

Does a bias exist in the Irish Electorate?

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Abstract

Ireland is the first country in the world to apply a legislated gender quota under the STV electoral system. As a candidate-centred electoral system, there was always a concern that the impact of the gender law might be weakened by the potential for gender bias in voting behaviour. The results of the 2020 Irish general election (the second election for which the quota was in place) are instructive. All parties implemented the quota and the initial gains from the quota's first 2016 election were maintained, with one more woman elected to Dáil Éireann than in 2016. However, the headline figures may be misleading. In this earthquake election a significant number of high-profile women from across the political spectrum lost their seats, while male colleagues retained theirs. Indeed, most of the gains in terms of women's numeric representation retained post-2016 were largely due to the Sinn Féin surge which resulted in a number of inexperienced female candidates winning new seats on the back of a significant party vote.

Using self-reported voter attitudes from the 2020 Irish National Election Study, we investigate whether there is an underlying bias amongst voters against women. We test whether such a bias has an impact on the share of women running and the share of women winning, as well as individual women's level of electoral success. Overall, we find no evidence that voter bias affected outcomes for women at the 2020 Irish general election.

Keywords: *gender, voter bias, voter behaviour, candidate selection*

Introduction

It is over 25 years since the UN Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) and the accompanying Declaration and Platform for Action, a key response to which has been the widespread introduction of gender quotas. In what has been dubbed 'quota fever' Dahlerup (2006) argues this global response also represents a process of international norm diffusion for quotas in political recruitment. These schemes are found to have achieved significant gains in the numbers of female MPs worldwide (Paxton & Hughes, 2015). However, men continue to dominate political decision-making with the average percentage of women MPs as of 1 October 2020 still a disappointing 25.2%¹, indicating the process of achieving gender balance in global parliaments remains stubbornly slow, incremental and, in some instances, progress has stalled or even reversed (Dahlerup & Leyenaar, 2013). Much of the literature on gender in politics focuses on the effects of gender quotas and the role of political

¹ <https://data.ipu.org/women-averages?month=10&year=2020> [accessed 23 November 2020]

parties as gatekeepers to candidate selection. There is no clear understanding of the role of gender bias in the selection and/or the election of women, especially in proportional electoral systems. Employing data from INES 2020, this paper asks if there is a significant proportion of the Irish electorate with an overall preference for male representatives and more importantly if this view drives vote choice.

There is a gap in the literature on the impact of voter behaviour and the current under-representation of women in parliament. Existing research draws primarily on cases with majoritarian electoral systems, especially the United States Sanbonmatsu 2002; Dolan 2004, 2008). Other approaches to this enquiry include a number of experimental studies (Matland & Tezcur 2011; King & Matland 2003; Matland & King 2002; Kahn 1992; Sapiro 1981/1982), but the limitation of this method is the inability to generalise findings as explanations for actual election results (Dolan & Lynch 2014). Even more limited is the literature on voter bias in PR systems, in this case mainly due to the absence of opportunities to study gender-based voting in these systems, the challenges are twofold. In the first instance, questions on whether there is a gender of vote preference is rarely specifically included in national election studies (Giger et al. 2014) and secondly many PR systems have closed or restricted ballot structures (Closed List and Ordered Lists) and therefore do not offer preference voting options at candidate level (Erzeel et al. 2018; Erzeel & Caluwaerts 2015; Holli & Wass 2010). The quantitative research in a PR context that does exist finds no evidence of a direct effect of candidate sex on vote choice however the impact may be more indirect. Certainly Darcy & Schramm (1977) find gender can affect vote choice, when the candidate pool makes a gender vote possible and that this effect may be greater for non-partisan voters (Plutzer & Zipp 1996) and while other studies find evidence of a gender effect in the context of elections with low levels of information (Sanbonmatsu 2002).

The Irish STV electoral system provides a particular opportunity to test gender bias. In the first instance STV is recognised as the most open ballot structure of all (Farrell 2011), offering voters the option to vote for as many and as few candidates within and across party slates as they wish. In addition, Irish national elections represent the only STV system to operate a legislative gender quota, which requires all parties to nominate a minimum of 30% female candidates to their slate¹. This is a recent electoral reform passed in 2012, making the 2020 election only the second election in which the quota applies. We argue that the Irish general 2020 election is therefore a case that is particularly suited to this inquiry as it includes an electoral system and a candidate pool that make a gender choice possible in addition to the recent nature of the quota implementation which implies a cohort of ‘new’ women on the slate, who are relatively unknown to the average voter. Thus, this case includes candidates with low levels of information in an election system and candidate pool that makes it possible for candidate gender to be one factor in explaining vote choice. This paper contributes to the debate by investigating voter bias against women. Such bias is most commonly thought of as the reduced likelihood of voting for a candidate due to her sex/gender².

Using the INES 2020 data, the paper uses an innovative approach to test if such a bias at constituency level impacts the selection, election and vote of female candidates. The paper proceeds with a review of the existing research on voter bias, followed by an overview of the Irish case in the 2020 general election. Next, we provide an outline of the data available as well as the research design. Descriptive statistics proceed the presentation of results and analysis. Finally, we conclude with a brief discussion of results and suggestions for possible future research. Overall,

we find no evidence that gender bias at constituency levels impacts either the selection or election, or winning potential of women in Ireland.

Literature Review

Explanations for the persistent dominance of men in global parliaments are often presented in terms of barriers in the supply of women to the system, and the challenges that exist in demand for female representatives by political parties and voters (Lovenduski & Norris 1993). Though it provides a useful framework for thinking about the issue, this candidate selection supply and demand model has been critiqued for not including the concept of gendered ideologies (Krook 2010). Feminist Institutionalism highlights the complexity of gendered dimensions in institutions and how they operate, underscoring the importance of understanding the role of gender in institutions, rules, norms and practices. All of which contributes to a more complete understanding of the mechanisms of both continuity and change processes such as those associated with the introduction of gender equality measures such as quota legislation (Mackay et al. 2010; Kenny & Mackay 2020). Applying a Feminist Institutional lens, in this study we focus on the demand side of the Lovenduski & Norris (1993) model, in particular we focus on the gendered nature of norms and practices, to test the impact, if any, of gender bias on the selection and election of women.

Voter bias is defined in this context as a heuristic or shortcut that may be used to compare candidates, in the context of low levels of clarifying information (McDermott 1997, 1998; Matson & Fine 2006). Voter bias against women arises where inferences about a candidate's beliefs and/or ability are made with reference to the candidates' sex/gender and are used in deciding vote choice (Aalberg & Jensen 2007). While the literature to date finds very limited evidence for a direct effect of gender in vote choice, the impact may be more indirect. Indeed, the affect may not always be a negative one for female candidates, as some studies show candidates, publicly identified as feminists, can receive additional support from female non-partisan voters (Smith & Fox 2001; Black & Erickson 2003; Plutzer & Zipp 1996, 1985; Burrell 1994). Context may also play a role, for example Lawless (2004) notes that voters may hold such attitudes but that they may only translate into action (i.e. may impact vote choice) under certain circumstances. She argues that in an increasingly security conscious environment voters express a preference for male traits and articulate the view that male candidates were more suited to addressing security concerns, something that has the potential ultimately to aid men at the polls to the detriment of women.

As discussed, much of the research in PR systems to date focusses on the role of gender-based voting. This is a concept developed by Holli and Wass (2010) which focusses on the voting behaviour of each gender and measures same gender candidate choice. The concept follows Dolan (2008) who suggest that in some contexts, voters' behaviour is based on the affinity the electorate holds for candidates with a shared gender. Here the explanation is that women, or men, vote for female, or male, candidates because they believe they share a core commonality and feel a greater connection. In the case of Finland, Holli & Wass (2010) do find a significant gender effect, particularly for male same-gender votes. However, the study acknowledges the limited nature of the model used in the analysis, where important variables such as bias against women in general and incumbency are not accounted for. A more recent study, also from Finland, analyses five parliamentary elections and does include such contextual factors (Giger et al. 2014). The findings support earlier studies, reporting men are still more likely to vote for male candidates, but

interestingly the gender gap is significantly reduced in larger districts where voters have an equal ratio of male and female candidates to choose from. A limitation of this study is the Finnish electoral system itself, where a wide preference is available to the electorate but only a single preference is allowed.

The more flexible design of the PR-Open List system in Belgium gives voters multiple preferential voting options for all elections. This is a significant difference from the Finnish system where the single vote means voters are limited to a single choice between a male or female candidate, compared to the Belgian option of multiple preferences thus allowing voters to vote for both men and women. Erzeel & Caluwaert's (2015) study of the 2009 Belgian election finds support for much of the quantitative literature to date in that approximately 50% of the Belgian electorate do express a gender preference, particularly in favour of male candidates. Though the key explanations for this behaviour are not gender based, as the analysis finds voters' engagement and party affiliation to be more important motivations. A more recent study of gender-based voting in Belgium tests voting behaviour in regional, federal and European elections in 2014 (Erzeel et al. 2018). The results here are again consistent with previous findings, showing evidence of gender-based voting, with men, again, more likely to vote for male candidates. Importantly the analysis finds that this gender gap is somewhat explained by composition of the ballot, as when the gender of the top candidate on the list is controlled for the significance of the gender gap falls away (Erzeel et al. 2018).

While the flexible preferential PR-Open list system in Belgium offers voters more than one preference vote, this preference is restricted to one list or party offering. The Single Transferable Vote (STV) system on the other hand significantly expands the options open to the voter, with the most open ballot structure. STV is argued to be the most open ballot as the system allows the electorate the maximum preference, allowing the voter to vote in order of their preference for as many or as few candidates on the ballot paper, from all parties and none, male or female (Farrell 2011, Farrell & McAllister 2006). Studies on the impact of gender on vote choice in this system are also mixed. A cross-national study of voter behaviour and gender in 15 elections across three countries operating STV; Australia, Malta and Ireland, find variation in gender impact across the states involved in the study. In the Australian senate election women are found to have a gender advantage, which is boosted with incumbency and/or previous electoral experience. However, no such significant effect is found in the Maltese national election results, while the Irish results find evidence of a negative gender bias against women (Schwindt-Bayer et al. 2010).

The Irish Case

While Ireland today is a relatively wealthy country with an open, global economy which ranks comparably well in some global measures of gender equality, the state is ranked third of 166 countries by the UN Gender Development Index 2019 (GDI)², however, even with the introduction of a legislated gender quota, the share of women in political life remains low. The country has a history of catholic conservatism, where women's traditional role in the private sphere is celebrated and specifically recognised in the constitution (Article 41.2.1 of the current constitution states 'In particular, the State recognises that by her life within the home, woman gives

² <http://hdr.undp.org/en/content/gender-development-index-gdi> [Accessed 2 December 2020]

to the State a support without which the common good cannot be achieved’). Therefore, Galligan (2020 forthcoming) argues that the gender imbalance within Dáil Éireann is a reflection of this history and the wider under-representation of women in decision-making within Irish society more broadly. And that the complex relationship between women and politics in Ireland is a cultural environment that requires female politicians to carry out a dual role of a career in public life, while also fulfilling traditional home-based duties. The question is does this culture with a traditional biased view of the role of women motivate the electorate to vote against female candidates as the international study of STV systems discussed above suggests?

We argue that the STV electoral system is a particularly instructive setting to assess the impact of gender bias in the electorate, but argues that there are important contextual differences in the Irish case. In Ireland there is no ‘above the line’ option to vote for a party, as is the case in the Australian senate elections, while the positioning of candidates on the ballot is alphabetical as opposed to the party grouping layout used in the national elections in Malta. These systematic differences in the Irish STV system provides the Irish electorate with multiple preference votes – but only at candidate level. The system makes no assumption as to the voter’s party intention and provides no party a structural advantage in the layout of the ballot. As a result, with each preference expressed, the electorate’s vote, from a gender point of view, includes a mandatory gender choice (Holli & Wass 2010). The first Irish National Election Survey in 2002 provided scholars with the opportunity to test the effect of candidate gender on vote choice in Ireland. The survey included data from over 2,500 voters randomly selected and interviewed regarding their political attitudes, vote choice, and demographics across in all 42 constituencies. In addition, this study included a unique data set, that of the trail of electronic voting in three constituencies, which (in anonymous format) provided the actual full rankings of more than 135,000 voters in 2002. The study concluded that there ‘is no penalty for promoting women, there also appears to be few advantages’, that gender does not bias vote choice (McElroy & Marsh 2010: 831). Indeed, in a follow-up study the authors conclude that ‘female candidates have as good a chance of getting elected as their male counterparts’ (McElroy & Marsh 2011: 521).

Yet the number of women in the Irish representative politics remained particularly low, leaving a lingering question over voter bias. Some explanations for this puzzle argue that there is resistance to women in political leadership and that those women who manage to overcome this barrier are therefore of exceptional ability, that they are not equivalent with many male candidates in the system and that it is this competence imbalance that disguises a voter gender bias (McElroy 2018). The 2016 Irish general election was the first election to be run under the gender quota legislation, thus allowing an analysis to be performed on a larger percentage of female candidates, arguably of equal quality to their male counterparts. This analysis supported the findings of earlier work, finding no evidence of a gender bias in the Irish electorate as a whole. However, ‘the aggregate and individual level data clearly suggests that [the Fianna Fáil] party’s voters do actually have a preference for male candidates’ (McElroy 2018).

Data and hypotheses

The results of the 2020 Irish general election, while maintaining the increase of women TDs achieved in the wake of the quota’s initial implementation, warrant further scrutiny by those concerned with women’s underrepresentation in political life. One somewhat troubling feature of that election is the comparatively large number of high-profile women who lost their seats, while

their male colleagues retained theirs. One potential explanation for this is that these women were more likely to be punished at the polls by an electorate that is biased against them. At the same time, the unique context of a surge in support for the Sinn Féin party caused a number of inexperienced female candidates to succeed, thus masking the electorate's gender bias. This argument holds that the headline figure (i.e. the share of women elected to Dáil Éireann) may be misleading and that the election results warrant further scrutiny.

This paper is one attempt to scrutinise this general election result. Assuming that attitudes towards women held by the electorate will precede both voting behaviour and party selection decisions, we seek to answer the following question: was voter bias present among the electorate during the 2020 Irish general election? We investigate this question by analysing outcomes at both the constituency-level and the level of the individual candidate.

Constituency-level analysis

At the constituency-level, if voter bias operates, we expect to see its impact in two different ways. First, constituencies that have a higher proportion of voters who are biased against women should see fewer female candidates running in elections. There are multiple potential causal mechanisms here. Women might be less likely to put themselves forward to run in their local area if they believe that the traditional views of the community would lead to a more difficult campaign when compared with their male counterparts, or indeed if they believe that they would be less likely to be elected. Quotas by their very nature suggest that political parties are gatekeepers to selection and that a bias against female candidates exists within this electorate. Party selectors are expected to be cautious about supporting women to run in constituencies where their gender is likely to be a liability rather than an asset. Finally, where party members in the constituency are themselves the selectorate, if voter bias operates then women should be less likely to be chosen to run. We therefore test the following hypothesis:

H1: constituencies with higher levels of voter bias should have a lower percentage of women candidates.

Still, we know that while the proportion of female candidates varies substantially across constituencies, if voter bias operates it should do so not just at the candidate selection stage. Therefore, we test hypothesis two also:

H2: constituencies with higher levels of voter bias should have a lower percentage of women being successfully elected.

Candidate-level analysis

This constituency-level analysis has two important limitations that the candidate-level analysis seeks to address. Firstly, there are only 39 constituencies in the Republic of Ireland meaning that any cross-sectional analysis at the constituency-level necessarily suffers from a low number of observations. This renders it difficult to detect any impact of voter bias on our outcomes of interest where the magnitude of such an effect is small. Secondly, the constituency-level approach assumes that there are no important differences between the candidates that might materially impact their chances of success. However, we know that there is a wealth of literature on this topic that demonstrates that this is not the case. In particular, we should expect differences between candidates with respect to their party affiliation and incumbency to matter for their level of success. For example, as we know from the results of the 2020 general election, Sinn Féin and,

to a lesser extent, the Green Party experienced a significant increase in their vote share, while parties like Fine Gael and Labour experienced significant losses.

Examining the impact of voter bias on the outcomes of individual candidates allows us to address these limitations. We expect women who experience voter bias to have lower success rates than their male counterparts, both with respect to the ultimate outcome of the election (i.e. whether they win a seat or not) but also with respect to how many first preference votes they attract. We therefore test the following two hypotheses:

H3: female candidates running in constituencies with higher levels of voter bias should be less likely to be elected.

H4: female candidates running in constituencies with higher levels of voter bias should receive a lower share of the quota³ than their male counterparts.

Data

This paper employs a variety of sources to build the datasets testing these four hypotheses, including version two of the *Irish National Election Study* (INES) 2020, *RTE News*, the notices of poll for the individual constituencies, and the *Elections Ireland* website.

We have four key dependent variables. For the constituency level, we employ as the first dependent variable in our model the share of female candidates running in a given constituency (i.e., the number of women running divided by the total number of candidates running in that constituency). This data was assembled from the notice of poll for each constituency, with the gender of each candidate being coded by the researchers where necessary. We further coded the female winners in order to create the second dependent variable, the share of female winners (i.e. the number of successfully elected women divided by the total number of elected TDs in a given constituency). As percentages, both variables can take any value between 0 and 100.

With respect to the candidate-level analysis, we have two further dependent variables. First, an elected variable which takes value 1 if a candidate was successfully elected and value 0 if not. And second, a continuous variable capturing the share of the quota received by the individual candidate in the first count (i.e., the number of first preference votes received divided by the number of votes required for a candidate in a given constituency to be deemed elected).

The key independent variable is voter bias. We do not have a direct measure of voter bias against female candidates. As has been discussed in the literature review previously, it is difficult to measure such bias directly – even if a voter is aware that they would prefer to vote for a male candidate over a similarly qualified female candidate, they are unlikely to be willing to reveal this due to social desirability bias. As a result, much of the research in this area has relied on the use of experiments, with the attendant issues that arise due to the artificiality of the methodology. Since we are investigating the issue of voter bias in a real-world election, we have to rely on alternative measures of voters' attitudes towards women to proxy for voter bias.

We employ three such items from the INES 2020 to capture voter bias in our models. The first is a measure of support for the existing gender quota. Respondents to the survey were asked to indicate how strongly they support the use of gender quotas for national elections on a scale of 0 (strongly oppose) to 10 (strongly support). Since we are interested in capturing voter bias, rather than support for women, we reverse coded the item so that high scores indicated a lack of support (i.e. bias). We then took the mean of the individual responses by constituency, so that each

constituency has a single score capturing the attitudes of the members of their electorate. This item – named anti-equality – can take any value between 1 and 11.

We also construct a multiplicative index using this anti-equality variable in addition to two other items in the INES that relate to attitudes towards gender equality. First, we employ an item that asks respondents to answer the following question: “would you be in favour of a quota to ensure women make up 50 per cent of the Cabinet of Government Ministers?” Responses take value 1 if the respondent would not be in favour of the intervention, and 2 if they would be in favour. Again, we reverse code this item. Second, we employ an item that asks respondents more broadly about their attitudes towards gender equality. INES participants were asked to indicate on a five-point scale whether they felt that attempts to give equal opportunities to women in Ireland had not gone far enough (1) or had gone too far (5). We multiplied these three items then took the mean by constituency to create a single variable – name anti-equality index – to capture the attitudes towards gender equality interventions held by the electorate in that constituency. Again, for this variables, high values indicate a lack of support for such interventions which we use as a proxy for voter bias.

The key variable of interest in the candidate-level analysis is the interaction between candidate gender and the voter bias measures, since we are interested in the impact of voter bias on female candidates. The variable female takes value 1 if the candidate is female and value 0 otherwise.

Controls

Finally, we include a number of controls in our models. For the constituency-level analysis, we include variables that we think are likely to explain both the share of women running in a given constituency and their success rate. We expect two characteristics of the constituencies, being an urban constituency and being a Dublin constituency, to provide a positive environment for women. In addition, we include the percentage of the electorate that voted ‘yes’ in the 2018 abortion referendum. Finally, we include the district magnitude of the constituency (i.e. the number of seats to be filled) since we know that higher district magnitude is associated with more favourable outcomes for women since parties are more willing to field more diverse tickets (Zimmerman, 1994).

For the candidate-level analysis we include district magnitude as a control, and we also include two variables to control for characteristics of the individual candidates that we can reasonably assume will impact on electoral outcomes. First, we include incumbency since we expect candidates who are running for re-election to enjoy an incumbency advantage. Second, we include party affiliation of the candidate. Candidates were coded into one of the following categories: Fine Gael, Fianna Fáil, the Labour Party, Sinn Féin, the Green Party, Other Party (this includes the smaller parties like the Social Democrats), and Non-Party (those running as independents). For the purposes of the analysis, Fine Gael, as the party of government, serves as the reference category.

The analysis was carried out using a series of Ordinary Least Squares regression models (to test hypotheses one, two and four), as well as logistic regression models (to test hypothesis three). The next section presents the results of this regression analysis.

Results

Descriptive statistics

Table 1 below presents the summary statistics for the continuous dependent variables and the key independent variables that serve as proxies for voter bias. Four of these variables are measured at the constituency-level, while one is measured at the level of the individual candidate.

At the 2020 general election, women made up just over thirty percent of candidates, but there is a high degree of variability here. In one constituency, Cork East, only 7.69 percent of candidates running were female, while in Kildare South this figure stands at over sixty percent⁴. The outcomes for women are similarly varied. Twelve constituencies elected no women, but the success rate for women was more than 22 percent nationally, with two-thirds of the seats in the Dublin Rathdown constituency being filled by women. Candidates in general had very disparate outcomes with respect to how many first preference votes they were able to secure. On average, candidates won a little over 37 percent of the quota needed to get elected. However, some candidates – typically those with low name-recognition, running as independents – garnered very low levels of support, with one candidate receiving just over 0.01 percent of the quota before being eliminated in the next round of the count, while another won their seat on the first count with almost two times the quota required.

Table 1. Descriptive statistics

Variable name	N	Mean	Min.	Max.
Anti-equality	39	5.836178	4.5	6.955555
Anti-equality index	39	27.75908	18.36364	34.96296
Share of female candidates	39	30.71188	7.692307	63.63636
Share of female winners	39	22.4359	0	66.66666
Share of quota received	531	0.372861	0.001341	1.965008

We see variation too with respect to the variables that we are using as proxies for voter bias, the anti-equality measure variable and the anti-equality measure index. People in Dublin South West report the highest levels of disagreement with the gender quota as a means of tackling gender inequality (with a score of 6.96), while voters in Dublin South Central are least likely to hold such attitudes (with a score of 4.5). We see variation too with respect to the index. Respondents in Galway East reported the highest levels of disagreement with the measures for tackling gender equality (with a score of 34.96), while those in Dublin South Central were the least likely to hold such attitudes (that constituency returned a score of just 18.36 on the index, far below the mean of 27.76). These results tell us that voters do hold negative attitudes towards measures aimed at increasing women’s representation in political life and that such attitudes vary across constituencies.

More generally, of the 39 constituencies in the Republic of Ireland, 11 are located in the Dublin area, and 13 are classified as urban. 531 candidates ran in the 2020 general election, with 159 of them winning a seat in Dáil Éireann. Of those that ran, 137 were incumbents and 161 were women.

The next section presents the results of the regression analysis.

Regression analysis

This section presents the results of the regression analysis. Models 1 to 4 in Table 2 investigate the constituency level whether voter bias operates, while Models 4 to 8 investigate voter bias using analysis at the level of the individual candidate.

Overall, the results indicate that the electorate was not biased against women at the 2020 general election. A high level of dissatisfaction with the gender quota (anti-equality) is not a significant predictor of the share of female candidates or the share of women elected to the Dáil, though the coefficients are negative as expected. We see the same results when we employ the anti-equality index, the coefficients in Models 2 (share of candidates) and 4 (share of winners) are both negative but not statistically significant. Hypotheses one and two are therefore not confirmed.

	Model 1: % Candidates	Model 2: % Candidates	Model 3: % Winners	Model 4: % Winners
Anti-equality	-1.668 (4.082)		-0.221 (6.275)	
Anti-equality index		-0.435 (0.516)		-0.361 (0.797)
% Yes vote in 2018 abortion ref.	0.407 (0.423)	0.327 (0.428)	0.446 (0.650)	0.383 (0.662)
Dublin	-3.529 (10.86)	-2.562 (10.75)	-7.608 (16.69)	-7.078 (16.61)
Urban	5.074 (9.808)	5.238 (9.723)	8.139 (15.08)	8.178 (15.02)
District magnitude	-1.976 (2.848)	-2.235 (2.828)	0.252 (4.377)	0.0871 (4.369)
Constant	20.77 (37.13)	29.16 (35.92)	-7.566 (57.08)	5.830 (55.50)
Observations	39	39	39	39
R-squared	0.109	0.123	0.043	0.049

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

Turning to the candidate-level analysis, presented in Table 3, with respect to the voter bias we find similar results. Recall that with respect to the analysis of the outcomes for the candidates we are interested in the impact of voter bias on women running for office, so the key coefficient is an interaction term. Models 5 and 6 test hypothesis 3, which states that female candidates running in constituencies with higher levels of voter bias should be less likely to be elected. Whether we employ the single item proxy for voter bias (anti-equality) or the index (anti-equality index), the regression models do not detect any impact of voter bias on electoral outcomes for women.

Models 7 and 8 investigate whether voter bias against women leads to them receiving a lower share of the quota than their male counterparts. These models therefore test hypothesis 4. As we can see in the table below, for both the single-item measure and the index no impact of

voter bias on share of the quota received by female candidates is detected. We can note also that in addition to these coefficients failing to reach statistical significance, the sign on the coefficients is in the expected direction (i.e. negative) in only one instance (in Model 6). This is in contrast with the coefficients presented above for the constituency-level analysis. We can also note that in contrast with the models presented for the analysis at the constituency level, the overall fit of the OLS models below is high. Models 7 and 8 explain 76 percent of the variation in the shared of the quota received by the candidates.

Table 3. Candidate-level analysis

	Model 5: Elected (Logit)	Model 6: Elected (Logit)	Model 7: Share of quota (OLS)	Model 8: Share of quota (OLS)
Female	-1.702 (3.230)	-0.625 (1.941)	-0.0993 (0.186)	-0.106 (0.117)
Anti-equality	-0.172 (0.290)		-0.0149 (0.0178)	
Female*anti-equality	0.186 (0.552)		0.0102 (0.0319)	
Anti-equality index		-0.0205 (0.0373)		-0.00308 (0.00233)
Female*anti-equality index		-0.000326 (0.0700)		0.00236 (0.00419)
Incumbent	2.992*** (0.305)	2.983*** (0.304)	0.387*** (0.0203)	0.386*** (0.0202)
Fianna Fáil	-0.127 (0.408)	-0.134 (0.408)	-0.00595 (0.0282)	-0.00588 (0.0282)
Labour Party	-0.287 (0.623)	-0.290 (0.624)	-0.0928** (0.0389)	-0.0947** (0.0389)
Sinn Féin	3.434*** (0.610)	3.435*** (0.609)	0.696*** (0.0345)	0.697*** (0.0344)
Green Party	0.963* (0.507)	0.949* (0.506)	0.0391 (0.0363)	0.0388 (0.0363)
Other party	-0.661 (0.460)	-0.668 (0.459)	-0.190*** (0.0274)	-0.190*** (0.0274)
Non-party	-0.654 (0.416)	-0.671 (0.418)	-0.191*** (0.0267)	-0.193*** (0.0267)
District magnitude	0.129 (0.173)	0.117 (0.173)	0.00688 (0.0107)	0.00513 (0.0107)
Constant	-1.290 (1.835)	-1.659 (1.364)	0.383*** (0.113)	0.389*** (0.0848)
Observations	531	531	531	531
R-squared			0.760	0.760

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

It is also worth mentioning that although these hypotheses are not confirmed, the results in these regression models are broadly in line with what we would expect from an analysis of the

2020 election. In all four of the models, incumbency is associated with more favourable outcomes. Incumbents are more likely to be elected and receive a greater share of the quota required to be deemed elected than do their non-incumbent competitors. And the results with respect to the party affiliation variable clearly show Sinn Féin's dramatic success at that election – candidates running for that party were more likely to be elected and received a substantially higher share of the quota when compared to Fine Gael candidates⁵. The Green Party's success is also evident; being a candidate for that party improved the likelihood of being elected (see Models 5 and 6). By contrast, the Labour Party, Other party and non-party candidates had a comparatively worse election, attracting a lower share of the quota (Models 7 and 8).

Robustness checks

A series of robustness checks were carried out in order to further investigate the results presented in the section above. We assessed all models for multi-collinearity. Only the variance inflation factors for the candidate-level models indicated that this was an area of concern. The issue arose due to the inclusion of the interaction between the female and voter bias variables in addition to the main effects. Given that this interaction produces the key coefficient of interest in these models, this issue warranted further investigation.

We excluded the main effects and re-ran the analysis but the interaction remained insignificant. We also demeaned the two variables capturing voter bias (anti-equality and anti-equality index) and re-ran the regression analysis. The variance inflation factors for these new models indicated that this procedure eliminated the issue of multicollinearity, though the interaction terms remained statistically insignificant once again, indicating that we can be confident that the null result with respect to the impact of voter bias on outcomes for female candidates holds regardless of the model specification.

We also ran alternative model specifications for the constituency-level analysis. The analysis presented in Table 2 above employs a mean voter bias score per constituency. This value is calculated by taking the scores reported by respondents in a given constituency and computing the mean of these responses. Of course, this process of aggregation of individual-level responses at the constituency level ignores the extent to which respondents within a given constituency may disagree with one another. Essentially, the constituency-level analysis fails to take account of the fact that the data that is used in this analysis is multi-level data: that is, respondents are nested within constituencies. We therefore re-ran the analysis using a multi-level model that enables us to more accurately reflect the structure of the data. The results with respect to voter bias were unchanged so, for simplicity, we present only the original OLS models in Table 2 of this paper.

Conclusion

Overall, these results indicate that the Irish electorate was not biased against women at the 2020 general election. High levels of disagreement with one gender equality strategy in particular (the candidate gender quota introduced at the 2016 general election) and gender equality strategies more generally (as measured by an index made up of attitudes towards the gender quota, attitudes towards a gender quota in government, and the extent to which respondents believe that interventions to tackle gender equality have gone too far) are not statistically significant predictors of outcomes for women at constituency level (as measured by the share of female candidates and the share of women elected) or at the candidate level (as measured by two dependent variables

capturing electoral success, shared of quota received at the first count and whether the candidate was elected).

In one respect this result might be regarded as unsurprising. As we outlined in the literature review above, though there is strong evidence for voter bias against women when experimental methodologies are employed, in practice, when the results of real-world elections are analysed, we do not tend to find evidence that women who run are electorally disadvantaged when compared with their male counterparts. In addition, previous research on this topic in an Irish context has failed to detect the same (McElroy, 2018; McElroy & Marsh, 2010; 2011).

Though the findings are encouraging for those who are concerned with addressed the dearth of women in Irish political life, it is worth considering some of the limitations of this analysis. This paper examined the results of a single Irish general election but going forward it might be worth considering the question employing cross-sectional over time analysis. Up until relatively recently so few women were elected to Dáil Éireann that such an approach would have been difficult. However, with the advent of the gender quota, and the attendant increase in the share of women running and, subsequently, being elected there are simply many more women in the pool of candidates since 2016. When the gender quota rises to 40 percent, most likely at the next general election, this will further increase the number of women candidates. This will solve one of the key issues of any such analysis, namely that we are trying to draw conclusions about a small number of people (i.e, women who run). But an analysis of multiple elections over time will also enable us to address another issue with this analysis, namely that the 2020 general election may have concealed the impact of voter bias against women due to may have some peculiar features.

The paper started out noting that the 2020 general election results should give those who are concerned with increasing women's representation pause. While one more woman was elected to the Dáil than in 2016, a large number of high-profile women, including former Labour Party leader Joan Burton, and Fine Gael TD Kate O'Connell who was active in the campaign to repeal the Eight Amendment to the constitution, lost their seats. At the same time, a number of female first-time TDs entered the Dáil, so that the headline share of women in parliament remained unchanged. It seems clear that many of these women (for example former Sinn Féin councillor Patricia Ryan who memorably went on holiday during the campaign) were benefitting from a swing towards their party, while those women who lost their seats did so even as their male colleagues retained theirs⁶. Analysis of subsequent elections would enable us to take account of particularities of the 2020 election.

Finally, and perhaps most importantly, it is important to mention some of the limitations associated with the measurement of our key independent variable, voter bias. Without any direct measures of voter bias, we had to rely on attitudes towards gender equality interventions as a proxy. However, there are obvious issues associated with doing this, namely that not everyone who fails to express support for such interventions might do so due to bias against women in politics. An alternative that might be adopted going forward might be to include items in the exit poll that are explicitly designed to measure voter bias. However, as we previously noted above, due to social desirability bias respondents are often unwilling to reveal or may not be aware of any such gender bias. It is for this reason that survey experiments are most often employed so that respondents are not alerted to the purpose of the study. A much better approach, though a potentially costly one, would be to go beyond asking voters to indicate the party identification of the candidates that they ranked as their top three preferences on the ballot by instead presenting them with a replica ballot

for their constituency and asking them to indicate their rank ordering of candidates. This would provide a direct measure of voter bias since it would enable us to identify whether female candidates are consistently ranked below male candidates, even those of their own party.

We conclude by noting that even though this paper finds no evidence for voter bias that impedes the success of women in politics in Ireland, the attitudinal items with respect to gender equality interventions from the INES – in particular the item asking respondents whether they thought that such interventions had gone too far – indicate that there are likely still regressive attitudes that are held by sections of the electorate. As Lawless (2004) notes, where such attitudes are held by the electorate but they do not presently translate into negative outcomes for women running for office, their presence means that there is the potential to do so in response to a change in context. With the increase in the threshold for the gender quota from 30 to 40 percent imminent, and with the open ballot structure of STV enabling voters to discriminate against female candidates should they choose to do so, it is worth continuing to pay attention to this question of voter bias.

Notes

¹ It should be noted that the quota legislation is written in gender neutral terms. Although in practice the quota has benefitted women, this is only due to their substantial underrepresentation in the Irish political space. Political parties in receipt of state funding that failed to field enough men to make up a minimum of 30 percent of their candidates would also be subject to the penalty (i.e. the loss of half their state funding for the full parliamentary term) applied to parties that do not meet the quota.

² In the literature on women in politics, voter bias is usually thought of as having two facets. Direct voter bias, whereby voter attitudes about women's suitability for public office lead to reduced electoral success. Indirect voter bias, by contrast, consists of differential evaluations of competence across issue areas that are gendered female, male, and neutral. This paper investigates direct voter bias only.

³ The number of first preference votes received varies according to the size of the electorate, therefore we have used the share of the quota received (i.e. the minimum number of votes a candidate must win in order to be deemed elected) to ensure comparability across candidates.

⁴ The appendix reports these scores for each constituency.

⁵ Fine Gael serves as the reference category against which each of the party coefficients should be judged.

⁶ Kate O'Connell lost her seat in Dublin Bay South, while her colleague Eoghan Murphy who, as Minister for Housing, Planning and Local Government, had attracted a great deal of ire as a result of the housing crisis and been subject to votes of no confidence in the Dáil retained his.

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Appendix

Table A. Variation across constituencies				
Constituency	% female candidates	% female winners	Anti-equality	Anti-equality index
Carlow Kilkenny	42.86	40.00	5.36	28.87
Cavan Monaghan	38.46	60.00	6.37	32.19
Clare	33.33	25.00	5.40	28.33
Cork East	7.69	0.00	5.53	23.97
Cork North Central	16.67	0.00	5.82	28.52
Cork North West	33.33	0.00	5.75	30.00
Cork South Central	28.57	25.00	6.39	30.94
Cork South West	41.67	0.00	5.68	22.15
Donegal	7.69	0.00	6.19	32.85
Dublin Bay North	22.22	20.00	4.78	19.93
Dublin Bay South	33.33	0.00	4.50	22.55
Dublin Central	56.25	50.00	6.38	29.14
Dublin Fingal	25.00	20.00	5.97	29.07
Dublin Mid West	33.33	25.00	6.08	30.48
Dublin North West	20.00	33.33	5.03	25.71
Dublin Rathdown	45.45	66.67	5.60	24.42
Dublin South Central	53.85	50.00	4.77	18.36
Dublin South West	37.50	0.00	6.96	33.21
Dublin West	25.00	0.00	6.13	32.48
Dun Laoghaire	38.46	25.00	5.85	34.33
Galway East	16.67	33.33	5.93	34.96
Galway West	26.67	60.00	5.80	25.06
Kerry	23.08	20.00	5.73	24.06
Kildare North	16.67	50.00	6.64	27.48
Kildare South	63.64	25.00	5.78	26.52
Laois Offaly	26.67	20.00	5.95	26.97
Limerick City	41.67	0.00	5.93	29.52
Limerick County	16.67	0.00	5.76	30.76
Longford Westmeath	33.33	25.00	5.88	30.05
Louth	20.00	20.00	6.42	33.19
Mayo	33.33	25.00	5.70	24.52
Meath East	50.00	33.33	6.10	28.42
Meath West	11.11	0.00	6.81	31.94
Roscommon Galway	36.36	33.33	6.31	30.00
Sligo Leitrim	31.58	25.00	5.49	27.29
Tipperary	35.71	0.00	5.87	22.73
Waterford	27.27	25.00	5.18	19.26
Wexford	26.67	20.00	5.47	24.52
Wicklow	20.00	20.00	6.35	27.83