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THE 'SINN FÉIN ELECTION' IN IRELAND, 1918

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REPRESENTATION OF THE PEOPLE: FRANCHISE EXTENSION AND  
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**Abstract**

Electoral reforms in 1918 nearly tripled the number of people eligible to vote in Ireland. Following the reforms – the largest franchise extensions in UK history – the previously obscure Sinn Féin party secured 73 of Ireland’s 105 seats, an outcome that presaged a guerrilla war and ultimately independence from the United Kingdom. This paper examines the relationship between the franchise extension and the election results. We find little evidence of a connection between the two. New female voters appear less likely to have supported Sinn Féin. New male voters were slightly more likely to vote for Sinn Féin, but the magnitude of this effect was small and statistically insignificant. In fact, non-voting appears particularly high for both groups of new voters. Our results suggest that the extension of the franchise cannot explain Sinn Féin's victory. We conclude their electoral success was more likely driven by a change of heart on behalf of the Irish electorate, rather than a change in its composition.

JEL-Classification: D72, N44, N94.

Keywords: Voting; Elections; Ireland; Sinn Féin

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## 1. Introduction

Can wholesale franchise extensions affect real political outcomes? December 2018 marks the centenary of one of the most important events in British and Irish history. Post-war franchise extensions resulted in Ireland, at the time still part of the United Kingdom, seeing its electorate grow from under 700,000 to over 1.9 million. The general election of 1918 saw Sinn Féin (“Ourselves”, in Irish), a revolutionary independence party that had not contested the previous general election, take 73 out of 105 seats in Ireland. The dominant and more moderate party of Irish nationalism, the Irish Parliamentary Party, was decimated, and returned just six of the 67 seats they held prior to the vote. This Sinn Féin victory ushered in an era of revolution. Within two months of the election, Sinn Féin’s MPs had declared independence from the UK and the armed conflict that would become Ireland’s War of Independence began.

But what role did the franchise extension play in all this? This paper quantitatively assesses how changes in voting rights shaped the outcome of the election. The Representation of the People Act (1918) extended the franchise to all men aged 21 or over and to most women aged over 30, nearly tripling the size of the electorate. Historians have previously cited this dramatic change as a factor in understanding the Sinn Féin victory, but the size and importance has not been subject to a rigorous quantitative analysis (McConnel, 2004; Laffan, 2005; Coakley, 1994; Farrell, 1971). That changes in voting rights can have implications for political outcomes is of course well recognised: in relation to redistribution and government spending (*inter alia* Aidt and Jensen, 2013; Aidt et al. 2010; Lindert, 2004; Fujiwara, 2015); in relation to the effects of female enfranchisement (*inter alia* de Bromhead, 2017; Aidt and Dallal, 2008; Lott and Kenny, 1999, Voucharas and Xefteris, 2018); or concerning how universal franchise affected the growth of social democracy and the nationalisation of politics more broadly (Caramani, 2004 p.249; Polanyi, 1944). However this paper is somewhat unique in that franchise extension was so large, and the implications (violent rebellion) were so significant. As such this paper contributes not just to the political history of Ireland, but to the debates surrounding electoral radicalisation, as well as the broader political economy literature that examines the impact of franchise changes on electoral outcomes and government policy more generally.

The analysis in this paper was made possible by our digitisation of census records. The empirical approach links electoral results with demographic data from the 1911 census at the constituency level for the entire country. This permits us to analyse the effects not just of franchise extension itself like Berlinski and Dewan (2011), but also control for a rich set of constituency-level factors like literacy rates and religious affiliation. As the franchise change extended voting rights to women and young men, we focus on the gender composition and socio-economic profile of voters. We examine the correlations between these and related variables such as literacy rates, religion, and occupations and votes for Sinn Féin, the IPP, and the Unionist Party. Our primary conclusions are that constituencies with greater numbers of newly enfranchised voters, all else being equal, did not return a higher Sinn Féin vote share. In fact, in constituencies where the share of female voters was higher, support for Sinn Féin was lower. We confirm our results through a series of robustness checks, including using 'ecological inference' approaches to address the problem of ecological fallacy.

We find these results surprising. Although minor electoral reforms may not significantly affect real outcomes, few authors have had the opportunity to examine the effects of such a large franchise extension. The 1920 US Presidential election, wherein the vote was extended to all

women, is probably the most well studied experience. At the time many believed that the impact of this reform would be limited by low turnout amongst newly enfranchised women (Gerould, 1925). Indeed, this is consistent with our findings. Further, research from Corder and Wolbrecht (2006) provide quantitative evidence supporting the view that female suffrage did not have a significant impact on the results of this election. Corder and Wolbrecht used aggregated census data, like ours, and found that not only were women less likely to vote but when they did vote, their vote went the same way as the male electorate. A study by Merriam and Gosnell (1924) sheds some light on why this might not be the case, as in their survey almost 10% of non-voters and more than 15% of unregistered respondents list “disbelief in women’s voting” or “objections of husband” as their reason.

It thus appears that women in early 20th century Western societies were still constrained upon the achievement of suffrage. This result contrasts somewhat with the results of Niemi, Stanley, and Evans (1984) who find that other new voters appear to turn out in equal proportion to the existing electorate. Taken together, the aforementioned research literature predicts that turnout should be lower amongst the newly enfranchised women but this does not extend to newly elected males. Furthermore, in cases where women did vote they were unlikely to vote in a way that was drastically different from their male counterparts. Our results are largely consistent with these findings.

The paper will proceed as follows: the next section provides some important historical and political background to the period, outlining the rise of Sinn Féin as a political force and the social and political context in which the election of 1918 took place. Section 3 describes the electoral, socioeconomic and demographic data employed in our empirical analysis of section 4, while the robustness of our results is tested in Section 5. Finally section 6 outlines some general conclusions.

## **2. Background**

The Sinn Féin victory in 1918 was a remarkable result for a party that had never before contested a general election.<sup>1</sup> The party won 73 of the 105 Irish parliamentary seats with the estimated support of between 52-64% of voters (Coakley, 1994 pp.163-64).<sup>2</sup> As dramatic perhaps as the Sinn Féin victory was the collapse of its opponent the Irish Parliamentary Party (IPP). The IPP had dominated the Irish political landscape in the last decades of the 19<sup>th</sup> century and, despite notable intra-party disunity, had achieved a comprehensive victory in the last pre-war election of December 1910. The IPP secured 73 of 103 Irish parliamentary seats, including 49 seats where the IPP candidate was elected unopposed.

Despite this victory for the IPP, the eight years between general elections – the longest period without a general election in UK parliamentary history – had witnessed a marked shift in the

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<sup>1</sup> Although the party contested some by-elections in the years following its founding, it did not contest either of the parliamentary elections held in 1910 (Laffan, 2005). In 1912 they remained “a mere fringe nationalist faction” (Lee, 1989 p.8).

<sup>2</sup> Sinn Féin won 47% of votes cast but were uncontested in 25 constituencies. Assuming turnout and support were similar in uncontested and contested districts gives an estimate of 51.5%, assuming all votes went to Sinn Féin in uncontested areas yields a figure of 64%. Success however varied geographically, with Sinn Féin winning 69 of the 72 seats in the majority Catholic south of Ireland, while only securing 19% of the votes cast in the six counties that would go on to constitute Northern Ireland.

political landscape.<sup>3</sup> The 1910 election had resulted in the IPP holding the balance of power in Westminster, a position they used, not for the first time, to extract concessions from the Liberal government. Their reward was the Third Home Rule Bill of 1912, which in conjunction with the Parliament Act of the previous year, set in motion the establishment of Home Rule in 1914. The Unionist response to the threat of Home Rule was to take up arms and prepare to resist its imposition by force, forming the Ulster Volunteers in early 1913. The Nationalists responded in turn by forming their own militia force, the Irish Volunteers, which vowed to counter Unionist resistance to Home Rule. The enactment of Home Rule, which by 1914 had brought Ireland to the brink of civil war, was shelved when war broke out in the late summer of 1914. The IPP leadership and the majority of the Irish Volunteers lent their support to the war effort in an act of loyalty to the crown that IPP leader John Redmond expected would be rewarded once hostilities ceased (Miller, 1973 p.309).

The decision of the IPP and the leadership of the Irish Volunteers to back the war effort split the Nationalist movement. A minority – perhaps 12,000 of the 180,000 members of the Irish volunteers – rejected the leadership’s position, with a small sub-group coalescing around the more radical leaders of the Irish Republican Brotherhood (IRB), who advocated the overthrow of British rule in Ireland by any means necessary, including violence (Wheatley, 2005).

With the British authorities preoccupied with the war on the continent, the insurgents saw their opportunity.<sup>4</sup> In Easter week, 1916, they staged a rising in Dublin, occupying key buildings and proclaiming Irish independence in front of the General Post Office. The rising was quickly put down by the British authorities and fifteen of the leaders court-martialled and shot following the rebel surrender. Although the rising had failed militarily, the perceived severity of the British reaction in its aftermath bred discontent among many sections of the population and helped turn public opinion towards sympathy for the rebels (Laffan, 2005). Despite the fact that Sinn Féin had very little to do with the Rising directly, they capitalised on the shift in public opinion that occurred in its aftermath.<sup>5</sup>

British attempts to introduce conscription in Ireland also boosted Sinn Féin's profile and further undermined the IPP's position as the preeminent force in Irish nationalist politics. Conscription had been enacted in Britain in 1916 and the German offensive of 1918 had induced the cabinet to finally extend conscription to Ireland (Ward, 1974). The attempt to introduce conscription in Ireland was, not unexpectedly, deeply unpopular. The various disparate strings of Irish Nationalism were united in opposition, with the IPP even going as far as withdrawing from parliament in protest (Coakley, 1994). Despite this demonstration, the conscription issue reinforced the link between the IPP and the war effort while Sinn Féin claimed the role of the most vociferous opponent of conscription, declaring that the conscription bill was tantamount to a declaration of war on Ireland (Townshend, 2013).

The fallout from the Easter Rising and the prospect of general conscription set the scene for Sinn Féin's first electoral successes. First in Roscommon in February 1917, followed by victories in Longford, Clare, Kilkenny, and Cavan, Sinn Féin gained seats in a series of by-

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<sup>3</sup> Elections had been postponed with the outbreak of war in 1914.

<sup>4</sup> Only about 2500 rebels took part in the Easter Rising, representing about 20% of the Irish Volunteers in Ireland in 1916 (Collins, 2016).

<sup>5</sup> The British press and the public in general inaccurately dubbed the rising the 'Sinn Féin' rebellion. (Henry, 1920).

elections. Nonetheless that the IPP was able to defeat Sinn Féin in three by-elections in 1918, restored some optimism to the party leadership (Laffan, 2005 p.128).

Nevertheless, the IPP could claim little success between 1910 and 1918. Their failure to achieve the fulfilment of Home Rule for Ireland fuelled the idea that the party had taken parliamentary nationalism as far as it could and that a new force was needed to carry on the struggle for Irish self-determination. By 1918, a reshaped Sinn Féin under the leadership of Éamon de Valera had positioned itself as a serious and determined alternative movement. The Sinn Féin manifesto of 1918 clearly sets out the party's aims: to withdraw representation from Westminster, establish an Irish assembly, to use "any and every means" to resist British power in Ireland and to appeal to the Paris Peace Conference to recognise Ireland as an independent nation (Sinn Féin, 1918). The decision by the Irish Labour Party not to contest the election ensured the 1918 election represented a relatively clear cut choice between two different versions of Irish nationalism – the incremental achievement of modest independence pursued by the IPP and the radical and revolutionary republicanism offered by Sinn Féin.

### *The Representation of the People Act (1918)*

The choice between a continuation of the constitutional approach of the IPP and the radical republicanism of Sinn Féin would be put before an electorate that had expanded dramatically since 1910. The Representation of the People Act of 1918 had resulted in a near tripling of the Irish electorate, from 698,000 to 1,931,000 (Laffan, 2005). All men over the age of 21 and women over 30 who met a property requirement would be entitled to vote (Ogg, 1918). The fact that many constituencies had not been contested for a number of decades and an eight-year gap between elections meant the electorate was inexperienced with voting. It is estimated that perhaps only 360,000 people— less than 20% of the electorate—had voted in a previous parliamentary election (Coakley, 1994). Many within the IPP worried that this new electorate would be easily radicalised and would not remember the political achievements of the party of the previous decades, most notably in the area of land reform (McConnel, 2004). Indeed Farrell (1971) argued that without the change in voting rights, the IPP would have been the victorious party in 1918. This contention has been challenged by Garvin (1981), who examined correlations between the Sinn Féin vote and aggregated demographic data for 18 counties, and found no correlation between support for Sinn Féin and the proportion of young people in 1911. Similarly, Fitzpatrick (1978) rejects the notion that Sinn Féin would have been defeated without franchise extension, emphasising that the party won five out of eight by-elections conducted under the old register in 1917 and 1918.

Furthermore, the impact of the changes to the parliamentary franchise in Ireland must be viewed in wider context. In Britain, the electorate had been similarly increased, with approximately 14 million new voters added to the electoral rolls. Predictions of destabilization ushered in by franchise extensions were ultimately unfulfilled (Ogg, 1918). Though the Labour Party did increase its share of the vote from 6.4% to 23%, its number of seats only went from 42 to 57. As in the 1910 election, the Conservatives emerged as the largest party with its share of the vote declining from 47% to 39% (Craig, 1976). The revolutionary nature of the election results in Ireland therefore stands in stark contrast to continuity in Britain, where franchise changes did not generate a pronounced political impact (Tanner, 2003 p.388). Whether changes in voting rights may have played a role in shaping the Sinn Féin victory remains, therefore, an open question.

### 3. Data

The 1918 electoral map of Ireland consisted of 103 constituencies electing 105 MPs to Westminster. All were single-seat constituencies with the exception of Cork City and Dublin University, which each elected two members.<sup>6</sup> To generate a socio-demographic profile of each electoral district, we link information from the 1911 Census of Ireland, available from the National Archives of Ireland, to constituency boundaries (see figure 1). Unfortunately constituency boundaries did not directly correspond to the administrative areas recorded in the census and as such the matching of information was required. Using parliamentary reports on electoral constituency boundaries we matched the 3655 district electoral divisions of Ireland (DEDs) to 100 parliamentary electoral districts.<sup>7</sup> A more detailed description of the procedure for matching districts can be found in the appendix. In addition to the census information, we also included information on the number of male and female voters as described in UK parliamentary papers (UK Parliament, 1918). The census information allows us, for example, to consider the occupation, age and gender composition of each constituency.<sup>8</sup> The descriptive statistics (Table 1) reveal some of the differences in the demographic profiles of the constituencies. The Social Class variables measure the proportion of the male voting-age population that belongs to one of six occupational groups (ranked highest to lowest), as defined by HISSCLASS categories (van Leeuwen and Maas, 2011). We also create a separate category for pensioners.<sup>9</sup> For example, the proportion of the voting-age male population in the lowest category (Social Class 6) ranges from 11% to 48% while literacy ranges from 54% to 96%. Likewise the religious divisions are evident, with some constituencies being as high as 99% Roman Catholic while others are as low as 7%. The female share of the electorate variable, *Share female voters*, defined as the share of female electors in the total electorate in each constituency varies considerably, from 0.30 to 0.44. Likewise our estimate of the relative size of the new male electorate is derived from data in the parliamentary papers. Unfortunately this source does not list the number of electors in each constituency who are ‘new’ and ‘old’ but simply by gender and type of franchise (e.g. local or parliamentary). To estimate the new male franchise for each constituency we use the difference between the male local government franchise and the male parliamentary franchise in 1918. Under the 1898 Local Government Act, the local government franchise was extended to include all male householders or occupiers (McManus, 2013). However the local government franchise was applied at the household level and therefore disenfranchised, among others, younger, single men who lived with their fathers—who were also disenfranchised in parliamentary elections before 1918.<sup>10</sup> Indeed according to Tanner (2003 p.119) “there was considerable continuity between the pre-war parliamentary franchise and the post-war municipal franchise”. From the information on men entitled to vote in local elections we generate a variable, *Share new males*, which is the number of new male

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<sup>6</sup> Election data was obtained from ARK Northern Ireland Elections database (accessed 4 March 2015)

<sup>7</sup> There were four University seats in total: two from Dublin University and one each from the National University of Ireland and Queen's University Belfast. These seats are excluded from our analysis.

<sup>8</sup> Of course the demographic profile of a constituency in 1911 may differ somewhat from that of 1918. We will address this point in the robustness section.

<sup>9</sup> The categories 'scholar' – those still in education – and 'NA/missing' were also created but not reported here.

<sup>10</sup> Most male householders had gained the vote before 1918 under the 1867 and 1884 Reform Acts. The proportion of adult males disenfranchised before 1918 varied across the UK however, ranging from one-third in England and Wales to one-half in Ireland (Cunningham, 2014).

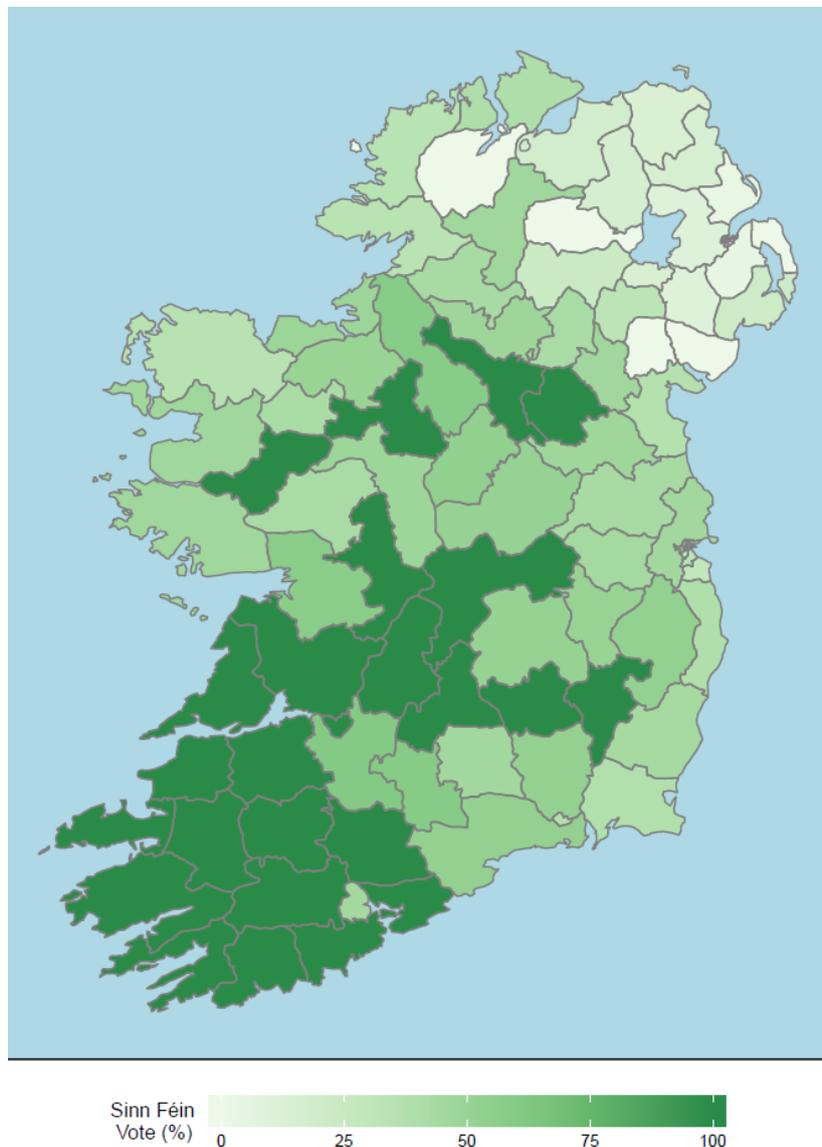
voters as a proportion of the electorate. The inclusion of this variable can help us identify whether newly enfranchised male voters gave disproportionate support to Sinn Féin.

#### 4. Results

##### *Regression Analysis*

As discussed above, contrasting explanations have been provided for the success of Sinn Féin in the 1918 General Election. Broadly categorized, we can separate the divergent theses explaining the electoral swing to militant republicanism in 1918 into two hypotheses. The first explanation – the franchise extension hypothesis – could be considered within the framework of traditional theories of non-random franchise extension. Under this hypothesis, the extension of voting rights to previously non-franchised groups permitted a more representative

Figure 1: Electoral Constituencies and Sinn Féin Vote Shares, 1918



'latent mandate' to emerge from the Irish people. If true, then we should expect to see large swings in areas most affected by the franchise extension. Under this hypothesis, areas with relatively larger numbers of women voters or newly enfranchised men, would expect to see larger Sinn Féin votes. The alternative explanation is that the electoral success of Sinn Féin was the result of a change in preferences on behalf of the electorate – that is the events of Easter 1916 and its aftermath, the conscription crisis, the perceived failure of the IPP to achieve Home Rule, or perhaps some other factor, led to a switch in voter allegiance within the Nationalist movement, from constitutional to republican. Under this alternative hypothesis, the franchise extension was not a substantial cause of the electoral shift, and variables such as the number of new voters should not have a significant effect on the Sinn Féin vote.

Table 1: Summary statistics of 1918 Election

	Mean	Std. Dev	N	Min	Max
SF vote	0.494	0.34	100	0.00	1.00
IPP vote	0.117	0.13	100	0.00	0.54
Unionist vote	0.154	0.23	100	0.00	0.75
Non-vote	0.229	0.16	100	0.00	0.72
Share female voters	0.361	0.03	100	0.30	0.44
Share new males	0.237	0.05	100	0.03	0.34
Social Class 1	0.023	0.01	100	0.01	0.08
Social Class 2	0.076	0.06	100	0.02	0.34
Social Class 3	0.110	0.08	100	0.03	0.39
Social Class 4	0.344	0.22	100	0.00	0.71
Social Class 5	0.080	0.06	100	0.01	0.23
Social Class 6	0.265	0.08	100	0.11	0.48
Pension recipient	0.010	0.00	100	0.00	0.03
Catholic	0.721	0.28	100	0.07	0.99
Literacy rate	0.826	0.07	100	0.54	0.96
Turnout	0.771	0.16	100	0.28	1.00
SF unopposed	0.250	0.44	100	0.00	1.00
SF no contest	0.050	0.22	100	0.00	1.00
Population density (log)	4.917	2.27	100	2.84	10.68
Average age	44.175	2.51	100	39.23	47.78

Figure 2: Share Female Voters and Sinn Féin Vote Shares

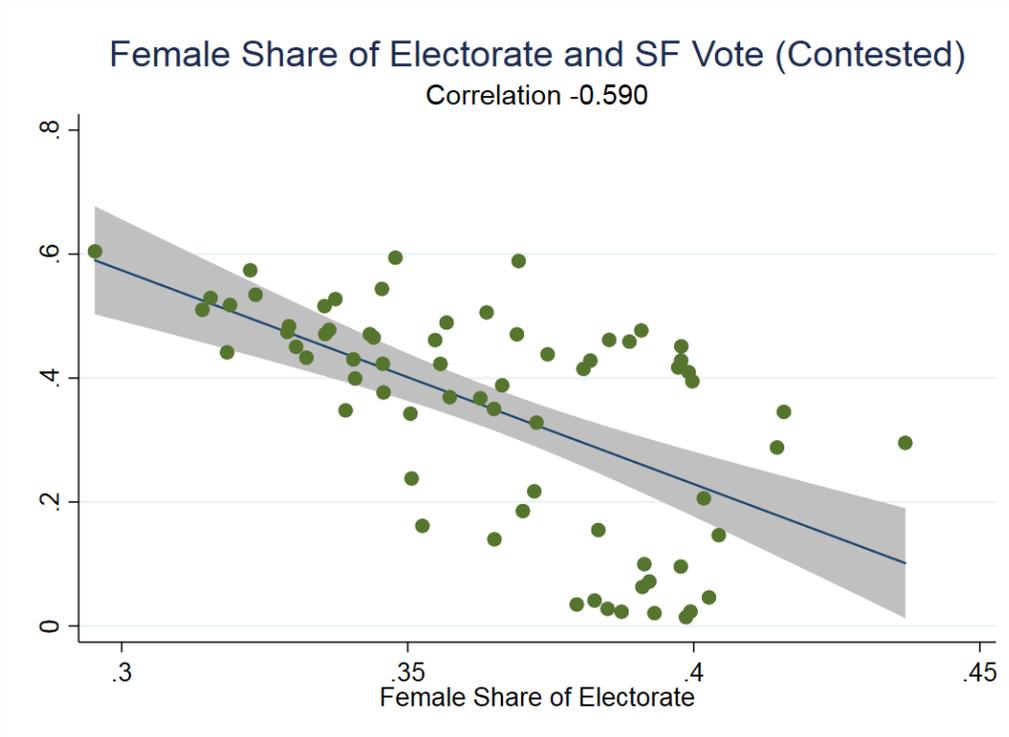
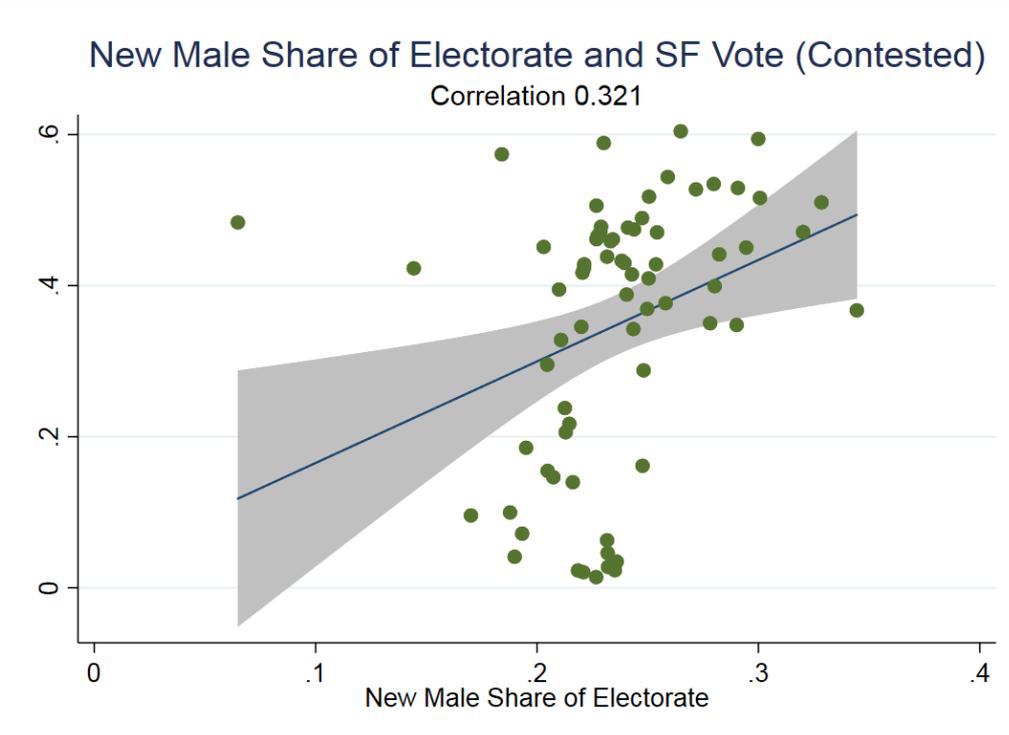


Figure 3: Share of newly enfranchised men and Sinn Féin vote share in contested elections



As a first pass, the simple correlation between the share of female voters and the Sinn Féin vote in contested constituencies is shown in figure 2 is informative. The graph shows a strong negative relationship between the share of women in the electorate and support for Sinn Féin, with a correlation of -0.59. Generally speaking, where women made up a greater proportion of the electorate, the Sinn Féin vote share was lower. Figure 3 shows the correlation between the share of new male voters and Sinn Féin vote shares. Here, the opposite relationship is apparent. A higher proportion of new male voters is positively associated with the Sinn Féin vote share, albeit with a weaker correlation of 0.32.

Of course, these bivariate relationships, however revealing, cannot be interpreted as direct proof of differential voting as the observed relationship may be a product of confounding factors related to both the number of new electors and support for Sinn Féin. The multivariate regression results reported in table 2 address this issue. Holding other variables such as social class constant, the extent to which franchise extension can explain the observed voting patterns of the Irish electorate sheds light on whether the 'latent mandate' or 'preference change' theories of 1918 carry more statistical weight.

Variable choice is important when dealing with highly correlated variables (e.g. social class, and literacy) and small sample sizes ( $n=100$ ). The first consideration is geographic. Ireland has four ancient provinces: Ulster, Munster, Leinster, and Connaught. The provinces coincide with North, South, East, and West, and are of largely comparable land area. There is reason to believe that these provinces display regional-specific heterogeneity; for example, protests against the Home Rule Bill centred around the Ulster Covenant, from which the Ulster Unionist Party emerged. Consequently the vote-shares for all three-parties (Sinn Féin, the IPP, and the Unionists) are presented both with and without provincial fixed effects. The interpretation of the results is largely the same regardless of the inclusion of provincial effects, quantitatively and qualitatively, though we include both specifications to confirm this.

The additional explanatory variables we choose to include reflect a mix of socio-economic (e.g. social class, literacy), demographic (age, population density, relative number of new male and female voters), and political (e.g. turnout, contested or non-contested race), determinants that we ex-ante believed were relevant considerations. For example, one might be concerned that voters perhaps become more conservative as they get older. The exact formulation was adjusted to account for high multicollinearity between some variables, and further specifications based on Bayesian selection criteria are discussed below. Table 2, the main findings of this paper, shows the regression results of party vote share on the share on non-household head males, the share of female voters, social class, pension status, percent of constituency which self-identifies as Roman Catholic, the literacy rate, turnout, whether Sinn Féin were the only party contesting a seat, whether Sinn Féin themselves contested a seat, the (natural log of) population per squared kilometre, and the average age in a constituency.<sup>11</sup>

The findings from Table 2 are consistent with the relationships between the Sinn Féin vote share and new voters represented in figures 2 and 3. There is a weak and statistically insignificant positive relationship between the Sinn Féin vote share and the share of new male voters. This corresponds to a negative relationship with the vote shares of the Unionists. The relationship between female voters and Sinn Féin vote is negative however and statistically significant at a 90% level, with a one standard deviation increase (0.03) in new female voters associated with a 2 percentage-point decrease in the Sinn Féin vote share.

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<sup>11</sup> 95% confidence intervals are in brackets in all tables.

Another interesting result in Table 2 is that an increase in the percent of voters categorised as Social class 1 and 2 - e.g. doctors, and other professionals - is generally negative for Sinn Féin and positive for the IPP, though most of these results are not clearly non-zero at typical confidence levels. This is consistent with a classical view of voting patterns, with wealthier groups favouring more conservative parties.<sup>12</sup> However, the positive effect on the IPP and negative effect on Sinn Féin of Social class 5 and 6 - which is relatively low on the socio-economic gradient - tends to refute the idea that the success of Sinn Féin in 1918 was driven by the extension of the franchise to relatively poorer men. Indeed, the interpretation of the coefficient -0.22 in column 2 is quite the opposite: that as the proportion of society that we categorize as in the two lowest social classes increases by one percentage point, Sinn Féin's vote decreases by 0.22 percentage points. As the base comparisons for this analysis are Social class 3 and 4, the conventional middle-classes, there appears to be a non-monotonic relationship between Sinn Féin's success and socio-economic status.

Interestingly, in constituencies with a higher number of pensioners the vote share for Sinn Féin was also greater, and that of the IPP and Unionists lower. This may be seen as evidence against the 'radical' effects of franchise extension to younger people. In a similar vein to the results on socio-economic status, these results must be interpreted with some nuance. Holding the average age of the constituents constant, an increase in particularly older (i.e. of pensionable age) people tends to increase the Sinn Féin vote and decrease the IPP vote. Less nuance is needed with respect to Catholic affiliation. Catholic areas are very strongly associated with voting for the nationalist parties, and are strongly disassociated with voting for Unionists. Literacy is positively associated with voting for Sinn Féin, although the estimate is very imprecise. In general, more urban places were less likely to vote for Sinn Féin.

Turning finally to columns 7 and 8, which considers non-voting as a separate voting preference we see some important results. Non-voting is strongly associated with the share of female voters but not with new male voters. This suggests perhaps that new female voters may have been less likely to use their vote, muting any potential effects of the extension of the franchise on the Sinn Féin vote.

As Sinn Féin's rise coincided with a large expansion of the franchise to women and relatively younger non-household head men, one could be forgiven for assuming that newly-enfranchised women and men voted for Sinn Féin. Based on these results, this seems unlikely to be true with respect to new male voters. However there is no evidence that women disproportionately supported Sinn Féin. Indeed our results suggest the opposite relationship: where more women were entitled to vote the Sinn Féin vote was lower. This finding should perhaps not be surprising. Evidence from other countries during the interwar period suggests that women voters were anti-extremist and more conservative (Boak, 1989; Turner, 1987). The radicalism of Sinn Féin's position therefore may have had relatively less appeal to women. Furthermore, although the effect is not statistically significant at conventional levels, the point estimates for social class suggest that the less well-off were not more supportive of Sinn Féin. Indeed the relatively strong positive relationship between this group and the IPP vote share also supports this interpretation. The finding that the proportion of pensioners in a constituency is positively correlated with the Sinn Féin vote further emphasises that older voters also supported Sinn Féin, even those that relied on payments from a parliament that Sinn Féin pledged to refuse to

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<sup>12</sup> See Evans (1999) for a discussion of class-based voting.

Table 2: Determinants of Party Vote Shares

	Sinn Féin			IPP			Unionist			Non-vote		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
Share new males	0.037 [-0.2,0.3]	0.013 [-0.3,0.3]	0.15 [-0.06,0.4]	0.091 [-0.2,0.4]	-0.24 [-0.4,-0.09]	-0.17 [-0.5,0.1]	-0.026 [-0.2,0.1]	0.081 [-0.1,0.3]				
Share female voters	-0.59 [-1.2,0.03]	-0.58 [-1.2,0.07]	-0.063 [-0.9,0.7]	0.32 [-0.5,1.1]	0.68 [-0.08,1.4]	0.34 [-0.3,1.0]	1.13 [0.1,2.1]	0.98 [0.02,1.9]				
Social class 1 and 2	-0.049 [-0.4,0.3]	-0.11 [-0.6,0.4]	0.29 [-0.2,0.8]	0.22 [-0.4,0.9]	0.046 [-0.3,0.4]	0.17 [-0.2,0.5]	-0.65 [-1.1,-0.2]	-0.69 [-1.2,-0.2]				
Social class 5 and 6	-0.18 [-0.4,0.06]	-0.22 [-0.5,0.05]	0.26 [0.05,0.5]	0.21 [-0.1,0.5]	0.073 [-0.1,0.3]	0.17 [-0.06,0.4]	-0.29 [-0.6,0.10]	-0.30 [-0.7,0.06]				
SF unopposed	0.44 [0.4,0.5]	0.44 [0.4,0.5]	-0.30 [-0.4,-0.2]	-0.29 [-0.4,-0.2]	-0.13 [-0.2,-0.08]	-0.14 [-0.2,-0.09]	-0.32 [-0.4,-0.3]	-0.29 [-0.3,-0.2]				
SF no contest	-0.25 [-0.3,-0.2]	-0.24 [-0.3,-0.1]	0.27 [0.2,0.3]	0.24 [0.1,0.3]	-0.024 [-0.06,0.008]	-0.0067 [-0.03,0.02]	0.056 [-0.1,0.2]	0.077 [-0.1,0.3]				
Catholic	0.45 [0.4,0.5]	0.41 [0.3,0.6]	0.35 [0.3,0.4]	0.49 [0.3,0.7]	-0.76 [-0.8,-0.7]	-0.85 [-0.9,-0.8]	0.082 [-0.05,0.2]	-0.056 [-0.2,0.1]				
Pension recipient	5.52 [1.4,9.6]	5.09 [1.5,8.7]	-2.23 [-5.5,1.1]	-1.24 [-4.3,1.8]	-2.19 [-5.3,0.9]	-2.56 [-5.5,0.3]	-0.31 [-6.0,5.4]	-1.70 [-7.8,4.4]				
Literacy rate	0.25 [-0.04,0.5]	0.19 [-0.2,0.6]	-0.20 [-0.6,0.2]	-0.077 [-0.4,0.3]	-0.093 [-0.3,0.2]	-0.14 [-0.4,0.1]	-0.26 [-0.5,-0.008]	-0.39 [-0.6,-0.1]				
Turnout	0.18 [-0.01,0.4]	0.20 [0.03,0.4]	0.36 [0.1,0.6]	0.31 [0.1,0.5]	0.44 [0.3,0.6]	0.46 [0.3,0.6]						
Population density (log)	-0.017 [-0.03,-0.004]	-0.016 [-0.03,-0.0009]	0.019 [0.002,0.04]	0.012 [-0.009,0.03]	-0.0044 [-0.02,0.008]	0.0010 [-0.01,0.01]	-0.0091 [-0.03,0.007]	-0.0041 [-0.02,0.01]				
Average age	-0.0063 [-0.02,0.010]	-0.0068 [-0.03,0.01]	0.011 [-0.002,0.02]	0.0048 [-0.01,0.02]	0.0072 [-0.008,0.02]	0.013 [-0.001,0.03]	-0.028 [-0.05,-0.004]	-0.025 [-0.05,-0.0007]				
Province FE		√		√		√		√				
Observations	100	100	100	100	100	100	100	100				
Adjusted $R^2$	0.963	0.962	0.709	0.727	0.945	0.951	0.755	0.774				

recognise. Finally new voters may not have voted in large numbers in 1918, a finding consistent with the fact that the UK 1918 election turnout rate (57%) was lower than any election since (UK Parliament, 2016)<sup>13</sup>. Taken together the results suggest that newly-enfranchised male voters did not give disproportionate support to Sinn Féin, new women voters were associated with a lower Sinn Féin vote and that Sinn Féin votes came from many diverse groups, attracting greater support in areas of higher literacy, a greater concentration of pensioners and more middle-class individuals.

## 5. Robustness

### *Non-Random Contests*

Overall the results presented in Table 2 are more consistent with a narrative that it was a change in the preferences of the electorate, however produced, rather than franchise extension that led to the remarkable result in December 1918. But the decision of the other parties to not oppose Sinn Féin in some constituencies will obviously affect party vote-shares. This is confirmed by the large coefficient on 'Sinn Féin unopposed' on Sinn Féin's vote.<sup>14</sup> To examine this issue more closely, linear probability coefficients and probit marginal effects on the determinants of whether or not Sinn Féin faced opposition in a constituency are shown in Table 3.

We can clearly see evidence in Table 3 that the decision to oppose Sinn Féin was non-random. For example, an increase in the SES of a constituency (as measure by Social class 1 and 2) is clearly associated with a decrease in the probability that Sinn Féin were unopposed, i.e. higher status constituencies were more likely to attract IPP or Unionist candidates. Similarly, Sinn Féin were more likely to be unopposed in more Catholic areas. However, much of this appears to have been an Ulster-specific effect, as the statistical significance of this relationship disappears when provincial fixed effects are included.

Given that the decision to select into the contest was non-random, it is instructive to see if the drivers of the Sinn Féin vote are substantially affected by comparing the determinants from the full sample to the restricted set of contested constituencies.<sup>15</sup> Table 4 presents the determinants of the Sinn Féin vote separately for contested elections and for the full sample. The general picture drawn from comparison of the two sets of results is that determinants were not enormously different between the two specifications. That is not to say that there are no differences at all. For example, comparing the coefficient on *Share female voters* in the FE-inclusive regressions, we see that the relationship is stronger (-1.08 versus -0.58) when restricting analysis to contested elections only. Overall the drivers of the Sinn Féin vote are not overwhelmed by a no-contest selection effect. For completeness the results for all parties without controls are included in the appendix.

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<sup>13</sup> Turnout in Ireland was 50% including uncontested constituencies or 66% in contested constituencies. It should also be noted that uncontested seats were not unique to Ireland in 1918. 107 out of 707 seats were uncontested across the UK (Audickas et al., 2017).

<sup>14</sup> In the analysis we set Sinn Féin vote to 100% if they faced no opposition in a constituency.

<sup>15</sup> This also excludes 5 constituencies that Sinn Féin did not contest.

Table 3: Non-random selection into uncontested races: SF Unopposed

	OLS		Probit	
	(1)	(2)	(3)	(4)
Share new males	-0.079 [-1.7,1.6]	-1.62 [-3.1,-0.1]	-0.0041 [-1.2,1.2]	-0.89 [-2.1,0.3]
Share female voters	1.90 [-3.7,7.5]	-0.0048 [-4.2,4.2]	1.26 [-2.6,5.2]	0.48 [-3.7,4.6]
Social class 1 and 2	-3.18 [-5.6,-0.8]	-2.29 [-4.1,-0.5]	-1.67 [-4.8,1.5]	-1.34 [-6.6,3.9]
Social class 5 and 6	-1.63 [-2.9,-0.4]	-1.55 [-2.7,-0.4]	-1.40 [-2.5,-0.3]	-1.42 [-3.0,0.2]
Catholic	0.50 [0.2,0.8]	0.33 [-0.5,1.1]	1.10 [0.1,2.1]	1.71 [0.03,3.4]
Pension recipient	14.8 [0.04,29.5]	11.6 [-3.8,26.9]	19.6 [1.2,37.9]	23.1 [-0.3,46.4]
Literacy rate	2.52 [1.0,4.1]	1.52 [-0.4,3.5]	2.23 [0.8,3.7]	1.19 [-0.04,2.4]
Population density (log)	-0.077 [-0.2,0.03]	-0.035 [-0.1,0.04]	-0.11 [-0.2,0.01]	-0.078 [-0.2,0.09]
Average age	-0.079 [-0.2,0.05]	-0.047 [-0.1,0.04]	-0.062 [-0.2,0.03]	-0.037 [-0.1,0.07]
Province FE		✓		✓
Observations	100	100	100	100
Adjusted $R^2$	0.268	0.461		

Table 4: Determinants of SF vote by contest/full sample

	Contested elections		Full sample	
	(1)	(2)	(3)	(4)
Share new males	-0.070 [-0.6,0.4]	-0.097 [-0.7,0.5]	0.037 [-0.2,0.3]	0.013 [-0.3,0.3]
Share female voters	-1.06 [-2.0,-0.2]	-1.08 [-2.1,-0.1]	-0.59 [-1.2,0.03]	-0.58 [-1.2,0.07]
Social class 1 and 2	-0.16 [-0.6,0.2]	-0.21 [-0.7,0.3]	-0.049 [-0.4,0.3]	-0.11 [-0.6,0.4]
Social class 5 and 6	-0.23 [-0.5,-0.0005]	-0.27 [-0.6,0.03]	-0.18 [-0.4,0.06]	-0.22 [-0.5,0.05]
Catholic	0.44 [0.4,0.5]	0.39 [0.2,0.6]	0.45 [0.4,0.5]	0.41 [0.3,0.6]
Pension recipient	8.44 [5.6,11.3]	7.72 [4.5,10.9]	5.52 [1.4,9.6]	5.09 [1.5,8.7]
Literacy rate	0.11 [-0.3,0.5]	0.0073 [-0.5,0.5]	0.25 [-0.04,0.5]	0.19 [-0.2,0.6]
Turnout	0.30 [0.1,0.5]	0.36 [0.2,0.6]	0.18 [-0.01,0.4]	0.20 [0.03,0.4]
Population density (log)	-0.018 [-0.03,-0.005]	-0.016 [-0.03,0.001]	-0.017 [-0.03,-0.004]	-0.016 [-0.03,-0.0009]
Average age	-0.013 [-0.03,0.007]	-0.013 [-0.04,0.009]	-0.0063 [-0.02,0.010]	-0.0068 [-0.03,0.01]
SF no contest			-0.25 [-0.3,-0.2]	-0.24 [-0.3,-0.1]
SF unopposed			0.44 [0.4,0.5]	0.44 [0.4,0.5]
Province FE		✓		✓
Observations	70	70	100	100
Adjusted $R^2$	0.862	0.857	0.963	0.962

### Variable Selection

As we have seen, the results presented in the preceding section are somewhat sensitive to the exact specification of the regression equation. This is inevitable when restricting to historical data with 100 observations. Although we assert that the narrative put forth is grounded in robust statistical analysis, it is inevitable that concerns will emerge regarding variable selection. To address this, we proceed with two complementary Bayesian-based approaches for regression specification.

The first approach is to iteratively include and exclude potential explanatory variables. This method is based on the Furnival-Wilson leaps-and-bounds approach.<sup>16</sup> The iterative algorithm then computes various statistical indicators (such as adjusted  $R^2$ , Akaike Information Criterion, Bayesian Information Criterion) to aid the choice of a 'best' specification.<sup>17</sup>

Recall from Table 2 that our preferred specification included 12 explanatory variables, several of which were not statistically significant. The general conclusion from the Furnival-Wilson operation is that the model is over-saturated, and a number of variables should be dropped from the regression equation.

Restricting the analysis to nine explanatory variables (SF unopposed, SF non-contest, Catholic, pension recipient, share female voters, population density, Social Class 5 and 6, literacy, and turnout) maximizes the adjusted  $R^2$ , (0.964) and minimises AIC. Applying a BIC-minimization criterion would suggest further consolidation of the model to omitting Social Class 5 and 6, female voters, and literacy. The magnitude of these changes are quite minimal: there is little either gained or lost in statistical power by tweaking between six (adjusted- $R^2$ , of 0.962) or nine (adjusted- $R^2$ , of 0.964) or indeed 10 explanatory variables (adjusted- $R^2$ , of 0.964). When the results of the original full specification are combined with this more parsimonious model in Table 5, it is clear that our conclusions based on the results in Table 2 remain unchanged.<sup>18</sup>

### *Ecological Inference*

The regression results presented do little to suggest that Sinn Féin's electoral success in the 1918 General Election can be explained by the extension of the franchise. However, these results rely on aggregate-level data to make inferences about individual-level behaviour, something which may induce ecological fallacy. The problem of ecological fallacy is a well-known issue in political science, and can potentially render the results of aggregated-level regressions useless. The potential for ecological fallacy was famously shown in Robinson (1950), who noted that while a U.S. state's percentage of migrants was positively correlated with literacy, on an individual level migrants were more likely to be illiterate. Had Robinson not run the individual-level analysis, he would have committed an ecological fallacy by inferring that migrants were more likely to be literate. Another well-known example occurs in U.S. politics where wealthier states such as California are more likely to vote Democrat but wealthier individuals are more likely to vote Republican. Fortunately, a number of ecological inference statistical methods exist and are well-established in political science research. Our application of ecological inference methods relates to our primary research question: how did the extension of the franchise affect the results of the 1918 election in Ireland? One would ideally answer this question with individual-level data on voting history and patterns.

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<sup>16</sup> Implemented in Stata using the `vselect` command

<sup>17</sup> This, of course, is a robustness check rather than an exact science. It is not unusual (and indeed it holds in our analysis) that the 'best' specification changes depending on whether one prefers the AIC versus the BIC for example.

<sup>18</sup> The second, complementary approach to specification choice is Bayesian Model Averaging. This is based on Magnus et al (2010). This estimator generates a weighted-average of least squares' coefficients, averaging over each of the possible specifications suggested by the exclusion candidates. Table A1 in the appendix shows the results from the BMA approach. Again our conclusions are the same as for table 2.

Table 5: Determinants of SF vote with varying specifications

	Bayesian specification	Full specification
	(1)	(2)
Share female voters	-0.64 [-1.2,-0.05]	-0.58 [-1.2,0.07]
Social class 5 and 6	-0.12 [-0.3,0.02]	-0.22 [-0.5,0.05]
SF unopposed	0.44 [0.4,0.5]	0.44 [0.4,0.5]
SF no contest	-0.25 [-0.3,-0.2]	-0.24 [-0.3,-0.1]
Catholic	0.45 [0.4,0.5]	0.41 [0.3,0.6]
Pension recipient	5.63 [2.3,9.0]	5.09 [1.5,8.7]
Literacy rate	0.27 [0.08,0.5]	0.19 [-0.2,0.6]
Turnout	0.17 [-0.01,0.3]	0.20 [0.03,0.4]
Population density (log)	-0.013 [-0.02,-0.002]	-0.016 [-0.03,-0.0009]
Share new males		0.013 [-0.3,0.3]
Social class 1 and 2		-0.11 [-0.6,0.4]
Average age		-0.0068 [-0.03,0.01]
Province FE	No	Yes
Observations	100	100
Adjusted $R^2$	0.964	0.962

Absent these data we must instead work with constituency-level data and use the best available ecological inference methods. The models used in this analysis infer the cell contents of an  $R \times C$  contingency table whereby we know the row and column totals in each constituency and use this information to infer the unknown cell contents.

King (1997) provided a comprehensive formalisation of this problem and suggested that the aforementioned unknown cell contents be estimated as statistical parameters, in a manner similar to the way coefficients are treated in all classes of regression models.<sup>19</sup> Here we follow the Bayesian hierarchical multinomial-Dirichlet model advocated in Rosen et al. (2001). We implement this using the R package *eiPack* (Lau et al., 2007). Our choice of the hierarchical

<sup>19</sup> See King et al. (2008) for an example of these methods in economic history research.

multinomial-Dirichlet model is guided by the recent research of Klima et al. (2016), who find this method superior to available alternative methods in their analysis of German voting patterns.

We begin our analysis of the 1918 election and the extension of the franchise by looking at voting shares across four distinct groups: Sinn Féin, Nationalist (IPP), other (nearly all unionist parties) and non-voters, as well as both genders, so in this instance we are making inferences based on a 4x2 contingency table.<sup>20</sup> At this point we also remove uncontested constituencies as the vote shares and turnout are obviously unknown. We estimate the vote share parameters using the hierarchical multinomial-Dirichlet model via Markov Chain Monte Carlo (MCMC). As the conditional parameters are drawn from non-standard conditional distributions a Metropolis-Hastings sampler is used as opposed to the more common Gibbs sampler. We employ the standard priors values of Lau et al. (2007) are experimented with various sampler criteria. We found that 5,000,000 posterior sample draws after a burn-in of 100,000 draws are discarded worked best in practice. We also found that a large thinning interval of 5,000 was required to achieve favourable Heidelberger and Welch chain-convergence diagnostic results. Lower thinning intervals tended to result in greater in-chain autocorrelation.

The results from this analysis are displayed in Table 6 and Figure 4. One must keep in mind, that it was women who were more likely to be first-time voters compared to their male counterparts. The most striking result here is on the male-female disparity in the likelihood of voting. We estimate that around 70 per cent of women did not vote compared to the median parameter estimate of around 8 per cent for men. The robustness of this result is underlined by the reasonably narrow 95% credible intervals associated with both parameters (i.e. the 2.5th and 97.5th percentiles of the posterior chain). The bottom panel in Table 6 show the results when the non-voting category is not considered. In this we can see that Sinn Féin was slightly preferred amongst the female vote, with a median of 52 per cent compared to the male vote share of 46 per cent. However, as is illustrated in Figure 4, this difference is minimal and the overlapping credible intervals suggest that this difference is just a result of sampling variation in these data.

Overall, results of the ecological inference model point to non-voting women as being a key demographic. Although individual level information is inevitably lost through aggregation and, as a result, ecological inference models must be interpreted with caution, our analysis highlights that newly enfranchised voters were far less likely to turn up and vote on Election Day. Therefore, these new voters couldn't have played a direct role in the rise of Sinn Féin and decline of the more traditional IPP.

### *Demographic Change*

A criticism that may be levelled at our linking of census data to election results is that our electoral data is from 1918 while our demographic data comes from the 1911 census. Although this is the closest census year available, our picture of the electorate of a constituency may not be accurate if demographics shifted significantly in the seven years between 1911 and 1918. Indeed there are obvious factors that may have influenced the demographics of a constituency

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<sup>20</sup> We also attempted to estimate a 4x3 table where male voters were divided into household head males and non-household head males but no sensible results could be obtained through this formulation.

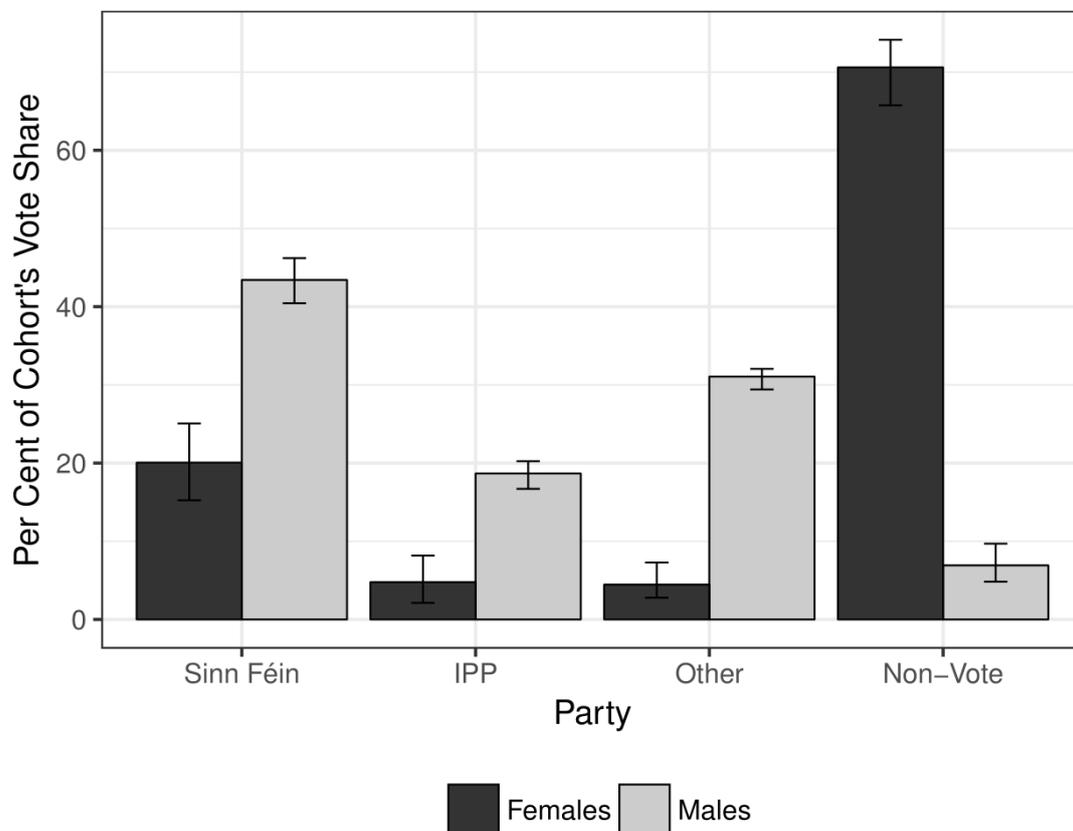
Table 6: Party Choice by Gender, 2.5th, 50th, and 97.5th Percentiles

Gender	Party	p2.5	p50	p97.5
Male	Sinn Féin	0.400	0.425	0.451
Female	Sinn Féin	0.112	0.156	0.201
Male	Nationalist	0.166	0.193	0.210
Female	Nationalist	0.045	0.075	0.121
Male	Other	0.279	0.308	0.324
Female	Other	0.040	0.068	0.118
Male	Non-Vote	0.051	0.076	0.107
Female	Non-Vote	0.644	0.698	0.742

Non-Vote Removed				
Gender	Party	p2.5	p50	p97.5
Male	Sinn Féin	0.437	0.459	0.493
Female	Sinn Féin	0.359	0.521	0.641
Male	Nationalist	0.184	0.209	0.226
Female	Nationalist	0.157	0.248	0.368
Male	Other	0.307	0.332	0.352
Female	Other	0.131	0.227	0.359

Figure 4: Median vote per cent by gender with 95% credible intervals



over the period, such as the impact of wartime recruitment, disruption of migration patterns or simply changes resulting from long-run demographic forces. However we do have some demographic information for 1918: the size of the male and female electorates. We can use this to test the accuracy of demographic data by estimating the number of male and female voters using the census data from 1911 and comparing it to the actual number of electors in each constituency in 1918. Specifically, we estimate the male electorate by counting the number of men over 20 years of age and the number of women over 30 in each constituency. Of course this is a relatively rough estimate of the male and female electorates; many otherwise eligible male voters would have been disqualified due to various registration restrictions such as a minimum residency requirement.

Figure 5: Actual versus predicted male electorate

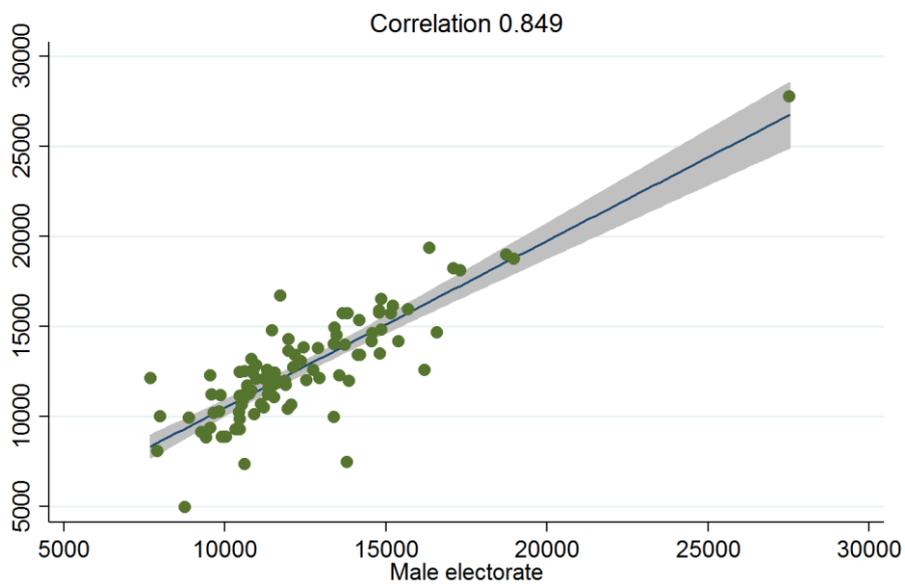
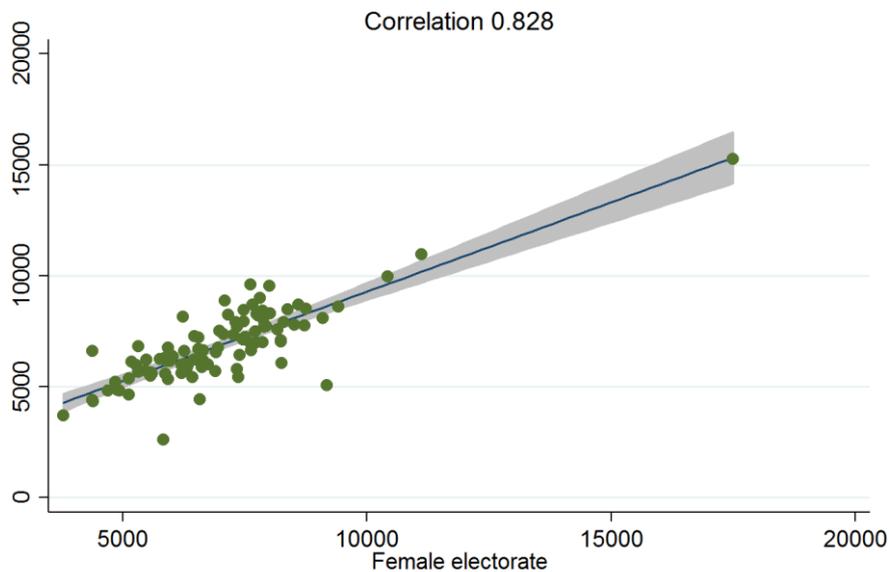


Figure 6: Actual versus predicted female electorate



Likewise, not all women over 30 would have been entitled to vote as this was restricted to rate payers or the wives of male rate payers. Nonetheless the exercise represents a useful test of the accuracy of our data. Figures 4 and 5 show the correlations between the actual electorate in 1918 and our estimate based on the 1911 census.

Clearly there is a tight correlation between our estimates based on the 1911 census and the actual electorates in 1918. For men the correlation is 0.85 and for women, 0.83. These strong relationships, despite the various reasons that these figures may legitimately diverge, reassures us that our matching exercise is valid and that any demographic shifts between 1911 and 1918 are not likely to invalidate our results.

### *Heterogeneous Effects*

A further area of interest is to investigate heterogeneity in our effects. We focus our efforts in this regard primarily as robustness checks of our headline results that franchise extension appears to have little explanatory power and, if anything, female and less well-off voters were more likely to side with the constitutionally oriented IPP.

The first source of investigation is if the interaction of class and gender provided any further evidence into voting patterns. To analyse this, we supplement the main specification with interaction terms of both *Female*  $\times$  *High SES* and *Female*  $\times$  *Pop Density*. Both show positive effects, indicating that wealthy, urban women were more likely to support Sinn Féin than other women. Similarly, the negative coefficients in Columns 3 and 4 imply these women were less supportive of the IPP relative to other women. None of these estimates are statistically significant, indicating low confidence in real heterogeneity there. Somewhat surprisingly, the point estimates on *Female*  $\times$  *High SES* are positive in the final two columns. This indicates relatively well-off women were less likely to vote than poorer women, but the confidence intervals on this is very wide.

A final robustness check is offered in Table 8, where we repeat the main results of Table 2 but with quantile regression rather than traditional OLS. Rather than estimating conditional mean effects like OLS, quantile regression estimates the conditional median (or other quantiles) and is thus more robust to outliers than OLS. In this sense it provides a useful complement to our primary analysis, ensuring our conclusions are not driven by, for example, effects specific to Dublin. The results from Table 8, with some caveats, present a very similar overview of the empirical results discussed above. Focusing on point estimates rather than t-statistics, the effects that are strongest suggest again that women were quite unlikely to exercise their vote, and those that did had lower chances of voting for Sinn Féin; that neither professionals in higher SES classes nor labourers in lower SES classes showed strong signs of Sinn Féin support; and that Catholics, pensioners, and literate voters were more likely to vote for Sinn Féin. Few results are significant at typical levels, reinforcing our conclusion that something other than our assembled variables explains the change in voting patterns of the electorate.

Table 7: Determinants of Party Vote Shares

	Sinn Féin			IPP			Unionist			Non-vote		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
Share new males	0.047 [-0.2,0.3]	0.022 [-0.3,0.4]	0.13 [-0.09,0.4]	0.073 [-0.2,0.4]	-0.24 [-0.4,-0.08]	-0.17 [-0.4,0.1]	-0.012 [-0.2,0.1]	0.080 [-0.2,0.3]				
Share female voters	-1.24 [-3.5,1.0]	-1.13 [-3.6,1.3]	1.02 [-2.7,4.7]	1.46 [-2.6,5.5]	-0.19 [-2.8,2.4]	-0.74 [-3.5,2.0]	0.61 [-2.0,3.2]	1.11 [-1.4,3.6]				
Social class 1 and 2	-0.54 [-7.0,5.9]	-0.15 [-6.2,5.9]	0.52 [-9.7,10.7]	0.36 [-8.3,9.0]	1.97 [-5.7,9.7]	1.63 [-5.3,8.6]	-2.34 [-11.2,6.5]	-0.82 [-9.6,8.0]				
Social class 5 and 6	-0.18 [-0.4,0.06]	-0.21 [-0.5,0.08]	0.26 [0.05,0.5]	0.19 [-0.1,0.5]	0.067 [-0.1,0.3]	0.18 [-0.06,0.4]	-0.28 [-0.6,0.04]	-0.30 [-0.7,0.09]				
SF unopposed	0.44 [0.4,0.5]	0.44 [0.4,0.5]	-0.30 [-0.4,-0.2]	-0.29 [-0.4,-0.2]	-0.13 [-0.2,-0.08]	-0.14 [-0.2,-0.09]	-0.31 [-0.4,-0.3]	-0.29 [-0.3,-0.2]				
SF no contest	-0.25 [-0.3,-0.2]	-0.24 [-0.3,-0.1]	0.27 [0.2,0.3]	0.24 [0.1,0.3]	-0.024 [-0.05,0.006]	-0.0078 [-0.04,0.02]	0.056 [-0.1,0.2]	0.077 [-0.1,0.3]				
Catholic	0.44 [0.4,0.5]	0.41 [0.2,0.6]	0.36 [0.3,0.4]	0.49 [0.3,0.7]	-0.77 [-0.8,-0.7]	-0.85 [-0.9,-0.8]	0.074 [-0.06,0.2]	-0.056 [-0.2,0.1]				
Pension recipient	5.82 [1.2,10.4]	5.39 [1.2,9.6]	-2.66 [-6.7,1.3]	-1.87 [-5.6,1.9]	-2.10 [-5.0,0.8]	-2.25 [-4.6,0.1]	0.097 [-5.2,5.4]	-1.74 [-7.1,3.6]				
Literacy rate	0.22 [-0.06,0.5]	0.18 [-0.2,0.6]	-0.16 [-0.5,0.2]	-0.060 [-0.4,0.3]	-0.11 [-0.3,0.1]	-0.15 [-0.4,0.1]	-0.29 [-0.5,-0.06]	-0.39 [-0.7,-0.1]				
Turnout	0.19 [0.002,0.4]	0.20 [0.02,0.4]	0.35 [0.1,0.6]	0.31 [0.1,0.5]	0.45 [0.3,0.6]	0.46 [0.3,0.6]						
Population density (log)	-0.072 [-0.4,0.2]	-0.068 [-0.4,0.2]	0.12 [-0.4,0.7]	0.12 [-0.5,0.7]	-0.13 [-0.5,0.3]	-0.13 [-0.5,0.3]	-0.026 [-0.4,0.3]	0.012 [-0.3,0.3]				
Average age	-0.0073 [-0.02,0.006]	-0.0071 [-0.02,0.009]	0.012 [-0.00006,0.02]	0.0055 [-0.007,0.02]	0.0084 [-0.007,0.02]	0.014 [0.0002,0.03]	-0.030 [-0.05,-0.006]	-0.025 [-0.05,0.002]				
<i>Female × High SES</i>	1.13 [-15.4,17.6]	0.066 [-15.7,15.8]	-0.44 [-26.6,25.7]	-0.25 [-22.6,22.1]	-4.87 [-24.3,14.5]	-3.72 [-21.2,13.8]	4.14 [-18.0,26.3]	0.36 [-21.5,22.2]				
<i>Female × Pop Density</i>	0.14 [-0.7,0.9]	0.13 [-0.7,0.9]	-0.26 [-1.7,1.2]	-0.27 [-1.7,1.2]	0.31 [-0.7,1.3]	0.34 [-0.7,1.3]	0.042 [-0.8,0.9]	-0.040 [-0.8,0.7]				
Province FE		√		√		√		√				
Observations	100	100	100	100	100	100	100	100				
Adjusted $R^2$	0.963	0.962	0.707	0.725	0.945	0.950	0.752	0.769				

Table 8: Median Regression of Party Vote Shares

	Sinn Féin			IPP			Unionist			Non-vote		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
Share new males	0.16 [-0.1,0.4]	0.093 [-0.3,0.5]	0.034 [-0.2,0.3]	-0.082 [-0.3,0.1]	-0.24 [-0.5,-0.02]	-0.092 [-0.4,0.2]	-0.023 [-0.2,0.2]	0.15 [-0.2,0.5]				
Share female voters	-0.62 [-1.4,0.2]	-0.44 [-1.3,0.4]	-0.061 [-1.2,1.0]	0.20 [-0.6,1.0]	0.78 [-0.05,1.6]	0.51 [-0.2,1.2]	0.58 [-0.4,1.6]	0.57 [-0.4,1.5]				
Social class 1 and 2	-0.085 [-0.6,0.4]	-0.13 [-0.8,0.5]	0.068 [-0.4,0.6]	0.053 [-0.4,0.5]	-0.0019 [-0.4,0.4]	0.28 [-0.3,0.8]	-0.46 [-0.9,0.01]	-0.69 [-1.4,0.02]				
Social class 5 and 6	-0.16 [-0.5,0.2]	-0.22 [-0.5,0.1]	0.14 [-0.03,0.3]	0.12 [-0.2,0.4]	0.030 [-0.2,0.3]	0.19 [-0.03,0.4]	-0.14 [-0.5,0.2]	-0.14 [-0.6,0.3]				
SF unopposed	0.43 [0.3,0.6]	0.45 [0.4,0.5]	-0.33 [-0.4,-0.3]	-0.32 [-0.4,-0.2]	-0.14 [-0.2,-0.08]	-0.14 [-0.2,-0.07]	-0.30 [-0.3,-0.3]	-0.28 [-0.3,-0.2]				
SF no contest	-0.32 [-0.4,-0.2]	-0.31 [-0.4,-0.2]	0.32 [0.2,0.4]	0.28 [0.2,0.4]	-0.034 [-0.08,0.01]	-0.017 [-0.09,0.06]	-0.079 [-0.1,-0.02]	-0.027 [-0.2,0.10]				
Catholic	0.49 [0.4,0.6]	0.48 [0.2,0.8]	0.30 [0.2,0.4]	0.45 [0.3,0.6]	-0.77 [-0.8,-0.7]	-0.80 [-1.0,-0.6]	0.037 [-0.07,0.1]	-0.095 [-0.4,0.2]				
Pension recipient	4.68 [-0.7,10.0]	2.97 [-0.5,6.5]	-0.40 [-2.3,1.5]	0.11 [-2.0,2.2]	-2.58 [-8.3,3.1]	-2.33 [-5.0,0.3]	0.075 [-3.6,3.8]	0.034 [-5.9,6.0]				
Literacy rate	0.19 [-0.1,0.5]	0.15 [-0.4,0.7]	-0.12 [-0.7,0.5]	-0.17 [-0.4,0.07]	-0.10 [-0.4,0.2]	-0.062 [-0.5,0.4]	-0.38 [-0.7,-0.01]	-0.28 [-0.6,0.05]				
Turnout	0.17 [-0.3,0.6]	0.14 [-0.03,0.3]	0.43 [0.3,0.6]	0.41 [0.3,0.6]	0.45 [0.3,0.6]	0.43 [0.3,0.6]						
Population density (log)	-0.0070 [-0.02,0.006]	-0.0071 [-0.02,0.006]	0.0072 [-0.008,0.02]	0.0064 [-0.01,0.02]	-0.0060 [-0.02,0.01]	0.0031 [-0.009,0.02]	-0.0026 [-0.03,0.02]	-0.0018 [-0.03,0.02]				
Average age	-0.0048 [-0.03,0.02]	-0.0073 [-0.04,0.02]	0.0016 [-0.01,0.02]	-0.0045 [-0.02,0.01]	0.0075 [-0.009,0.02]	0.019 [0.004,0.03]	-0.017 [-0.05,0.01]	-0.017 [-0.04,0.008]				
Province FE		√		√		√		√				
Observations	100	100	100	100	100	100	100	100				

Table 9: Effects of incumbency and new military franchise on SF vote

	(1)	(2)	(3)	(4)
Share new males	0.036 [-0.2,0.2]	0.033 [-0.3,0.3]	0.052 [-0.2,0.3]	0.029 [-0.3,0.4]
Share female voters	-0.54 [-1.2,0.1]	-0.56 [-1.2,0.1]	-0.59 [-1.2,-0.010]	-0.59 [-1.2,0.01]
Social class 1 and 2	-0.060 [-0.5,0.4]	-0.091 [-0.6,0.4]	-0.090 [-0.5,0.3]	-0.14 [-0.6,0.3]
Social class 5 and 6	-0.14 [-0.4,0.1]	-0.17 [-0.4,0.08]	-0.18 [-0.4,0.06]	-0.22 [-0.5,0.05]
SF unopposed	0.43 [0.4,0.5]	0.43 [0.4,0.5]	0.42 [0.3,0.5]	0.42 [0.3,0.5]
SF no contest	-0.25 [-0.3,-0.2]	-0.24 [-0.3,-0.1]	-0.26 [-0.4,-0.2]	-0.25 [-0.4,-0.1]
Catholic	0.43 [0.4,0.5]	0.41 [0.2,0.6]	0.43 [0.4,0.5]	0.40 [0.2,0.5]
Pension recipient	6.17 [1.5,10.9]	5.73 [1.3,10.2]	5.87 [1.5,10.2]	5.46 [1.6,9.3]
Literacy rate	0.21 [-0.10,0.5]	0.18 [-0.2,0.6]	0.26 [-0.009,0.5]	0.21 [-0.2,0.6]
Turnout	0.19 [-0.002,0.4]	0.21 [0.03,0.4]	0.19 [-0.006,0.4]	0.21 [0.04,0.4]
Population density (log)	-0.015 [-0.03,0.001]	-0.014 [-0.03,0.003]	-0.019 [-0.03,-0.003]	-0.017 [-0.03,-0.0003]
Average age	-0.0086 [-0.03,0.009]	-0.0083 [-0.03,0.01]	-0.0056 [-0.02,0.01]	-0.0058 [-0.02,0.01]
Military Electorate	-0.44 [-1.8,0.9]	-0.36 [-1.7,1.0]		
Unionist incumbent			-0.048 [-0.1,0.01]	-0.049 [-0.1,0.01]
IPP incumbent			-0.016 [-0.05,0.02]	-0.015 [-0.06,0.03]
SF incumbent			-0.0016 [-0.03,0.03]	-0.0073 [-0.05,0.03]
Province FE		✓		✓
Observations	100	100	100	100
Adjusted $R^2$	0.963	0.962	0.963	0.962

## 6. Conclusion

On the eve of the 1918 election, the IPP MP for West Mayo, William Doris, wrote to the party leader, John Dillon, speculating how new voters would cast their votes:

“On the old register we were perfectly safe and the question is how the extended franchise will affect us. I am satisfied that a majority of the women over thirty will be with us, but the vast majority of the boys from 21 to 30 will be against us. They appear to have gone mad and no doubt we will have all kinds of intimidation, personation, etc.” (Doris, 1918, cited in McConnel, 2004 p.375)

The second part of the statement may well have been accurate and is broadly consistent with our findings, although our results suggest that the impact of new male voters was muted. However the claim that the IPP under the old register would have been safe is less convincing. Indeed Doris himself polled 2,363 fewer votes than 1910, even under a vastly enlarged electorate. Clearly, absolute support for the IPP had declined in the face of Sinn Féin's triumph.

A little more than a month after the election, the Sinn Féin deputies followed through on the policy of abstentionism put forward in their election manifesto and convened the first meeting of an independent Irish Parliament, Dáil Eireann, on 21 January 1919.<sup>21</sup> With the ratification that day of the 1916 proclamation of independence and the adoption of a new constitution, Ireland began the journey to formal independence and ultimately the establishment of the 26-county Irish Republic. The members of the First Dáil firmly believed that their convincing victory in 1918 had given them a clear mandate to sever political ties with Britain (Coleman, 2013). It is of course impossible to know what issues motivated individual voters in 1918. Nonetheless the election was ultimately framed as a clear-cut choice about the future direction of Irish nationalism. As the Meath Chronicle (21 December 1918, p.1) put it:

"...the ballot boxes will reveal whether the people of Ireland support the historic claim that our nation should enjoy her rights as an unfettered and independent Republic or whether Ireland is content to return to the wilderness of Parliamentary opportunism."

That the election was more akin to a referendum on the future direction of Irish Nationalism is perhaps most evident in the returns for the two-seat constituency of Cork City, where each voter was given two votes to distribute to any of the six candidates (two Sinn Féin, two IPP and two Unionists). In the end, 94% of voters chose two candidates from the same party (Coakley, 1994 p.43).<sup>22</sup> It is clear that the events between 1916 and 1918 led an increasing number of people to abandon support for the IPP and back the more radical form of nationalism offered by Sinn Féin. The results of this paper suggest that, even without a change in the franchise, the election of 1918 would still have marked a turning point in Irish history.

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<sup>21</sup> In fact less than one third of the 103 Irish MPs returned in 1918 attended. The Unionists, although invited, did not attend. Many other Sinn Féin MPs were unable to attend, it was noted, as they were declared 'faoi ghlas ag Gallaibh' – imprisoned by the foreigner (Farrell, 1994 p.2).

<sup>22</sup> Sinn Féin took both seats with 68% of the votes cast.

## References

- Aidt, T. S. and B. Dallal (2008). Female voting power: the contribution of women's suffrage to the growth of social spending in Western Europe (1869-1960). *Public Choice* 134 (3), 391-417.
- Aidt, T. S., M. Daunton, and J. Dutta (2010). The retrenchment hypothesis and the extension of the franchise in England and Wales. *The Economic Journal* 120 (547), 990-1020.
- Aidt, T. S. and P. S. Jensen (2013). Democratization and the size of government: evidence from the long 19th century. *Public Choice* 157 (3), 511-542.
- Audickas, L., Hawkins, O. and Cracknell, R. (2017). UK Election Statistics: 1918-2017. House of Commons briefing paper, CBP7529.
- Berlinski, S. and T. Dewan (2011), "The Political Consequences of Franchise Extension: Evidence from the Second Reform Act", *Quarterly Journal of Political Science* Vol. 6: No. 3-4, pp 329-376.
- Boak, H. L. (1989). Our last hope; women's votes for Hitler: A reappraisal. *German Studies Review* 12 (2), 289-310.
- Caramani, D. (2004). The Nationalization of Politics: The Formation of National Electorates and Party Systems in Western Europe. *Cambridge Studies in Comparative Politics*. Cambridge University Press.
- Coakley, J. (1994). The election that made the first Dáil. In B. Farrell (Ed.), *The Creation of the Dáil*, Chapter 3, pp. 31-44. Dublin: Blackwater Press.
- Coleman, M. (2013). *The Irish Revolution, 1916-1923*. Seminar Studies in History. Taylor & Francis.
- Collins, L. (2016). *1916: The Rising Handbook*. O'Brien Press.
- Corder, J. K., and Wolbrecht, C. (2006). Political Context and the Turnout of New Women Voters after Suffrage. *Journal of Politics*, 68 (1), 34-49. Craig, F. (1976). *British Electoral Facts 1885-1975*. Palgrave Macmillan UK.
- Cunningham, H. (2014). *The Challenge of Democracy: Britain 1832-1918*. New History of Britain. Taylor & Francis.
- de Bromhead, A. (2018). Women voters and trade protectionism in the interwar years. *Oxford Economic Papers* 70 (1), 22-46.
- Doris, W. (1918). *Letter to John Dillon*, 13 December. TCD, DP, MS 6753/362.
- Evans, G. (1999). *The End of Class Politics? Class Voting in Comparative Context*. Oxford scholarship online. Oxford University Press.
- Farrell, B. (1971). *The founding of Dáil Éireann: parliament and nation building*, Volume 2. Gill and Macmillan.
- Fitzpatrick, D. (1978). The geography of Irish nationalism 1910-1921. *Past & Present* (78), 113-144.

- Fujiwara, T. (2015). Voting technology, political responsiveness, and infant health: Evidence from Brazil. *Econometrica*, 83(2), 423-464.
- Furnival, G. M. and R. W. Wilson (1974). Regressions by leaps and bounds. *Technometrics* 16 (4), 499-511.
- Garvin, T. (1981). *The Evolution of Irish nationalist politics*. Holmes & Meier.
- Gerould, K. F. (1925). Some American Women and the Vote. *Scribner's Magazine* 127 (May), 449-52.
- Imai, K., Y. Lu, A. Strauss, et al. (2011). Eco: R package for ecological inference in 2x2 tables. *Journal of Statistical Software* 42 (i05).
- King, G. (1997). *A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data*. Princeton, NJ: Princeton University Press.
- King, G., O. Rosen, M. Tanner, and A. F. Wagner (2008). Ordinary Economic Voting Behavior in the Extraordinary Election of Adolf Hitler. *The Journal of Economic History* 68 (4), 951-996.
- Klima, A., P.W. Thurner, C. Molnar, T. Schlesinger, and H. Küchenhoff (2016). Estimation of Voter Transitions Based on Ecological Inference: An Empirical Assessment of Different Approaches. *AStA Advances in Statistical Analysis* 100 (2), 133-159.
- Laffan, M. (2005). *The Resurrection of Ireland: The Sinn Féin Party, 1916-1923*. Cambridge University Press.
- Lau, O., R. T. Moore, and M. Kellermann (2007). eiPack: RxC Ecological Inference and Higher-Dimension Data Management. *R News* 7 (2), 43-47.
- Lee, J. J. (1989). *Ireland, 1912-1985: Politics and Society*. Cambridge University Press.
- Lindert, P. (2004). *Growing Public: Volume 1, The Story: Social Spending and Economic Growth Since the Eighteenth Century*. Growing Public. Cambridge University Press.
- Lott, Jr, J. R. and L. W. Kenny (1999). Did women's suffrage change the size and scope of government? *Journal of Political Economy* 107 (6), 1163-1198.
- Magnus, J. R., O. Powell, and P. Prüfer (2010). A comparison of two model averaging techniques with an application to growth empirics. *Journal of Econometrics* 154 (2), 139-153.
- McConnel, J. (2004). The franchise factor in the defeat of the Irish Parliamentary Party, 1885-1918. *The Historical Journal* 47 (2), 355-377.
- Merriam, C. E., and H. F. Gosnell (1924). *Non-voting: Causes and Methods of Control*. University of Chicago Press.
- Miller, D. (1973). *Church, State, and Nation in Ireland, 1898-1921*. University of Pittsburgh Press.

- McManus, M. (2013). The Republic of Ireland in Chandler, J.A. (ed.), *Local Government in Liberal Democracies: An Introductory Survey*. Routledge, 28-52.
- Niemi, R. G., H. W. Stanley, and C. L. Evans (1984). Age and Turnout Among the Newly Enfranchised: Life Cycle versus Experience Effects. *European Journal of Political Research* 12 (December): 371-386.
- Ogg, F. A. (1918). The British Representation of the People Act. *The American Political Science Review* 12 (3), 498-503.
- Polanyi, K. (1944). *The great transformation: The political and economic origin of our time*. Beacon Press.
- Robinson, W. S. (1950). Ecological Correlations and the Behaviour of Individuals. *American Sociological Review* 15, 351-357.
- Rosen, O., W. Jiang, G. King, and M. A. Tanner (2001). Bayesian and Frequentist Inference for Ecological Inference: The RxC Case. *Statistica Neerlandica* 55 (2), 134-156.
- Sinn Féin (1918). *General election manifesto to the Irish people - an mórhoghadh feisiri gairmscoile do mhuintir na heireann*. Sinn Féin.
- Tanner, D. (2003). *Political Change and the Labour Party 1900-1918*. Cambridge University Press.
- Townshend, C. (2013). *The Republic: The Fight for Irish Independence, 1918-1923*. Penguin Books Limited.
- Turner, J. (1987). The labour vote and the franchise after 1918: an investigation of the English evidence. In P. Denley and D. Hopkin (Eds.), *History and Computing*, Chapter 23, p. 136-146. Manchester University Press.
- UK Parliament (1918). *Parliamentary and Local Government Electors (United Kingdom)*. *Return to an Address of the Honourable the House of Commons*, (138) xix, 925, 16 October. House of Commons accounts and papers. Proquest LLC.
- UK Parliament (2016). *General election turnout*. [www.parliament.uk](http://www.parliament.uk). Accessed Jan 2018.
- van Leeuwen, M. and I. Maas (2011). *Hisclass: A Historical International Social Class Scheme*. G – Reference Information and Interdisciplinary Subjects Series. Leuven University Press.
- Ward, A. J. (1974). Lloyd George and the 1918 Irish conscription crisis. *The Historical Journal* 17 (1), 107-129.
- Wheatley, M. (2005). *Nationalism and the Irish Party: Provincial Ireland 1910-1916*. OUP Oxford.
- Voucharas, G. and D. Xeferis (2018) Women's Political Power and Environmental Outcomes, *University of Cyprus Working Papers in Economics* 07-2018, University of Cyprus Department of Economics.

## Appendix

Table A1: Simple Regression Analysis without control variables

Table 10: Effect of New Voters on Party Shares

	Sinn Féin		IPP		Unionist		Non-vote	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share new males	0.51 [-0.3,1.3]	-0.097 [-0.7,0.5]	0.68 [-0.2,1.5]	0.22 [-0.4,0.8]	-1.44 [-3.2,0.3]	-0.63 [-1.6,0.3]	0.21 [-0.4,0.8]	0.40 [-0.2,1.0]
Share female voters	-3.19 [-6.2,-0.1]	-2.65 [-3.9,-1.4]	-0.48 [-1.7,0.7]	-0.35 [-1.2,0.5]	3.14 [-0.7,7.0]	2.25 [1.2,3.3]	0.22 [-0.5,0.9]	0.48 [-0.2,1.2]
Province FE		✓		✓		✓		✓
Observations	70	70	70	70	70	70	70	70

Table A2: Bayesian Model Average Specifications

Table 11: Bayesian Model Average Specifications

	Sinn Féin	IPP	Unionist
	(1)	(2)	(3)
Share new males	0.055 [-0.2,0.3]	0.062 [-0.3,0.4]	-0.19 [-0.5,0.09]
Share female voters	-0.63 [-1.3,0.08]	0.19 [-0.6,1.0]	0.65 [0.05,1.3]
Social class 5 and 6	-0.14 [-0.3,0.03]	0.11 [-0.09,0.3]	0.073 [-0.09,0.2]
SF unopposed	0.44 [0.4,0.5]	-0.32 [-0.4,-0.2]	-0.14 [-0.2,-0.09]
SF no contest	-0.25 [-0.3,-0.2]	0.27 [0.2,0.3]	-0.012 [-0.07,0.04]
Catholic	0.44 [0.4,0.5]	0.38 [0.3,0.5]	-0.78 [-0.9,-0.7]
Pension recipient	5.49 [2.2,8.8]	-1.79 [-5.5,1.9]	-2.03 [-4.8,0.7]
Literacy rate	0.27 [0.01,0.5]	-0.21 [-0.5,0.09]	-0.11 [-0.3,0.1]
Turnout	0.17 [-0.002,0.3]	0.38 [0.2,0.6]	0.47 [0.3,0.6]
Population density (log)	-0.013 [-0.02,-0.003]	0.014 [0.003,0.03]	-0.0078 [-0.02,0.002]
Province FE	Yes	Yes	Yes
Observations	100	100	100

### **Census and electoral data Matching Procedure**

The objective of our data linking exercise was to match electoral data at the parliamentary constituency level to individual level returns from the 1911 census. Each individual in the 1911 census was identified as residing in one of 3655 District Electoral Divisions (DEDs) which we used as the unit to place an individual in one of the 100 parliamentary constituencies in Ireland.<sup>23</sup> To match DEDs to parliamentary constituencies for constituencies that were redrawn in 1918 we used information on constituency boundaries as described in the Report of the Boundary Commission (1917). Where constituency boundaries were defined using the report of the Boundary Commission (Ireland) under the Redistribution of Seats Act (1885), we used the 1901 census summary reports to firstly link DEDs to Baronies (the next level of aggregation up from DEDs, c.330 baronies in Ireland) and then matched Baronies to 1918 electoral constituencies using Baronies and Electoral Constituencies (1885).<sup>24</sup> When a barony straddled a constituency boundary we endeavoured to include the barony in the constituency in which the majority of the barony was located. Having established a link between census divisions and electoral constituencies, individual census level data were aggregated to establish demographic statistics for each parliamentary constituency.

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<sup>23</sup> There were four University seats in total: two from Dublin University and one each from the National University of Ireland and Queen's University Belfast. These seats are excluded from our analysis.

<sup>24</sup> The constituent DEDs of a parliamentary constituency were not listed in the 1885 volume.