (*retraite*), retirement (*réforme*), wage (*salaire*), salary (*salarie*), social security (*sécurité social*), work (*travail*), worker (*travailleur*).

Environment: farmer (*agriculteur*), agricultural (*agricole*), agriculture, dietary (*alimentaire*), water (*eau*), ecology (*écologie*), ecological (*écologique*), electricity (*électricité*), energetic (*énergétique*), energy (*énergie*), environment (*environnement*), environmental (*environnemental*), gas (*gaz*), nuclear (*nucleaire*), pollution, vehicle (*véhicule*).

Health: health insurance (*assurance maladie*), cancer, hospital (*hôpital*), hospitable (*hospitalier*), sick (*malade*), disease (*maladie*), medical, doctor (*médecin*), medicine (*médecine*), drug (*médicament*), patient, sanitary (*sanitaire*), health (*santé*), treatment (*soin*).

Education: class (*classe*), school (*école*), national education (*éducation national*), student (*élève*), child (*enfant*), teacher (*enseignant*), education (*enseignement*), student (*étudiant*), formation, young (*jeune*), parent, teacher (*professeur*), research (*recherche*), academic (*scolaire*), university (*université*).

Foreign policy: germany (*allemagne*), german (*allemand*), europe, european (*européen*), international, world (*monde*), global (*mondial*), treaty (*traité*), european union (*union européen*), united states (*stats unis*).

Security & justice: insecurity (*insécurité*), minister of justice (*garde sceaux*), judicial (*judiciaire*), justice, penal, police, police officer (*policier*), security (*sécurité*), violence.

Local politics: territorial planning (*aménagement territorial*), collectivity (*collectivité*), territorial collectivity (*collectivité territoriale*), department (*département*), departmental (*départementale*), inhabitant (*habitant*), local, municipal, region, regional,

rural, public service (*service public*), territory (*territoire*), territorial, city (*ville*).

List of top words per topic

Economy: firm (*entreprise*), fiscal, tax (*impôt*), economy (*économie*), finance, market (*marché*), euro, tax (*taxe*), measure (*mesure*), competition (*concurrence*).

Finance: budget, expenditures (*dépense*), euro, budgetary (*budgétaire*), million, public, credit, deficit, billion (*milliard*), year (*année*).

Employment & social security: work (*travail*), employment (*emploi*), social, retirement (*retraite*), wage (*salaire*), social security (*sécurité social*), reform (*réforme*), employee (*salariée*).

Environment: energy (*énergie*), agricultural (*agricole*), environment (*environnement*), water (*eau*), farmer (*agriculteur*), energetic (*energétique*), ecologic (*écologique*), nuclear (*nucleaire*), gas (*gaz*), transport.

Health: health (*santé*), treatment (*soin*), doctor (*médecin*), sanitary (*sanitaire*), medical, disease (*maladie*), hospital (*hôpital*), person (*personne*), social, patient.

Education: child (*enfant*), young (*jeune*), formation, research (*recherche*), school (*école*), student (*élève*), woman (*femme*), school (*scolaire*), parent, teaching (*enseignement*).

Foreign policy: european (*européen*), french (*français*), france, world (*monde*), country (*pays*), politics (*politique*), europe, international, european union (*union européen*), today (*aujourd*).

Security & justice: security (*sécurité*), right (*droit*), justice, sentence (*peine*), judiciary (*judiciaire*), violence, police, person (*personne*), against (*contre*), procedure.

Local politics: territory (*territoire*), collectivity (*collectivité*), local, region, territorial, department (*département*), city (*ville*), public service (*service public*), regional, housing (*logement*).

Other: propose (*proposer*), want (*vouloir*), act (*agir*), know (*savoir*), case (*cas*), subject (*sujet*), go (*aller*), no (*non*), commission, government (*gouvernement*).

CorEx model - List of top words per topic

Economy: finance, tax (*impôt*), fiscal, budget, expenditures (*dépense*), budgetary (*budgétaire*), euro, billion (*milliard*), economy (*économie*), firm (*entreprise*).

Employment & social security: employment (*emploi*), salary (*salarie*), work (*travail*), contribution (*cotisation*), retirement (*retraite*), wage (*salaire*), social, unemployment (*chômage*), employer (*employeur*), employee (*salariée*).

Environment: energy (*énergie*), agricultural (*agricole*), environment (*environ-*

nement), energetic (*energétique*), ecologic (*écologique*), environmental (*environnemental*), farmer (*agriculteur*), agriculture, gas (*gaz*), electricity (*électricité*).

Health: health (*santé*), medical, doctor (*médecin*), treatment (*soin*), disease (*maladie*), hospital (*hôpital*), patient, hospitable (*hospitalier*), health insurance (*assurance maladie*), sanitary (*sanitaire*).

Education: child (*enfant*), young (*jeune*), parent, school (*école*), academic (*scolaire*), formation, national education (*éducation national*), teaching (*enseignement*), teacher (*enseignant*), student (*élève*).

Foreign policy: european (*européen*), european union (*union européen*), europe, international, france, union, country (*pays*), global (*mondial*), world (*monde*), french (*français*).

Security & justice: right (*droit*), case (*cas*), provision (*disposition*), judiciary (*judiciaire*), principle (*principe*), security (*sécurité*), object (*objet*), procedure, justice, sentence (*peine*).

Local politics: collectivity (*collectivité*), territorial, local, territorial collectivity (*collectivité territorial*), territory (*territoire*), region, department (*département*), inhabitan (*habitant*), city (*ville*), rural.

Other 1: year (*année*), mean (*moyen*), account (*compte*), public, politic (*politique*), last (*dernier*), measure (*mesure*), today (*aujourd*), government (*gouvernement*), term (*terme*).

Other 2: want (*vouloir*), no (*non*), see (*voir*), propose (*proposer*), know (*savoir*), less (*moins*), glow (*luire*), point, give (*donner*), go (*aller*).

Other 3: new (*nouveau*), act (*agir*), put (*mettre*), effect (*effet*), concerned (*concerner*), material (*matière*), necessary (*nécessaire*), cadre, objectif, important.

C.1.5 Written questions

List of seeded words

Economy: craft (*artisanat*), budget, budgetary (*budgétaire*), trade (*commerce*), expenditure (*dépense*), deficit, economy (*économie*), firm (*entreprise*), finance, fiscal, tax (*impôt*), industry (*industrie*), tax (*taxe*), taxation.

Employment & social security: contribution (*cotisation*), unemployment (*chômage*), employment (*emploi*), employee (*salariée*), employer (*employeur*), pension, reform (*réforme*), retirement (*retraite*), wage (*salaire*), social security (*sécurité social*), work (*travail*), worker (*travailleur*).

Environment: agricultural (*agricole*), agriculture, farmer (*agriculteur*), alimentary (*alimentaire*), water (*eau*), ecology (*écologie*), ecological (*écologique*), energetic (*énergetique*), energy (*énergie*), environment (*environnement*), environmental (*environnemental*), gas (*gaz*), nuclear (*nucléaire*), pollution, vehicle (*véhicule*).

Health: health insurance (*assurance maladie*), cancer, hospital (*hôpital*), hospitable (*hospitalier*), sick (*malade*), disease (*maladie*), medicine (*médicament*), medical, doctor (*médecin*), medicine (*médicine*), patient, health (*santé*), sanitary (*sanitaire*), treatment (*soin*).

Education: class (*classe*), formation, school (*école*), national education (*éducation national*), student (*éleve*), child (*enfant*), teacher (*enseignant*), education (*enseignement*), student (*étudiant*), young (*jeune*), parent, teacher (*professeur*), research (*recherche*), school (*scolaire*), university (*universitaire*).

Security, justice & foreign policy: allemagne (*germany*), german (*allemand*), armed (*armée*), lawyer (*avocat*), defense, delinquency (*délinquance*), united states (*états unis*), europe, european (*européen*), cop (*gendarme*), police station (*gendarmerie)*, insecurity (*insécurité*), international, judicial (*judiciaire*), justice, judge (*magistrat*), military (*militaire*), sentence ( ), prison (*pénitentiaire*), police, police officer (*policier*), prison, security (*sécurité*), treaty (*traité*), terrorism (*terrorisme*), terrorist (*terroriste*), court (*tribunal*), violence, european union (*union européen*), world (*monde, mondial*).

Local politics: land use planning (*aménagement territoire*), collectivity (*colléctivité*), territorial collectivity (*colléctivité territorial*), department (*département*), departmental (*départementale*), inhabitant (*habitant*), local, public service (*service public*), region, regional, territorial, territory (*territoire*), city (*ville*).

List of top words per topic

Economy: firm (*entreprise*), economy (*économie*), finance, industry (*industrie*), budget, fiscal, tax (*taxe*), tax (*impôt*), trade (*commerce*), euro.

Employment & social security: work (*travail*, employment (*emploi*), retirement (*retraite*), employee (*salariée*), social, reform (*réforme*), pension, situation, contribution (*cotisation*), social security (*sécurité social*).

Environment: agriculture, agricultural (*agricole*), energy (*énergie*), environment (*environnement*), development (*developpement*), water (*eau*), vehicle (*vehicule*), ecology (*écologie*), government (*gouvernement*), product (*produit*).

Health: health (*santé*), person (*personne*), disease (*maladie*), social, treatment (*soin*), medical, doctor (*médecin*), charge (*charger*), patient, sanitary (*sanitaire*).

Education: child (*enfant*), formation, teaching (*enseignement*), national education (*éducation national*), young (*jeune*), research (*recherce*), student (*élève*), national, school (*scolaire*), education.

Security, justice & foreign policy: european (*européen*), security (*sécurité*), justice, french (*français*), france, state (*état*), international, defense, right (*droit*), country (*pays*).

Local politics: territory (*territoire*), public, local, collectivity (*collectivité*), department (*département*), territorial, service, state (*état*), region, municipality (*commune*).

Other 1: housing (*logement*), transport, no (*ne*), allow (*permettre*), measure (*mesurer*, make (*faire*), take (*prendre*), effect (*effet*), equipment (*equipement*), put (*mettre*).

Other 2: law (*loi*), article, decree (*décret*), application, disposition, law (*code*), relative (*relatif*), allow (*prévoir*), right (*droit*), no (*ne*).

Other 2: well (*bien*), want (*vouloir*), kiendly (*bien vouloir*), want to shine (*vouloir luire*), indicate (*indiquer*), ask well (*demand bien*), shine indicate (*luire indiquer*), report (*rapport*), to specify (*preciser*), to know (*connaître*).

CorEx model - List of top words per topic

Economy: finance, economy (*économie*), industry (*industrie*), economy finance (*économie finance*), tax (*impôt*), firm (*entreprise*), trade (*commerce*), fiscal, craft (*artisanat*), finance industry (*finance industrie*).

Employment & social security: employment (*emploi*), retirement (*retraite*), work (*travail*), employee (*salariée*), pension, contribution (*cotisation*), wage (*salaire*), employer (*employeur*), public administration (*fonction public*), work employment (*travail emploi*).

Environment: agriculture, ecology (*écologie*), agricultural (*agricole*), energy (*énergie*), fishing (*pêche*), ecologic (*écologique*), sustainable development (*développement durable*), farmer (*agriculteur*), sustainable (*durable*), ecologic development (*écologie developpement*).

Health: health (*santé*), disease (*maladie*), treatment (*soin*), medical, patient, doctor (*médecin*), social health (*social santé*), health insurance (*assurance maladie*), social, social affair (*affaire social*).

Education: national education (*éducation national*), teaching (*enseignement*), education, academic (*scolaire*), research (*recherche*), teacher (*enseignant*), school (*école*), national, student (*élève*), higher education (*enseignement supérior*).

Security, justice & foreign policy: european (*européen*), justice, european union (*union européen*), military (*militaire*), defense, *garde sceaux*, *sceaux*, *sceaux justice*, international, garde.

Local politics: territory (*territoire*), collectivity (*collectivité*), territorial, local, territorial collectivité (*collectivité territorial*), territorial planning (*aménagement territorial*), inhabitant (*habitant*), planning (*aménagement*), interior (*intérieur*), municipality (*commune*).

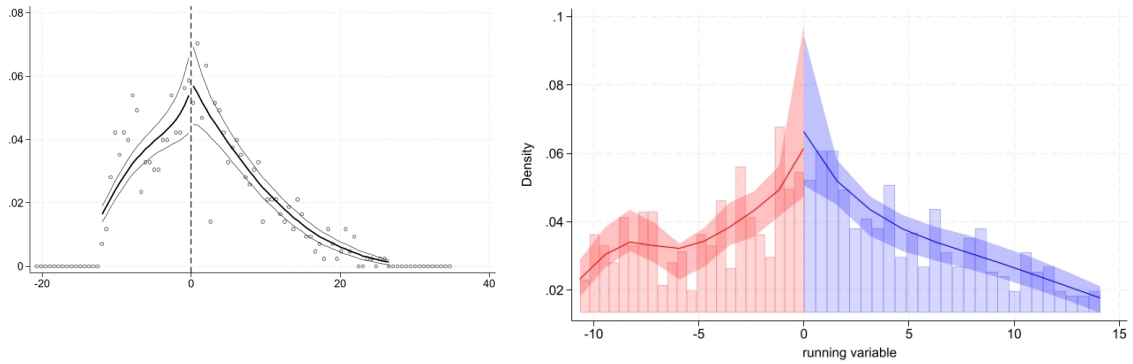
Other 1: put (*mettre*), government (*gouvernement*), permit (*permettre*), euro, should (*devoir*), measure (*mesurer*), million, very (*très*), today (*aujourd*), place.

Other 2: article, law (*loi*), code, article code, decree (*décret*), application, relatif, article law (*article loi*), disposition, foresee (*prévoir*).

C.2 Empirical strategy

Figure C.5: Manipulation testing: Most voted female - 2nd most voted male

(a) McCrary (2008) (b) Cattaneo et al. (2018)



Notes. Figures (a) and (b) represent the density test for races where only one candidate (or none) obtained the 12.5%; the margin is the difference between the most-voted woman and the second most-voted man. Figure (a) illustrates the McCrary density test; discontinuity estimate b: 0.045 (s.e. 0.167). Figure (b) illustrates the Cattaneo et al. (2018) manipulation test; p-value 0.344 (not reject the null hypothesis of no manipulation).

I conduct placebo tests to examine whether there is discontinuity at the threshold for each variable used to predict treatment. I first provide information about the construction of each variable. If the information is missing, it is because the name of the dependent variable is self-explanatory.

Votes: number of votes obtained divided by the number of enrolled voters.

Number candidates: number of candidates running in the electoral district.

Number female: number of female candidates running in the electoral district.

Victory margin: margin between the most voted and the second most voted candidate.

Wage gap: Le Barbanchon and Sauvagnat (2022) gender bias estimation; they computed the residualized local earnings gaps after controlling for age, industry, and occupation.

Number far-left, left, right, far-right: Number of candidates of the respective ideology.

Sum left/right: sum of the vote share in all left/right candidates.

Number words: total number of words in the manifesto.

Far-left, left, liberal, right, far-right: a dummy equal to 1 if the politician is classified as belonging to that ideology, 0 if not.

Run: dummy equal to 1 if the candidate was eligible for the 2nd round and decided to run, 0 if he was eligible but decided not to run.

Available: dummy equal to 1 if the manifesto for the 1st and 2nd round is available, 0 if not.

Run in the past: dummy equal to 1 if the candidate has run for legislative elections in the past, 0 if not.

Table C2: Balancing tests: 1st round electoral district characteristics

	(1) Votes	(2) Turnout	(3) Number candidates	(4) Number female	(5) Enrolled voters	(6) Victory margin	(7) Elected a woman in the past	(8) Wage gap
Woman	0.174	-2.615	0.011	0.007	-3,932	-0.641	0.001	0.003
	(0.598)	(5.706)	(0.994)	(0.568)	(3,535)	(1.614)	(0.010)	(0.005)
Observations	731	731	731	731	731	731	731	672
Eff. number of obs	261	278	191	240	347	259	283	300
Robust p-value	0.828	0.452	0.685	0.806	0.271	0.735	0.834	0.664
Polyn. order	1	1	1	1	1	1	1	1
Bandwidth	3.664	3.934	2.578	3.322	5.213	3.594	3.991	4.894
Mean, left of threshold	8.963	23.033	11.702	4.105	79971	7.510	0.226	0.069

	(9) Number far-left	(10) Number left	(11) Number right	(12) Number far-right	(13) Sum left	(14) Sum right
Woman	0.656	-0.383	0.141	-0.121	-0.244	-2.984
	(0.346)	(0.360)	(0.327)	(0.198)	(1.705)	(3.423)
Observations	731	731	731	731	731	731
Eff. number of obs	150	310	212	308	261	186
Robust p-value	0.027	0.259	0.498	0.373	0.817	0.236
Polyn. order	1	1	1	1	1	1
Bandwidth	1.933	4.415	2.907	4.378	3.670	2.439
Mean, left of threshold	1.571	3.368	1.753	2.181	18.186	21.784

Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table C3: Balancing tests - differences in the ideology of female and male candidates

	(1) Far-left	(2) Left	(3) Liberal	(4) Right	(5) Far-right
Woman	0.057	0.095	-0.034	-0.129	0.049
	(0.067)	(0.106)	(0.096)	(0.088)	(0.094)
Observations	731	731	731	731	731
Eff. number of obs	321	334	318	232	277
Robust p-value	0.529	0.590	0.680	0.347	0.714
Polyn. order	1	1	1	1	1
Bandwidth	4.617	4.947	4.575	3.153	3.927
Mean, left of threshold	0.076	0.320	0.210	0.162	0.156

In columns (1)-(5), the outcome variable is a dummy equal to 1 if the candidate belongs to the referred ideology, 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table C4: Balancing tests - differences in the characteristics of female and male candidates

	(1) Run	(2) Available	(3) Number words	(4) Incumbent	(5) Run in the past
Woman	-0.002	-0.026	9.575	0.003	-0.058
	(0.025)	(0.098)	(51.697)	(0.101)	(0.099)
Observations	1148	1148	731	731	731
Eff. number of obs	500	445	347	262	347
Robust p-value	0.864	0.866	0.958	0.970	0.629
Polyn. order	1	1	1	1	1
Bandwidth	4.132	3.587	5.193	3.683	5.193
Mean, left of threshold	0.981	0.577	581.407	0.170	0.268

In column 1, the outcome is a dummy equal to 1 if the candidate decides to go to the second round. In column 2, the outcome is a dummy equal to 1 if the manifesto is available in both election rounds. In column 3, the outcome is the number of words of the manifesto in 1st round. In column 4, the dependent variable is a dummy variable, indicating whether the candidate is an incumbent. In column 5, the outcome is a dummy variable equal to 1 if the candidate ran previously, and 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table C5: Balancing tests - differences in the occupation of female and male candidates

	(1) Labor force participation	(2) Public administration	(3) Education & health	(4) Justice & defense	(5) Management
Woman	0.107	0.082	-0.148	0.079	-0.073
	(0.115)	(0.108)	(0.113)	(0.057)	(0.097)
Observations	534	534	534	534	534
Eff. number of obs	183	256	200	208	244
Robust p-value	0.297	0.465	0.126	0.282	0.342
Polyn. order	1	1	1	1	1
Bandwidth	3.165	4.996	3.492	3.717	4.454
Mean, left of threshold	0.111	0.202	0.274	0.000	0.197

	(7) Agriculture	(8) Worker	(9) Commerce	(10) Other middle skill	(11) Other high skill
Woman	0.089	-0.002	0.095	-0.067	-0.068
	(0.047)	(0.044)	(0.058)	(0.095)	(0.066)
Observations	534	534	534	534	534
Eff. number of obs	115	230	202	178	203
Robust p-value	0.055	0.977	0.158	0.674	0.342
Polyn. order	1	1	1	1	1
Bandwidth	1.845	4.194	3.552	3.097	3.561
Mean, left of threshold	-0.055	0.028	-0.020	0.065	0.082

Columns (1)-(11) are dummy variables equal to 1 if the candidate has the referred occupation, 0 otherwise. Education & health refer to jobs such as a teacher or a doctor. Justice & defense refers, e.g., to a lawyer, a judge, or a policeman. Management mostly refers to jobs as a clerk or a CEO. Worker to low-skilled worker jobs. Commerce refers, e.g., to a salesperson. Other middle-skilled refers, e.g., to technicians or liberal professions. Other high-skilled refers, e.g., to engineers, architects, or journalists. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. Data is only available for the legislative years 2012, 2017, 2022, and 2024.

Table C6: Balancing tests - differences in the age of female and male candidates

	(1)	(2)	(3)	(4)	(5)	(6)
	<25	25-34	35-44	45-54	55-64	≥ 65
Woman	0.022	0.117	0.176	0.065	-0.072	-0.256
	(0.047)	(0.122)	(0.105)	(0.134)	(0.107)	(0.095)
Observations	534	534	534	534	534	534
Eff. number of obs	208	159	220	212	247	175
Robust p-value	0.421	0.212	0.120	0.812	0.458	0.018
Polyn. order	1	1	1	1	1	1
Bandwidth	3.707	2.665	4.057	3.858	4.643	3.039
Mean, left of threshold	0.033	0.097	0.062	0.303	0.253	0.227

Columns (1)-(6) are dummy variables equal to 1 if the candidate falls in a given age bracket, 0 otherwise. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. Data is only available for the legislative years 2012, 2017, 2022, and 2024.

Table C7: Balancing tests - differences in the ideology of female and male opponents

	(1)	(2)	(3)	(4)	(5)
	Far-left	Left	Liberal	Right	Far-right
Woman	0.029	-0.175	0.125	0.077	-0.054
	(0.030)	(0.104)	(0.136)	(0.136)	(0.103)
Observations	731	731	731	731	731
Eff. number of obs	237	262	213	197	258
Robust p-value	0.293	0.109	0.258	0.876	0.685
Polyn. order	1	1	1	1	1
Bandwidth	3.230	3.691	2.930	2.671	3.575
Mean, left of threshold	0.000	0.301	0.217	0.229	0.216

In columns (1)-(5), the outcome variable is a dummy equal to 1 if the opponent belongs to the referred ideology, 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the candidate is a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table C8: Balancing tests - differences in the salience of topics between female and male candidates in the 1st round

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.034	0.011	-0.007	-0.095	-0.078	0.029
	(0.056)	(0.016)	(0.047)	(0.065)	(0.021)	(0.025)
Observations	731	731	731	731	731	731
Eff. number of obs	202	254	194	188	293	244
Robust p-value	0.834	0.804	0.795	0.088	0.002	0.196
Polyn. order	1	1	1	1	1	1
Bandwidth	2.797	3.515	2.637	2.531	4.135	3.411
Mean, left of threshold	0.187	0.053	0.227	0.183	0.118	0.112

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table C9: General balance test

	(1)	(2)
Woman	0.074	0.102
	(0.052)	(0.064)
Observations	731	534
Eff. number of obs	299	189
Robust p-value	0.258	0.256
Polyn. order	1	1
Bandwidth	4.213	3.255
Mean, left of threshold	0.363	0.423

The outcome is the candidate's predicted treatment status based on observable characteristics listed in the text. The outcome is computed as follows: for column (1), first, the treatment variable T is regressed on all 27 baseline variables presented in Tables C2-C4 and C7, and then the treatment status of each candidate is predicted using the regression coefficients. For column (2), the treatment variable T is regressed on all 43 baseline variables presented in Tables C2-C7. The sample is restricted to candidates included in the RDD sample as described in the text. The independent variable is an indicator equal to 1 if the candidate is a female. I use a nonparametric estimation procedure and MSERD data-driven bandwidths. Standard errors are in parentheses and clustered at the district-candidate level. The mean gives the average outcome value for the male candidates at the threshold.

D Results

D.1 Topics

Table D10: Differences between female and male 2nd round political candidates (with control for number of far-left candidates)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.003	0.003	-0.032	0.077	0.018	-0.010
	(0.029)	(0.008)	(0.030)	(0.044)	(0.018)	(0.032)
Observations	731	731	731	731	731	731
Eff. number of obs	298	286	265	199	194	324
Robust p-value	0.864	0.573	0.246	0.074	0.629	0.828
Polyn. order	1	1	1	1	1	1
Bandwidth	4.208	4.027	3.754	2.699	2.648	4.816
Mean, left of threshold	-0.019	-0.005	0.043	-0.126	0.008	0.069

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The estimation includes a control for the number of far-left candidates. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D11: Differences between female and male 2nd round political candidates (with controls for occupation and age)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.006	0.006	-0.023	0.097	-0.003	-0.035
	(0.022)	(0.009)	(0.033)	(0.053)	(0.019)	(0.034)
Observations	534	534	534	534	534	534
Eff. number of obs	193	213	206	152	132	197
Robust p-value	0.713	0.355	0.507	0.043	0.666	0.284
Polyn. order	1	1	1	1	1	1
Bandwidth	3.388	3.898	3.637	2.386	2.154	3.458
Mean, left of threshold	-0.068	-0.025	0.052	-0.098	0.020	0.062

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The estimation includes the covariates listed in the Tables C5-C7. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D12: Differences between female and male 2nd round political candidates (half of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.030	0.012	-0.039	0.179	0.003	-0.030
	(0.048)	(0.011)	(0.047)	(0.077)	(0.026)	(0.048)
Observations	731	731	731	731	731	731
Eff. number of obs	161	161	139	109	102	186
Robust p-value	0.538	0.264	0.400	0.025	0.974	0.555
Polyn. order	1	1	1	1	1	1
Bandwidth	2.074	2.084	1.744	1.239	1.175	2.407
Mean, left of threshold	-0.030	-0.013	0.031	-0.145	0.014	0.103

Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under half of the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D13: Differences between female and male 2nd round political candidates (double of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.002	-0.003	-0.014	0.046	0.030	-0.018
	(0.019)	(0.006)	(0.022)	(0.031)	(0.015)	(0.023)
Observations	731	731	731	731	731	731
Eff. number of obs	505	507	433	334	322	571
Robust p-value	0.721	0.558	0.237	0.037	0.935	0.789
Polyn. order	1	1	1	1	1	1
Bandwidth	8.297	8.337	6.977	4.958	4.702	9.627
Mean, left of threshold	-0.009	-0.006	-0.001	-0.061	-0.019	0.082

Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under twice the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D14: Differences between female and male 2nd round political candidates (Calonico et al. (2020) bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.015	0.006	-0.035	0.131	0.001	-0.017
	(0.036)	(0.009)	(0.038)	(0.060)	(0.023)	(0.039)
Observations	731	731	731	731	731	731
Eff. number of obs	217	218	188	141	136	250
Robust p-value	0.664	0.466	0.317	0.030	0.897	0.706
Polyn. order	1	1	1	1	1	1
Bandwidth	2.990	3.004	2.514	1.787	1.694	3.469
Mean, left of threshold	-0.021	-0.012	0.023	-0.115	0.013	0.094

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the CER procedure, suggested by Calonico et al. (2020). The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D15: Differences between female and male 2nd round political candidates (with covariates)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	0.018	0.004	-0.034	0.064	0.016	-0.006
	(0.028)	(0.008)	(0.022)	(0.037)	(0.018)	(0.030)
Observations	731	731	731	731	731	731
Eff. number of obs	231	307	338	220	190	266
Robust p-value	0.389	0.492	0.152	0.081	0.738	0.926
Polyn. order	1	1	1	1	1	1
Bandwidth	3.109	4.365	5.037	3.016	2.562	3.770
Mean, left of threshold	0.091	-0.003	0.067	-0.024	0.015	-0.086

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The estimation includes the covariates listed in the Tables C2-C4 and C7. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table D16: Differences between female and male 2nd round political candidates (CorEx model)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
			Panel A: Without covariates				
Woman	-0.029	0.028	0.217	-0.190	0.265	-0.018	-0.182
	(0.242)	(0.269)	(0.208)	(0.236)	(0.244)	(0.165)	(0.191)
Observations	731	731	731	731	731	731	731
Eff. number of obs	321	238	256	312	240	231	310
Robust p-value	0.913	0.724	0.243	0.364	0.272	0.689	0.457
Polyn. order	1	1	1	1	1	1	1
Bandwidth	4.672	3.270	3.551	4.427	3.320	3.124	4.415
Mean, left of threshold	-0.234	-0.054	-0.311	-0.189	-0.505	-0.126	0.063
			Panel B: With covariates				
Woman	0.024	-0.013	0.317	-0.093	0.560	0.113	-0.095
	(0.228)	(0.218)	(0.217)	(0.202)	(0.224)	(0.124)	(0.190)
Observations	731	731	731	731	731	731	731
Eff. number of obs	262	231	207	347	200	238	260
Robust p-value	0.859	0.834	0.125	0.659	0.010	0.537	0.721
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.708	3.141	2.871	5.230	2.729	3.244	3.637
Mean, left of threshold	1.855	1.125	0.066	0.182	-0.643	-0.004	0.449

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. Panel (a) does not include any covariate. Panel (b) includes the covariates listed in the Tables C2-C4 and C7. The dependent variables computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

D.2 Sentiment language

Table D17: Differences between female and male 2nd round political candidates on the sentiment language of the topics (CorEx)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
Woman	-0.260	-0.126	-0.256	0.206	-0.052	-0.272	0.224
	(0.208)	(0.235)	(0.236)	(0.291)	(0.277)	(0.231)	(0.221)
Observations	731	731	731	731	731	731	731
Eff. number of obs	300	318	282	204	213	277	213
Robust p-value	0.213	0.587	0.405	0.352	0.609	0.287	0.257
Polyn. order	1	1	1	1	1	1	1
Bandwidth	4.233	4.515	3.968	2.847	2.910	3.928	2.938
Mean, left of threshold	0.035	-0.010	0.122	-0.234	0.149	-0.173	-0.213

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

E Potential mechanisms

E.1 Gender differences and voters' gender bias

Table E18: Differences between female and male 2nd round political candidates, by district gender discrimination (CorEx)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
Panel A: Gender wage gap above median							
Woman	0.631	0.418	0.594	0.028	1.248	0.089	-1.042
	(0.355)	(0.324)	(0.345)	(0.289)	(0.309)	(0.172)	(0.277)
Observations	335	335	335	335	335	335	335
Eff. number of obs	75	61	80	128	68	69	91
Robust p-value	0.071	0.215	0.046	0.809	0.000	0.773	0.001
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.729	2.113	2.915	4.643	2.304	2.350	3.169
Mean, left of threshold	3.075	0.060	-0.039	-0.505	0.462	1.185	2.664
Panel B: Gender wage gap below median							
Woman	-0.601	-0.280	0.116	-0.223	0.732	0.361	0.430
	(0.269)	(0.243)	(0.247)	(0.240)	(0.267)	(0.190)	(0.246)
Observations	336	336	336	336	336	336	336
Eff. number of obs	115	142	136	155	88	119	102
Robust p-value	0.034	0.286	0.856	0.278	0.008	0.076	0.043
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.067	3.871	3.649	4.230	2.191	3.164	2.572
Mean, left of threshold	1.706	0.702	0.995	0.890	-0.497	1.122	-0.725
Panel C: Districts that never elected a woman							
Woman	0.160	-0.019	0.232	-0.196	0.624	0.011	-0.072
	(0.223)	(0.206)	(0.222)	(0.262)	(0.235)	(0.146)	(0.213)
Observations	532	532	532	532	532	532	532
Eff. number of obs	239	234	169	176	150	177	221
Robust p-value	0.564	0.905	0.242	0.412	0.008	0.810	0.733
Polyn. order	1	1	1	1	1	1	1
Bandwidth	4.615	4.419	3.168	3.313	2.811	3.335	4.155
Mean, left of threshold	2.083	1.272	-0.011	0.770	-0.134	0.090	0.385
Panel D: Districts that elected a woman in the past							
Woman	-0.151	-0.710	0.024	-0.155	0.408	-0.027	0.137
	(0.490)	(0.297)	(0.401)	(0.481)	(0.320)	(0.241)	(0.167)
Observations	199	199	199	199	199	199	199
Eff. number of obs	41	40	62	48	67	62	64
Robust p-value	0.865	0.039	0.812	0.597	0.237	0.766	0.095
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.095	2.049	3.079	2.447	3.817	3.058	3.224
Mean, left of threshold	3.788	5.767	-0.783	0.175	-3.153	1.223	2.424

In Panel A, the sample is restricted to districts with a gender wage gap above the median, while Panel B restricts the sample to districts with a gender wage gap below the median. Panel C restricts the sample to districts that never elected a woman, and Panel D restricts the sample to districts that elected a woman in the past. Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The regressions include the covariates listed in the Tables C2-C4 and C7. The dependent variables are computed using the CorEx model. The mean gives the average outcome value for male candidates at the threshold.

Table E19: Balancing tests for districts with gender wage gap above median

	Discontinuity	S.E.	Rob. *p*-v.	95% C.I.
Panel A. District characteristics				
% votes	0.34	(0.455)	0.373	[-0.55 ; 1.23]
Turnout	-0.88	(7.313)	0.877	[-15.2 ; 13.4]
Number candidates	0.34	(0.881)	0.542	[-1.39 ; 2.06]
Number female	1.31	(0.750)	0.043	[-0.16 ; 2.78]
Enrolled voters	-4853.8	(4598.266)	0.369	[-13866.3 ; 4158.6]
Victory margin	-1.76	(2.145)	0.405	[-5.96 ; 2.45]
Number far-left	0.24	(0.341)	0.319	[-0.43 ; 0.91]
Number left	-0.039	(0.362)	0.741	[-0.75 ; 0.67]
Number right	0.21	(0.416)	0.540	[-0.60 ; 1.03]
Number far-right	0.080	(0.276)	0.833	[-0.46 ; 0.62]
Sum left	0.092	(1.973)	0.848	[-3.78 ; 3.96]
Sum right	-7.05	(3.847)	0.045	[-14.6 ; 0.49]
Elected a woman in the past	-0.11	(0.121)	0.375	[-0.34 ; 0.13]
Panel B. Individual characteristics				
Number words	41.3	(75.534)	0.644	[-106.8 ; 189.3]
Run in the past	-0.016	(0.137)	0.934	[-0.28 ; 0.25]
Incumbent	0.020	(0.093)	0.884	[-0.16 ; 0.20]
Far-left	0.050	(0.047)	0.509	[-0.041 ; 0.14]
Left	0.27	(0.155)	0.116	[-0.031 ; 0.58]
Right	-0.24	(0.109)	0.059	[-0.45 ; -0.026]
Far-right	-0.0011	(0.151)	0.910	[-0.30 ; 0.29]
Panel C. Occupation				
Labor force participation	0.030	(0.081)	0.771	[-0.13 ; 0.19]
Public administration	0.073	(0.153)	0.742	[-0.23 ; 0.37]
Agriculture	0.042	(0.032)	0.132	[-0.021 ; 0.10]
Education	-0.072	(0.123)	0.524	[-0.31 ; 0.17]
Justice & defense	-0.036	(0.038)	0.416	[-0.11 ; 0.038]
Management	-0.034	(0.142)	0.667	[-0.31 ; 0.24]
Worker	0.0015	(0.081)	0.859	[-0.16 ; 0.16]
Commerce	0.083	(0.090)	0.430	[-0.093 ; 0.26]
Middle skilled	0.19	(0.153)	0.192	[-0.11 ; 0.49]
Panel D. Age				
25-34 years old	-0.27	(0.140)	0.090	[-0.55 ; 0.0016]
35-44 years old	0.39	(0.133)	0.004	[0.13 ; 0.65]
45-54 years old	0.11	(0.203)	0.756	[-0.29 ; 0.51]
55-64 years old	-0.082	(0.127)	0.668	[-0.33 ; 0.17]
65 years old	-0.16	(0.113)	0.292	[-0.38 ; 0.058]
Panel E. Opponent				
Opponent far-left	0.048	(0.055)	0.418	[-0.059 ; 0.16]
Opponent left	-0.12	(0.097)	0.244	[-0.31 ; 0.075]
Opponent right	-0.22	(0.178)	0.143	[-0.57 ; 0.13]
Opponent far-right	-0.18	(0.118)	0.185	[-0.41 ; 0.055]

Table E20: Balancing tests for districts with gender wage gap below median

	Discontinuity	S.E.	Rob. *p*-v.	95% C.I.
Panel A. Population characteristics				
% votes	-0.59	(0.733)	0.526	[-2.02 ; 0.85]
Turnout	-13.3	(8.825)	0.111	[-30.6 ; 3.96]
Number candidates	-0.28	(1.203)	0.969	[-2.64 ; 2.08]
Number female	-0.18	(0.560)	0.889	[-1.28 ; 0.92]
Enrolled voters	506.4	(5511.597)	0.881	[-10296.1 ; 11308.9]
Victory margin	1.12	(1.754)	0.481	[-2.31 ; 4.56]
Number far-left	0.49	(0.450)	0.204	[-0.39 ; 1.38]
Number left	-0.59	(0.487)	0.232	[-1.55 ; 0.36]
Number right	-0.34	(0.245)	0.193	[-0.82 ; 0.14]
Number far-right	-0.17	(0.220)	0.391	[-0.60 ; 0.26]
Sum left	-1.20	(2.144)	0.713	[-5.40 ; 3.00]
Sum right	-2.23	(2.797)	0.353	[-7.71 ; 3.25]
Elected a woman in the past	0.018	(0.156)	0.734	[-0.29 ; 0.32]
Panel B. Individual characteristics				
Number words	14.8	(78.272)	0.702	[-138.7 ; 168.2]
Run in the past	-0.39	(0.183)	0.037	[-0.75 ; -0.031]
Incumbent	-0.085	(0.145)	0.515	[-0.37 ; 0.20]
Far-left	0.042	(0.117)	0.699	[-0.19 ; 0.27]
Left	0.035	(0.158)	0.845	[-0.27 ; 0.34]
Right	-0.10	(0.092)	0.490	[-0.28 ; 0.078]
Far-right	0.12	(0.120)	0.329	[-0.11 ; 0.36]
Panel C. Occupation				
Labor force participation	0.086	(0.129)	0.437	[-0.17 ; 0.34]
Public administration	-0.083	(0.130)	0.616	[-0.34 ; 0.17]
Agriculture	0.099	(0.067)	0.113	[-0.032 ; 0.23]
Education	-0.041	(0.119)	0.585	[-0.27 ; 0.19]
Justice & defense	0.081	(0.065)	0.348	[-0.045 ; 0.21]
Management	-0.0036	(0.124)	0.901	[-0.25 ; 0.24]
Worker	0	(.)	0.317	[0 ; 0]
Commerce	0.093	(0.064)	0.140	[-0.032 ; 0.22]
Middle skilled	-0.084	(0.097)	0.343	[-0.27 ; 0.11]
Panel D. Age				
25-34 years old	0.32	(0.163)	0.046	[0.0037 ; 0.64]
35-44 years old	0.098	(0.134)	0.630	[-0.16 ; 0.36]
45-54 years old	0.011	(0.142)	0.999	[-0.27 ; 0.29]
55-64 years old	-0.049	(0.137)	0.773	[-0.32 ; 0.22]
65 years old	-0.22	(0.103)	0.046	[-0.42 ; -0.018]
Panel E. Opponent				
Opponent far-left	-0.043	(0.052)	0.555	[-0.15 ; 0.060]
Opponent left	-0.38	(0.160)	0.016	[-0.70 ; -0.068]
Opponent right	0.12	(0.114)	0.360	[-0.10 ; 0.34]
Opponent far-right	0.11	(0.119)	0.420	[-0.13 ; 0.34]

Table E21: Differences between female and male 2nd round political candidates, by district gender discrimination (with covariates)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: Gender wage gap above median						
Woman	0.070	0.012	-0.192	0.216	0.012	-0.079
	(0.018)	(0.004)	(0.016)	(0.031)	(0.007)	(0.025)
Observations	201	201	201	201	201	201
Eff. number of obs	58	58	58	53	50	50
Robust p-value	0.000	0.050	0.000	0.000	0.200	0.124
Polyn. order	1	1	1	1	1	1
Bandwidth	2.993	3.055	3.026	2.816	2.606	2.556
Mean, left of threshold	0.036	-0.114	0.116	-0.064	0.050	0.302
Panel B: Gender wage gap below median						
Woman	0.093	-0.017	-0.009	-0.027	0.013	0.065
	(0.022)	(0.010)	(0.029)	(0.040)	(0.020)	(0.030)
Observations	314	314	314	314	314	314
Eff. number of obs	73	129	109	106	97	112
Robust p-value	0.000	0.079	0.859	0.656	0.688	0.023
Polyn. order	1	1	1	1	1	1
Bandwidth	1.941	3.697	3.052	2.879	2.468	3.179
Mean, left of threshold	-0.360	0.127	0.057	-0.150	-0.004	-0.057
Panel C: Districts that never elected a woman						
Woman	0.049	0.006	-0.017	0.067	-0.019	-0.035
	(0.024)	(0.008)	(0.025)	(0.034)	(0.014)	(0.027)
Observations	356	356	356	356	356	356
Eff. number of obs	113	142	118	143	102	160
Robust p-value	0.061	0.379	0.636	0.076	0.062	0.393
Polyn. order	1	1	1	1	1	1
Bandwidth	2.658	3.506	2.898	3.536	2.277	4.041
Mean, left of threshold	-0.038	0.006	0.190	-0.165	0.123	0.054

In Panel A, the sample is restricted to districts with a gender wage gap above the median, while Panel B restricts the sample to districts with a gender wage gap below the median. Panel C restricts the sample to districts that never elected a woman. Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The estimations include the controls listed in Table E19. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E22: Differences between female and male in the 1st round political platforms

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
	Panel A: Gender wage gap above median					
Woman	-0.062	0.012	0.101	-0.097	-0.044	0.076
	(0.098)	(0.019)	(0.057)	(0.078)	(0.034)	(0.042)
Observations	362	362	362	362	362	362
Eff. number of obs	74	124	67	100	94	88
Robust p-value	0.329	0.885	0.020	0.188	0.487	0.060
Polyn. order	1	1	1	1	1	1
Bandwidth	2.281	4.010	2.100	3.157	3.052	2.901
Mean, left of threshold	0.239	0.044	0.092	0.181	0.103	0.075
	Panel B: Gender wage gap below median					
Woman	0.106	0.019	-0.048	0.003	-0.105	0.006
	(0.061)	(0.021)	(0.061)	(0.081)	(0.027)	(0.030)
Observations	363	363	363	363	363	363
Eff. number of obs	147	180	143	141	172	147
Robust p-value	0.131	0.557	0.668	0.737	0.000	0.725
Polyn. order	1	1	1	1	1	1
Bandwidth	3.579	4.483	3.472	3.457	4.256	3.569
Mean, left of threshold	0.135	0.057	0.290	0.151	0.131	0.131

In Panel A, the sample is restricted to districts with a gender wage gap above the median, while Panel B restricts the sample to districts with a gender wage gap below the median. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

E.2 Gender differences and ideology

Table E23: Differences between female and male 2nd round political candidates, by ideology (CorEx)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
			Panel A: Left-wing candidates				
Woman	-0.336	-0.260	0.960	0.057	0.335	0.685	-0.252
	(0.307)	(0.246)	(0.346)	(0.296)	(0.224)	(0.231)	(0.293)
Observations	245	245	245	245	245	245	245
Eff. number of obs	98	117	98	93	100	85	90
Robust p-value	0.367	0.400	0.005	0.999	0.156	0.005	0.518
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.610	4.484	3.688	3.370	3.898	2.925	3.158
Mean, left of threshold	2.259	1.583	0.100	0.768	-0.429	0.909	-0.177
			Panel B: Right-wing candidates				
Woman	0.916	0.198	-0.280	0.034	0.598	-0.298	-0.066
	(0.368)	(0.298)	(0.200)	(0.274)	(0.275)	(0.175)	(0.238)
Observations	473	473	473	473	473	473	473
Eff. number of obs	105	127	167	156	122	97	157
Robust p-value	0.011	0.443	0.204	0.986	0.028	0.133	0.758
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.539	3.071	3.969	3.751	3.005	2.266	3.798
Mean, left of threshold	0.111	0.683	0.259	-1.001	-1.243	-0.529	-0.118

In Panel A, the sample is restricted to far-left and left-wing candidates. In Panel B, the sample is restricted to liberal, right-wing, and far-right candidates. Standard errors are in parentheses and clustered at the district level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is through the CorEx model. The mean gives the average outcome value for male candidates at the threshold.

E.3 Are candidates just responding to their opponents?

Table E24: Gender differences in convergence to the opponent (CorEx)

	(1) Opponent name	(2) Similar to opponent 1st round	(3) Similar to opponent 2nd round
Woman	0.025	-0.015	-0.013
	(0.100)	(0.065)	(0.101)
Observations	731	650	645
Eff. number of obs	199	232	211
Robust p-value	0.723	0.953	0.845
Polyn. order	1	1	1
Bandwidth	2.685	3.487	3.118
Mean, left of threshold	-0.255	0.406	0.293

Column (1) is a dummy variable equal to one if the candidate cites at least once her opponent's name, 0 otherwise. Column (2) is the cosine similarity between the candidate's platform in the second round and the opponent's platform in the first round. Column (3) is the cosine similarity between the candidate's platform in the second round and the opponent's platform in the second round. Standard errors are in parentheses and clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

Table E25: Differences in policy topics of the opponents of female and male candidates

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman	-0.023	-0.014	-0.012	0.042	-0.033	-0.021
	(0.033)	(0.010)	(0.028)	(0.035)	(0.025)	(0.024)
Observations	873	873	873	873	873	873
Eff. number of obs	323	288	426	422	275	339
Robust p-value	0.399	0.196	0.812	0.273	0.147	0.321
Polyn. order	1	1	1	1	1	1
Bandwidth	3.231	2.883	4.460	4.438	2.680	3.457
Mean, left of threshold	0.137	0.035	0.213	0.085	0.099	0.114

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

E.4 Gender differences and electoral outcomes

Table E26: Gender differences in electoral outcomes depending on topic salience (topics computed with CorEx)

	(1) All	(2) Economy	(3) Employment & social security	(4) Environment	(5) Health & education	(6) Security & foreign policy	(7) Local politics	(8) National politics
Panel A: Women give salience on the topic above the median								
Woman	-1.019	-1.400	-1.805	-1.185	-1.818	-0.551	-1.205	-1.157
	(1.268)	(1.416)	(1.360)	(1.370)	(1.410)	(1.341)	(1.348)	(1.444)
Observations	731	566	645	599	638	577	583	614
Eff. number of obs	298	237	249	260	223	262	259	256
Robust p-value	0.471	0.312	0.285	0.407	0.231	0.671	0.335	0.410
Polyn. order	1	1	1	1	1	1	1	1
Bandwidth	4.212	4.067	3.985	4.353	3.662	4.406	4.295	4.198
Mean, left of threshold	46.668	48.688	48.988	48.771	48.503	47.493	49.078	47.637
Panel B: Women give salience on the topic below the median								
Woman		0.018	1.590	-0.197	1.069	-2.406	1.589	0.023
		(1.576)	(1.641)	(1.446)	(1.633)	(1.484)	(1.543)	(1.229)
Observations		503	424	470	431	492	486	455
Eff. number of obs		171	125	143	159	163	144	142
Robust p-value		0.722	0.285	0.914	0.399	0.297	0.240	0.746
Polyn. order		1	1	1	1	1	1	1
Bandwidth		3.521	2.749	3.012	3.362	3.671	3.091	2.997
Mean, left of threshold		41.386	39.792	38.426	39.279	43.753	38.911	38.523

In Panel A, the sample is restricted to all males and women who assign salience to the topic above the median (relative to all females). In Panel B, the sample is restricted to all males and women who assign less salience to the referred topic than the median (among all females). For Panels A and B, the dependent variable is the number of votes per enrolled voter. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The mean gives the average outcome value for male candidates at the threshold.

E.5 Are women behaving strategically during elections or also signaling their type as MPs?

Table E27: Differences between elected female and male politicians during political campaigns and after being elected

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) Questions/ Debates
			Panel A: Political platforms			
Woman	-0.011	-0.017	-0.085	0.164	0.006	
	(0.021)	(0.011)	(0.042)	(0.086)	(0.038)	
Observations	265	265	265	265	265	
Eff. number of obs	132	152	101	87	97	
Robust p-value	0.574	0.037	0.004	0.019	0.233	
Polyn. order	1	1	1	1	1	
Bandwidth	7.855	8.869	5.723	4.593	5.483	
Mean, left of threshold	-0.012	0.005	0.048	-0.115	-0.027	
			Panel B: Written questions			
Woman	-0.067	-0.076	0.122	0.097	-0.082	-22.684
	(0.050)	(0.061)	(0.097)	(0.038)	(0.048)	(11.005)
Observations	306	306	306	306	306	306
Eff. number of obs	131	128	151	178	114	129
Robust p-value	0.512	0.979	0.490	0.619	0.014	0.585
Polyn. order	1	1	1	1	1	1
Bandwidth	6.611	6.394	7.572	8.990	5.531	6.473
Mean, left of threshold	0.230	0.252	0.320	0.074	0.140	41.173
			Panel C: Legislative debates			
Woman	0.005	0.023	0.008	0.016	-0.012	-21.028
	(0.054)	(0.077)	(0.077)	(0.081)	(0.034)	(29.669)
Observations	306	306	306	306	306	306
Eff. number of obs	143	109	160	134	156	152
Robust p-value	0.438	0.141	0.306	0.820	0.316	0.869
Polyn. order	1	1	1	1	1	1
Bandwidth	7.322	5.201	8.031	6.798	7.741	7.585
Mean, left of threshold	0.181	0.177	0.231	0.272	0.114	90.315

Panel A restricts the analysis to elected politicians and focuses on the topics covered during the political campaign. Panel B restricts the analysis to elected politicians and focuses on the written questions sent to the members of the Government after being elected. Panel C restricts the analysis to elected politicians and focuses on the topics covered during the legislative debates in the French National Assembly. Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under double of the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E28: Balancing tests: 1st round characteristics (elected candidates)

	Discontinuity	S.E.	Rob. p-v.	95% C.I.
Panel A. District characteristics				
% votes	-1.02	(1.265)	0.389	[-3.50 ; 1.46]
Turnout	7.81	(11.109)	0.705	[-14.0 ; 29.6]
Number candidates	-1.68	(1.391)	0.440	[-4.40 ; 1.05]
Number female	-2.32	(0.763)	0.008	[-3.82 ; -0.83]
Enrolled voters	-1599.9	(8111.438)	0.800	[-17498.1 ; 14298.2]
Victory margin	-0.11	(0.938)	0.735	[-1.94 ; 1.73]
Number far-left	-0.53	(0.493)	0.548	[-1.49 ; 0.44]
Number left	0.65	(0.915)	0.498	[-1.15 ; 2.44]
Number right	-0.58	(0.449)	0.224	[-1.46 ; 0.30]
Number far-right	-0.66	(0.379)	0.103	[-1.40 ; 0.081]
Sum left	2.67	(2.952)	0.366	[-3.11 ; 8.46]
Sum right	-1.54	(3.525)	0.491	[-8.44 ; 5.37]
Elected a woman in the past	-0.16	(0.181)	0.388	[-0.52 ; 0.19]
Panel B. Individual characteristics				
Number words	232.4	(120.598)	0.037	[-4.00 ; 468.7]
Run in the past	0.16	(0.268)	0.727	[-0.37 ; 0.68]
Incumbent	0.14	(0.260)	0.667	[-0.36 ; 0.65]
Far-left	-0.095	(0.083)	0.217	[-0.26 ; 0.067]
Left	0.39	(0.254)	0.106	[-0.10 ; 0.89]
Right	-0.11	(0.235)	0.755	[-0.57 ; 0.35]
Far-right	-0.090	(0.079)	0.216	[-0.24 ; 0.065]
Panel C. Occupation				
Labor force participation	0.16	(0.216)	0.410	[-0.27 ; 0.58]
Public administration	0.093	(0.196)	0.697	[-0.29 ; 0.48]
Agriculture	0.23	(0.192)	0.188	[-0.14 ; 0.61]
Education	-0.24	(0.163)	0.160	[-0.56 ; 0.079]
Justice & defense	0	(.)	0.618	[0 ; 0]
Management	-0.24	(0.167)	0.243	[-0.57 ; 0.087]
Worker	0.0045	(0.006)	0.877	[-0.0072 ; 0.016]
Commerce	0.23	(0.183)	0.201	[-0.13 ; 0.59]
Middle skilled	-0.54	(0.250)	0.018	[-1.03 ; -0.054]
Panel D. Age				
25-34 years old	0.13	(0.249)	0.550	[-0.36 ; 0.62]
35-44 years old	0.10	(0.165)	0.571	[-0.22 ; 0.42]
45-54 years old	-0.12	(0.329)	0.693	[-0.77 ; 0.52]
55-64 years old	0.031	(0.237)	0.989	[-0.43 ; 0.50]
65 years old	-0.093	(0.073)	0.498	[-0.24 ; 0.049]
Panel E. Opponent				
Opponent far-left	0	(.)	0.694	[0 ; 0]
Opponent left	-0.40	(0.193)	0.028	[-0.78 ; -0.021]
Opponent right	0.39	(0.211)	0.101	[-0.022 ; 0.80]
Opponent far-right	0.38	(0.260)	0.124	[-0.13 ; 0.89]

Table E29: Differences between elected female and male politicians during political campaigns and after being elected (with covariates)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) Questions/ Debates
Panel A: Political platforms						
Woman	-0.017	-0.024	-0.156	0.302	-0.016	
	(0.023)	(0.014)	(0.056)	(0.135)	(0.054)	
Observations	265	265	265	265	265	
Eff. number of obs	83	94	47	44	45	
Robust p-value	0.477	0.076	0.006	0.021	0.544	
Polyn. order	1	1	1	1	1	
Bandwidth	4.455	5.205	2.817	2.404	2.608	
Mean, left of threshold	-0.010	0.014	0.068	-0.205	-0.043	
Panel B: Written questions						
Woman	-0.050	-0.106	0.099	0.120	-0.098	-15.970
	(0.073)	(0.098)	(0.167)	(0.057)	(0.063)	(11.918)
Observations	306	306	306	306	306	306
Eff. number of obs	70	66	78	76	56	75
Robust p-value	0.574	0.431	0.598	0.111	0.104	0.340
Polyn. order	1	1	1	1	1	1
Bandwidth	3.285	3.144	3.803	3.697	2.674	3.496
Mean, left of threshold	0.200	0.329	0.408	-0.043	0.094	16.635
Panel C: Legislative debates						
Woman	0.052	0.011	-0.057	0.120	-0.033	-0.666
	(0.072)	(0.098)	(0.104)	(0.121)	(0.033)	(0.397)
Observations	306	306	306	306	306	306
Eff. number of obs	78	59	84	67	90	105
Robust p-value	0.398	0.683	0.428	0.451	0.560	0.322
Polyn. order	1	1	1	1	1	1
Bandwidth	3.807	2.886	4.067	3.202	4.266	4.886
Mean, left of threshold	0.154	0.241	0.350	0.065	0.133	0.221

Panel A restricts the analysis to elected politicians and focuses on the topics covered during the political campaign. Panel B restricts the analysis to elected politicians and focuses on the written questions sent to the members of the Government after being elected. Panel C restricts the analysis to elected politicians and focuses on the topics covered during the legislative debates in the French National Assembly. Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The regressions include controls for the unbalanced covariates: the number of female candidates in the first round and a dummy variable indicating whether the opponent is left-wing. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E30: Differences between elected female and male politicians during political campaigns and after being elected (CorEx model)

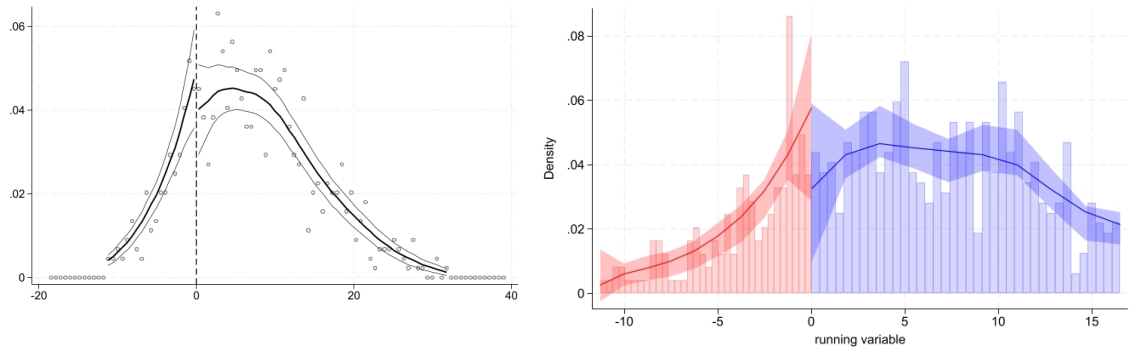
	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) Questions/ Debates
Panel A: Political platforms						
Woman	-0.496	-0.264	-0.268	0.844	-0.129	
	(0.521)	(0.456)	(0.499)	(0.428)	(0.098)	
Observations	265	265	265	265	265	
Eff. number of obs	74	64	64	45	35	
Robust p-value	0.289	0.627	0.604	0.056	0.131	
Polyn. order	1	1	1	1	1	
Bandwidth	4.120	3.660	3.632	2.610	2.060	
Mean, left of threshold	-0.300	-0.221	-0.066	-0.812	0.127	
Panel B: Written questions						
Woman	0.074	-0.150	0.096	-0.127	-0.229	-41.271
	(0.116)	(0.076)	(0.130)	(0.071)	(0.095)	(27.516)
Observations	306	306	306	306	306	306
Eff. number of obs	94	76	89	57	54	69
Robust p-value	0.534	0.098	0.577	0.044	0.014	0.305
Polyn. order	1	1	1	1	1	1
Bandwidth	4.385	3.599	4.171	2.816	2.547	3.234
Mean, left of threshold	0.291	0.317	0.438	0.205	0.442	64.796
Panel C: Legislative debates						
Woman	0.000	-0.035	0.067	-0.044	0.045	-16.956
	(0.120)	(0.065)	(0.118)	(0.136)	(0.049)	(36.986)
Observations	306	306	306	306	306	306
Eff. number of obs	70	111	76	77	59	78
Robust p-value	0.789	0.680	0.527	0.971	0.275	0.851
Polyn. order	1	1	1	1	1	1
Bandwidth	3.312	5.361	3.681	3.737	2.894	3.792
Mean, left of threshold	0.522	0.295	0.580	0.635	0.212	86.176

Panel A restricts the analysis to elected politicians and focuses on the topics covered during the political campaign. Panel B restricts the analysis to elected politicians and focuses on the written questions sent to the members of the Government after being elected. Panel C restricts the analysis to elected politicians and focuses on the topics covered during the legislative debates in the French National Assembly. Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is through CorEx. The mean gives the average outcome value for male candidates at the threshold.

E.6 Do women strategically adapt to the gender of their opponent?

Figure E.6: Manipulation testing: Most voted female - 2nd most voted male

(a) McCrary (2008) (b) Cattaneo et al. (2018)



Notes. Figures (a) and (b) represent the density test for races where only one candidate (or none) obtained the 12.5%; the margin is the difference between the most-voted man and the second most-voted woman. Figure (a) represents the McCrary density test; discontinuity estimate b: -0.239 (s.e. 0.204). Figure (b) represents the Cattaneo et al. (2018) manipulation test; p-value 0.271 (not reject the null hypothesis of no manipulation).

Table E31: Balancing tests: 1st round electoral district characteristics

	(1) Votes	(2) Turnout	(3) Number candidates	(4) Number female	(5) Enrolled voters	(6) Victory margin	(7) Elected a woman in the past	(8) Wage gap
Woman competing	0.634	-6.092	-0.060	0.075	5,286	1.036	-0.011	0.005
against a man	(1.472)	(8.094)	(0.944)	(0.580)	(4,819)	(1.560)	(0.156)	(0.007)
Observations	521	521	521	521	521	521	521	488
Eff. number of obs	202	161	142	190	183	181	181	197
Robust p-value	0.525	0.436	0.945	0.770	0.257	0.391	0.783	0.343
Polyn. order	1	1	1	1	1	1	1	1
Bandwidth	3.975	3.155	2.803	3.704	3.582	3.552	3.531	4.335
Mean, left of threshold	16.010	25.032	12.164	6.074	81139	7.392	0.432	0.070

	(9) Number far-left	(10) Number left	(11) Number right	(12) Number far-right	(13) Sum left	(14) Sum right
Woman competing	0.392	-0.778	0.319	-0.591	-1.885	-1.299
against a man	(0.309)	(0.386)	(0.407)	(0.322)	(1.940)	(2.276)
Observations	521	521	521	521	521	521
Eff. number of obs	177	124	122	117	179	197
Robust p-value	0.228	0.042	0.293	0.043	0.428	0.624
Polyn. order	1	1	1	1	1	1
Bandwidth	3.421	2.460	2.423	2.217	3.442	3.879
Mean, left of threshold	1.770	3.320	1.611	2.557	15.853	18.234

Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table E32: Balancing tests - differences in the ideology of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) Far-left	(2) Left	(3) Liberal	(4) Right	(5) Far-right
Woman competing	-0.012	0.004	0.045	-0.049	0.016
against a man	(0.012)	(0.117)	(0.166)	(0.110)	(0.131)
Observations	521	521	521	521	521
Eff. number of obs	124	160	183	160	194
Robust p-value	0.327	0.834	0.835	0.797	0.922
Polyn. order	1	1	1	1	1
Bandwidth	2.459	3.130	3.590	3.140	3.771
Mean, left of threshold	0.000	0.099	0.511	0.155	0.220

In columns (1)-(5), the outcome variable is a dummy equal to 1 if the candidate belongs to the referred ideology, 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table E33: Balancing tests - differences in the characteristics of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) Run	(2) Available	(3) Number words	(4) Incumbent	(5) Run in the past
Woman competing against a man	0.056 (0.081)	-0.089 (0.105)	103.895 (109.236)	-0.124 (0.144)	-0.208 (0.159)
Observations	852	738	525	525	525
Eff. number of obs	220	210	145	125	122
Robust p-value	0.474	0.426	0.333	0.312	0.162
Polyn. order	1	1	1	1	1
Bandwidth	3.511	3.496	2.851	2.467	2.387
Mean, left of threshold	0.891	0.882	579.698	0.249	0.369

In column 1, the outcome is a dummy variable equal to 1 if the candidate decides to go to the second round. In column 2, the outcome is a dummy equal to 1 if the manifesto is available in both election rounds. In column 3, the outcome is the number of words of the manifesto in 1st round. In column 4, the dependent variable is a dummy variable, indicating whether the candidate is an incumbent. In column 5, the outcome is a dummy variable equal to 1 if the candidate ran previously, and 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table E34: Balancing tests - differences in the occupation of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) Labor force participation	(2) Public administration	(3) Education & health	(4) Justice & defense	(5) Management
Woman competing against a man	-0.003 (0.094)	-0.094 (0.092)	0.137 (0.129)	0.059 (0.030)	0.166 (0.141)
Observations	477	477	477	477	477
Eff. number of obs	189	200	165	116	201
Robust p-value	0.805	0.339	0.291	0.032	0.322
Polyn. order	1	1	1	1	1
Bandwidth	3.909	4.220	3.337	2.395	4.239
Mean, left of threshold	0.072	0.149	0.094	-0.038	0.251

	(7) Agriculture	(8) Worker	(9) Commerce	(10) Other middle skill	(11) Other high skill
Woman competing against a man	-0.031 (0.030)	0.013 (0.017)	-0.019 (0.020)	-0.248 (0.155)	-0.061 (0.052)
Observations	477	477	477	477	477
Eff. number of obs	213	311	130	129	111
Robust p-value	0.468	0.524	0.464	0.106	0.153
Polyn. order	1	1	1	1	1
Bandwidth	4.626	7.914	2.685	2.632	2.235
Mean, left of threshold	0.030	0.000	-0.005	0.322	0.049

Columns (1)-(11) are dummy variables equal to 1 if the candidate has the occupation referred to, and 0 otherwise. Education & health refer to jobs such as a teacher or a doctor. Justice & defense refers, e.g., to a lawyer, a judge, or a policeman. Management mostly refers to jobs as a clerk or a CEO. Worker to low-skilled worker jobs. Commerce refers, e.g., to a salesperson. Other middle-skilled refers, e.g., to technicians or liberal professions. Other high-skilled refers, e.g., to engineers, architects, or journalists. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. Data is only available for the legislative years 2012, 2017, 2022, and 2024.

Table E35: Balancing tests - differences in the age of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) <25	(2) 25-34	(3) 35-44	(4) 45-54	(5) 55-64	(6) ≥ 65
Woman competing against a man	-0.076 (0.073)	-0.030 (0.125)	0.056 (0.165)	-0.158 (0.200)	0.122 (0.151)	0.084 (0.079)
Observations	477	477	477	477	477	477
Eff. number of obs	134	168	121	123	151	139
Robust p-value	0.299	0.768	0.569	0.347	0.348	0.281
Polyn. order	1	1	1	1	1	1
Bandwidth	2.782	3.401	2.527	2.539	3.110	2.895
Mean, left of threshold	0.076	0.177	0.196	0.368	0.210	0.000

Columns (1)-(6) are dummy variables equal to 1 if the candidate falls in a given age bracket, 0 otherwise. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. Data is only available for the legislative years 2012, 2017, 2022, and 2024.

Table E36: Balancing tests - differences in the ideology of the opponents of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) Far-left	(2) Left	(3) Liberal	(4) Right	(5) Far-right
Woman competing against a man	-0.016 (0.108)	-0.097 (0.142)	0.015 (0.145)	0.197 (0.128)	-0.083 (0.101)
Observations	521	521	521	521	521
Eff. number of obs	177	164	188	175	189
Robust p-value	0.997	0.529	0.859	0.167	0.416
Polyn. order	1	1	1	1	1
Bandwidth	3.394	3.226	3.659	3.360	3.686
Mean, left of threshold	0.151	0.301	0.265	0.047	0.183

In columns (1)-(5), the outcome variable is a dummy equal to 1 if the opponent belongs to the referred ideology, 0 otherwise. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure.

Table E37: Balancing tests - differences in the salience of topics of the most voted woman in the first round who competes against a man vs one that competes against a woman

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Woman competing against a man	-0.031 (0.051)	-0.013 (0.012)	-0.084 (0.055)	-0.007 (0.059)	-0.057 (0.032)	-0.049 (0.029)
Observations	525	525	525	525	525	525
Eff. number of obs	143	185	140	215	191	139
Robust p-value	0.434	0.240	0.130	0.829	0.166	0.107
Polyn. order	1	1	1	1	1	1
Bandwidth	2.795	3.578	2.746	4.349	3.651	2.690
Mean, left of threshold	0.111	0.031	0.250	0.143	0.117	0.097

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man, and 0 if she competes against another woman. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E38: General balance test

	(1)	(2)
Woman competing	-0.022	-0.022
against a man	(0.042)	(0.042)
Observations	525	525
Eff. number of obs	175	175
Robust p-value	0.481	0.481
Polyn. order	1	1
Bandwidth	3.330	3.330
Mean, left of threshold	0.692	0.692

The outcome is the candidate's predicted treatment status based on observable characteristics. The outcome is computed as follows: on column (1), first, regress the treatment variable T on all 27 baseline variables presented in Table E31-E33 and E36-E37 and then predict the treatment status of each candidate using the regression coefficients. On column (2), regress the treatment variable T on all 49 baseline variables presented in Table E31-E37. The sample is restricted to candidates included in the RDD sample as described in the text. The independent variable is an indicator equal to 1 if the most-voted woman in the 1st round competes against a man in the 2nd round, and 0 if she competes against another woman. I use a nonparametric estimation procedure and MSERD data-driven bandwidths. Standard errors are in parentheses and clustered at the district-candidate level. The mean gives the average outcome value for the women competing against a woman at the threshold.

Table E39: Balancing tests: 1st round electoral district characteristics (districts with wage gap above median)

	Discontinuity	S.E.	Rob. *p*-v.	95% C.I.
Panel A. District characteristics				
% votes	1.78	(2.050)	0.262	[-2.23 ; 5.80]
Turnout	-6.38	(9.755)	0.594	[-25.5 ; 12.7]
Number candidates	0.52	(1.180)	0.746	[-1.80 ; 2.83]
Number female	0.19	(0.569)	0.771	[-0.92 ; 1.31]
Enrolled voters	1694.1	(6183.600)	0.989	[-10425.5 ; 13813.8]
Victory margin	2.06	(2.249)	0.265	[-2.35 ; 6.47]
Number far-left	0.46	(0.421)	0.392	[-0.36 ; 1.28]
Number left	-0.81	(0.514)	0.088	[-1.81 ; 0.20]
Number right	0.51	(0.400)	0.227	[-0.27 ; 1.29]
Number far-right	-0.35	(0.322)	0.197	[-0.98 ; 0.28]
Sum left	-0.24	(2.112)	0.807	[-4.38 ; 3.90]
Sum right	-3.04	(3.095)	0.461	[-9.10 ; 3.03]
Elected a woman in the past	0.18	(0.199)	0.511	[-0.21 ; 0.57]
Panel B. Individual characteristics				
Number words	143.2	(136.311)	0.350	[-124.0 ; 410.3]
Run in the past	-0.037	(0.222)	0.789	[-0.47 ; 0.40]
Incumbent	-0.034	(0.202)	0.829	[-0.43 ; 0.36]
Far-left	0.010	(0.019)	0.604	[-0.028 ; 0.048]
Left	0.069	(0.075)	0.420	[-0.078 ; 0.21]
Right	-0.18	(0.153)	0.363	[-0.48 ; 0.12]
Far-right	0.0089	(0.185)	0.986	[-0.35 ; 0.37]
Panel C. Occupation				
Labor force participation	0.0017	(0.109)	0.932	[-0.21 ; 0.21]
Public administration	-0.27	(0.153)	0.121	[-0.57 ; 0.031]
Agriculture	-0.079	(0.065)	0.289	[-0.21 ; 0.048]
Education	0.19	(0.113)	0.109	[-0.032 ; 0.41]
Justice & defense	0.11	(0.063)	0.097	[-0.014 ; 0.23]
Management	0.32	(0.190)	0.162	[-0.048 ; 0.69]
Worker	-0.050	(0.052)	0.379	[-0.15 ; 0.052]
Commerce	0.056	(0.087)	0.369	[-0.11 ; 0.23]
Middle skilled	-0.47	(0.168)	0.003	[-0.80 ; -0.14]
Panel D. Age				
25-34 years old	0.41	(0.200)	0.037	[0.020 ; 0.80]
35-44 years old	0.21	(0.187)	0.284	[-0.15 ; 0.58]
45-54 years old	-0.34	(0.267)	0.154	[-0.86 ; 0.19]
55-64 years old	-0.19	(0.216)	0.349	[-0.62 ; 0.23]
65 years old	0.070	(0.106)	0.432	[-0.14 ; 0.28]
Panel E. Topics in 1st round				
Economy & employment	-0.0049	(0.049)	0.996	[-0.10 ; 0.092]
Environment	-0.018	(0.013)	0.216	[-0.044 ; 0.0068]
Health & education	-0.048	(0.071)	0.559	[-0.19 ; 0.091]
Security & foreign policy	0.0061	(0.087)	0.884	[-0.17 ; 0.18]
Local politics	-0.10	(0.040)	0.020	[-0.18 ; -0.022]
National politics	-0.024	(0.044)	0.668	[-0.11 ; 0.063]
Panel F. Opponent				
Opponent far-left	0.070	(0.103)	0.637	[-0.13 ; 0.27]
Opponent left	-0.34	(0.221)	0.173	[-0.78 ; 0.089]
Opponent right	0.49	(0.186)	0.010	[0.13 ; 0.85]
Opponent far-right	-0.018	(0.156)	0.768	[-0.32 ; 0.29]

Table E40: Balancing tests: 1st round electoral district characteristics (districts with wage gap below median)

	Discontinuity	S.E.	Rob. *p*-v.	95% C.I.
Panel A. District characteristics				
% votes	-1.11	(2.856)	0.681	[-6.71 ; 4.48]
Turnout	-13.8	(11.599)	0.197	[-36.6 ; 8.91]
Number candidates	0.24	(1.265)	0.806	[-2.24 ; 2.72]
Number female	-0.52	(0.851)	0.737	[-2.19 ; 1.14]
Enrolled voters	9076.9	(5886.102)	0.099	[-2459.7 ; 20613.4]
Victory margin	-0.98	(2.843)	0.730	[-6.55 ; 4.60]
Number far-left	0.66	(0.400)	0.101	[-0.12 ; 1.44]
Number left	0.17	(0.582)	0.742	[-0.97 ; 1.31]
Number right	-0.034	(0.432)	0.834	[-0.88 ; 0.81]
Number far-right	-0.88	(0.388)	0.019	[-1.64 ; -0.12]
Sum left	-2.78	(4.130)	0.607	[-10.9 ; 5.31]
Sum right	1.06	(2.287)	0.623	[-3.42 ; 5.54]
Elected a woman in the past	-0.18	(0.196)	0.342	[-0.56 ; 0.21]
Panel B. Individual characteristics				
Number words	59.3	(134.966)	0.577	[-205.3 ; 323.8]
Run in the past	-0.42	(0.210)	0.038	[-0.83 ; -0.0081]
Incumbent	-0.28	(0.189)	0.102	[-0.65 ; 0.088]
Far-left	0	(.)	0.815	[0 ; 0]
Left	-0.098	(0.184)	0.614	[-0.46 ; 0.26]
Right	0.046	(0.106)	0.666	[-0.16 ; 0.25]
Far-right	0.048	(0.197)	0.821	[-0.34 ; 0.43]
Panel C. Occupation				
Labor force participation	0.0053	(0.134)	0.755	[-0.26 ; 0.27]
Public administration	-0.015	(0.132)	0.804	[-0.27 ; 0.24]
Agriculture	0	(.)	0.484	[0 ; 0]
Education	0.033	(0.167)	0.832	[-0.29 ; 0.36]
Justice & defense	0.0022	(0.010)	0.197	[-0.017 ; 0.022]
Management	-0.027	(0.174)	0.808	[-0.37 ; 0.31]
Worker	0.025	(0.025)	0.319	[-0.024 ; 0.073]
Commerce	0.075	(0.047)	0.167	[-0.018 ; 0.17]
Middle skilled	-0.030	(0.164)	0.815	[-0.35 ; 0.29]
Panel D. Age				
25-34 years old	0.0016	(0.154)	0.881	[-0.30 ; 0.30]
35-44 years old	-0.23	(0.196)	0.343	[-0.62 ; 0.15]
45-54 years old	-0.055	(0.203)	0.660	[-0.45 ; 0.34]
55-64 years old	0.20	(0.153)	0.168	[-0.100 ; 0.50]
65 years old	0.084	(0.076)	0.402	[-0.065 ; 0.23]
Panel E. Topics in 1st round				
Economy & employment	-0.037	(0.090)	0.542	[-0.21 ; 0.14]
Environment	-0.016	(0.018)	0.288	[-0.052 ; 0.020]
Health & education	-0.12	(0.065)	0.067	[-0.24 ; 0.011]
Security & foreign policy	-0.012	(0.096)	0.810	[-0.20 ; 0.18]
Local politics	-0.0085	(0.033)	0.911	[-0.074 ; 0.057]
National politics	-0.044	(0.026)	0.063	[-0.094 ; 0.0071]
Panel F. Opponent				
Opponent far-left	0.097	(0.213)	0.490	[-0.32 ; 0.51]
Opponent left	0.025	(0.129)	0.969	[-0.23 ; 0.28]
Opponent right	0.016	(0.179)	0.935	[-0.33 ; 0.37]
Opponent far-right	-0.096	(0.120)	0.462	[-0.33 ; 0.14]

Table E41: Impact of a marginal presence of a man on female candidates in the 2nd round (half of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
			Panel A: All districts			
Woman competing	-0.007	0.002	-0.003	0.013	-0.022	-0.029
against a man	(0.008)	(0.008)	(0.035)	(0.036)	(0.021)	(0.041)
Observations	525	525	525	525	525	525
Eff. number of obs	57	121	99	118	91	99
Robust p-value	0.613	0.794	0.899	0.706	0.319	0.475
Polyn. order	1	1	1	1	1	1
Bandwidth	1.105	2.350	1.868	2.230	1.627	1.849
Mean, left of threshold	0.015	0.002	0.007	-0.030	0.008	0.039
			Panel B: Gender wage gap above median			
Woman competing	-0.021	0.004	-0.008	0.089	-0.017	0.025
against a man	(0.009)	(0.014)	(0.043)	(0.059)	(0.031)	(0.094)
Observations	247	247	247	247	247	247
Eff. number of obs	28	50	49	53	42	35
Robust p-value	0.347	0.728	0.800	0.121	0.570	0.785
Polyn. order	1	1	1	1	1	1
Bandwidth	1.134	1.956	1.908	2.161	1.779	1.512
Mean, left of threshold	0.023	0.001	0.032	-0.090	0.015	-0.002
			Panel C: Gender wage gap below median			
Woman competing	-0.015	0.007	0.026	-0.034	-0.028	-0.042
against a man	(0.011)	(0.010)	(0.047)	(0.019)	(0.022)	(0.049)
Observations	243	243	243	243	243	243
Eff. number of obs	59	53	54	45	46	40
Robust p-value	0.223	0.459	0.612	0.080	0.276	0.356
Polyn. order	1	1	1	1	1	1
Bandwidth	2.367	2.027	2.099	1.574	1.653	1.321
Mean, left of threshold	0.010	0.001	-0.022	0.013	0.011	0.049

In Panel B, the sample is restricted to districts where the gender wage gap is above the median, while Panel C restricts the sample to districts below the median. Standard errors clustered at the district-candidate level are in parenthesis. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most voted woman in the first round competes against a man in the second round, 0 if she competes against a woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under half of the MSERD procedure. The dependent variables computation is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.

Table E42: Impact of a marginal presence of a man on female candidates in the 2nd round (double of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: All districts						
Woman competing	-0.013	-0.001	0.007	0.022	0.009	-0.018
against a man	(0.010)	(0.005)	(0.023)	(0.018)	(0.015)	(0.023)
Observations	525	525	525	525	525	525
Eff. number of obs	217	379	321	369	295	319
Robust p-value	0.325	0.854	0.682	0.340	0.868	0.288
Polyn. order	1	1	1	1	1	1
Bandwidth	4.419	9.402	7.473	8.921	6.508	7.398
Mean, left of threshold	0.006	0.000	-0.013	-0.026	-0.015	0.063
Panel B: Gender wage gap above median						
Woman competing	-0.008	-0.002	-0.012	0.061	0.018	-0.034
against a man	(0.012)	(0.008)	(0.031)	(0.031)	(0.025)	(0.045)
Observations	244	244	244	244	244	244
Eff. number of obs	100	149	147	168	138	122
Robust p-value	0.231	0.676	0.412	0.124	0.885	0.929
Polyn. order	1	1	1	1	1	1
Bandwidth	4.448	7.773	7.571	8.613	6.906	5.962
Mean, left of threshold	0.003	0.000	-0.008	-0.063	-0.021	0.080
Panel C: Gender wage gap below median						
Woman competing	-0.019	-0.000	0.027	-0.015	-0.011	-0.005
against a man	(0.013)	(0.006)	(0.036)	(0.019)	(0.017)	(0.030)
Observations	247	247	247	247	247	247
Eff. number of obs	178	163	164	143	145	123
Robust p-value	0.307	0.598	0.684	0.203	0.637	0.167
Polyn. order	1	1	1	1	1	1
Bandwidth	9.491	8.393	8.441	6.361	6.613	5.271
Mean, left of threshold	0.009	0.000	-0.019	0.007	0.002	0.046

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors are in parentheses and clustered at the district-candidate level. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man in the second round, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under twice the MSERD procedure. The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.

Table E43: Impact of a marginal presence of a man on female candidates in the 2nd round (Calonico et al. (2020) bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: All districts						
Woman competing	0.004	-0.001	0.007	0.022	-0.001	-0.035
against a man	(0.010)	(0.007)	(0.030)	(0.028)	(0.021)	(0.034)
Observations	525	525	525	525	525	525
Eff. number of obs	89	181	140	169	122	139
Robust p-value	0.501	0.875	0.914	0.457	0.875	0.317
Polyn. order	1	1	1	1	1	1
Bandwidth	1.621	3.448	2.741	3.272	2.387	2.713
Mean, left of threshold	0.007	0.003	-0.001	-0.037	-0.005	0.057
Panel B: Gender wage gap above median						
Woman competing	0.007	0.006	-0.019	0.086	0.011	-0.011
against a man	(0.017)	(0.013)	(0.041)	(0.046)	(0.035)	(0.070)
Observations	244	244	244	244	244	244
Eff. number of obs	39	70	67	79	62	54
Robust p-value	0.553	0.625	0.598	0.081	0.849	0.956
Polyn. order	1	1	1	1	1	1
Bandwidth	1.694	2.961	2.884	3.281	2.630	2.271
Mean, left of threshold	0.002	0.000	0.016	-0.102	-0.006	0.042
Panel C: Gender wage gap below median						
Woman competing	-0.017	0.003	0.027	-0.042	-0.015	-0.053
against a man	(0.017)	(0.008)	(0.043)	(0.023)	(0.022)	(0.042)
Observations	247	247	247	247	247	247
Eff. number of obs	88	79	80	60	63	54
Robust p-value	0.355	0.678	0.591	0.101	0.528	0.178
Polyn. order	1	1	1	1	1	1
Bandwidth	3.618	3.200	3.218	2.425	2.521	2.009
Mean, left of threshold	0.007	0.002	-0.018	0.012	0.013	0.051

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a woman running in the second round as an alternative to a man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the CER procedure, suggested by Calonico et al. (2020). The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E44: Impact of a marginal presence of a man on female candidates in the 2nd round (with covariates)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: All districts						
Woman competing	-0.005	-0.002	-0.006	0.013	-0.012	-0.026
against a man	(0.008)	(0.006)	(0.027)	(0.028)	(0.015)	(0.029)
Observations	477	477	477	477	477	477
Eff. number of obs	111	197	165	156	116	134
Robust p-value	0.913	0.860	0.678	0.665	0.306	0.287
Polyn. order	1	1	1	1	1	1
Bandwidth	2.230	4.027	3.336	3.227	2.425	2.825
Mean, left of threshold	0.023	0.027	0.062	0.065	-0.072	-0.064
Panel B: Gender wage gap above median						
Woman competing	-0.004	-0.007	-0.124	0.105	-0.056	0.034
against a man	(0.010)	(0.009)	(0.035)	(0.039)	(0.014)	(0.038)
Observations	217	217	217	217	217	217
Eff. number of obs	55	75	60	86	73	62
Robust p-value	0.560	0.522	0.002	0.012	0.001	0.476
Polyn. order	1	1	1	1	1	1
Bandwidth	2.535	3.308	2.709	3.722	3.217	2.821
Mean, left of threshold	0.117	0.065	-0.234	-0.434	0.129	-0.037
Panel C: Gender wage gap below median						
Woman competing	0.001	0.005	0.057	-0.047	-0.007	-0.091
against a man	(0.014)	(0.008)	(0.040)	(0.020)	(0.020)	(0.027)
Observations	247	247	247	247	247	247
Eff. number of obs	58	77	60	60	65	71
Robust p-value	0.734	0.419	0.240	0.037	0.641	0.001
Polyn. order	1	1	1	1	1	1
Bandwidth	2.235	3.059	2.339	2.392	2.594	2.882
Mean, left of threshold	0.012	0.051	0.282	0.121	0.088	-0.058

Panel A includes controls for the district characteristics and occupation. In Panel B, the sample is restricted to districts where the gender wage gap is above the median; it includes controls for occupation, age, and opponent ideology. Panel C restricts the sample to districts below the median; it includes controls for district and individual characteristics. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man in the second round, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.

Table E45: Impact of a marginal presence of a man on female candidates in the 2nd round (with CorEx)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
			Panel A: All districts				
Woman competing	0.468	-0.297	-0.414	0.160	-0.249	-0.439	0.232
against a man	(0.315)	(0.236)	(0.268)	(0.242)	(0.395)	(0.368)	(0.313)
Observations	521	521	521	521	521	521	521
Eff. number of obs	136	167	177	139	172	123	163
Robust p-value	0.123	0.265	0.129	0.433	0.569	0.183	0.383
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.661	3.262	3.408	2.738	3.316	2.449	3.201
Mean, left of threshold	-0.573	0.024	0.128	-0.200	-0.593	-0.153	-0.085
			Panel B: Gender wage gap above median				
Woman competing	0.352	-0.431	-0.634	-0.138	-0.503	-0.357	0.161
against a man	(0.549)	(0.383)	(0.503)	(0.312)	(0.596)	(0.427)	(0.360)
Observations	244	244	244	244	244	244	244
Eff. number of obs	65	85	64	96	98	75	85
Robust p-value	0.391	0.347	0.179	0.762	0.547	0.559	0.618
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.816	3.439	2.724	3.963	4.092	3.133	3.468
Mean, left of threshold	-0.638	0.132	0.396	-0.003	-0.468	0.085	0.166
			Panel B: Gender wage gap below median				
Woman competing	0.602	-0.075	-0.049	0.291	0.010	-0.299	1.070
against a man	(0.341)	(0.246)	(0.285)	(0.280)	(0.503)	(0.546)	(0.452)
Observations	243	243	243	243	243	243	243
Eff. number of obs	87	89	88	76	76	54	59
Robust p-value	0.060	0.905	0.854	0.250	0.971	0.375	0.014
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.753	3.864	3.825	3.156	3.076	2.054	2.367
Mean, left of threshold	-0.585	-0.270	-0.124	-0.446	-0.643	-0.255	-0.526

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted woman in the first round competes against a man in the second round, and 0 if she competes against another woman. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.

E.7 Do men strategically adapt to the gender of their opponent?

Table E46: Impact of a marginal presence of a female on male candidates in the 2nd round (half of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
			Panel A: All districts			
Man competing	0.024	-0.001	-0.012	-0.017	0.055	0.006
against a woman	(0.019)	(0.004)	(0.037)	(0.036)	(0.032)	(0.046)
Observations	836	836	836	836	836	836
Eff. number of obs	179	161	196	264	211	205
Robust p-value	0.204	0.667	0.773	0.627	0.102	0.897
Polyn. order	1	1	1	1	1	1
Bandwidth	1.676	1.405	1.903	2.690	2.054	1.994
Mean, left of threshold	-0.015	-0.001	-0.021	-0.035	-0.017	0.102
			Panel B: Gender wage gap above median			
Man competing	0.042	-0.002	0.085	-0.031	0.056	-0.068
against a woman	(0.026)	(0.008)	(0.062)	(0.065)	(0.054)	(0.081)
Observations	382	382	382	382	382	382
Eff. number of obs	74	63	80	89	116	87
Robust p-value	0.102	0.695	0.164	0.631	0.316	0.384
Polyn. order	1	1	1	1	1	1
Bandwidth	1.779	1.426	2.130	2.403	3.171	2.333
Mean, left of threshold	-0.036	0.001	-0.065	-0.029	-0.026	0.164
			Panel C: Gender wage gap below median			
Man competing	0.013	0.002	-0.133	0.007	0.050	0.093
against a woman	(0.030)	(0.006)	(0.046)	(0.057)	(0.030)	(0.065)
Observations	383	383	383	383	383	383
Eff. number of obs	96	109	71	96	87	88
Robust p-value	0.684	0.788	0.006	0.924	0.105	0.153
Polyn. order	1	1	1	1	1	1
Bandwidth	1.807	2.050	1.282	1.808	1.508	1.582
Mean, left of threshold	-0.005	-0.003	0.013	-0.052	-0.026	0.070

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted man in the first round competes against a woman in the second round, and 0 if he competes against another man. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under half of the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for men competing against a man at the threshold.

Table E47: Impact of a marginal presence of a female on male candidates in the 2nd round (double of MSERD bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
			Panel A: All districts			
Man competing	0.013	0.005	-0.010	-0.001	0.006	0.013
against a woman	(0.013)	(0.003)	(0.018)	(0.016)	(0.015)	(0.025)
Observations	836	836	836	836	836	836
Eff. number of obs	533	475	585	753	621	607
Robust p-value	0.124	0.976	0.927	0.754	0.291	0.659
Polyn. order	1	1	1	1	1	1
Bandwidth	6.705	5.619	7.610	10.758	8.215	7.975
Mean, left of threshold	-0.019	-0.002	-0.027	-0.022	-0.019	0.100
			Panel B: Gender wage gap above median			
Man competing	0.009	0.005	0.025	0.000	0.011	0.003
against a woman	(0.015)	(0.004)	(0.035)	(0.029)	(0.026)	(0.040)
Observations	382	382	382	382	382	382
Eff. number of obs	220	183	183	304	355	299
Robust p-value	0.167	0.434	0.245	0.694	0.539	0.316
Polyn. order	1	1	1	1	1	1
Bandwidth	7.115	5.703	5.703	9.612	12.684	9.333
Mean, left of threshold	-0.019	-0.002	-0.042	-0.034	-0.034	0.126
			Panel C: Gender wage gap below median			
Man competing	0.031	0.003	-0.046	-0.004	0.011	0.006
against a woman	(0.020)	(0.003)	(0.027)	(0.029)	(0.015)	(0.035)
Observations	383	383	383	383	383	383
Eff. number of obs	276	296	228	277	251	258
Robust p-value	0.350	0.380	0.018	0.725	0.249	0.222
Polyn. order	1	1	1	1	1	1
Bandwidth	7.226	8.199	5.127	7.234	6.030	6.330
Mean, left of threshold	-0.027	-0.002	-0.010	-0.025	-0.013	0.098

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted man in the first round competes against a woman in the second round, and 0 if he competes against another man. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under twice the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for men competing against a man at the threshold.

Table E48: Impact of a marginal presence of a woman on male candidates in the 2nd round (Calonico et al. (2020) bandwidth)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
Panel A: All districts						
Man competing	0.024	0.000	-0.009	-0.012	0.037	0.013
against a woman	(0.018)	(0.004)	(0.030)	(0.028)	(0.026)	(0.038)
Observations	836	836	836	836	836	836
Eff. number of obs	240	207	265	350	281	270
Robust p-value	0.165	0.887	0.801	0.654	0.150	0.739
Polyn. order	1	1	1	1	1	1
Bandwidth	2.402	2.013	2.726	3.853	2.943	2.857
Mean, left of threshold	-0.020	-0.001	-0.027	-0.033	-0.021	0.111
Panel B: Gender wage gap above median						
Man competing	0.036	-0.004	0.065	-0.013	0.019	-0.047
against a woman	(0.023)	(0.007)	(0.049)	(0.053)	(0.042)	(0.061)
Observations	382	382	382	382	382	382
Eff. number of obs	93	80	116	129	160	126
Robust p-value	0.120	0.470	0.163	0.774	0.612	0.382
Polyn. order	1	1	1	1	1	1
Bandwidth	2.650	2.124	3.174	3.580	4.724	3.476
Mean, left of threshold	-0.032	0.003	-0.055	-0.037	-0.025	0.155
Panel C: Gender wage gap below median						
Man competing	0.029	0.003	-0.123	-0.017	0.038	0.075
against a woman	(0.028)	(0.005)	(0.041)	(0.045)	(0.026)	(0.052)
Observations	380	380	380	380	380	380
Eff. number of obs	142	153	99	142	118	125
Robust p-value	0.341	0.602	0.004	0.696	0.144	0.131
Polyn. order	1	1	1	1	1	1
Bandwidth	2.682	3.039	1.888	2.741	2.222	2.355
Mean, left of threshold	-0.018	-0.003	0.024	-0.042	-0.022	0.083

Standard errors in parentheses are clustered at the district-candidate level. Each column reports the results from a separate local polynomial regression. The variable of interest is a man competing against a woman as an alternative to a man competing against another man. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the CER procedure, suggested by Calonico et al. (2020). The dependent variables take values between 0 and 1, and their computation is explained in Section 5.1. The mean gives the average outcome value for male candidates at the threshold.

Table E49: Impact of a marginal presence of a woman on male candidates in the 2nd round (with covariates for district and individual characteristics)

	(1) Economy & employment	(2) Environment	(3) Health & education	(4) Security & foreign policy	(5) Local politics	(6) National politics
			Panel A: All districts			
Man competing	0.031	0.006	0.006	-0.016	0.014	0.008
against a woman	(0.015)	(0.003)	(0.025)	(0.027)	(0.021)	(0.029)
Observations	836	836	836	836	836	836
Eff. number of obs	264	336	311	346	368	334
Robust p-value	0.026	0.091	0.703	0.444	0.452	0.857
Polyn. order	1	1	1	1	1	1
Bandwidth	2.691	3.583	3.270	3.770	3.990	3.558
Mean, left of threshold	0.113	0.001	0.037	-0.040	-0.023	-0.038
			Panel B: Gender wage gap above median			
Man competing	0.012	-0.004	-0.008	0.001	0.002	0.036
against a woman	(0.015)	(0.005)	(0.030)	(0.050)	(0.037)	(0.050)
Observations	382	382	382	382	382	382
Eff. number of obs	104	96	182	99	172	131
Robust p-value	0.408	0.297	0.911	0.899	0.936	0.472
Polyn. order	1	1	1	1	1	1
Bandwidth	2.939	2.697	5.595	2.805	4.994	3.740
Mean, left of threshold	0.184	0.025	0.214	-0.189	0.083	-0.152
			Panel C: Gender wage gap below median			
Man competing	0.016	0.008	-0.046	-0.010	0.019	0.004
against a woman	(0.022)	(0.004)	(0.027)	(0.037)	(0.020)	(0.032)
Observations	383	383	383	383	383	383
Eff. number of obs	109	142	163	155	132	107
Robust p-value	0.333	0.053	0.082	0.736	0.335	0.876
Polyn. order	1	1	1	1	1	1
Bandwidth	2.059	2.770	3.393	3.073	2.468	2.015
Mean, left of threshold	0.317	-0.009	-0.018	-0.050	0.045	-0.025

In Panel B, the sample is restricted to districts where the gender wage gap is above the median. Panel C restricts the sample to districts below the median. All panels include district and individual characteristics controls. Standard errors clustered at the district-candidate level are in parenthesis. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most voted man in the first round competes against a woman in the second round, 0 if he competes against a man. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The dependent variables computation is explained in Section 5.1. The mean gives the average outcome value for men competing against a man at the threshold.

Table E50: Impact of a marginal presence of a woman on male candidates in the 2nd round (topics computed with CorEx)

	(1) Economy	(2) Employment & social security	(3) Environment	(4) Health & education	(5) Security & foreign policy	(6) Local politics	(7) National politics
			Panel A: All districts				
Man competing	0.106	-0.045	-0.042	-0.059	-0.041	0.398	-0.078
against a man	(0.218)	(0.158)	(0.160)	(0.171)	(0.297)	(0.231)	(0.184)
Observations	836	836	836	836	836	836	836
Eff. number of obs	413	266	372	361	276	346	311
Robust p-value	0.576	0.699	0.617	0.695	0.741	0.140	0.730
Polyn. order	1	1	1	1	1	1	1
Bandwidth	4.494	2.761	4.032	3.936	2.895	3.785	3.277
Mean, left of threshold	-0.402	-0.184	-0.164	-0.244	-0.562	-0.674	-0.160
			Panel B: Gender wage gap above median				
Man competing	0.539	0.053	0.106	0.370	0.009	0.325	-0.114
against a woman	(0.395)	(0.226)	(0.195)	(0.290)	(0.508)	(0.411)	(0.256)
Observations	382	382	382	382	382	382	382
Eff. number of obs	129	99	159	148	104	126	133
Robust p-value	0.156	0.863	0.828	0.157	0.802	0.573	0.674
Polyn. order	1	1	1	1	1	1	1
Bandwidth	3.618	2.821	4.618	4.149	2.964	3.527	3.837
Mean, left of threshold	-0.594	-0.114	-0.212	-0.480	-0.607	-0.360	0.033
			Panel C: Gender wage gap below median				
Man competing	-0.490	-0.157	-0.157	-0.340	-0.278	0.566	0.012
against a woman	(0.341)	(0.275)	(0.275)	(0.253)	(0.317)	(0.343)	(0.275)
Observations	383	383	383	383	383	383	383
Eff. number of obs	151	187	187	146	188	162	149
Robust p-value	0.097	0.442	0.442	0.115	0.306	0.102	0.804
Polyn. order	1	1	1	1	1	1	1
Bandwidth	2.955	4.027	4.027	2.891	4.039	3.313	2.921
Mean, left of threshold	-0.345	-0.156	-0.156	-0.163	-0.620	-0.921	-0.412

In Panel B, the sample is restricted to districts with a gender wage gap above the median, while Panel C restricts the sample to districts with a gender wage gap below the median. Standard errors clustered at the district-candidate level are in parentheses. The unit of observation is the candidate. The independent variable is a dummy equal to 1 if the most-voted man in the first round competes against a woman in the second round, and 0 if he competes against another man. Each column reports the results from a separate local polynomial regression. Separate polynomials are fitted on each side of the threshold. The polynomial order is 1, and the optimal bandwidths are derived under the MSERD procedure. The computation of the dependent variables is explained in Section 5.1. The mean gives the average outcome value for women competing against a woman at the threshold.