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# Backlash in the Backyard: Female Representation and Gender Attitudes in the UK

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## Abstract

We analyze the effect of increased women representation in politics on gender attitudes within the adult UK population, combining 2002-2019 local election results in England with survey responses from *Understanding Society* and the British Household Panel Survey. Our Regression Discontinuity analysis shows that the election of a female councillor generates a shift towards more conservative gender attitudes in the population. This *backlash effect* is entirely driven by male respondents and by those more affected by economic insecurity, i.e. unemployed individuals and those more exposed to the import competition with China. Additionally, we find suggestive evidence that the backlash mainly affects attitudes related to the private sphere, rather than views about society at large. The effect on female respondents is very limited, but our results show that the election of a woman raises their support for work-family policies. Importantly, given the context of our analysis, our results are unlikely to be driven by gender differences in policymaking.

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# 1 Introduction

The last decades have witnessed substantial increases in the share of women holding political positions. More and more countries have had a female head of government or state, while the average proportion of seats held by women in national parliaments around the world increased from 12% in 1997 to 27% in 2023. These constituted important steps towards a more substantive representation of different preferences in politics, mostly in light of the well-documented gender gap in social preferences and priorities ([Andreoni and Vesterlund \(2001\)](#), [Edlund and Pande \(2002\)](#), [Andersen et al. \(2008\)](#), [Funk and Gathmann \(2015\)](#)). Additionally, the changes spurred a growing interest in the consequences of electing female politicians. A consistent body of literature has focused on gender differences in policy outcomes such as size and type of public spending (among others [Chattopadhyay and Duflo \(2004\)](#), [Clots-Figueras \(2011\)](#), [Funk and Gathmann \(2015\)](#), [Brollo and Troiano \(2016\)](#), [Bagues and Campa \(2021\)](#), [Casarico et al. \(2022\)](#), [Bruce et al. \(2022\)](#), [Carozzi and Gago \(2023\)](#) – see [Hessami and da Fonseca \(2020\)](#) for a comprehensive literature review), finding mixed evidence. Particular attention was also given to whether the election of female politicians promotes future female political engagement (e.g. [Wolbrecht and Campbell \(2007\)](#), [Beaman et al. \(2009\)](#), [Broockman \(2014\)](#)), electoral success ([Beaman et al. \(2009\)](#), [Ferreira and Gyourko \(2014\)](#), [Baskaran and Hessami \(2018\)](#)) and labor market participation ([Ghani et al., 2013](#)).

A question that still remains relatively unexplored, however, is whether the increased presence of women in highly visible and powerful positions - such as political offices - can have broader effects within society, extending beyond the political sphere. For example, [Beaman et al. \(2009\)](#) show that the election of female politicians has positive spillovers on female adolescents' aspirations and parents' aspirations for their daughters. However, much less is known about the effects of increased female representation in politics among the adult population at large, and especially among men.<sup>1</sup>

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<sup>1</sup>[Beaman et al. \(2009\)](#) use Implicit Associations Tests to show that exposure to female leaders in India increases male villagers' propensity to associate women with leadership activities (as opposed to domestic

This paper addresses the gap by examining the impact of increased women’s representation on gender attitudes in the UK (English) adult population. Our analysis leverages a unique dataset that combines detailed information on local election results in England between 2002 and 2019 with survey responses from *Understanding Society*, the largest panel survey in the UK, and its predecessor, the British Household Panel Survey. Focusing on close electoral margins, we apply a regression discontinuity design (RDD) to isolate the causal effect of the election of a female local council member on respondents’ gender attitudes.

Local governments in England – known as Local Authorities (LAs) – are responsible for key public services and economic development. Councillors are elected through a first-past-the-post system in electoral districts called *wards*, which may elect one to three representatives. LA councils are relatively large, with an average of 50 members. Our analysis focuses on female politicians marginally elected at the ward level, and examines how their election affects gender attitudes among residents of the same ward. In multi-member wards, we exploit the margin between the last elected and the first non-elected candidate. This institutional setting is important for interpretation: unlike in contexts where elected officials hold executive power (e.g., Clots-Figueras (2011); Brollo and Troiano (2016); Baskaran and Hessami (2018); Casarico et al. (2022); Daniele et al. (2023)), councillors in England operate within large deliberative bodies and cannot unilaterally shape policy. Moreover, wards make up only a small portion of the broader LA, further limiting individual councillors’ influence. These features suggest that the effects we observe are unlikely to stem from policy changes, and instead reflect the symbolic impact of female political representation.

To measure attitudes, we rely on three survey items eliciting respondents’ level of agreement with the following three statements: “*All in all, family life suffers when the woman has a full-time job,*” “*A husband’s job is to earn money, a wife’s job is to look after the home and family,*” and “*Employers should make special arrangements to help mothers combine jobs and childcare.*” Each of the statements captures a different dimension of gender attitudes, activities).

including beliefs about domestic roles, labor market participation, and institutional support for working mothers, thereby reflecting perspectives in both private and public spheres. Our main measure of gender attitudes is the *Traditional Gender Norms Index*, obtained as the first principal component of the responses to the three survey items. We also examine the level of agreement with each statement separately.

Our analysis reveals a *backlash effect* triggered by increased female representation in local government. Exposure to the marginal election of a female councillor leads to more conservative gender attitudes, as indicated by a statistically significant rise in our *Traditional Gender Norms Index*. Crucially, this shift is entirely driven by male respondents, with no significant change observed among women. Among men, the effect appears to be shaped by economic insecurity. Specifically, the backlash is concentrated among unemployed respondents and those residing in areas more exposed to Chinese import competition (Colantone and Stanig, 2018). The effect is also stronger and more precisely estimated in the years prior to 2007 – a period marked by rapid growth in Chinese exports to the UK (Brandt and Lim, 2024).<sup>2</sup> Further heterogeneity analysis shows that the backlash is stronger among individuals who support the Conservative party and those who place high importance on national identity. We find no significant variation by age, and only limited evidence of heterogeneity by education level.

The analysis of the individual components of our *Traditional Gender Norms Index* reveals that the election of a female councillor affects respondents’ agreement with two of the three underlying statements: “*All in all, family life suffers when the woman has a full-time job*” and “*A husband’s job is to earn money, a wife’s job is to look after the home and family.*” Consistent with our main results, these effects are observed only among male respondents. Specifically, the election of a female councillor increases male respondents’ agreement with the first statement by approximately 4% relative to the sample mean, and with the second by

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<sup>2</sup>This finding aligns with correlational evidence from Off et al. (2022), who show that gender backlash in EU countries is more pronounced among young individuals in regions with high unemployment and low institutional trust.

about 4.8%. Notably, these effects are entirely driven by men who are married or cohabiting. By contrast, we find no significant effect on the level of agreement with the third statement, *“Employers should make special arrangements to help mothers combine jobs and childcare”*, even when disaggregating by gender. However, among female respondents who are married or in a couple, we detect a negative effect – indicative of a shift towards more progressive gender attitudes – on this item.

A potential concern is that multi-member wards where a female candidate narrowly wins are also more likely to elect additional women. Additionally, the marginally elected women are more likely to belong to progressive parties such as Labour or the Liberal Democrats. While our main specification controls for these factors, we further address this issue through two robustness checks. First, we repeat the analysis on the subsample of wards where no other women – apart from the marginally elected one – are elected. The results remain unchanged, suggesting that the effect is not driven by the joint election of multiple women. Second, we estimate the effect of narrowly electing a Labour or LibDem candidate and find no significant effects. This finding helps rule out the possibility that our results are driven by party affiliation rather than candidate gender. Additionally, one might worry that the backlash we detect reflects gender-specific policy decisions rather than symbolic reactions to female representation. To test this, we replicate our analysis while controlling for the share of female councillors in the respondent’s Local Authority (LA) at the time of the interview. Since policymaking occurs at the LA level, this approach helps account for potential policy-driven effects. The results are unchanged, reinforcing our interpretation that the backlash is not explained by policy changes, but rather by symbolic responses to the election of a woman.

Our paper offers several key contributions. First, to our knowledge, it is the first to causally estimate the impact of increased female political representation on gender attitudes in the general adult population. This complements existing literature that has primarily focused on the effects of electing female politicians on policy outcomes, subsequent female

political participation, electoral success, and labor market outcomes (see references above). However, the effect on gender attitudes has remained underexplored. Importantly, the institutional context of our study – the election of a single councillor within relatively large councils – supports interpreting our findings as a symbolic reaction to female representation rather than the result of gender-based policymaking differences. This aligns with evidence from [Daniele et al. \(2023\)](#), who document that female politicians face higher risks of political violence, driven more by discrimination than strategic policymaking motives. More broadly, our results contribute to the growing literature showing that elected officials can shape social norms ([Bursztyn et al., 2020](#)).

Our work also makes important contributions to the literature on *gender backlash* ([Clark et al., 2022](#)) and, more broadly, *cultural backlash* ([Norris and Inglehart, 2019](#)), which documents how the rise of progressive social values – such as women’s empowerment, expanded minority protections, and cultural globalization – has triggered a conservative reaction among traditionally dominant groups, particularly white men.<sup>3</sup> While existing research has typically focused on cultural backlash as a driver of support for populist and far-right parties ([Gidron and Hall, 2017](#); [Norris and Inglehart, 2019](#); [Guriev and Papaioannou, 2022](#)),<sup>4</sup> our paper highlights how such backlash can also emerge directly from the political process itself.

Additionally, our findings on the role of economic insecurity contribute to the ongoing debate about the interaction between cultural backlash and economic factors in driving support for populist parties ([Inglehart and Norris, 2017](#); [Gidron and Hall, 2017](#); [Margalit, 2019](#); [Gidron and Hall, 2020](#); [Guiso et al., 2020](#)). In particular, the fact that the backlash effect is observed only among unemployed individuals and those more exposed to the China shock – and is stronger during the period of intensified competition with China – lends

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<sup>3</sup>[Bosetti et al. \(2025\)](#) similarly document a *green backlash*, where citizens adversely affected by the decarbonization transition express stronger opposition to climate policies.

<sup>4</sup>For studies specifically addressing gender backlash, see [Schaffner et al. \(2018\)](#), [Bracic et al. \(2019\)](#), [Cassese and Holman \(2019\)](#), [Kantola and Lombardo \(2021\)](#), [De Geus et al. \(2022\)](#), and [Anduiza and Rico \(2024\)](#). In the UK context, gender backlash has been linked to support for Leave in the Brexit referendum ([Green and Shorrocks, 2023](#)).

support to the “culture *times* economics” hypothesis (Guriev and Papaioannou, 2022), which posits that cultural backlash is *triggered* and *amplified* by adverse economic shocks and resulting economic insecurity.<sup>5</sup>

Finally, our analysis of the individual components of the Traditional Gender Norms Index provides suggestive evidence that the gender backlash primarily affects *egocentric* rather than *sociocentric* attitudes. Following the framework of Retzl et al. (2024), who distinguish between attitudes focused on one’s personal sphere (*egocentric*) and those concerning broader societal views (*sociocentric*), our results align with findings from Swiss data showing backlash effects on *egocentric* gender attitudes – but not *sociocentric* ones – in response to increased labor market feminization. While our survey data do not fully disentangle these categories, the fact that the backlash is concentrated among respondents who are married or cohabiting suggests that it primarily impacts those personally connected to the issues addressed by the statements.

The remainder of the paper is organized as follows. Section 2 provides an overview of the context for our analysis. Section 3 describes the data and key outcome variables, while Section 4 outlines the methodological approach. In Section 5, we present our main findings for the *Traditional Gender Norms Index*, followed by Section 6, which explores the role of economic insecurity. Section 7 analyzes the effects on individual survey items. Finally, Section 8 offers concluding remarks.

## 2 Context

### 2.1 Local Elections in England

Local elections in the UK serve as a crucial mechanism for governance and accountability, shaping policies that directly impact residents’ daily lives. Local governments are responsi-

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<sup>5</sup>This contrasts with the “culture *plus* economics” view, where economic factors play only a minor, additive role in shaping slow-moving cultural traits. Gidron and Hall (2017) refer to these as *interactive* versus *additive* effects of economic factors.

ble for delivering a wide range of services essential for economic and social welfare, including education, social care, environmental planning, public health, and infrastructure. Moreover, they play a key role in fostering economic development by supporting businesses and job creation, thereby influencing regional productivity and growth. As such, local elections are instrumental in determining the allocation of resources, economic strategies, and the provision of social services, ensuring responsiveness to local needs and contributing to regional stability.

The structure of local government in England varies in terms of size, governance, and responsibilities. Most areas operate under a two-tier system, comprising county councils and district councils (typically referred to as district, borough, or city councils), each responsible for distinct service provisions. In contrast, other areas follow a single-tier model, where unitary authorities, London boroughs, and metropolitan boroughs are entirely responsible for local governance.

The administrative and electoral divisions of district, borough, and city councils in two-tier areas, and all single-tier authorities (more generally Local Authorities, LA) are known as Local Authority Districts (LADs). These are further subdivided into wards, which serve as the primary electoral units. There are currently 6,904 electoral wards and 317 LAs in England.<sup>6</sup> Each ward elects one or more councillors (up to three), depending on its population density and geographic characteristics. Elections operate under a first-past-the-post system, where voters can select as many candidates as there are vacancies in their ward. Councillors typically serve four-year terms, but electoral cycles vary across councils ([Dipoppa and Grossman, 2020](#)): some councils elect all members simultaneously, while others stagger elections by electing half of the councillors every two years or one-third annually, with no elections in the fourth year. Despite substantial variation, council size is generally large. The average size is approximately 50, while the median is 48. The smallest and largest

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<sup>6</sup>Specifically, there are 185 two-tier councils (164 district councils and 21 county councils) and 132 single-tier councils (62 unitary authorities, 36 metropolitan districts, 32 London boroughs, one City of London, and one Isles of Scilly). Source: UK Government website.

councils are composed of 16 (Isle of Scilly) and 147 (Buckinghamshire Council) members, respectively.<sup>7</sup> Hence, individual councillors represent very small parts of the broader area governed by the LA, and wield limited influence over policy decisions. This is important for our purposes, as it allows us to rule out gender differences in policymaking as a possible mechanism driving our results.

Finally, even though local councils may feature candidates from regional or independent parties, the UK political landscape is predominantly shaped by the two major national parties, the Conservative Party and the Labour Party, which contest the majority of wards.

## 2.2 Women Representation in Elections

The representation of women in politics plays a crucial role in promoting inclusive governance and ensuring that a broader range of voices and experiences are reflected in policymaking. As of 2024, the UK ranks 25<sup>th</sup> globally in the proportion of women in the lower house of parliament—11<sup>th</sup> in Europe—and leads the G7 countries in female parliamentary representation, having moved up from third place prior to the 2024 general election.<sup>8</sup>

Women’s presence in UK politics has a long but uneven history. Nancy Astor became the first woman to sit in Parliament in 1919, yet women remained significantly underrepresented for decades. It was not until 1987 that women made up more than 5% of MPs. Since then, female representation has increased markedly, reaching 34% after the 2019 election and rising further to 40% in 2024. Notable leaps occurred in 1997, when the share of women MPs doubled from 9% to 18%, and in 2015, when it increased from 22% to 30%.<sup>9</sup>

At the local level, greater participation of women in politics can be especially transformative, given the proximity of local offices to everyday governance and public service delivery. Figure 1 illustrates trends in women’s representation in local elections over time.<sup>10</sup> The data

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<sup>7</sup>The statistics are based on 2025 data provided by the Local Government Boundary Commission for England.

<sup>8</sup><https://www.instituteforgovernment.org.uk/explainer/gender-balance-politics>

<sup>9</sup><https://commonslibrary.parliament.uk/research-briefings/sn01250/>

<sup>10</sup>The methodology for identifying female candidates is detailed in Section 4.

reveal a persistent gender gap, both in the share of female candidates and in the proportion of elected officials, underscoring the ongoing underrepresentation of women in local political leadership.

Figure 1: Women and local elections



The figure presents the trend in women's representation in UK local elections from 2002 to 2019. The blue line depicts the yearly average share of female candidates among all candidates, while the red line indicates the proportion of women among elected officials.

### 3 Data & Outcomes of interest

Our analysis draws on two primary data sources. The first key dataset is *Understanding Society*, also known as the UK Household Longitudinal Study (UKHLS). This large-scale, nationally representative panel survey is a cornerstone of social science research, providing rich and detailed insights into the economic, social, and health dynamics of the UK population. UKHLS has incorporated and harmonized data from its predecessor, the British Household Panel Survey (BHPS). This smaller scale survey ran from 1991 until its inte-

gration into UKHLS in 2009. By combining the two surveys, we obtained a harmonized panel spanning the years 2002 to 2019, offering a continuous and comprehensive view of individual-level trends over nearly two decades.

The dataset contains extensive demographic and socio-economic information on respondents, including age, gender, educational attainment, employment status, and household composition. Additionally, we have secured restricted access to ward-level identifiers for each respondent. This precise geographic information allows us to link individual responses to the corresponding ward-level electoral outcomes, facilitating a unique integration of personal characteristics, behaviors, and local political conditions.

We merge the survey data with electoral data obtained from the Local Elections Archive Project (LEAP), curated by Andrew Teale. LEAP provides comprehensive ward-level information on all local elections in the UK from 2002 onward. For each ward-election, the dataset includes details on all candidates who contested the election, the total number of votes cast, the vote share obtained by each candidate, and their party affiliation. Crucially, the data also include candidates' names, which we use to infer their gender.

Our outcome variables capture attitudes toward gender inequality. Specifically we use three survey questions that measure respondents' level of agreement with the following statements: *“All in all, family life suffers when the woman has a full-time job”*, *“A husband’s job is to earn money, a wife’s job is to look after the home and family”*, and *“Employers should make special arrangements to help mothers combine jobs and childcare”*. The statements capture different dimensions of gender attitudes, such as beliefs about domestic roles, labor market participation, and institutional support for working mothers, thus offering perspectives in both private and public spheres.

These survey items were included in selected waves, specifically waves 2, 4 and 10 of UKHLS and waves 13, 15 and 17 of BHPS. Responses are recorded on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure consistency in interpretation, answers to the last statement are recoded so that higher values across all questions

uniformly reflect lower support for gender equality (or, equivalently, stronger *disagreement* with the last statement). Figure A.1 presents the overall distribution of responses for each question, while Figure A.2 disaggregates the responses by gender (both figures can be found in the Appendix). To construct a comprehensive measure of gender attitudes, we apply Principal Component Analysis (PCA) to these three questions. PCA identifies underlying patterns in correlated variables by transforming them into a smaller set of uncorrelated components that capture the most variance. The first principal component, which accounts for the largest share of variation in the responses, serves as our *Traditional Gender Norms Index* (TGNI). The index is a continuous measure ranging from -1 to 1, with higher values indicating stronger adherence to traditional gender roles. By aggregating multiple related items into a single metric, PCA improves both the reliability and interpretability of our results.

Our final sample consists of 72,345 observations, coming from 48,871 unique individuals and from 5,978 different wards. For each individual, we know the ward in which they live and the result of the local election at the time of the interview. Figure A.3 in the Appendix shows the distribution of the interviews over time. Table 1 reports descriptive statistics of the final sample. Panel A provides descriptive statistics for the responses to the three questions on gender attitudes described above. Panel B shows descriptive statistics for respondent characteristics. Finally, Panel C reports descriptive statistics related for electoral data.

## 4 Methodology

To estimate the causal effect of electing female candidates on attitudes toward gender equality, we employ a regression discontinuity design (RDD) (Calonico et al., 2014). Specifically, we focus on mixed-gender elections and compare the attitudes of respondents residing in wards where a female candidate narrowly won versus those where she narrowly lost. In cases where multiple candidates are elected within a single ward, we focus on the margin between the last elected candidate and the first non-elected candidate. This approach exploits

Table 1: Descriptive statistics

|                                                                               | N     | Mean  | SD    | Min   | Max   |
|-------------------------------------------------------------------------------|-------|-------|-------|-------|-------|
| <i>Panel A: Outcomes of interest</i>                                          |       |       |       |       |       |
| Family life suffers when the woman has a full-time job                        | 72220 | 2.87  | 1.06  | 1     | 5     |
| Husband's job is to earn money, wife's job is to look after home and family   | 72252 | 2.38  | 1.04  | 1     | 5     |
| Employers should make arrangements to help mothers combine jobs and childcare | 72195 | 2.15  | 0.87  | 1     | 5     |
| <i>Panel B: Respondents Characteristics</i>                                   |       |       |       |       |       |
| Males                                                                         | 72317 | 0.45  | 0.50  | 0     | 1     |
| Age                                                                           | 72316 | 44.46 | 18.55 | 15    | 101   |
| Employed                                                                      | 72317 | 0.57  | 0.50  | 0     | 1     |
| Children Under 16                                                             | 56121 | 0.49  | 0.91  | 0     | 9     |
| Single                                                                        | 72237 | 0.27  | 0.44  | 0     | 1     |
| Married                                                                       | 72237 | 0.60  | 0.49  | 0     | 1     |
| Divorced                                                                      | 72237 | 0.08  | 0.27  | 0     | 1     |
| Widowed                                                                       | 72237 | 0.05  | 0.22  | 0     | 1     |
| Secondary Education (or below)                                                | 47044 | 0.48  | 0.50  | 0     | 1     |
| Advanced Education                                                            | 47044 | 0.17  | 0.38  | 0     | 1     |
| Graduate (or above)                                                           | 47044 | 0.35  | 0.48  | 0     | 1     |
| <i>Panel C: Electoral data</i>                                                |       |       |       |       |       |
| Election per ward                                                             | 7157  | 3.70  | 2.26  | 1.00  | 10.00 |
| # Candidates                                                                  | 7157  | 5.57  | 3.12  | 2.00  | 18.00 |
| # Elected                                                                     | 7157  | 1.68  | 0.85  | 1.00  | 3.00  |
| # Female Candidates                                                           | 7157  | 1.72  | 1.52  | 0.00  | 10.00 |
| # Elected women                                                               | 7157  | 0.53  | 0.64  | 0.00  | 3.00  |
| Mix Gender                                                                    | 7286  | 0.40  | 0.49  | 0.00  | 1.00  |
| Female Margin of Victory                                                      | 2902  | -0.00 | 0.23  | -0.79 | 0.84  |

The table presents descriptive statistics for the three survey questions used to measure gender attitudes (Panel A), respondents' characteristics (Panel B) and electoral data (Panel C). The table reports the number of observations (N), mean, standard deviation (SD), minimum, and maximum values for each variable. In Panel A, higher values indicate stronger support for traditional gender roles, as responses to the last statement have been recoded for consistency. The three gender attitude questions were included in selected survey waves: 2003, 2005, 2007, 2010-2011, 2012-2013, and 2018-2019.

quasi-random variation in election outcomes, ensuring that wards just above and below the electoral threshold are comparable in expectation.

The RDD specification is as follows:

$$Y_{iwt} = \alpha + \beta_1 \text{Victory Margin}_{wt} + \tau \text{Female Victory}_{wt} + \beta_2 (\text{Victory Margin}_{wt} \times \text{Female Victory}_{wt}) + \epsilon_w \quad (1)$$

where  $Y_{iwt}$  represents the outcome of interest (for the main analysis, TGNI or responses to the single survey items) for individual  $i$  in ward  $w$  during term  $t$ . Given the panel structure of the survey, respondents may answer the same question multiple times within a given electoral term. Consequently, our primary dependent variable is the average response for each individual  $i$  residing in ward  $w$  during term  $t$ . The variable  $\text{Victory Margin}_{wt}$  denotes the margin of victory, defined as the vote share difference between the female candidate and her closest male competitor. The binary variable  $\text{Female Victory}_{wt}$  equals 1 if a female candidate wins and 0 otherwise. To determine candidates' gender, we use their first names and apply the **genderit** package, which employs probabilistic classification methods across multiple election years. The coefficients  $\beta_1$  and  $\beta_2$  capture the linear effect of the victory margin, while  $\tau$  represents the local average treatment effect of electing a female candidate on the outcome variable. Standard errors are clustered at the ward level to account for potential within-ward correlations.

The validity of the RDD approach hinges on two key assumptions. The first is the continuity of the running variable, meaning that the probability of treatment assignment (i.e., electing a female candidate) changes smoothly at the threshold, with no evidence of strategic manipulation. The second is the absence of systematic differences in covariates around the cutoff, ensuring that any observed differences in outcomes can be attributed to the treatment rather than pre-existing differences between treated and control units. When these assumptions hold, the local random assignment near the threshold allows us to identify the causal effect of electing a female candidate.

In our analysis, we find no evidence of manipulation or imbalance around the cutoff point for the margin of victory. Figure A.4 in the Appendix displays the distribution of the running variable, showing a smooth density function around the cutoff, with no apparent excess or deficit of observations just above or below the threshold. Furthermore, the McCrary (McCrary, 2008) density test, presented in Figure A.5 in the Appendix, confirms the absence of a statistically significant discontinuity at the cutoff, reinforcing the credibility of our RDD framework with respect to the running variable.

Some concerns arise regarding the continuity of certain covariates around the threshold. Table A.1 in the Appendix reports differences in covariates between wards where female candidates narrowly won versus narrowly lost. Specifically, Column (1) indicates that female candidates elected with a close margin are statistically less likely to be affiliated with the Conservative party, while Columns (2) and (3) show a higher likelihood of affiliation with the Labour and Liberal Democrat parties, respectively. Finally, Column (4) reveals that, at the threshold, there is a higher probability of other female candidates also being elected in the same election, beyond the specific female candidate of interest. This issue is particularly relevant given that, while we focus on the closest contest between the last elected and first non-elected candidate, in several cases multiple candidates are elected in the same ward election.

These imbalances could potentially affect the internal validity of our estimates by introducing unobserved factors correlated with both the election of a female candidate and our outcome variables. To address this issue, we propose results based on a model that includes covariates related to party affiliation and the presence of other female candidates as additional controls in our regression models, thereby mitigating the influence of these covariate imbalances on our estimates. Additionally, in Section 5.1, we conduct two further robustness checks. First, we repeat our analysis for the subsample of wards where no additional woman has been elected, obtaining qualitatively identical results. Second, we adapt the main analysis to test the effect of electing a Labour and a LibDem candidate and we find no significant

effect.

## 5 Main Results

Table 2 presents the RD estimates for the impact of electing a female politician on the *Traditional Gender Norms Index* (TGNI), which is constructed as the first principal component of three survey questions on gender attitudes, as described in Section 3. The index ranges from -1 to 1, with higher values indicating stronger support for traditional gender roles.

Table 2: Effect of Female Candidate Election on Traditional Gender Norms Index

|                | All                | Males              | Females          |
|----------------|--------------------|--------------------|------------------|
|                | (1)                | (2)                | (3)              |
| Conventional   | 0.078**<br>(0.037) | 0.119**<br>(0.048) | 0.038<br>(0.042) |
| Bias-corrected | 0.073**<br>(0.037) | 0.122**<br>(0.048) | 0.030<br>(0.042) |
| Robust         | 0.073*<br>(0.042)  | 0.122**<br>(0.055) | 0.030<br>(0.048) |
| Respondents:   | All                | Males              | Females          |
| Mean Dep. Var. | -.03               | -.04               | -.02             |
| Bandwidth:     | .17                | .145               | .166             |
| N (Left):      | 9631               | 3930               | 5345             |
| N (Right):     | 8734               | 3622               | 4704             |
| Controls:      | Yes                | Yes                | Yes              |

Notes: RD estimates for the effect of electing a female candidate on the *Traditional Gender Norms Index*, a composite measure from three survey items on gender attitudes (higher values indicate more traditional beliefs). Column (1) reports results for the full sample; Columns (2) and (3) show estimates for male and female respondents, respectively. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Column (1) reports the estimated effect for the full sample, showing that the election of

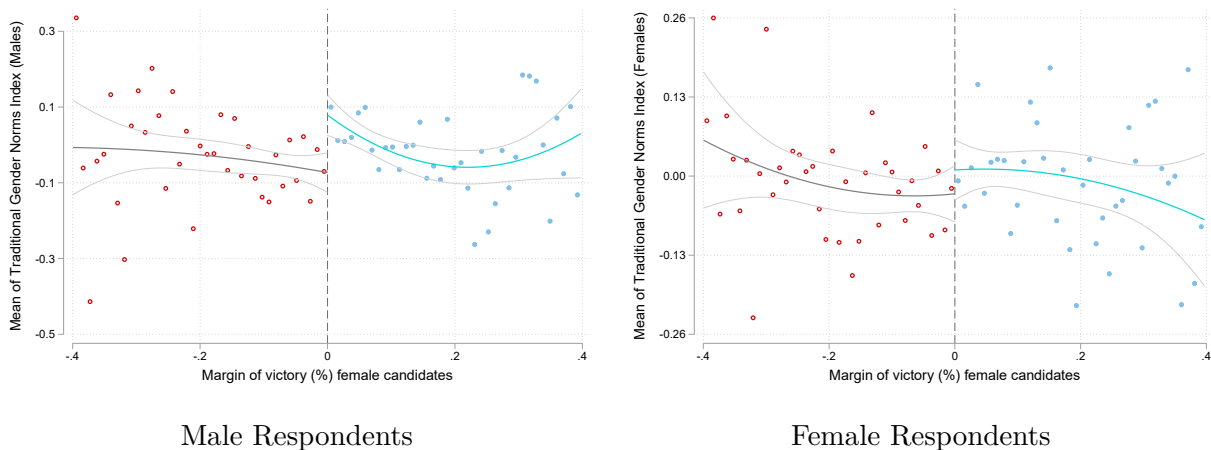
a female politician leads to a statistically significant increase in the TGNI. This suggests that exposure to female political leadership triggers a shift toward more conservative gender attitudes among respondents. However, when we disaggregate the analysis by gender, a striking difference emerges. As shown in Column (2), male respondents exhibit a strong and highly significant reaction, with a notable increase in their support for traditional gender norms following the election of a female politician. By contrast, the effect for female respondents, reported in Column (3), is close to zero and statistically insignificant, indicating no measurable change in their attitudes.

These results suggest a *backlash effect* among male respondents, whose attitudes toward gender roles become significantly more conservative in response to female political leadership. On the contrary, attitudes for female respondents remain unaffected. This heterogeneous response is further illustrated in Figure 2, which presents RD plots for the *Traditional Gender Norms Index* separately for men and women. The running variable is the female candidate’s margin of victory (%), with each dot representing the average TGNI level at a given margin. The panel on the left clearly shows a discontinuous jump at the threshold for male respondents, confirming a sharp shift in attitudes. Importantly, this shift is not driven by outliers, but reflects a smooth and consistent increase in conservatism in wards where a female candidate won by a narrow margin. In contrast, the panel on the right shows no discernible shift for female respondents, reinforcing the null effect observed in the regression results.

Although we cannot entirely rule out the possibility that the gender backlash we document is a response to different policy choices made by female councillors, we believe the context of our analysis makes this explanation unlikely. As noted above, council sizes are generally large, and the likelihood that a single member can meaningfully influence policy outcomes is negligible. Instead, we believe that the effect we observe is more likely to stem from a symbolic reaction to the mere election of a woman, in line with an interpretation based on simple discrimination rather than substantive policy differences. In Section 5.1, we present a robustness check that further supports this conclusion.

We also conducted further heterogeneity analysis on respondents' political views, which we report in Figure A.6 in the Appendix. Given that our main results are primarily driven by male respondents, in this exercise, we restricted attention to this group only.<sup>11</sup> Figure A.6 suggests that the backlash might be driven by individuals who support the Conservative party and by those who report that being British is very important to their identity. Due to the smaller sample sizes in these subgroups, however, these findings should be interpreted with caution. As discussed in more detail in the next section, we find no effect of electing a Labour or LibDem candidate on gender attitudes. Hence, we interpret these results as suggesting that the effect might be stronger on more conservative individuals, rather than capturing the effect of candidates' party affiliation.

Figure 2: RD Plot, by gender



Notes: The figure displays RD plots for the Traditional Gender Norms Index, separated by gender. The running variable is the margin of victory (%) of female candidates, with each dot representing the average level of Traditional Gender Norms Index for that margin value. The solid line indicates the fitted values, with shaded areas representing 95% confidence intervals. Data includes the period 2002-2019.

<sup>11</sup>The heterogeneity analysis with respect to respondents' demographic characteristics does not show significant differences. The effect is similar for younger men (below 45) and older men (above 45). Moreover, while the coefficient is better identified for the former, the magnitude of the effect is similar for individuals with and without a college degree. All results are reported in Figure A.7 in the Appendix.

## 5.1 Robustness Checks

To assess the robustness of the main findings reported in Table 2, we conduct several robustness checks.

First, we check that our results do not capture pre-existing trends. To do so, we repeat the RD analysis used in Table 2, this time using lagged responses to construct our TGNI. In other words, we compare the responses of individuals living in wards where a woman won or lost by a small margin *before* the elections. If the results in Table 2 indeed capture the effect of electing a female councillor by a small margin, the analysis of responses pre-dating this event should produce no significant result. Table A.2 in the Appendix reports the results of our placebo test. Reassuringly, all coefficients are statistically insignificant, and the coefficients for male respondents, in particular, are practically zero. This mitigates the concern that the effects documented in our main analysis might be due to pre-existing differences among our respondents.

As a second robustness check, we investigate whether the results are sensitive to the specific cutoff point used in the primary analysis. In our main specification, we set the cutoff at zero, focusing on close elections where the margin of victory for female candidates is minimal. If the observed effect is genuinely driven by tight elections, we should not find significant effects when applying alternative cutoff points. Table A.3 in the Appendix presents the results for all respondents, as well as for male and female respondents, using alternative cutoffs that include small positive and negative values. None of the coefficients for these non-zero cutoffs are statistically significant, indicating that our main findings are specific to elections decided by the narrowest margins. Notably, the coefficient for male respondents in Panel B, which was statistically significant and approximately equal to 0.12 in the main specification, drops to virtually zero when alternative cutoffs are used.

Table 2 reports the results using the MSERD-optimal bandwidth, as proposed by Calonico et al. (2014). As a further robustness check, we evaluate the sensitivity of our results to the

choice of bandwidth. The results of this exercise are shown in Table A.4 in the Appendix. Column (1) presents the coefficient from Table 2 as a reference. Column (2) uses the alternative CERRD-optimal bandwidth (Calonico et al., 2014), while Columns (3) and (4) present results for two more stringent bandwidths: one is half of the MSERD-optimal bandwidth, and the other is a manually specified bandwidth of 0.05. Even under these more restrictive bandwidth choices, the effect remains consistent, providing additional support for the robustness and causal interpretation of our results.

Following recent recommendations in the literature (Gelman and Imbens, 2019), our main analysis employs a linear first-order polynomial to mitigate overfitting concerns. Reassuringly, as shown in Table A.5, our results remain unchanged when using a second-order polynomial, further confirming the robustness of our estimates.

As discussed in Section 2.1, some wards elect multiple candidates simultaneously. For these wards, our main RD specification uses the vote share difference between the last elected and first non-elected candidate as running variable. At the same time, our balance tests (Table A.1) show that wards electing a female councillor by a small margin are also more likely to elect other women in the same election. To mitigate concerns about the influence of additional women elected alongside the focal female candidate in a closely contested race, our controls in the main analysis include a dummy equal to one if other women were elected in the same election. As a further robustness check, we replicate the analysis focusing only on elections in which no other woman was elected alongside the female candidate. This allows us to check that the observed backlash effect is truly driven by the election of a female candidate at the margin, rather than by the presence of several women elected in the same election (both with and without small margins). Table A.6 in the Appendix presents the results. The coefficients remain positive and significant, confirming that the backlash effect is robust even when restricting the analysis to elections with a single female candidate. This reinforces the interpretation that our results are driven specifically by the election of a woman, rather than broader trends in female representation within the ward.

Our balance tests also show that women elected at the margin are more likely to belong to the Labour and LibDem Party (Table A.1). This raises the concern that our results might actually be capturing the effect of a candidate’s party affiliation, rather than gender. To address the concern, we modify our analysis to test the effect of electing a Labour or LibDem politician in a closely contested local race. Specifically, we perform an RD analysis on the TGNI using the margin of victory for the Labour or LibDem candidate as a running variable. We present the results in Table A.7 in the Appendix. As shown, we find no significant effect, reinforcing the idea that our results are driven by the election of a female politician, and not by the party affiliation of the elected candidate.<sup>12</sup>

An additional potential concern is that this backlash may be driven by gender differences in policymaking decisions. As discussed in Section 2.1, the institutional design of English local elections limits the policymaking power of a single councillor elected at the ward level. Elected councillors become part of a much larger local authority (LA) council, where decisions are made collectively. To further address this concern, we implement a robustness check that explicitly accounts for the broader gender composition of the local government. In Table A.8 in the Appendix, we replicate our main specification while controlling for the share of female councillors in the respondent’s LA at the time of the interview. The idea is that if gender-equality legislation were driving the backlash, it would be more likely to occur in councils with a higher share of women. By holding this share constant, we isolate the effect of electing a female candidate in the respondent’s ward from potential policy-driven mechanisms at the LA level. The results remain robust, further supporting the interpretation of our findings as a symbolic response to female representation rather than a reaction to policy change.

As a final robustness check, we examine whether the election of a female councillor affects agreement with two statements that are entirely unrelated to gender attitudes: “*Strong trade unions protect employees*” and “*Private enterprise solves economic problems*”. These placebo

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<sup>12</sup>This result holds even when the Labour/LibDem candidate in the closely contested race is the only potential Labour/LibDem candidate (similar to the analysis in Table A.6 for elections with no other women).

outcomes serve as a test of specificity. If our main results indeed reflect a genuine shift in gender norms triggered by the election of a woman – rather than a general ideological shift or survey response bias – we should observe no significant effects on these unrelated items. As shown in Table A.9 in the Appendix, the estimates are small and statistically insignificant, providing further reassurance that our findings are not driven by unobserved confounders or broader attitudinal changes.

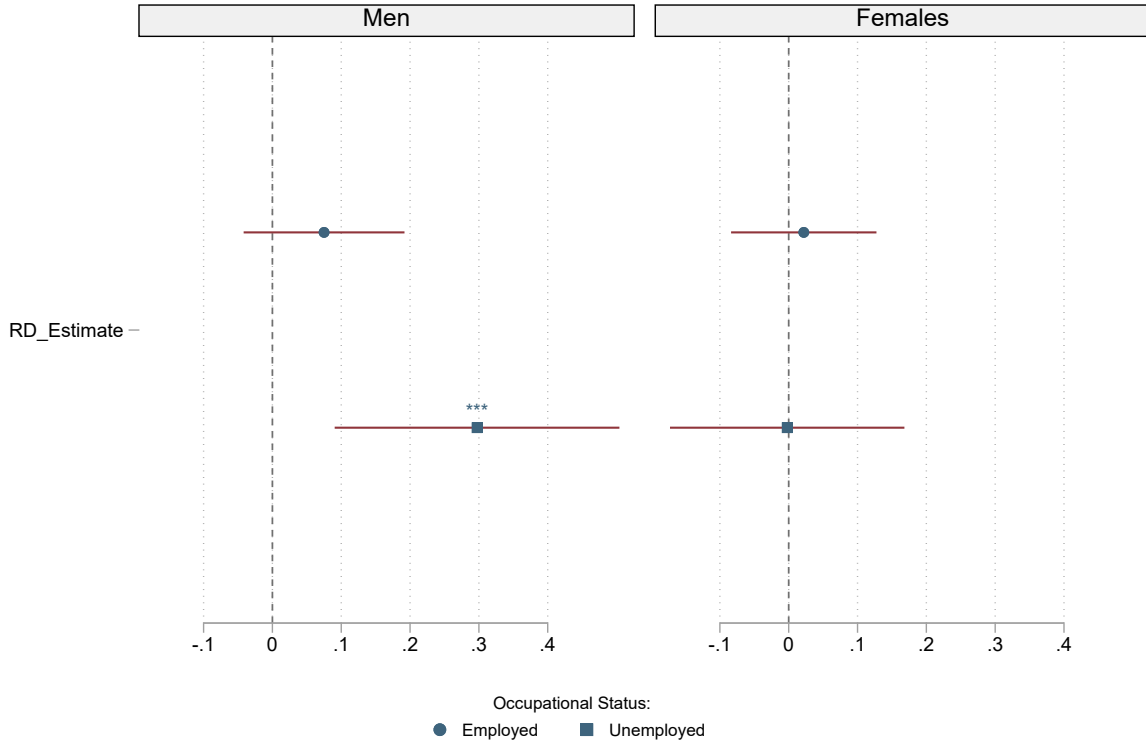
## 6 Gender Backlash and Economic Insecurity

Understanding how individuals respond to the election of female politicians requires considering the broader socio-economic context in which these events take place. A growing body of research in political science and political economy suggests that economic shocks can shape attitudes toward gender roles and other dimensions of social hierarchy (Margalit, 2013; Gidron and Hall, 2020). Importantly, economic dislocation – such as job loss, wage stagnation, and long-term insecurity – has been linked to increased support for traditional values and backlash against perceived social progress (Inglehart and Norris, 2017). More precisely, the “culture times economics” or “interactive effect” theory (Guriev and Papaioannou (2022), Gidron and Hall (2017)) suggests that the cultural backlash has been *triggered* and exacerbated by phenomena like globalization and economic insecurity. In light of this, this section explores the relationship between the backlash effect generated by the election a female politician and the level of economic insecurity of the respondents.

We begin by investigating whether our results depend on respondents’ employment status. Figure 3 shows that the election of a female councilor generates a gender backlash only on male respondents who are unemployed. For female respondents, employment status does not seem to matter.

To further investigate the role of economic insecurity, we look at the effect of the rise in Chinese import competition following China’s integration into global markets. This so-

Figure 3: Effect of Female Candidate Election on Traditional Gender Norms Index: Occupational Status

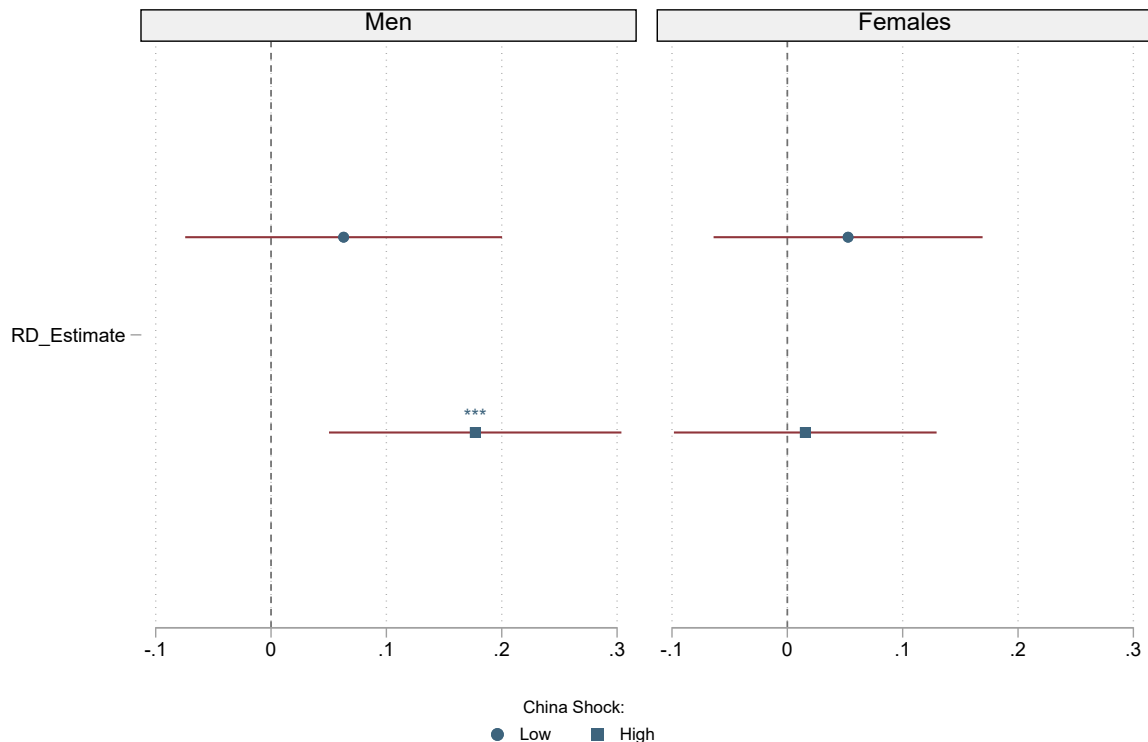


The graphs show RDD estimates of the effect of electing a female candidate on the *Traditional Gender Norms Index*, by gender and occupational status. The analysis focuses on respondents aged between 18 and 65. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Points indicate the estimated coefficients; bars represent 95% confidence intervals.

called “China shock” has been one of the most consequential economic disruptions in recent decades (Autor et al., 2013). While much of the literature has focused on the electoral consequences of this shock – such as increased support for populist or nationalist parties (Colantone and Stanig, 2018) – less attention has been paid to how it may interact with cultural and gender-related attitudes. In our analysis, we use the measures of local exposure to Chinese import competition across 167 NUTS-3 regions in Britain provided by Colantone and Stanig (2018). We assign each ward to its corresponding NUTS-3 region and classify wards as high- or low-exposure, depending on whether their associated level of exposure to Chinese import competition falls above or below the national median. We then replicate

our main RDD analysis separately for respondents living in high-exposure or low-exposure wards.

Figure 4: Effect of Female Candidate Election on Traditional Gender Norms Index: China-Shock Effects



The graphs show RDD estimates of the effect of electing a female candidate on the *Traditional Gender Norms Index*, by gender and exposure to the China shock. Exposure is measured using data from [Colantone and Stanig \(2018\)](#). All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Points indicate the estimated coefficients; bars represent 95% confidence intervals.

We present the results in Figure 4. As shown, male respondents in high-exposure areas exhibit a strong and statistically significant backlash in response to the election of a female politician. In contrast, the estimated effect among males in low-exposure regions is close to zero and not statistically significant. Among female respondents, we continue to observe no discernible effect, regardless of local exposure levels.

To further probe the role of the China shock, we examine whether the effect differs before and after 2007 – the year in which the growth of Chinese exports began to slow down ([Brandt](#)

and Lim, 2024), marking a decline in the intensity of the shock. Figure A.8 in the Appendix plots RDD estimates separately for male and female respondents in the pre- and post-2007 periods. Consistent with the previous results, we find that the backlash among men is present only before 2007 and disappears thereafter. Once again, the estimates for women remain close to zero in both periods.

Taken together, these patterns provide support for the “culture times economic” theory, and suggest that the China shock may have heightened sensitivity to symbolic political representation among certain groups of voters, particularly men in economically distressed areas.

## 7 Single Components

Our analysis so far has focused on the effect of electing a female politician on our comprehensive measure of gender attitudes, the *Traditional Gender Norms Index*. In this section, we explore the effect on each individual component. As each component captures a different dimension of gender attitudes, this offers a deeper understanding of the drivers of the backlash effect identified in our main results. Table 3 reports the estimated effects for each individual survey item included in the composite measure. The estimates are reported separately for all respondents (Column (1)) and disaggregated by gender, with results for men presented in Column (2) and for women in Column (3).<sup>13</sup>

The results show that the gender backlash identified in the main analysis is driven by changes on the level of agreement with the statements “*All in all, family life suffers when the woman has a full-time job*” and “*A husband’s job is to earn money, a wife’s job is to look after the home and family*” (top and middle panels in Table 3, respectively). For these items, the results consistently highlight significant heterogeneity in responses between male and female respondents. The coefficients for male respondents are positive, generally larger and

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<sup>13</sup>As before, results do not change if we repeat the analysis on the subsample of wards where no other women, except for the marginally elected one, was elected (see Table A.10 in the appendix).

Table 3: Effect of Female Candidate Election on PCA Components of Gender Norms

| <i>Family life suffers when<br/>the woman has a full-time job</i>                      |                   |                    |                   |
|----------------------------------------------------------------------------------------|-------------------|--------------------|-------------------|
|                                                                                        | (1)               | (2)                | (3)               |
| Robust                                                                                 | 0.079*<br>(0.042) | 0.119**<br>(0.054) | 0.047<br>(0.046)  |
| Respondents:                                                                           | All               | Males              | Females           |
| Mean Dep. Var.                                                                         | 2.85              | 2.9                | 2.81              |
| Bandwidth:                                                                             | .164              | .149               | .201              |
| N (Left):                                                                              | 9543              | 4006               | 5857              |
| N (Right):                                                                             | 8587              | 3700               | 5152              |
| <i>Husband's job is to earn money,<br/>wife's job is to look after home and family</i> |                   |                    |                   |
|                                                                                        | (1)               | (2)                | (3)               |
| Robust                                                                                 | 0.064<br>(0.042)  | 0.119**<br>(0.057) | 0.029<br>(0.051)  |
| Respondents:                                                                           | All               | Males              | Females           |
| Mean Dep. Var.                                                                         | 2.34              | 2.44               | 2.27              |
| Bandwidth:                                                                             | .192              | .146               | .163              |
| N (Left):                                                                              | 10284             | 3962               | 5319              |
| N (Right):                                                                             | 9243              | 3636               | 4682              |
| <i>Employers should help mothers<br/>combine jobs and childcare</i>                    |                   |                    |                   |
|                                                                                        | (1)               | (2)                | (3)               |
| Robust                                                                                 | -0.039<br>(0.033) | -0.045<br>(0.041)  | -0.044<br>(0.040) |
| Respondents:                                                                           | All               | Males              | Females           |
| Mean Dep. Var.                                                                         | 2.15              | 2.24               | 2.08              |
| Bandwidth:                                                                             | .11               | .143               | .114              |
| N (Left):                                                                              | 7403              | 3902               | 4204              |
| N (Right):                                                                             | 6722              | 3602               | 3749              |

Notes: RD estimates for the effect of electing a female candidate on the individual components of the *Traditional Gender Norms Index*. All statements are measured on a 5-point Likert scale, where higher values indicate stronger agreement with the statements “Family life suffers when the woman has a full-time job” and “Husband’s job is to earn money; wife’s job is to look after home and family”, and stronger disagreement with the statement “Employers should make special arrangements to help mothers combine jobs and childcare”. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

statistically significant, while those for female respondents are consistently close to zero and statistically insignificant. Importantly, the magnitude of the effects on male respondents is substantial: electing a female politician increases their agreement with the statement “*All in all, family life suffers when the woman has a full-time job*” by 0.119 percentage points, which represents an increase of approximately 4% relative to the sample mean of 2.9. Likewise, agreement with the statement “*A husband’s job is to earn money, a wife’s job is to look after the home and family*” increases by 0.119 percentage points, corresponding to an increase of about 4.8% relative to the sample mean of 2.44. The election of a female politician does not appear to have any significant effect on respondents’ level of disagreement with the statement “*Employers should make special arrangements to help mothers combine jobs and childcare*” (bottom-panel).

Overall, these results hint at the possibility that the gender backlash might be mainly driven by considerations related to the private sphere, rather than those pertaining to more policy-relevant domains. This would be consistent with the evidence in [Rettl et al. \(2024\)](#), who find that increased female participation in the labour market has induced a gender backlash on *egocentric* attitudes, but not on *sociocentric* ones. The authors distinguish between these two types of attitudes by analysing different survey questions. The set of questions on gender attitudes available in the UKLHS and BHPS is not rich enough to allow us replicate this distinction. Nonetheless, the heterogeneous results presented in the next section offer some support for the conclusions in [Rettl et al. \(2024\)](#).

## 7.1 Who Reacts?

The results presented above suggest that the overall backlash effect observed in response to the election of a female politician is primarily driven by male respondents, particularly in relation to beliefs about the compatibility of full-time work and family life for women, and traditional household roles. A natural question to ask, then, is whether this reaction reflects a general shift in gender norms across the population, or whether it is more concentrated

among individuals who are personally affected by such norms.

Table 4: Effect of Female Candidate Election on Gender Norms by Respondent Characteristics

| <i>Family suffers when the woman has a full-time job</i>                                       |                  |                   |                  |                     |                    |                     |
|------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|---------------------|--------------------|---------------------|
|                                                                                                | Single           |                   |                  | In Couple           |                    |                     |
|                                                                                                | (1)              | (2)               | (3)              | (4)                 | (5)                | (6)                 |
| Robust                                                                                         | 0.072<br>(0.066) | 0.032<br>(0.091)  | 0.111<br>(0.076) | 0.104**<br>(0.051)  | 0.156**<br>(0.063) | 0.049<br>(0.060)    |
| Respondents:                                                                                   | All              | Males             | Females          | All                 | Males              | Females             |
| Mean Dep. Var.                                                                                 | 2.53             | 2.64              | 2.44             | 2.94                | 2.98               | 2.91                |
| Bandwidth:                                                                                     | .14              | .133              | .213             | .201                | .189               | .208                |
| N (Left):                                                                                      | 2368             | 1086              | 1537             | 6268                | 2847               | 3371                |
| N (Right):                                                                                     | 2107             | 1005              | 1341             | 5679                | 2627               | 3032                |
| <i>A husband's job is to earn money,<br/>a wife's job is to look after the home and family</i> |                  |                   |                  |                     |                    |                     |
|                                                                                                | Single           |                   |                  | In Couple           |                    |                     |
|                                                                                                | (1)              | (2)               | (3)              | (4)                 | (5)                | (6)                 |
| Robust                                                                                         | 0.062<br>(0.061) | 0.047<br>(0.095)  | 0.052<br>(0.080) | 0.110*<br>(0.056)   | 0.162**<br>(0.063) | 0.080<br>(0.070)    |
| Respondents:                                                                                   | All              | Males             | Females          | All                 | Males              | Females             |
| Mean Dep. Var.                                                                                 | 2.13             | 2.3               | 1.98             | 2.38                | 2.46               | 2.31                |
| Bandwidth:                                                                                     | .153             | .127              | .151             | .175                | .19                | .145                |
| N (Left):                                                                                      | 2517             | 1061              | 1321             | 5861                | 2853               | 2822                |
| N (Right):                                                                                     | 2228             | 960               | 1129             | 5296                | 2628               | 2504                |
| <i>Employers should help mothers combine jobs and childcare</i>                                |                  |                   |                  |                     |                    |                     |
|                                                                                                | Single           |                   |                  | In Couple           |                    |                     |
|                                                                                                | (1)              | (2)               | (3)              | (4)                 | (5)                | (6)                 |
| Robust                                                                                         | 0.021<br>(0.053) | -0.003<br>(0.072) | 0.031<br>(0.071) | -0.075**<br>(0.038) | -0.056<br>(0.051)  | -0.127**<br>(0.050) |
| Respondents:                                                                                   | All              | Males             | Females          | All                 | Males              | Females             |
| Mean Dep. Var.                                                                                 | 2.09             | 2.2               | 1.99             | 2.17                | 2.25               | 2.1                 |
| Bandwidth:                                                                                     | .144             | .157              | .163             | .182                | .177               | .125                |
| N (Left):                                                                                      | 2403             | 1196              | 1384             | 5943                | 2753               | 2498                |
| N (Right):                                                                                     | 2132             | 1105              | 1180             | 5412                | 2536               | 2273                |

Notes: RD estimates of the effect of electing a female candidate on the individual components of the *Traditional Gender Norms Index*, split by respondents' gender and personal circumstances. Outcomes are measured on 5-point Likert scales; higher values indicate stronger agreement with the statements "*Family life suffers when the woman has a full-time job*" and "*Husbands job is to earn money; wives job is to look after home and family*" (top and middle panel, respectively), and stronger disagreement with the statement "*Employers should make special arrangements to help mothers combine jobs and childcare*" (bottom panel). In each panel, Columns 1-3 show results for single individuals, columns 4-6 for partnered individuals. Columns 1 and 4 show results for all respondents, 2 and 5 for men, 3 and 6 for women. All regressions control for interview timing, party of elected candidate, and presence of additional women elected. Year fixed effects included. Sample: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels.

Table 4 investigates this question by disaggregating the analysis between respondents who are single (Columns 1–3) and those who are “Married/Living as couple” (henceforward, “partnered”, Columns 4–6). The three statements on gender attitudes we analyze pertain to a familial context, as they refer to responsibilities and dynamics within the structure of a household or family unit, rather than focusing on individuals in isolation. Hence, distinguishing between partnered and single respondents should allow us to test whether the reaction is stronger for individuals who are more personally connected to the statements.

Table 4 clearly shows that, indeed, all the effects documented in our previous analysis seem to be driven by partnered individuals. None of the coefficients for single respondents is significant, and many are very close to zero. Consistent with our previous analysis, the election of a female councilor increases the level of agreement with the first two statements for male, partnered respondents. Interestingly, instead, it seems to induce more progressive opinions on the last statement, with the effect being driven by female (partnered) respondents.

Overall, the evidence indicates that the election of a female politician does not prompt a broad reconsideration of traditional gender norms across the population. Instead, it triggers a backlash primarily among those who perceive a more personal connection with the three statements. Although clearly not definitive proof, we believe these conclusions align with the evidence presented in [Rettl et al. \(2024\)](#). If the backlash affected attitudes at a more *sociocentric* level, we would not expect to observe differences between respondents based on their personal circumstances. The fact that we do instead is consistent with the backlash affecting attitudes at a more *egocentric* level.

## 8 Conclusion

This paper has examined how increased female representation in local government influences gender attitudes among the adult population in England. We combined data on local election

outcomes between 2002 and 2019 with individual-level survey responses from *Understanding Society* and the British Household Panel Survey and identified a causal effect through a Regression Discontinuity Design that exploits close electoral races.

Our findings indicate that the election of a female councillor triggers a shift towards more conservative gender attitudes, as captured by an increase in our Traditional Gender Norms Index. This backlash effect is driven entirely by male respondents and is especially pronounced among those who identify with the Conservative party or express strong national attachment. Economic insecurity appears to amplify this response: the effect is concentrated among unemployed individuals, those residing in areas more exposed to Chinese import competition, and during the period when such exposure was most intense – namely, prior to 2007. In contrast, we find no significant change in the overall index among women. However, women exposed to a female councillor exhibit increased support for work-family balance policies. Importantly, we interpret these findings as symbolic reactions to the election of a woman, rather than the result of substantive policy influence, given the limited decision-making power held by individual councillors within the large and collective structure of English local governments.

In evaluating the robustness of our findings, we engage with recent critiques of politician-characteristic regression discontinuity (PCRD) designs, such as those articulated by [Marshall \(2024\)](#). These critiques highlight the risk that close-election RD designs might conflate the effect of a candidate’s characteristic with other unobserved attributes that differ systematically among narrowly elected candidates. In the context of gender, such concerns are particularly salient: women who narrowly win may differ from men in campaign skills, policy priorities, or voter coalitions, and these bundled traits could influence downstream outcomes. Acknowledging this challenge, we undertook several diagnostic and robustness checks to assess the credibility of our design.

First, we tested for continuity in pre-treatment covariates at the cutoff. While data constraints prevent us from observing individual characteristics such as candidate age or ed-

ucation, we document and adjust for imbalances in party affiliation and the presence of other female candidates elected in the same ward. We further implemented density tests, finding no evidence of manipulation around the vote margin threshold. Additionally, robustness checks restricted to wards without other women elected yield similar results, reinforcing the interpretation of the discontinuity as driven by the election of a female councillor.

Moreover, the specific institutional and outcome context of our study helps mitigate concerns about PCRD validity. Unlike studies focusing on mayors or governors – roles associated with substantial executive authority and policy visibility – local councillors in England operate within multi-member wards and exercise limited unilateral power. Policy decisions are typically collective, and few opportunities exist for councillors to enact highly salient individual initiatives. Relatedly, our outcome of interest does not concern policy outputs, but rather shifts in public attitudes. In this context, the election of a female councillor acts less as a policy intervention and more as a symbolic event or role model signal. If unobserved competence or legislative skill differences were driving our results, we would expect attitudinal changes across both men and women, and across a wider set of beliefs. Instead, we find that the backlash is confined to male respondents and focused on private-sphere gender norms, while women exposed to female councillors report greater support for work-family reconciliation and higher social trust. This gender-specific pattern is difficult to reconcile with mechanisms rooted in candidate effectiveness or policy performance, and instead points to the power of symbolic representation.

Overall, while no observational design can fully eliminate concerns about unobserved confounding, we believe that the combination of balance tests, density checks, robustness analyses, and the symbolic nature of our institutional setting provides strong evidence that the election of female councillors causally shifts public attitudes through descriptive representation. Future research might extend these insights to offices with greater individual authority or explore how media portrayals of female politicians condition public responses. Nonetheless, our findings underscore the complex social dynamics that accompany efforts to

increase women's political representation.

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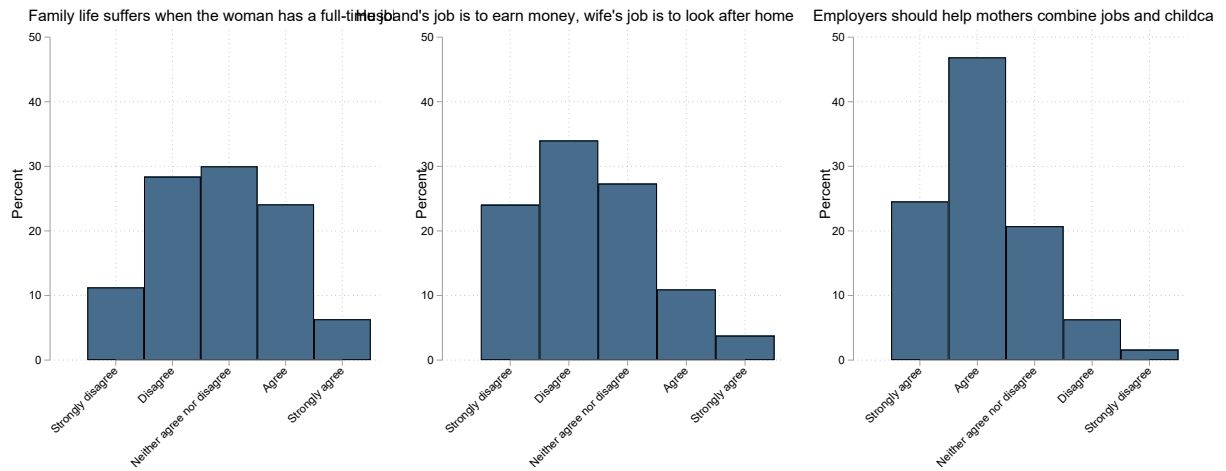
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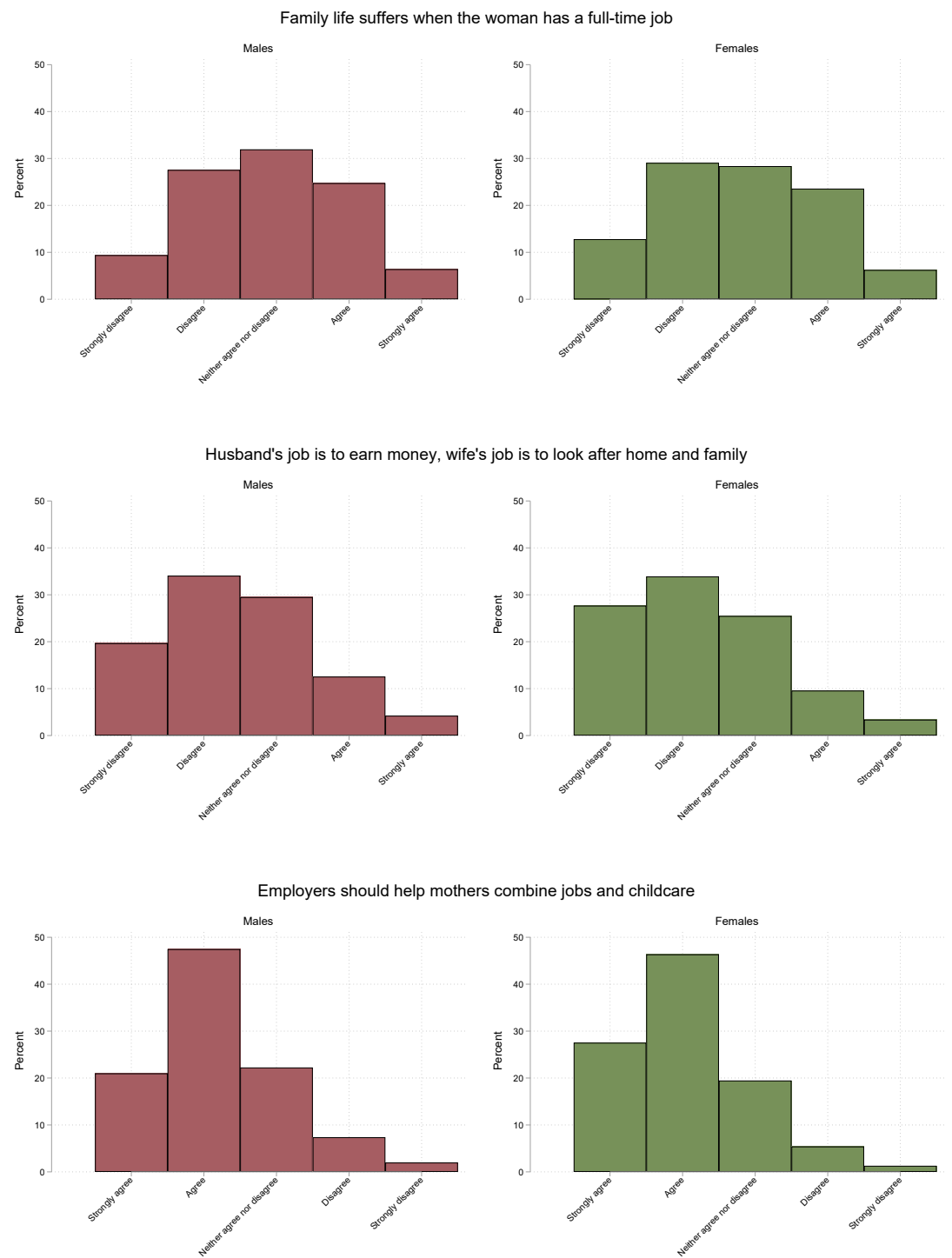
## 9 Appendix Figures

Figure A.1: Distribution of Responses to Gender Balance Questions



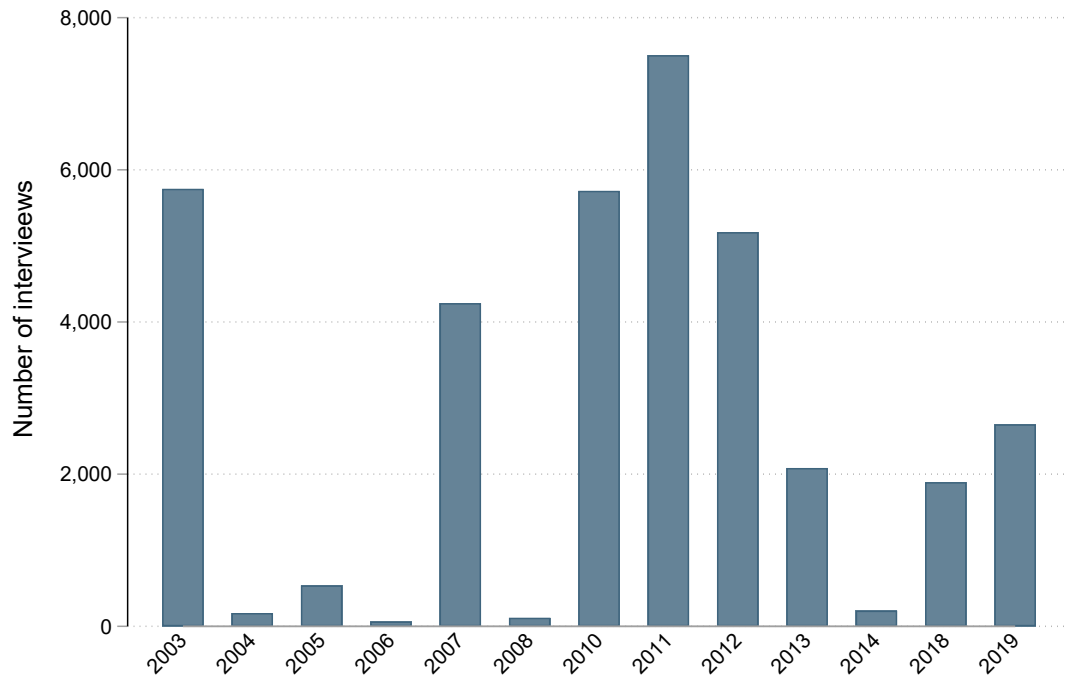
The graphs illustrate the distribution of responses to five questions assessing attitudes towards gender roles and equality. Responses range from 1 to 5, with higher values indicating greater support for gender conservatism. Data is pooled from surveys conducted between 2002 and 2019.

Figure A.2: Distribution of Responses to Gender Balance Questions



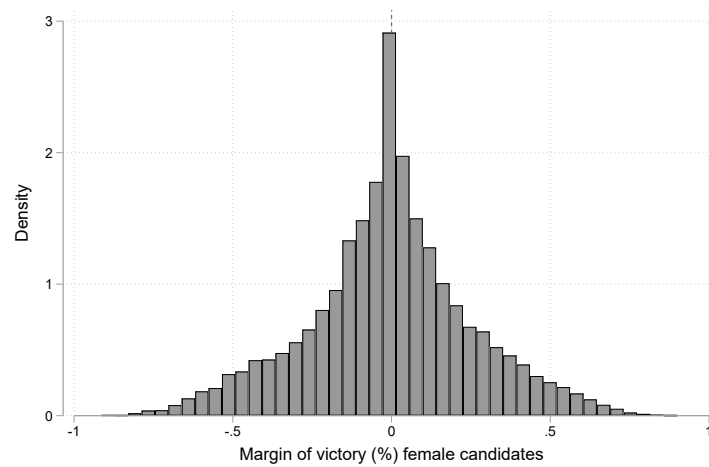
The graphs illustrate the distribution of responses to five questions assessing attitudes towards gender roles and equality, for male and female respondents. Responses range from 1 to 5, with higher values indicating greater support for gender conservatism. Data is pooled from surveys conducted between 2002 and 2019.

Figure A.3: Number of Interviews by Year



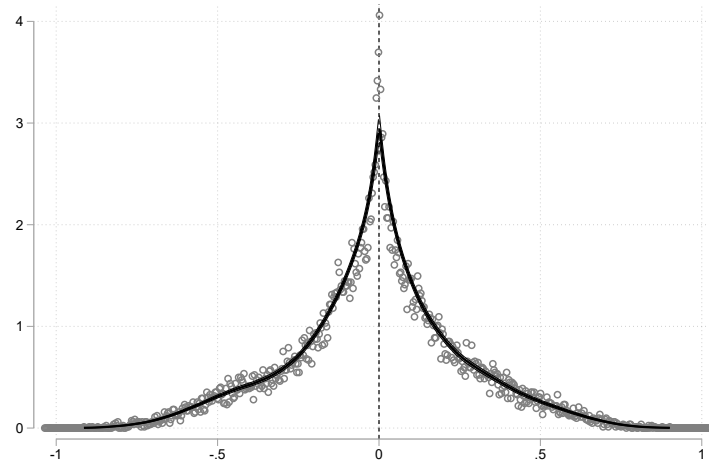
The figure shows the distribution of interviews in the sample by year.

Figure A.4: Distribution of Female Candidate Margin of Victory



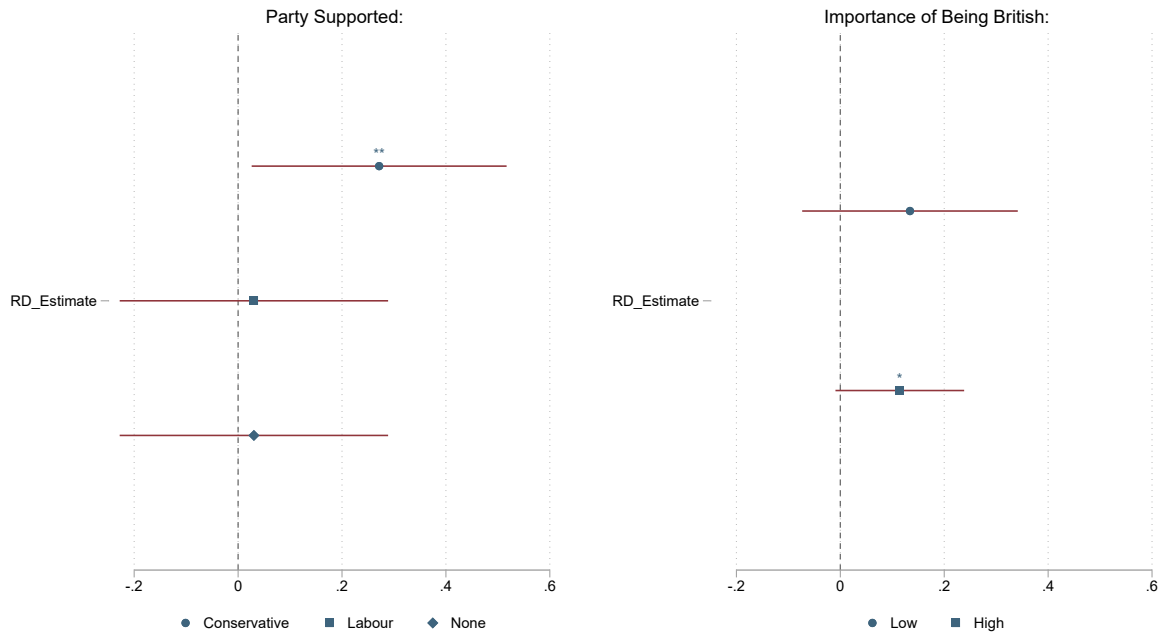
The figure shows the distribution of the running variable, defined as the margin of victory for female candidates. Positive values indicate an election win by a female candidate, while negative values indicate a loss. Data covers years 2002-2019.

Figure A.5: McCrary Density Test for Running Variable Continuity at Threshold



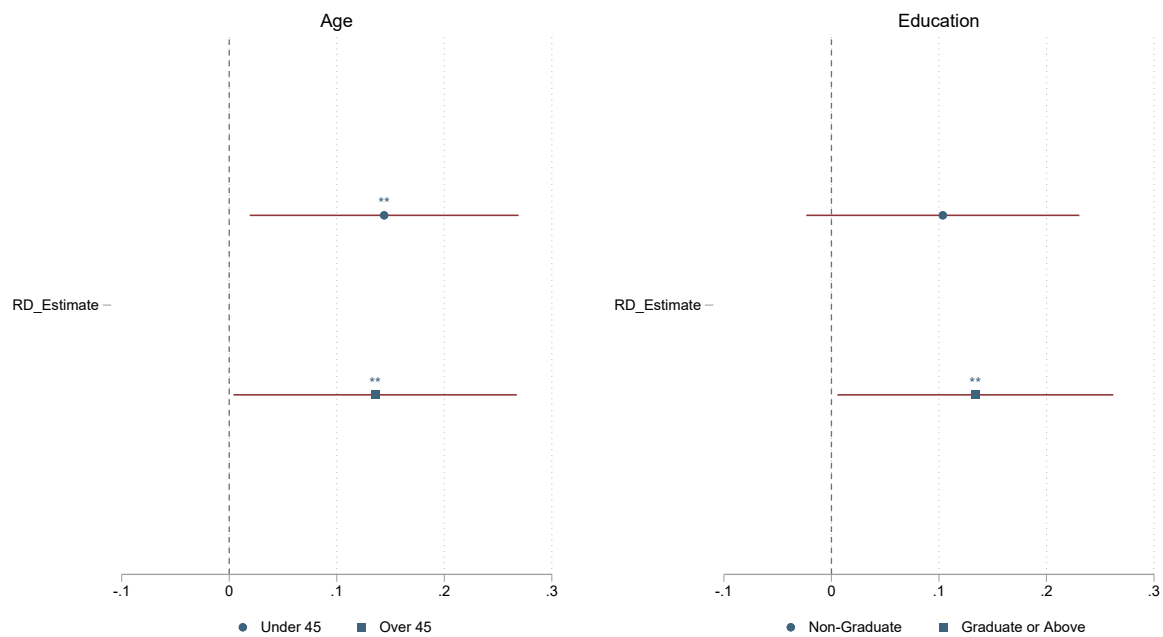
The figure presents the McCrary test for the continuity of the running variable (female candidates margin of victory) around the electoral threshold. The distribution shows no evidence of manipulation at the cutoff, supporting the validity of the RDD design. Data from years 2002-2019.

Figure A.6: Heterogeneous Effect of Female Candidate Election on Traditional Gender Norms Index – Male Respondents



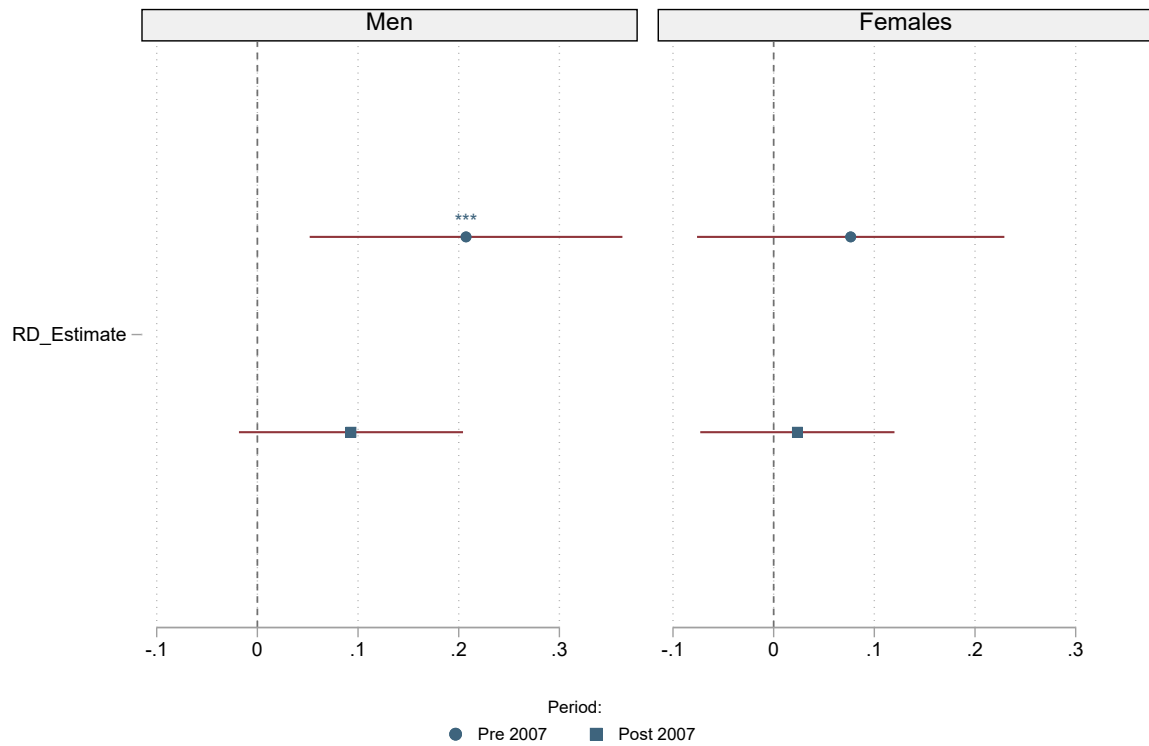
The graphs show RDD estimates of the effect of electing a female candidate on the *Traditional Gender Norms Index*, among male respondents. The left panel splits the sample by party identification, and the right panel by whether respondents report that being British is very important. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Points indicate the estimated coefficients; bars represent 95% confidence intervals.

Figure A.7: Heterogeneous Effect of Female Candidate Election on Traditional Gender Norms Index – Male Respondents



The graphs show RDD estimates of the effect of electing a female candidate on the *Traditional Gender Norms Index*, among male respondents. The left panel splits the sample by age (above/below median age of 45), while the right panel splits by education level. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Points indicate the estimated coefficients; bars represent 95% confidence intervals.

Figure A.8: Effect of Female Candidate Election on Traditional Gender Norms Index: Pre-Post China Shock



The graphs show RDD estimates of the effect of electing a female candidate on the *Traditional Gender Norms Index*, by gender and period. The sample is split between pre-2007 and post-2007, the year marking a slowdown in Chinese export growth [Brandt and Lim \(2024\)](#). All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Points indicate the estimated coefficients; bars represent 95% confidence intervals.

## A Appendix Tables

Table A.1: Covariate Balance Test at the Electoral Threshold

|                | Conservative<br>Winner<br>(1) | Labour<br>Winner<br>(2) | LibDem<br>Winner<br>(3) | Other Women<br>Elected<br>(4) | Total<br>Candidates<br>(5) | Total<br>Elected<br>(6) |
|----------------|-------------------------------|-------------------------|-------------------------|-------------------------------|----------------------------|-------------------------|
| Robust         | -0.078***<br>(0.020)          | 0.046**<br>(0.018)      | 0.042***<br>(0.014)     | 0.281***<br>(0.016)           | 0.039<br>(0.131)           | -0.028<br>(0.036)       |
| Mean Dep. Var. | .44                           | .29                     | .15                     | .05                           | 4.83                       | 1.52                    |
| Years:         | 2002-2019                     | 2002-2019               | 2002-2019               | 2002-2019                     | 2002-2019                  | 2002-2019               |
| Bandwidth:     | .121                          | .139                    | .177                    | .0967                         | .121                       | .133                    |
| N (Left):      | 5676                          | 6288                    | 7334                    | 4828                          | 5655                       | 6117                    |
| N (Right):     | 5556                          | 6118                    | 7101                    | 4779                          | 5545                       | 5944                    |

Notes: This table reports the balance test results for key covariates at the electoral threshold, assessing continuity for the RDD assumptions. Column (1) shows the probability of the candidate being Conservative, (2) Labour, (3) Liberal Democrat, and (4) the probability of other women also being elected. Standard errors are clustered at the ward level. Years covered: 2002-2019. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Table A.2: Effect of Female Candidate Election on Traditional Gender Norms Index – Lagged Outcome

|                | All              | Males             | Females          |
|----------------|------------------|-------------------|------------------|
|                | (1)              | (2)               | (3)              |
| Conventional   | 0.051<br>(0.060) | -0.000<br>(0.074) | 0.094<br>(0.070) |
| Bias-corrected | 0.057<br>(0.060) | -0.003<br>(0.074) | 0.100<br>(0.070) |
| Robust         | 0.057<br>(0.069) | -0.003<br>(0.086) | 0.100<br>(0.081) |
| Respondents:   | All              | Males             | Females          |
| Mean Dep. Var. | -.02             | .07               | -.09             |
| Bandwidth:     | .129             | .138              | .126             |
| N (Left):      | 3279             | 1523              | 1780             |
| N (Right):     | 2680             | 1246              | 1473             |
| Controls:      | Yes              | Yes               | Yes              |

Notes: RD estimates for the effect of electing a female candidate on the lagged *Traditional Gender Norms Index* (before the election of a woman). Column (1) reports results for the full sample; Columns (2) and (3) show estimates for male and female respondents, respectively. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.3: Alternative Cutoff

| <i>Panel A: All Respondents</i>    |                   |                  |                   |                   |
|------------------------------------|-------------------|------------------|-------------------|-------------------|
|                                    | (1)               | (2)              | (3)               | (4)               |
| Robust                             | -0.043<br>(0.053) | 0.051<br>(0.057) | -0.008<br>(0.052) | -0.018<br>(0.056) |
| Cutoff:                            | 0.05              | 0.10             | -0.05             | -0.10             |
| Bandwidth:                         | .126              | .155             | .141              | .179              |
| N (Left):                          | 9419              | 10767            | 5964              | 4978              |
| N (Right):                         | 5020              | 4055             | 10149             | 12334             |
| Controls:                          | Yes               | Yes              | Yes               | Yes               |
| <i>Panel B: Male Respondents</i>   |                   |                  |                   |                   |
|                                    | (1)               | (2)              | (3)               | (4)               |
| Robust                             | -0.012<br>(0.068) | 0.024<br>(0.074) | 0.054<br>(0.060)  | -0.055<br>(0.074) |
| Cutoff:                            | 0.05              | 0.10             | -0.05             | -0.10             |
| Bandwidth:                         | .127              | .148             | .201              | .152              |
| N (Left):                          | 4246              | 4653             | 3266              | 2055              |
| N (Right):                         | 2302              | 1789             | 5566              | 4869              |
| Controls:                          | Yes               | Yes              | Yes               | Yes               |
| <i>Panel C: Female Respondents</i> |                   |                  |                   |                   |
|                                    | (1)               | (2)              | (3)               | (4)               |
| Robust                             | -0.023<br>(0.054) | 0.078<br>(0.066) | -0.016<br>(0.061) | -0.003<br>(0.076) |
| Cutoff:                            | 0.05              | 0.10             | -0.05             | -0.10             |
| Bandwidth:                         | .184              | .192             | .136              | .148              |
| N (Left):                          | 6753              | 7069             | 3247              | 2509              |
| N (Right):                         | 3457              | 2514             | 5486              | 5841              |
| Controls:                          | Yes               | Yes              | Yes               | Yes               |

Notes: RD estimates of the effect of electing a female candidate on the Traditional Gender Norms Index, where higher values indicate stronger adherence to traditional gender role beliefs. Results are shown using alternative cutoffs of 0.05, 0.10, -0.05, and -0.10. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.4: Alternative Bandwidth

| <i>Panel A: All Respondents</i>    |                    |                    |                    |                    |
|------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                    | (1)                | (2)                | (3)                | (4)                |
| Robust                             | 0.073*<br>(0.042)  | 0.082*<br>(0.046)  | 0.105<br>(0.068)   | 0.127<br>(0.077)   |
| Bandwidth:                         | mserd              | cerrd              | mserd/2            | 0.05               |
| Bandwidth:                         | .17                | .112               | .073               | .05                |
| N (Left):                          | 9631               | 7479               | 5397               | 4225               |
| N (Right):                         | 8734               | 6812               | 5062               | 3784               |
| Controls:                          | Yes                | Yes                | Yes                | Yes                |
| <i>Panel B: Male Respondents</i>   |                    |                    |                    |                    |
|                                    | (1)                | (2)                | (3)                | (4)                |
| Robust                             | 0.122**<br>(0.055) | 0.126**<br>(0.059) | 0.182**<br>(0.080) | 0.193**<br>(0.094) |
| Bandwidth:                         | mserd              | cerrd              | mserd/2            | 0.05               |
| Bandwidth:                         | .145               | .0968              | .073               | .05                |
| N (Left):                          | 3930               | 3027               | 2390               | 1851               |
| N (Right):                         | 3622               | 2848               | 2305               | 1716               |
| Controls:                          | Yes                | Yes                | Yes                | Yes                |
| <i>Panel C: Female Respondents</i> |                    |                    |                    |                    |
|                                    | (1)                | (2)                | (3)                | (4)                |
| Robust                             | 0.030<br>(0.048)   | 0.043<br>(0.051)   | 0.031<br>(0.078)   | 0.060<br>(0.088)   |
| Bandwidth:                         | mserd              | cerrd              | mserd/2            | 0.05               |
| Bandwidth:                         | .166               | .11                | .073               | .05                |
| N (Left):                          | 5345               | 4106               | 3001               | 2369               |
| N (Right):                         | 4704               | 3651               | 2755               | 2066               |
| Controls:                          | Yes                | Yes                | Yes                | Yes                |

Notes: RD estimates of the effect of electing a female candidate on the Traditional Gender Norms Index, where higher values indicate stronger adherence to traditional gender role beliefs. Results are shown using alternative bandwidths: Column (2) applies the CERRD-optimal bandwidth (Calonico et al., 2014), Column (3) uses half of the MSERD-optimal bandwidth, and Column (4) employs a manually specified bandwidth of 0.05. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.5: Second Order Polynomial

|                | All               | Males              | Females          |
|----------------|-------------------|--------------------|------------------|
|                | (1)               | (2)                | (3)              |
| Conventional   | 0.078*<br>(0.044) | 0.128**<br>(0.055) | 0.035<br>(0.052) |
| Bias-corrected | 0.074*<br>(0.044) | 0.129**<br>(0.055) | 0.039<br>(0.052) |
| Robust         | 0.074<br>(0.048)  | 0.129**<br>(0.060) | 0.039<br>(0.057) |
| Respondents:   | All               | Males              | Females          |
| Mean Dep. Var. | -.03              | -.04               | -.02             |
| Bandwidth:     | .245              | .231               | .211             |
| N (Left):      | 11400             | 4939               | 5930             |
| N (Right):     | 10300             | 4557               | 5281             |

Notes: RD estimates of the effect of electing a female candidate on the Traditional Gender Norms Index, where higher values indicate stronger adherence to traditional gender role beliefs. Estimates are based on a second-order polynomial specification. All regressions control for days between the election and interview, party of the winning candidate, and the presence of additional women elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.6: No Other Women Elected

|                | All               | Males              | Females          |
|----------------|-------------------|--------------------|------------------|
|                | (1)               | (2)                | (3)              |
| Conventional   | 0.077*<br>(0.042) | 0.117**<br>(0.052) | 0.034<br>(0.045) |
| Bias-corrected | 0.074*<br>(0.042) | 0.115**<br>(0.052) | 0.030<br>(0.045) |
| Robust         | 0.074<br>(0.048)  | 0.115*<br>(0.060)  | 0.030<br>(0.052) |
| Respondents:   | All               | Males              | Females          |
| Mean Dep. Var. | -.03              | -.04               | -.02             |
| Bandwidth:     | .167              | .156               | .208             |
| N (Left):      | 9196              | 3959               | 5672             |
| N (Right):     | 6530              | 2848               | 4036             |

Notes: RD estimates of the effect of electing a female candidate on the Traditional Gender Norms Index, where higher values indicate stronger adherence to traditional gender role beliefs. The analysis considers elections in which no additional women were elected. All regressions control for days between the election and interview and the party of the winning candidate. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.7: Effect of Other Parties Candidate Election on Traditional Gender Norms Index

|                | Labour           |                  |                   | Lib Dem           |                   |                   |
|----------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
|                | (1)              | (2)              | (3)               | (4)               | (5)               | (6)               |
| Conventional   | 0.004<br>(0.035) | 0.004<br>(0.045) | 0.004<br>(0.039)  | -0.020<br>(0.040) | -0.015<br>(0.048) | -0.023<br>(0.045) |
| Bias-corrected | 0.004<br>(0.035) | 0.013<br>(0.045) | -0.002<br>(0.039) | -0.028<br>(0.040) | -0.024<br>(0.048) | -0.029<br>(0.045) |
| Robust         | 0.004<br>(0.040) | 0.013<br>(0.051) | -0.002<br>(0.045) | -0.028<br>(0.045) | -0.024<br>(0.054) | -0.029<br>(0.051) |
| Respondents:   | All              | Males            | Females           | All               | Males             | Females           |
| Mean Dep. Var. | -.03             | -.02             | -.03              | .01               | .01               | .01               |
| Bandwidth:     | .148             | .148             | .145              | .12               | .137              | .118              |
| N (Left):      | 11577            | 5172             | 6330              | 7993              | 4000              | 4343              |
| N (Right):     | 13656            | 6086             | 7309              | 7527              | 3672              | 4121              |
| Controls:      | Yes              | Yes              | Yes               | Yes               | Yes               | Yes               |

Notes: RD estimates for the effect of electing a Labour or LibDem candidate on the *Traditional Gender Norms Index*. All regressions control for days between the election and interview and the presence of additional Labour/LibDem politicians elected in the same election. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.8: Controlling for Female Representation in Local Authority

|                | All                | Males               | Females          |
|----------------|--------------------|---------------------|------------------|
|                | (1)                | (2)                 | (3)              |
| Conventional   | 0.093**<br>(0.037) | 0.148***<br>(0.048) | 0.042<br>(0.041) |
| Bias-corrected | 0.093**<br>(0.037) | 0.152***<br>(0.048) | 0.036<br>(0.041) |
| Robust         | 0.093**<br>(0.043) | 0.152***<br>(0.055) | 0.036<br>(0.046) |
| Respondents:   | All                | Males               | Females          |
| Mean Dep. Var. | -.03               | -.04                | -.02             |
| Bandwidth:     | .157               | .139                | .168             |
| N (Left):      | 9310               | 3810                | 5354             |
| N (Right):     | 8374               | 3542                | 4731             |

Notes: RD estimates for the effect of electing a female candidate on the *Traditional Gender Norms Index*, a composite measure from three survey items on gender attitudes (higher values indicate more traditional beliefs). Column (1) reports results for the full sample; Columns (2) and (3) show estimates for male and female respondents, respectively. All regressions control for days between the election and interview, the party of the winning candidate, the presence of additional women elected in the same election, and the share of female councillors in the Local Authority at the time of interview. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.9: Effect of Female Candidate Election on non-related Gender Norm Questions

|                | <i>Strong trade unions<br/>protect employees</i> |                   |                  | <i>Private enterprise solves<br/>economic problems</i> |                   |                  |
|----------------|--------------------------------------------------|-------------------|------------------|--------------------------------------------------------|-------------------|------------------|
|                | (1)                                              | (2)               | (3)              | (4)                                                    | (5)               | (6)              |
| Robust         | -0.013<br>(0.088)                                | -0.049<br>(0.127) | 0.031<br>(0.095) | -0.006<br>(0.059)                                      | -0.093<br>(0.100) | 0.131<br>(0.088) |
| Respondents:   | All                                              | Males             | Females          | All                                                    | Males             | Females          |
| Mean Dep. Var. | 2.56                                             | 2.6               | 2.53             | 3.07                                                   | 2.95              | 3.17             |
| Bandwidth:     | .13                                              | .138              | .139             | .202                                                   | .158              | .141             |
| N (Left):      | 1454                                             | 680               | 821              | 1899                                                   | 757               | 785              |
| N (Right):     | 1289                                             | 612               | 738              | 1670                                                   | 655               | 721              |
| Controls:      | Yes                                              | Yes               | Yes              | Yes                                                    | Yes               | Yes              |

Notes: RD estimates for the effect of electing a female candidate on non-related Gender Norm Questions. All statements are measured on a 5-point Likert scale, where higher values indicate stronger disagreement with the statements. All regressions control for days between the election and interview and the party of the winning candidate. Year-of-election fixed effects included. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

Table A.10: Effect of Female Candidate Election on PCA Components of Gender Norms – No Other Women Elected

| <i>Family life suffers when<br/>the woman has a full-time job</i>                      |        |                   |                    |                   |
|----------------------------------------------------------------------------------------|--------|-------------------|--------------------|-------------------|
|                                                                                        |        | (1)               | (2)                | (3)               |
|                                                                                        | Robust | 0.091*<br>(0.048) | 0.123**<br>(0.058) | 0.050<br>(0.056)  |
| <hr/>                                                                                  |        |                   |                    |                   |
| Respondents:                                                                           | All    | Males             | Females            |                   |
| Mean Dep. Var.                                                                         | 2.85   | 2.9               | 2.81               |                   |
| Bandwidth:                                                                             | .156   | .157              | .163               |                   |
| N (Left):                                                                              | 8964   | 3979              | 5090               |                   |
| N (Right):                                                                             | 6282   | 2857              | 3508               |                   |
| <hr/>                                                                                  |        |                   |                    |                   |
| <i>Husband's job is to earn money,<br/>wife's job is to look after home and family</i> |        |                   |                    |                   |
|                                                                                        |        | (1)               | (2)                | (3)               |
|                                                                                        | Robust | 0.060<br>(0.048)  | 0.108*<br>(0.062)  | 0.011<br>(0.058)  |
| <hr/>                                                                                  |        |                   |                    |                   |
| Respondents:                                                                           | All    | Males             | Females            |                   |
| Mean Dep. Var.                                                                         | 2.35   | 2.44              | 2.27               |                   |
| Bandwidth:                                                                             | .205   | .163              | .186               |                   |
| N (Left):                                                                              | 10216  | 4055              | 5396               |                   |
| N (Right):                                                                             | 7403   | 2937              | 3755               |                   |
| <hr/>                                                                                  |        |                   |                    |                   |
| <i>Employers should help mothers<br/>combine jobs and childcare</i>                    |        |                   |                    |                   |
|                                                                                        |        | (1)               | (2)                | (3)               |
|                                                                                        | Robust | -0.046<br>(0.037) | -0.056<br>(0.047)  | -0.046<br>(0.044) |
| <hr/>                                                                                  |        |                   |                    |                   |
| Respondents:                                                                           | All    | Males             | Females            |                   |
| Mean Dep. Var.                                                                         | 2.15   | 2.24              | 2.08               |                   |
| Bandwidth:                                                                             | .111   | .14               | .12                |                   |
| N (Left):                                                                              | 7207   | 3691              | 4197               |                   |
| N (Right):                                                                             | 4866   | 2635              | 2765               |                   |

Notes: RD estimates for the effect of electing a female candidate on each individual component of the *Traditional Gender Norms Index*. All statements are measured on a 5-point Likert scale, where higher values indicate stronger agreement with the statements “*Family life suffers when the woman has a full-time job*” and “*Husband's job is to earn money; wife's job is to look after home and family*”, and stronger disagreement with the statement “*Employers should make special arrangements to help mothers combine jobs and childcare*”. The analysis considers elections in which no additional women were elected. All regressions control for days between the election and interview and the party of the winning candidate. Year-of-election fixed effects included. Year-of-election fixed effects included. Sample period: 2002-2019. Standard errors clustered at the ward level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.