The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States

Mona Morgan-Collins

The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States

Mona Morgan-Collins

Mona Morgan-Collins
Durham University
mona.morgan-collins@durham.ac.uk

The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States.

Mona Morgan-Collins

Durham University[1]

Abstract

Did the expansion of women's suffrage make a dent in electoral politics? I theorize that while women's suffrage has the potential to sway electoral tides in favor of the newly enfranchised, such effects are conditional on the strength of a social movement that represents their interests. A social movement defines the groups' shared interests and helps to create an active, informed and mobilized pool of voters that can take electoral action to foster common policy goals. In testing this argument, I use evidence from the adoption of the Nineteenth Amendment in the United States and employ a difference in difference approach that exploits the heterogeneity in the proportion of women across counties. I find support for the argument. The findings have important implications for the study of representation of marginalized groups, as formal inclusion of previously disenfranchised groups may not be sufficient to secure their de facto representation.

Word Count: 9980 (without title page)

Introduction

The debate over women's suffrage was surrounded by intense political battles, not the least because changing the rules radically changes politics. It is hardly surprising that politicians either feared the consequences of the reform or eagerly endorsed it (Przeworski 2009; Teele 2018). Once adopted, politicians started catering to women's preferences and public spending increased, especially on maternity and education (Aidt and Dallal 2008; Bertocchi 2011; Carruthers and Wanamaker 2015; Kose, Kuka and Shenhav 2015; Miller 2008), although some of this initial success was later reversed (Harvey 1998, p.11).

In this paper, I argue that the link between women's suffrage and the subsequent fiscal changes is conditional on the ability of newly enfranchised women to mobilize on shared interests. The inherent conditionality of this link is rarely addressed in the literature, and the ability of newly enfranchised women to effectively threaten politicians at the polls is mostly taken for granted. On the other hand, much of what we know about women's voting behavior at the turn of the last century points to new women voters having a relatively poor capacity to mobilize around shared interests (Corder and Wolbrecht 2016, p.260-261; McConnaughy 2013, p.10). I therefore examine what is generally left out in the 'black box', that is, the electoral mechanism that underpins the fiscal changes that followed women's enfranchisement. In doing so, I reconcile the apparent contradiction in the literature, where women's suffrage brings about policy change on the one hand, but new women voters do not have the ability to coordinate electorally around shared policy goals.

More generally, I examine under what conditions newly enfranchised groups mobilize on shared interests and, therefore, electorally threaten politicians should they fail to take into account the new electorate's demands. I theorize that the presence of electoral threat from newly enfranchised groups is conditional on their ability to organize around such interests. Strong social movements, in particular, raise awareness of the groups' interests and inform and mobilize the group on these issues. In the absence of such mobilization, the new electorate is unlikely to coordinate electorally on self-defined interests and the potential for de facto improvement in the electoral and policy representation of previously marginalized groups may never materialize.

In testing the argument, I use evidence from the adoption of the Nineteenth Amendment that

enfranchised most American women in the 1920 election. In particular, I explore the role of the largest suffrage organization in mediating the electoral impact of women's suffrage around the progressive dimension. Not only did organized women at the time of suffrage often endorse progressive preferences (Banaszak 1996, p.194-5; Goss 2013, pp.4, 27), but the passage of the suffrage bill has also been linked to an increase in progressive voting in Congress (Lott and Kenny 1999; Miller 2008). Given that the differences on the progressive dimension were greater across politicians from the same party than across parties, I then examine whether newly enfranchised women punished conservative politicians, particularly in states where the suffrage movement was strong.

This study analyses what is essentially a panel data set of counties before and after the adoption of the Nineteenth Amendment in states that were affected by it. The analysis is based on four elections after the end of World War I and the Progressive era, that is, one election before and three elections after suffrage. Given that the main goal is to identify the immediate effect of women's suffrage on electoral outcomes, the first election after suffrage is of particular interest. In order to estimate this effect, I exploit the fact that women were not distributed uniformly across counties. Specifically, within a difference in difference framework, I compare trends in electoral support before and after suffrage in counties with more women to counties with less women. For example, if a strong movement mobilizes women against conservative incumbents, the electoral support for these incumbents should decrease more in places with the most women. The main advantage of this subnational approach is that by exploiting within country variation in the intensity of suffrage exposure, this study does not suffer from selection bias, such as the possibility that politicians supported suffrage in response to trends in their electoral support. Further, counties within states may provide better comparison than states and countries with different historical and institutional trajectories.

I find evidence in support of my argument. I show that conservative incumbents lost votes among women in states where the suffrage movement was very strong, while incumbents in places where the movement was weaker were not affected by women's suffrage. The electoral retaliation against conservative incumbents was particularly strong with respect to incumbents' opposition to bills that were supported by organized women in Congress. Over time, however, women's groups abandoned its electoral strategy, and the ability of women to coordinate against unresponsive incumbents

dissipated. I run 14 placebo tests and show that trends in incumbents' support and turnout were not related to the proportion of women at any level of incumbents' progressive score when and where women's suffrage was not introduced. I also utilize a unique data set of sex-separated ballots from Illinois and show that women and men did not electorally respond to the proportion of women. Altogether, these tests provide robust evidence that the results are not driven by preexisting trends, nor by a strategic response from voters.

These findings have important implications for the study of women's representation (Folke and Rickne 2016; Franceschet and Piscopo 2008; O'Brian 2015), the study of women in American political development (Banaszak 1996; McConnaughy 2013; Teele 2018) and democratization processes in general. The study offers insights into how political preferences of newly enfranchised women are formed and how these preferences subsequently translate into vote choice and policy change. A close examination of the underlying mechanisms that underpin democratization processes is crucial in that it highlights that the institution of suffrage is a necessary but not sufficient condition for de facto representation of previously disenfranchised groups.

Women's Mobilization after Suffrage in the United States

Were newly enfranchised women able to electorally mobilize around shared interests? The existing literature provides two rather pessimistic answers. First, scholars of American political development mostly question that new women voters formed homogeneous voting block (Freeman 2002, p. 2; Skocpol 1992, pp. 506). The most common explanations emphasize women's relative political inexperience, lack of voting habit, the heterogeneity of women as a group and the lack of a single party that represented women's interests (Clark and Clark 2008, p.2; Corder and Wolbrecht 2016, p.23; McConnaughy 2013, p.8-15). Indeed, the gender voting gap was negligible and heavily dependent on context at the time of suffrage (Alpern and Baum 1985; Corder and Wolbrecht 2016, pp.260-2; Harvey 1998, p.106-7). However, all empirical studies to date measure the gender voting gap at partisan level. Given that parties have a limited incentive to adopt the women's agenda prior to suffrage, women's issues are likely to cut across party lines at the time of suffrage (Andersen 1996, pp.153-5; McConnaughy 2013, p.37; Sainsbury 2001, p.66, 68). As such, a negligible and

inconsistent partisan gender gap may mask a sizable and consistent gender voting gap at a local level.

Second, the political economy literature suggests that politicians' quick response to suffrage mitigated its electoral impact (Miller 2008; Lott and Kenny 1999).[2] To the extent that politicians adopt policies that cater to the demands of newly enfranchised groups, suffrage, in theory, may bring about massive fiscal changes without shaking up the electoral status quo. However, given politicians' limited ability to converge on the median voter (Grofman 2004), such mechanisms are, at best, likely to reduce the electoral effects of the reform. Importantly, these accounts assume - rather than test - that women can, indeed, coordinate electorally against unresponsive politicians. Neither these accounts can explain why some politicians are more prone to adapt their policies, nor why some of the initial success of women's lobby dissipated over time.

In this paper, (i) I measure women's mobilizational capacity at the issue-district level, rather than at the party level. (ii) I explore conditions under which newly enfranchised women had the capacity to coordinate electorally, rather than taking it for granted. In doing so, I reconcile the apparent contradiction in the literature that would suggest that politicians respond to women's preferences even though women cannot effectively threaten unresponsive politicians.

When Newly Enfranchised Coordinate Electorally

I theorize that successful mobilization of newly enfranchised groups around shared interests depends on a presence of active mobilization emphasizing these groups' shared interests. A strong social movement, in particular, has two important functions: (i) it articulates and raises awareness of the group's interests, and (ii) it creates an active, informed and mobilized pool of voters that can take electoral action to foster these interests. I discuss both channels below.

(i) A new electorate can mobilize on shared interests provided that a social movement defines the group, articulates its interests and raises awareness of such interests within and outside of the group. If intergroup interactions are essential for creating the group's collective interests (Weldon

---

[2]See Larcineze 2014 and Berlinski and Dewan 2011 for a similar argument with respect to men's suffrage.

2002), the mere presence of unorganized presence of individuals cannot successfully articulate the interests' of the group. Without a movement that negotiates the group's interests, fosters collective identity of the group and raises the group's consciousness of these interests, not only there is no constituency for politicians to represent (Weldon 2011, p.2-4), but also the group cannot credibly threaten politicians' electoral survival in order to obtain policy concessions.

Several studies recognize the crucial role of social movements in the formation of groups' shared interests. Scholars have long pointed to the role of the socialist movement in the development of class consciousness and the subsequent electoral representation of worker's interests (Katznelson and Zolberg 1986). With respect to women's interests, women's vital organizing was important at the time of democratic transitions in that it articulated women's shared interests and therefore helped women to capitalize on new women-friendly constitutional frameworks after democratic transitions (Waylen 2007, p. 202). Similarly, mobilization of women into a liberal suffrage movement fostered women's identification with the Liberal Party in Canada (Bashevkin 1983).

(ii) Once shared interests are articulated and the awareness of these interests is established, a strong social movement also helps to mobilize the new electorate around these interests. If newly enfranchised groups lack experience with the political process, a strong social movement may help to overcome this relative 'disadvantage'. Where the social movement has a high organizational capacity, it not only informs politicians about its preferences (Gillion 2012; Teele 2018), but also informs new voters about politicians' position on relevant issues. Indeed, social movements often disseminate information on voting records of individual representatives in the hope of turning electoral and policy tides in their favor (Banaszak 1996, pp.134-5; Kitschelt 1986).

Several studies recognize the importance of mobilization campaigns of social movements for electoral coordination. Suffrage expansion was a far lesser threat to the bourgeois in countries where the working class was not successfully mobilized by the socialist movement (Huber et al. 1993; Przeworski and Sprague 1986). Similarly, the absence of a racially diverse labor movement in the United States undermined labor friendly policies and the ability of the Democratic party to capitalize on the mobilizational strength of both the civil rights and labour movements (Frymer 2008). With respect to women's movements, the power of the suffrage movement to mobilize women has been recognized by parties and politicians, who strategically aligned with suffragists in

an attempt to exchange women's loyalties for their support for suffrage (McConnaughy 2013, p.8-15; Teele 2014).

Historical Background: Women, Suffragists and Politicians

There is a consensus among scholars that American women around the turn of last century organized on progressive issues, including suffrage, temperance, child welfare, military and maternal benefits, education, minimum wage, prostitution, food regulations, equal pay, working conditions and child labor (Cott 1990, pp.157, 161-8; Flanagan 2007, pp.42-8; Goss 2013, pp.4, 27; Kraditor 1981, p.60-5; Lemons 1973, p.83; McArthur 1998, pp.1-3, Schuyler 2006, p.7, 138). The unifying element across otherwise heterogeneous women's organizations was the belief that women's suffrage was a means to implementing reformist, progressive legislation (Buechler 1986, p.149). After the ratification of the Nineteenth Amendment, a newly established umbrella organization, the Women's Joint Congressional Committee, became central to coordinating the women's lobby (Wilson 2007, p.2-5). Women's progressive preferences were thought to stem from women's caring nature, moral authority, and economic vulnerability (Dunkan-Clark 1913, p.103-5; Skocpol 1992, p.2-3, 20-1).

The fight for suffrage was later coordinated by the largest suffrage organization, National American Women's Suffrage Association (NAWSA), effectively a federation of women's organizations. Although strictly nonpartisan (Banaszak 1996, p.105), NAWSA embedded the suffrage cause in a largely middle class, native born and white progressive agenda (Kraditor 1981, p.56) and gradually began to emphasize expediency arguments for women's suffrage. These policy-driven arguments were successful (McCammon and Campbell 2001), not least because they secured wide support from progressives (McConnaughy 2013, p.12; Banaszak 1996, p.99-107, 162, 187-99; Schuyler 2006, p.5). For example, the flagship journal of women's political activism, the Woman Citizen, published just before the 1918 election, argued that women's votes will be crucial for post-war reconstruction:

There will be, among others, the problems connected with the [...] widows and orphans, and the problems connected with the [...] women who have been brought to into the industry by the war emergency, besides the problem of nursing and caring for [...] men. [...]. To most men who have any progressive outlook at all, it is clear that the joint wisdom of men and women should be brought to bear upon these [post-war] problems, on the ground not so much of the women's abstract right as of the country's urgent need [...] .

Although there were internal struggles over the adoption of causes beyond that of women's suffrage (Buechler 1982, p.13), it was not uncommon that NAWSA endorsed less controversial policies at the national level, such as women's equal pay and restrictions' on night work of women (Kraditor 1981, p.62-3). At the local level, suffragists played an active role in the passage of progressive polices, often in conjunction with other organizations.[3]

NAWSA sought to attract broader public support with a range of educational and mobilizational activities. NAWSA collected information and statistics on pro-women bills, monitored who supported these bills and published analyses of the bill's effects. Of interest were bills that specifically referred to women and children, but also broadly progressive laws on industrial accidents, initiatives and referenda, prohibition, gambling, health measures, public schools and workmen's compensations.[4] Suffragists used 'file systems to categorize political leaders as friend or foe', polled incumbents on their stance on specific issues[5] and mobilized women for or against individual politicians (Andersen 1996, p.149; Banaszak 1996, pp.134-5; Schuyler 2006, pp.4, 194). 'Our opposition

---

[3]See, for example, Woman Citizen, August 3, 1918, p.189 for strategic alliance between progressive organizations and suffragists in Georgia on teacher's salaries.

[4]See NAWSA's Woman's Suffrage Yearbook (1917, p.106); Women Voters Manual, 1918. NY: The Century Co.; 'Legislation that Interests Women', The Woman Citizen, January 4, 1919; A.G.Porritt's 'Law's affecting women and children in the suffrage and non-suffrage states, National Woman Suffrage Publishing Company, Inc., 1917.

[5]See, for example, NAWSA's Woman' Suffrage Yearbook, 1917; 'Mayors of Illinois on Chicago Woman Suffrage', Illinois Suffrage Association.

to individual candidates shall not be based on party considerations', heard the wartime NAWSA convention.[6] The local focus on issues and candidates went hand in hand with the fact that NAWSA was organized by electoral districts (Banaszak 1996, pp.134, 140, 68). At the local level, organized women were able to mobilize an otherwise heterogeneous group of women for progressive issues, effectively leveraging the power of their votes (Harvey 1998, p.11; Flexner 1975, p.301; Kraditor 1981, p.247; Schuyler 2006, pp.8-10; 218-20).

Despite the mobilization efforts of women's organization, there is a consensus that women's turnout was lower than men's in most places (Corder and Wolbrecht 2006). Among the women who voted, issue - rather than partisan - calculus seemed more important. Emily Blair, who later served as a strategist in the Democratic party, noted that women's choice might be hard in the 1920 election because progressive Republicans and liberal Democrats did not differ much.[7] Contemporary sources and suffragists often reported that women demonstrated impact in elections locally, voting out conservative politicians (Andersen 1996, p.157; Andersen 1990, p.189; Cott 1990, p.158; Schuyler 2006, p.219). For example, the Woman Citizen, published on 26 August 1922, reported:[8]

[Women] claim the credit of being largely responsible for the defeat of the machine in Pennsylvania [...]. They were also active in Iowa, where colonel Brookhart, a progressive, if not radical, was nominated; [...] and in Nebraska where R. B. Howell won the Republican nomination for the Senate. Mr. Howell is also a progressive and was originally an advocate of both prohibition and woman suffrage [...] .

Naturally, the expectations that enfranchising women would sweep politics with reforms added to the fears of conservative politicians and anti-suffragists who often aligned with big businesses that benefitted from wet policies, poor working conditions and child labor (Flexner 1975, p.307-13; Kraditor 1981, p.31-6; Lemons 1973, p.89). This fear might have been further exacerbated by the fact that women's partisan loyalties were markedly weaker than men's (Goldstein 1973, p. 76, 134-

---

[6]NAWSA convention meeting 12-13th December 1917; Cited in Flexner 1975, p.301.

[7]Emily Newell Blair, Green Book 23, June 1920; quoted in Anderson 1999, p.110.

[8]Quoted in Andersen (1996, p.157).

138). In the words of Republican suffragist Lillian Feickert, 'women are for the Republican Party right, but not right or wrong.'[9] After 1924, however, organized women abandoned their electoral strategy and the successes of the women's lobby dissipated. The Child Labor Amendment was never ratified, the Sheppard-Towner Act was repealed by 1929, appropriations for the Women's and Children's Bureaus were reduced after 1925 and state-level mothers' pensions were harder to push through (Harvey 1998, p.6; Skocpol 1992, p.479).

Empirical Strategy

To uncover a causal relationship between suffrage and electoral outcomes, it is necessary to isolate the effect of suffrage from possible confounders. This gets considerably harder in a context where the extension of women's rights was a calculated move by politicians who also considered the reform's likely impact (Przeworski 2009; Teele 2018). As such, empirical strategy that exploits variation in the adoption of suffrage reforms across all states, even in a context where only some states are forced to enfranchise, inevitably suffers from identification issues such as selection bias and reverse causality.

The estimation strategy employed in this paper goes a long way towards tackling these challenges. Rather than comparing countries or states, I exploit variation in the intensity of suffrage within one country in states where the suffrage reform was imposed by a federal Amendment. This has two advantages. First, counties within states provide a better comparison than states or entire countries with different trajectories. Second, the ratification of the Nineteenth Amendment did not require consensus, thus affecting all states that have not yet enfranchised women, whether their representatives liked it or not.

More specifically, this study compares counties that received higher intensity of the exposure to the suffrage treatment to counties with lower exposure.[10] To this end, I take advantage of a prevalent

---

[9]Gordon, After Winning, 87. Quoted in Andersen 1996, p.100.

[10]The idea of exploiting the intensity of suffrage in examining the effects of suffrage reforms was first used by Berlinski and Dewan (2011) and later applied in various contexts (Carruthers and Wanamaker 2014; Kroth, Larcinese and Wehner 2015; Larcinese 2014; Vernby 2013).

historical fact that the proportion of women in the population varied substantially across localities. As counties with a higher proportion of women were more exposed to the suffrage treatment than counties with lower proportion of women, I should observe a more profound change in incumbent support before and after suffrage in counties with more women. For example, if newly enfranchised women punished conservatives, conservative incumbents should suffer greater electoral losses in localities with more women than in localities with fewer women.

I therefore analyze the reform's electoral impact only in states that were affected by the Nineteenth Amendment and regress the change in incumbent support at a county level on a full interaction between Female vote and incumbent's progressive score, controlling for incumbent's party:

$$\Delta Inc_{i1920-1918} = \alpha + \beta Pty_d + \gamma FemVot_i + \delta Prog_d + \theta FemVot_i * Prog_d + \Delta\varepsilon_{i1920-1918} \quad (1)$$

where ΔInc refers to a percentage point change in the electoral support for incumbents between the first post-suffrage election and the last pre-suffrage election in county i. Pty refers to the incumbent's party in a district d, $FemVot$ refers to the proportion of eligible women of voting age in county i in the suffrage year and $Prog$ refers to incumbent's progressive score (voting record) in the 66$^{\text{th}}$ Congress in district d. To address the fact that progressive score varies at the district level, that is, counties within a district are not independent, I cluster standard errors on district level throughout all estimations.

Note that $FemVot$ effectively captures change in the proportion of newly enfranchised, which goes from zero before suffrage to a proportion of eligible women after suffrage. Given that both the independent and the dependent variables are differenced over two time periods, equation (1) is equivalent to a fixed effects strategy with county and year dummies. The constant then accounts for a trend across all counties, it is therefore effectively a coefficient on a single 1920 year dummy in a typical difference in difference setting (Wooldridge 2010, p.279).

The main advantage of the difference in difference specification is that, by using changes rather than levels, it accounts for observed and unobserved fixed county characteristics. In other words, if county characteristics that vary systematically with Female vote are also correlated with electoral support, a model that regresses electoral support in a single year on Female vote would return biased

and inconsistent estimates. However, equation (1) tackles this issue by regressing change in electoral support and turnout before and after suffrage on Female vote at various levels of progressive score, thus controlling for fixed county characteristics correlated with Female vote.

Endogeneity Concerns

The most severe concern of my estimation strategy is that equation (1) could return biased and inconsistent estimates if *trends* in electoral support were correlated with fixed county characteristics. This would occur if, for example, there were more eligible women in counties that also witnessed a more profound turn against conservative incumbents that was driven by reasons other than the addition of women to the electorate. In addressing this possibility, I take two actions. First, in an attempt to capture trends in incumbent support, I add several control variables[11] and state fixed effects to all models. Second, I probe the validity of the parallel trend assumption with a series of placebo tests that explore the effect of Female vote and progressive score on change in incumbent support at times where women were not enfranchised. All of these placebo regressions return small estimates that are not statistically distinguishable from zero, indicating that electoral support for progressive and conservative incumbents was not trending differently in counties with more or fewer women in the absence of enfranchisement.

Data and Variables

The data set is essentially a panel that consists of county level electoral returns, embedded in electoral districts and states, for the first two post-suffrage elections and the first three post-suffrage elections in 34 states where women could vote for the first time in 1920.[12] The aim of this paper is to identify short-term effects of suffrage on electoral support in the first three elections after suffrage, with the primary focus on the first election after suffrage. Data from years before the

---

[11]These include all variables that are correlated with the Female vote, as indicated in Table A7: urban, adult black, margin of victory in 1918, dry legislation by 1918. I also add four binary indicators that capture Republican/Democratic entry/withdrawal between the two respective elections.

[12]A list of all states in the sample in Appendix A.

reform are used for robustness purposes. Counties that were uncontested before and after suffrage are excluded from the sample,[13] as are counties with boundary changes between relevant elections, absentee votes, soldier votes and at-large seats. A full description of data sources and the sample in Appendix A.

Data for the strength of the suffrage movement are adapted from Banaszak (1996) and is measured at the state level as a membership per capita in NAWSA. The sample is split into two groups of states with 'weak' and 'strong' suffrage movements, where 'weak' refers approximately to the top tercile of the membership distribution. The mean NAWSA membership in states with a strong suffrage movement is more than double that of states with a weak suffrage movement (Table 1). The two groups of states are fairly comparable in the proportion of Republican incumbents and the number of Midwestern and Southern states, although Northeastern states mostly appear in the 'strong' category.

Table 1: Summary Statistics by Suffrage Movement Strength

| | Strength of the Suffrage Movement | |
	Weak	Strong
Membership pc (mean)	0.47 (0.188)	1.049 (0.28)
Membership pc min	0.052	0.645
Membership pc max	0.642	2.173
% Republican Incumbent	71.78	78.68
# States in Northeast	1	6
# States in Midwest	7	4
# States in South	4	5
N	574	333

Notes: Cutoff point refers to a 60th percentile of the county level membership distribution.

Incumbents' ideological position is indicated by a progressive score, which is defined as a propor-

---

[13]Where either of the two elections were uncontested, the change in incumbent vote share reflects change in contestation, rather than change in electoral support for the incumbent. Excluding uncontested counties mostly affects the South, where about three-quarters of counties were uncontested either before and immediately after suffrage (1918 and 1920).

tion of 'yea' votes on all progressive bills in the previous Congress.[14,15] The coding for progressive bills is adapted from Miller (2008), and uses a textbook definition of progressive legislation as aiming to reduce sale of alcohol, regulate child labor and sweatshops, manage natural resources, ensure pure water and milk, restrict immigration, regulate trusts, eliminate corruption, regulate business practices, address health hazards, improve working conditions, adopt women's suffrage and give the public more direct control over government.[16] The broad array of legislation that falls under this definition aims to capture the general progressive agenda supported by organized women. In the analysis below, however, I also run the analysis by individual bills.

Figure 1 depicts kernel densities of progressive score in the 66th Congress just prior to the adoption of women's suffrage. The figure shows that there was a substantial overlap between Republican and Democratic representatives on the progressive dimension, with Republican representatives slightly more progressive. This pattern holds in all elections under study, except for the 68th, where representatives of neither party were more progressive (see Figure A3).[17] This is consistent with the historical account that the progressive agenda cut across party lines, although the Republican party was, on a whole, more favorable to progressive women voters. Note also that the DW-NOMINATE scores from the first dimension are orthogonal to the progressive score, where the most conservative Republican incumbents, as indicated by DW-NOMINATE scores, are no more or less progressive (see Figure A2).

---

[14]A list of all progressive bills in Appendix B.

[15]Incumbents who were continuously inactive in Congress excluded from the analysis.

[16]Definition sourced from a Digital History at http://www.digitalhistory.uh.edu

[17]By 1924, the two parties realigned, with the Democrats now moving to a more progressive (liberal) position.

Figure 1: Kernel Densities of Progressive Score in 66th Congress, by Party.
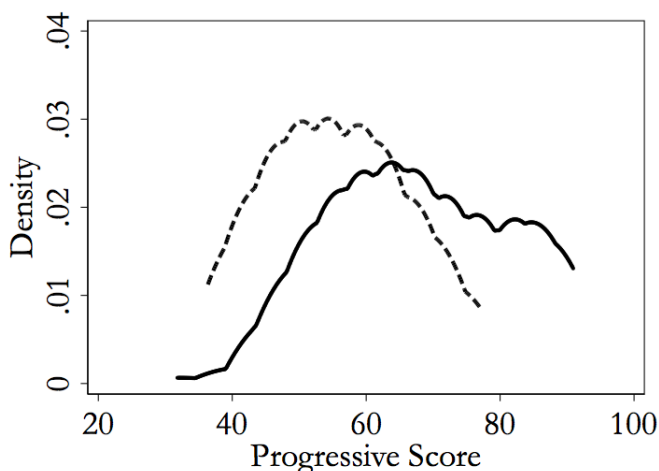
Notes: Solid (dashed) black line depicts Republican (Democratic).

The key outcome of interest is a change in percentage point incumbent vote share before and after suffrage in a county. The 1918 midterm election is used as a pre-suffrage reference year for three elections after suffrage.[18] Only Republican and Democratic incumbents, who run in both elections for the same party, are included in the analysis.Figure 2 below depicts the mean of the outcome variable by terciles of progressive score. The graph shows that while both progressive and conservative incumbents gained votes in the 1918 election, progressives in the highest tercile gained on average about 3% of votes and conservatives lost on average 3.7% in the 1920 election. After the 1920 election, electoral swings are less affected by progressive score (see Figure A4). Regressing the outcome on progressive score by social movement strength reveals that, as we would expect, progressives do better in states with a strong movement, while no such effects are observed before suffrage and in states with a weak movement (see Figure A5). However, no such effects are observed

[18]I prefer using the midterm 1918 election as a reference year to the general elections of 1920, which maximizes the size of the sample and minimizes the length of the interval between the two elections before and after suffrage. It also allows for a direct comparison of elections that were both held after the war and the end of the Progressive era. Note that the fact that voters tend to vote less often and cast ballots against the presidential party in the midterm election should not affect inference as long as such changes were not related to Female vote. The null results from placebo tests further support the validity of this assumption.

among the few Democrats in the sample.

Figure 2: Change in (pp) Incumbent Support by Terciles of Progressive Score

Note: 95% CI; Darker colors denote higher terciles of progressive score.

The key independent variable, Female vote, is defined as the proportion of adult women in a county in 1920. Figure 3 below shows the density of adult women across counties in 1920. In around 90% of all counties in the sample, adult women compromised between 43.7% and 50.8% of the adult population, although there were counties with as few as 33.3% of women and some with as many as 54.6%. Table A7 regresses several covariates on Female vote in the pooled sample and by the suffrage movement strength. Overall, there are more women in urban and dry counties. However, some differences are observed across the two groups of states. In states with a weak suffrage movement, counties with more women are more competitive and more often adopted dry legislation by 1918. In states with a strong movement, on the other hand, counties with more women are more urban, more progressive and have a lower proportion of black population.

Figure 3: Kernel Density of Female Vote in 1920.
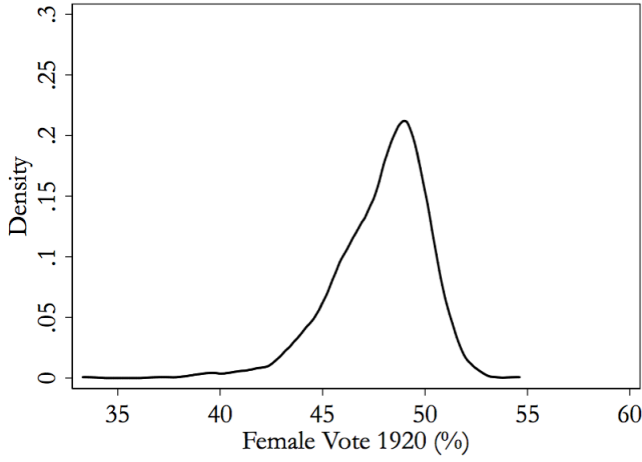
Note: Kernel density of Female vote in the sample for 1920 election.

Results

The Impact of Women's Suffrage by Progressive Score

I explore whether the poor electoral fate of conservative incumbents in the 1920 election, as shown in Figure 2, was related to suffrage and the movement strength. If women's suffrage and women's mobilizational efforts were at least partly responsible, we would expect the effect of Female vote to vary with progressive score in states with the strongest suffrage movements. Figure 4 below depicts the marginal effects of Female vote conditional on incumbent's progressive score separately for states with weak and strong suffrage movement. A histogram of the progressive score is superimposed on each plot. The first model in Figure 4 returns a negative product term of the interaction between Female vote and progressive score (-0.008), with a p-value of 0.620. When the suffrage movement is relatively weak, the effect of the Female vote is not conditional on the progressive score. This suggests that women's suffrage did not have much impact on conservative politicians in states with a weak movement.

The second model in Figure 4, on the other hand, shows that when the suffrage movement is very strong, women respond to the incumbent's progressive voting record. Conservative incumbents did worse in counties with high Female vote, that is, they lost due to women's suffrage. The model

returns a positive product term of the interaction between Female vote and progressive score of 0.014, with a p-value of 0.033. When incumbent's progressive score is at the mean, the effect of Female vote on change in incumbent vote before and after suffrage is -0.115. For every additional percentage point decrease in incumbent's progressive score, the effect of Female vote decreases by 0.014. Looking closely at the marginal effects depicted in Figure 4, the model suggests that incumbents with a progressive score ten or more points below average did significantly worse among women than among men. When incumbent's score is ten points below average, ten percentage point increase in the Female vote decreases incumbent's vote by 2.5%. To assess the substantive relevance of this effect, about a third of incumbents in strong suffrage states had progressive score ten point below average and therefore lost votes on average because of women's suffrage in the 1920 election. Five of these incumbents were not reelected, a result that might have been reversed in the absence of women's suffrage. Note that the model does not suggest that progressive incumbents were rewarded from women at the polls. This is consistent with accounts that suggest that suffragists primarily sought to threaten conservative politicians electorally.

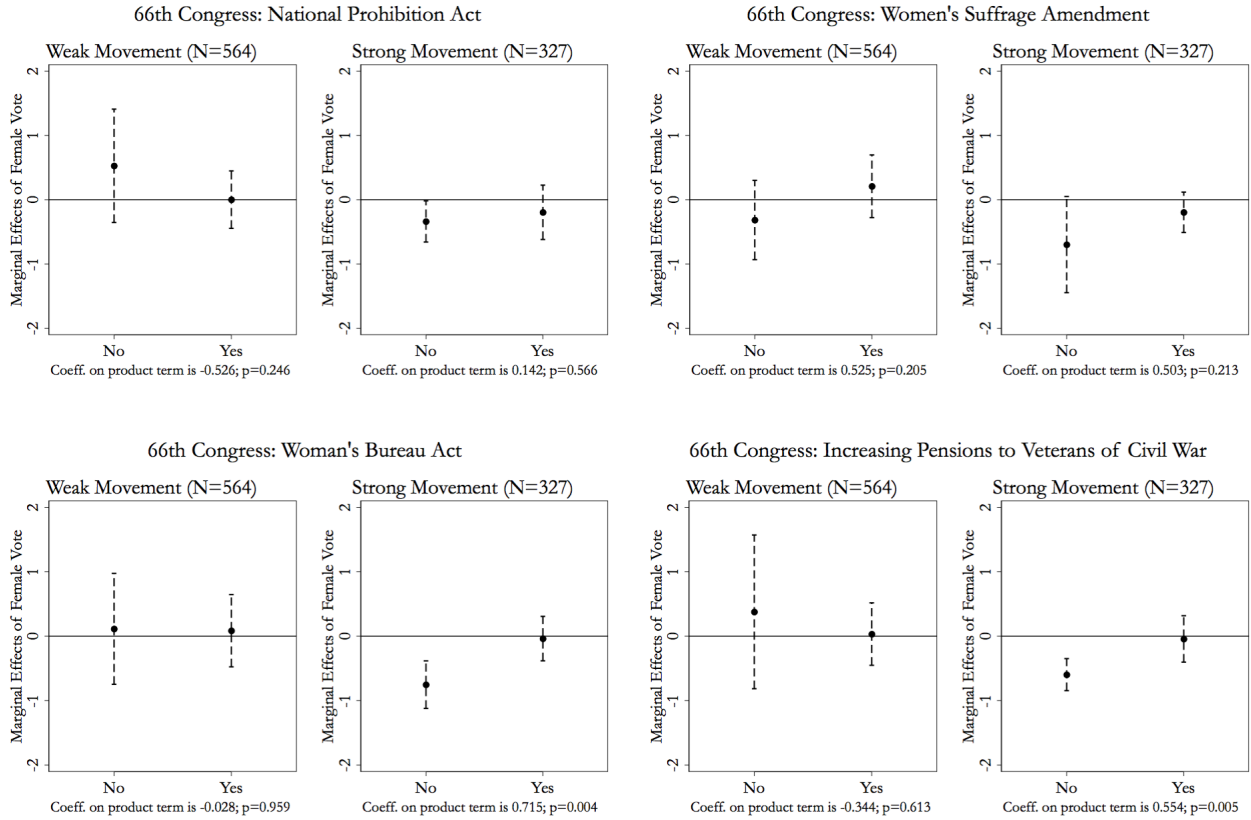Figure 4: 1920 election: Marginal Effects of Female Vote, by the Suffrage Movement Strength
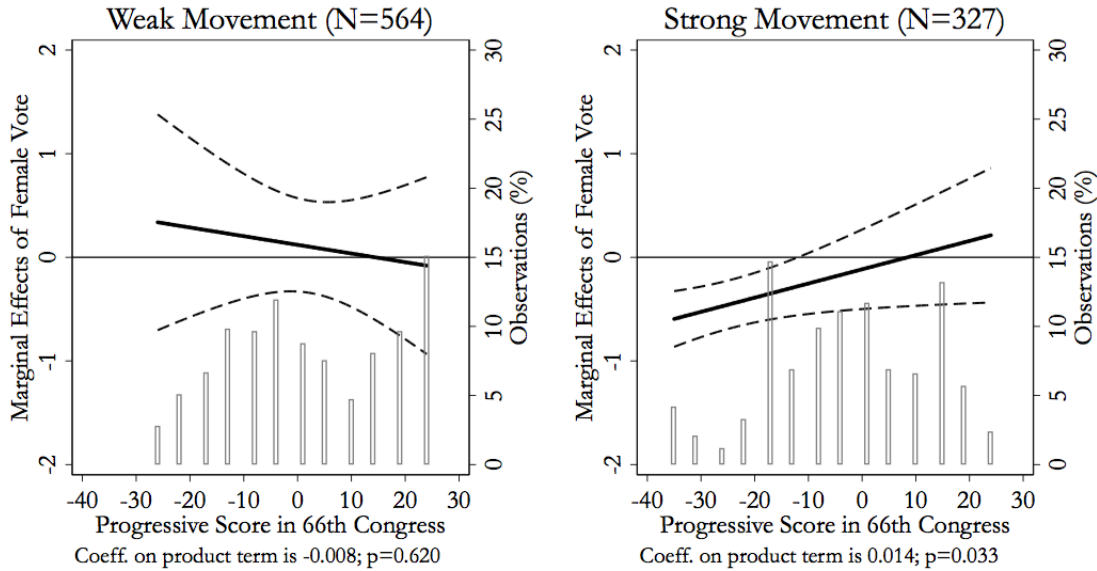
Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in inc. support between 1920 and 1918; Progressive score and Female vote centered around mean.

The Impact of Women's Suffrage by Salient Bills

I now examine the immediate effects of women's suffrage by salient bills. While incumbents' votes on all progressive bills tend to be correlated, this analysis allows me to assess which set of bills drives the main result. First, I look at all bills that were supported by organized women (see Table A6). Apart from a long tradition of organized women's lobbying for the suffrage bill, women's groups in the 66th Congress lobbied for prohibition and the establishment of Women's Bureau. Figure 5 depicts the marginal effects of Female vote on incumbents' vote on these three bills. The figure shows that, in states with a strong movement, incumbents opposing any of these bills did worse in places with more women, while no such effects are observed in states with a weak movement. These effects are strongest for incumbents opposing the Women's Bureau Act, which is often referred to as the first legislation that specifically catered to the newly enfranchised women. The results on the women's suffrage bill are somewhat weaker. This may not be surprising, given that the suffrage bill was often perceived as a means to other pro-women legislation, so incumbents' support of the suffrage bill itself would have been less relevant than their support of pro-women policies.

Among all other progressive bills of the 66th Congress, at least three bills improved the welfare of women, although neither was specifically supported by women's groups in the 66th Congress. A bill that increased veteran pensions affected women by extending to widows, children and dependents of veterans. The Smith-Fess bill laid grounds for vocational rehabilitation to workers in industry, thus providing greater security to their dependents in case of accident, injury or disease and, similarly, the Civil Service Retirement Act provided greater security to federal employees and their dependents in case of a disability or death of the breadwinner. Out of these three bills, only the incumbents' vote on veteran pensions with direct payments to widows and children returns large and statistically significant results in states with strong movement (see Figure 5 and Figure A6). Further, none of the other remaining progressive bills, namely, those aimed at immigration restriction and World War I veteran compensation returns significant results (see Figure A). Altogether, these results suggest that the punishment of conservative incumbents was driven to a greater degree by these incumbents' opposition to women's progressive legislation. The main results appear to be primarily affected by those bills that are either directly endorsed by organized women or that directly affect

19

Figure 5: Salient Bills in the 66th Congress: Marginal Effects of Female Vote, by the Suffrage Movement Strength

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is change in (pp) inc. support between 1920 and 1918 election.

the welfare of women.

Long-Term Effects

I then examine whether the main result identified in Figure 4 above persists in the second and third election after suffrage. Specifically, I explore the effects of the Female vote conditional on incumbent's progressive score of the most preceding Congress on change in incumbent support between 1918 (pre-suffrage election) and 1922 and 1924 (second and third election post-suffrage). Note that substantial attrition occurs the further in time we go. The results are therefore conditional on incumbents being reelected in between the two elections. The results are presented in Figure A7 and suggest that conservative incumbents who were reelected in 1920 lost votes in counties

with more women between 1918 and 1922, while progressive incumbents benefited from passing women's legislation after suffrage. While the sign and the size of the product term is similar to the estimate for 1920, neither the product term, nor the marginal effects, are statistically significant at conventional levels. No long-term effects are observed in 1924 in either group of states. Note that the now reduced sample size puts a hefty demand on this estimation strategy, returning estimates that are imprecisely estimated. However, these results are consistent with the argument that women continued to vote on the progressive dimension, although these effects disappeared by the third post-suffrage election, when organized women decided to abandon their previous electoral strategy.

Alternative Mechanisms

I address several alternative mechanisms that may drive the main result. First, if incumbents in states with a strong suffrage movement have been less able to mitigate the effects of women's suffrage, the conservative loss would still be mediated by suffragists, albeit for different reasons. This could occur if, for example, greater public awareness of politician's past voting record impedes their ability to adapt, or if sufrage movement strengthens men's resistance to progressive shifts. To this end, I explore ideological shifts of politicians before suffrage (see Figure A10). The average progressive shift of incumbents in each state prior to women's enfranchisement is not correlated with state level movement strength. Altogether, these results suggest that the main result is not driven by politicians being better able to mitigate the effects of women's suffrage in states that do not have a strong movement.

Second, I explore whether the presence of a strong anti-suffragist countermovement altered the ability of the suffrage movement to mobilize new women voters (see Figure A11). If, for example, anti-suffragists were stronger in states with an otherwise weak movement, the observed null effect in those states may have been due to the presence of anti-suffragists rather than the relative weakness of suffragists. Alternatively, a high prevalence of anti-suffragists may have reduced the ability of suffragists to mobilize women into their ranks. To this end, I fit the main result from Figure 4 separately for states with weak and strong representation of anti-suffragists. The results indicate that, regardless of the organized presence of the National Association Opposed to Woman's Suffrage,

21

women mobilized against conservative incumbents in states with a strong movement. This result is consistent with the fact that anti-suffragists did not have a coordinated national strategy, relied on rich donations of organized interests rather than on membership dues and did not seek to mobilize women electorally, or otherwise engage them (Freeman 2002, p.52; Schreiber 2008, p.18-9).

Third, the loss of votes for conservatives in states with a strong movement may be driven by NAWSA's tendency to build a strong progressive electorate, rather than by NAWSA's mobilizational and informational activities on the ground. To this end, I explore whether the two groups of states differ on several indicators related to progressive preferences among the electorate. The two groups of states are fairly balanced in terms of progressive score in the 65th and 64th Congresses, proportion and a number of progressive candidates in 1912 election, women's labor force, proportion of urban population, proportion of adult blacks and manufacturing output (see Figure A12). On the other hand, 'Strong' suffrage states were more competitive in 1918, have a higher number of dry counties in 1918 and are slightly less likely to have a progressive representative in the 66th Congress (see Table A11). Altogether, this pattern of data is consistent with an account where NAWSA's strength does not build on a preexisting progressive electorate, but on the organizational strength of the temperance movement, while strategically mobilizing women against conservative incumbents who could be defeated (see too Banaszak 1996, pp.134-5; McDonagh and Price 1985).

Fourth, I explore the channels through which the suffrage movement achieved its electoral success. To this end, I estimate women's turnout in states with a strong and weak movement. If the women's movement did not only define women's issues, but also mobilized women on such issues, we should see that more women voted in states with a strong movement. I therefore regress percentage point change in the overall turnout between 1920 and 1918 on Female vote separately for the two groups of states (see Table A10). As we would expect, the overall turnout grew less in counties with more women, suggesting that women voted less than men. Importantly, the size of the effect is nearly twice as large in states with a weak movement, suggesting that women were especially mobilized in states with a strong movement. This claim is further supported with placebo tests, which regress change in turnout in two elections before and two elections after suffrage on Female vote. Overall, these placebo regressions return small and non-significant estimates and therefore strengthen confidence that the observed effects in 1920 are not spurious.

Robustness Checks

The prime concern of the diff-in-diff strategy is a violation of the parallel trends assumption. This would happen if electoral support of incumbents trended differently in counties with high and low proportions of women regardless of women's suffrage. If, for example, support for conservative incumbents was already falling in counties with the most women prior to the adoption of women's suffrage, we would have reason to believe that the above identified effects of women's suffrage were driven by potential confounders correlated with the Female vote, rather than directly caused by the reform.

In probing such possibility, I run several placebo tests where (pp) change in incumbent support and (pp) change in overall turnout is regressed on the interaction between Female vote and the progressive score at times where women were not enfranchised. I find that neither support for incumbents, nor turnout, were trending differently with Female vote and the progressive score in states with a weak and strong movement (i) in one election before the adoption of suffrage, (ii) in the two subsequent elections after suffrage and (iii) in 1920 election in states that enfranchised women before the 1920 election (see Appendix E). In all fourteen placebo regressions, the product term is far from being statistically significant, close to zero or smaller and the marginal effects are also far from being significant at any value of the progressive score. While the parallel trends assumption is not directly testable, these results increase our confidence that the above identified effects of women's suffrage are not driven by confounders correlated with the Female vote and progressive score.

The second concern is that women and/or men may have strategically responded to Female vote in the first election after suffrage. In such case, placebo tests would confirm parallel trends, but the above identified effects of suffrage would not estimate women's voting behavior. There are two main concerns in this respect. First, the effects of suffrage could have been driven by a strategic response of men to the adoption of suffrage. For example, progressive men may have turned out more and/or may have become progressive in places with more women in states with a strong movement. In this case, the effects of suffrage would be driven by men's strategic response to women, rather than by women's voting behavior. Second is the possibility that the effects of suffrage are driven by a

23

differential electoral response among women depending on the level of the Female vote. If women formed their preferences or made their initial decision to vote based on how many women lived in their county, the diff-in-diff would fail to uncover women's voting behavior.

One of the strengths of the applied diff-in-diff design, however, is that the proportion of women across counties/districts does not vary too much, so it seems unlikely that women and men would have directly responded to such relatively small nuances. Importantly, the results from placebo tests already provide some reassurance that women's and men's preferences do not vary with Female vote. I nonetheless provide further evidence from sex-separated electoral data in Illinois in the first post-suffrage election and use this data to explore whether women and men respond differently to Female vote upon the introduction of women's suffrage. I show that (i) men did not change turnout levels and did not change preferences for the Democratic (progressive) incumbent Woodrow Wilson in response to Female vote at the time of the introduction of women's suffrage and that (ii) women did not have distinct preferences and did not vote at different levels with respect to Female vote in the first election after suffrage. All four graphs that plot indicators of women's and men's response on the Female vote show fairly weak or no correlation, and this null finding is confirmed in a regression setting (Appendix F). While geographically limited in scope, this analysis provides further confidence in the ability of the diff-in-diff method to estimate women's voting behavior.

Finally, I fit several alternative specifications. First, I fit the main model separately for Republican and Democratic incumbents (see Figure A8). The size of the product term of the interaction between Female vote and progressive score is smaller for Republican incumbents, and the product term is not significant at conventional levels for either party. However, while again imprecisely estimated, the product term has the same sign for both parties and the marginal effects of Female vote are significant at the lowest levels of the progressive score for incumbents of either party. Altogether, these results suggest that women targeted conservative politicians from both parties. Second, I implement alternative cutoff points at the 40th and 50th percentile of the distribution of state-level membership in NAWSA (see Table A8). These additional models do not return results that are substantively or statistically significant, suggesting that women mobilized on progressive issues only in states with the very strongest suffrage movement. Third, I interact Female vote with terciles of the progressive score (see Table A8), which returns comparable estimates.

Table A9 shows results from further alternative specifications. Removing all controls widens the confidence intervals, but returns similar estimates. Adding a separate interaction between control variables (urban, black) and progressive score does not affect the main result. Using more accurate definitions of the proportion of eligible women (literate women in the four states with literacy tests and non-black women in two states with poll taxes) does not alter the main result. Excluding districts with strong (above 15%) support for third parties reduces the size and significance of the product term, but returns otherwise similar results where the marginal effects for incumbents with conservative voting records are statistically significant. The main result also remain intact when all counties with an upper bound on the dependent variable, that is counties with above 80% of votes are excluded. Finally, dropping one state at a time does not affect the substantive interpretation of the main result, although excluding Indiana or West Virginia increases the size on the interaction term, while excluding Maine or Missouri decreases the magnitude of the effect (see Figure A9).

Discussion

This paper explores the electoral mechanisms that underpin democratization processes and by doing so, highlights the importance of social movements in raising group consciousness among newly enfranchised groups and mobilizing the group around shared interests. Without such mobilization, politicians do not have an incentive to cater to the new electorate and the introduction of a previously marginalized group may undermine its potential to achieve desired policies. This research thus highlights that the enfranchisement of previously marginalized groups does not always translate into a 'better life for all' (Kroth, Larcinese and Wehner 2015), but is highly conditional on the presence of a movement that defines and represents the interests of the newly enfranchised.

This paper thus provides a rebuttal to those who almost invariably emphasize politicians' ability to mitigate the electoral consequences of suffrage, without also considering the ability of newly enfranchised to pose an electoral threat to politicians. The weak electoral consequences of the introduction of suffrage to working class men may thus be explained by a presence or relative absence of a strong movement, rather than by politicians' ability to mitigate its effects. It is therefore not surprising that enfranchising urban working class before the emergence of a viable labor movement

25

in the U.K. did not shake up the electoral status quo (Berlinski and Dewan 2011), while the late adoption of male suffrage in Italy turned the tides to reformist parties (Larcinese 2014).

Overall, this paper provides somewhat a more optimistic view of new women voters as active and informed part of the electorate as opposed to the so frequent perception that women were uninterested voters who doubled the votes of their husbands (Duverger 1955). It also challenges the conventional narrative that women were more conservative than men and moved to the 'left' of men only when outside employment became the norm (Inglehart and Norris 2000). Even if women were more conservative than men in the middle of the last century, these observations cannot be linearly extrapolated back into the 1920s. Much like the feminist wave of the 1970s, the surge in women's mobilization that accompanied the suffrage movement raised women's consciousness as a group and mobilized them around progressive agendas.

A quick glance at histories of suffrage movements suggest that suffragists endorsed progressive policies and mobilized women even in party-centered contexts. Much like their American counterparts, suffragists in Sweden, Norway and Canada, for example, aligned with policy-oriented women's organizations and sought to mobilize women as a means to obtain policy concessions, including legal rights of married women, prohibition and better working conditions (Bacchi 1983; Blom 2012; Sjogren 2013). While targeting individual politicians was not uncommon even in party-centered environments, the predominant strategies of suffragists in such context were focused on parties (Teele 2014). Once again, the scope and the character of the suffrage movement affects who benefitted from women's votes (Bashevkin 1983). In countries where suffragists mobilized working class women into the movement or otherwise aligned with labor, for example, we would expect parties of the left to have an easier inroad in capturing large segments of the new votes. However, the jury is still out about how early women used their newly gained votes outside United States.

References

1. Aidt, Toke S., and Bianca 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(3–4): 391–417.

2. Alpern, Sara, and Dale Baum. 1985. "Female Ballots: The Impact of the Nineteenth Amendment." The Journal of Interdisciplinary History 16(1): 43–67.

3. Andersen, Kristi. 1990. "Women and Citizenship in the 1920s." In Women, Politics, and Change, New York: Russell Sage Foundation, 177–98.

4. ———. 1996. After Suffrage. Women in Partisan and Electoral Politics before the New Deal. Chicago: The University of Chicago Press.

5. Anderson, Kathryn. 1999. "Evolution of a Partisan: Emily Newell Blair and the Democratic Party, 1920-1932." In We Have Come to Stay: American Women and Political Parties, Albuquerque: University of New Mexico Press, 1880–1960.

6. Bacchi, Carol Lee. 1983. Liberation Deferred?: The Ideas of the English-Canadian Suffragists, 1877-1918. Toronto: University of Toronto Press.

7. Banaszak, Lee Ann. 1996. Why Movements Succeed or Fail. Opportunity, Culture, and the Struggle for Woman Suffrage. Princeton: University Press.

8. Bashevkin, Sylvia B. 1983. "Social Change and Political Partisanship: The Development of Women's Attitudes in Quebec, 1965-1979." Comparative Political Studies 16(2): 147–172.

9. Berlinski, Samuel, and Torun Dewan. 2011. "The Political Consequences of Franchise Extension: Evidence from the Second Reform Act." Quarterly Journal of Political Science 6(34): 329–376.

10. Bertocchi, Graziella. 2011. "The Enfranchisement of Women and the Welfare State." European Economic Review 55(4): 535–553.

11. Blom, Ida. 2012. "Structures and Agency: A Transnational Comparison of the Struggle for Women's Suffrage in the Nordic Countries During the Long 19th Century." Scandinavian Journal of History 37(5): 600–620.

12. Buechler, Steven M. 1986. The Transformation of the Woman Suffrage Movement: The Case of Illinois, 1850-1920. New Brunswick, NJ: Rutgers University Press.

13. Carruthers, Celeste K., and Marianne H. Wanamaker. 2015. "Municipal Housekeeping: The Impact of Women's Suffrage on Public Education." Journal of Human Resources 50(4): 837–872.

14. Clark, Cal, and Janet Clark. 2008. Women at the Polls: The Gender Gap, Cultural Politics, and Contested Constituencies in the United States. Newcastle-upon-Tyne: Cambridge Scholars Publishing.

15. Corder, J. Kevin, and Christina Wolbrecht. 2006. "Political Context and the Turnout of New Women Voters after Suffrage." Journal of Politics 68(1): 34–49.

16. ———. 2016. Counting Women's Ballots. Cambridge: University Press.

17. Cott, Nancy F. 1990. "Across the Great Divide: Women in Politics before and after 1920." In Women, Politics and Change, eds. Louise A. Tilly and Patricia Gurin. New York: Russell Sage Foundation, 153–76.

18. Duverger, Maurice. 1955. The Political Role of Women. Paris: UNESCO.

19. Flanagan, Maureen A. 2007. America Reformed: Progressives and Progressivisms, 1890s-1920s. Oxford: University Press.

20. Flexner, Eleanor. 1975. Century of Struggle. Cambridge, MA: Harvard University Press.

21. Folke, Olle, and Johanna Rickne. 2016. "The Glass Ceiling in Politics: Formalization and Empirical Tests." Comparative Political Studies 49(5): 567–599.

22. Franceschet, Susan, and Jennifer M. Piscopo. 2008. "Gender Quotas and Women's Substantive Representation: Lessons from Argentina." Politics & Gender 4(3): 393–425.

23. Freeman, Jo. 2002. A Room at a Time. How Women Entered Party Politics. Lanham, MD: Rowman & Littlefield.

24. Frymer, Paul. 2008. Black and Blue. Princeton: University Press.

25. Gillion, Daniel Q. 2012. "Protest and Congressional Behavior: Assessing Racial and Ethnic Minority Protests in the District." The Journal of Politics 74(4): 950–962.

26. Goldstein, Joel H. 1973. The Effects of the Adoption of Woman Suffrage. Sex Differences in Voting Behaviour – Illinois, 1914-1921. New York: Praeger Publishers.

27. Goss, Kristin A. 2013. The Paradox of Gender Equality: How American Women's Groups Gained and Lost Their Public Voice. Ann Arbor: University of Michigan Press.

28. Grofman, Bernard. 2004. "Downs and Two-Party Convergence." Annu. Rev. Polit. Sci 7: 25–46.

29. Harvey, Anna L. 1998. Votes Without Leverage: Women in American Electoral Politics, 1920-1970. Cambridge: University Press.

30. Huber, Evelyne, Charles Ragin, and John D. Stephens. 1993. "Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State." American Journal of Sociology 99(3): 711–49.

31. Inglehart, Ronald, and Pippa Norris. 2000. "The Developmental Theory of the Gender Gap: Women's and Men's Voting Behavior in Global Perspective." International Political Science Review 21(4): 441–63.

32. Katznelson, Ira, and Aristide R. Zolberg, eds. 1986. Working-Class Formation: Nineteenth-Century Patterns in Western Europe and the United States. Princeton: University Press.

33. Kitschelt, Herbert P. 1986. "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies." British Journal of Political Science 16(1): 57–85.

34. Kose, Esra, Elira Kuka, and Na'ama Shenhav. 2015. Women's Enfranchisement and Children's Education: The Long-Run Impact of the US Suffrage Movement. IZA Discussion Paper

No.10148. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2826982

35. Kraditor, Aileen S. 1981. The Ideas of the Woman Suffrage Movement, 1890-1920. New York: W.W. Norton & Company.

36. Kroth, Verena, Valentino Larcinese, and Joachim Wehner. 2016. "A Better Life for All? Democratization and Electrification in Post-Apartheid South Africa." The Journal of Politics 78(3): 774–791.

37. Larcinese, Valentino. 2014. "Enfranchisement and Representation: Evidence from the Introduction of Quasi-Universal Suffrage in Italy." Innocenzo Gasparini Institute for Economic Research Working Paper Series 512. URL: https://ideas.repec.org/p/igi/igierp/512.html

38. Lemons, J. Stanley. 1973. The Woman Citizen Social Feminism in the 1920's. Urbana: University of Illinois Press.

39. Lott, Jr, John R., and Lawrence W. Kenny. 1999. "Did Women's Suffrage Change the Size and Scope of Government?" Journal of Political Economy 107(6): 1163–1198.

40. McArthur, Judith N. 1998. 1893 Creating the New Woman: The Rise of Southern Women's Progressive Culture in Texas. Champaign, IL: University of Illinois Press.

41. McCammon, Holly J., and Karen E. Campbell. 2001. "Winning the Vote in the West: The Political Successes of the Women's Suffrage Movements, 1866-1919." Gender & Society 15(1): 55–82.

42. McConnaughy, Corrine M. 2013. The Woman Suffrage Movement in America: A Reassessment. Cambridge: UP.

43. McDonagh, Eileen L., and H. Douglas Price. 1985. "Woman Suffrage in the Progressive Era: Patterns of Proposition and Support in Referenda Voting, 1910-1918." American Political Science Review 79(2): 415–435.

44. Miller, Grant. 2008. "Women's Suffrage, Political Responsiveness, and Child Survival in American History." The Quarterly Journal of Economics 123(3): 1287–1327.

45. O'Brien, Diana Z. 2015. "Rising to the Top: Gender, Political Performance, and Party Leadership in Parliamentary Democracies." American Journal of Political Science 59(4): 1022–1039.

46. Przeworski, Adam. 2009. "Conquered or Granted? A History of Suffrage Extensions." British Journal of Political Science 39(2): 291–321.

47. Przeworski, Adam, and John D. Sprague. 1986. Paper Stones: A History of Electoral Socialism. Chicago: University of Chicago Press.

48. Sainsbury, Diane. 2001. Rights without Seats. The Puzzle of Women's Legislative Recruitment in Australia. Elections: Full, Free & Fair.

49. Schreiber, Ronnee. 2008. Righting Feminism: Conservative Women and American Politics. Oxford: UP.

50. Schuyler, Lorraine Gates. 2006. The Weight of Their Votes. Southern Women and Political Leverage in the 1920s. Chapel Hill: The University of North Carolina Press.

51. Sjögren, Åsa Karlsson. 2012. "Women's Voices in Swedish Towns and Cities at the Turn of the Twentieth Century: Municipal Franchise, Polling, Eligibility and Strategies for Universal Suffrage." Century, Women's History Review 21(3): 379–398.

52. Skocpol, Theda. 1992. Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States. Cambridge, MA: Harvard University Press.

53. Teele, Dawn Langan. 2014. "Ordinary Democratization: The Electoral Strategy That Won British Women the Vote." Politics & Society 42(4): 537–561.

54. ———. 2018. "How the West Was Won: Competition, Mobilization, and Women's Enfranchisement in the United States." The Journal of Politics 80(2).

55. Vernby, Kåre. 2013. "Inclusion and Public Policy: Evidence from Sweden's Introduction of Noncitizen Suffrage." American Journal of Political Science 57(1): 15–29.

56. Waylen, Georgina. 2007. Engendering Transitions: Women's Mobilization, Institutions and Gender Outcomes. Oxford: University Press.

57. Weldon, S. Laurel. 2002. "Beyond Bodies: Institutional Sources of Representation for Women in Democratic Policymaking." Journal of Politics 64(4): 1153–1174.

58. ———. 2011. When Protest Makes Policy: How Social Movements Represent Disadvantaged Groups. Ann Arbor: University of Michigan Press.

59. Wilson, Jan. 2007. The Women's Joint Congressional Committee and the Politics of Maternalism, 1920-30. Champaign, IL: University of Illinois Press.

60. Wooldridge, Jeffrey M. 2010. Econometric Analysis of Cross-Section and Panel Data. Cambridge, MA: MIT press.

Online Appendix: The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States.

Contents

List of Figures

List of Tables

# Online Appendix A: Data and Variables

Data Sources

- Election data were gathered from the 'United States Historical Election Returns, 1824–1968 (ICPSR 1)', available for download at the ICPSR website.

- Socio-economic indicators (Female vote, urban, black, female labor force, manufacturing output), were gathered from 'Historical, Demographic, Economic, and Social Data: The United States 1790–2002 (ICPSR 2896)', available for download at the ICPSR website.

- Data on the proportion of counties with dry policies were collected from a data set 'Prohibition Movement in the United States, 1801-1920 (ICPSR 8343)', available to download at the ICPSR website.

- Data on redistricting of counties, their mergers and splits were collected from the 'Atlas of Historical County Boundaries'. This data is available for download here.

- Data on progressive bills were adapted from Miller (2008), available here.

- House roll call data and DW-NOMINATE scores from Voteview Website.

- Data on bills lobbied for by women's organizations collected via Proquest Congressional Database of congressional hearings.

- Data on NAWSA membership per capita collected by Banaszak (1996), obtained in personal communication with the author.

- Data on the timing of the adoption of women's suffrage for Congressional elections were collected from Keyssar (2002); Historical Statistics of the United States, Millennial Edition On-line.

- Data on election returns separated by sex in Illinois were sourced from Goldstein (1973) and Illinois State Archives.

- Data on literacy tests and poll taxes were collected from Keyssar 2000.

Sample States

There were 34 states where women voted for the first time to Congress in 1920: Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin. Two Southern States, Mississippi and Georgia, were affected by the Nineteenth Amendment, but defied it by failing to update the registration deadline for newly enfranchised women. Three states, Oklahoma, Michigan and South Dakota, gave women full voting rights before the Nineteenth Amendment, but where women voted for the first time to Congress only in the 1920 election.

Figure 1: States where Women Voted to Congress for the First Time in 1920.
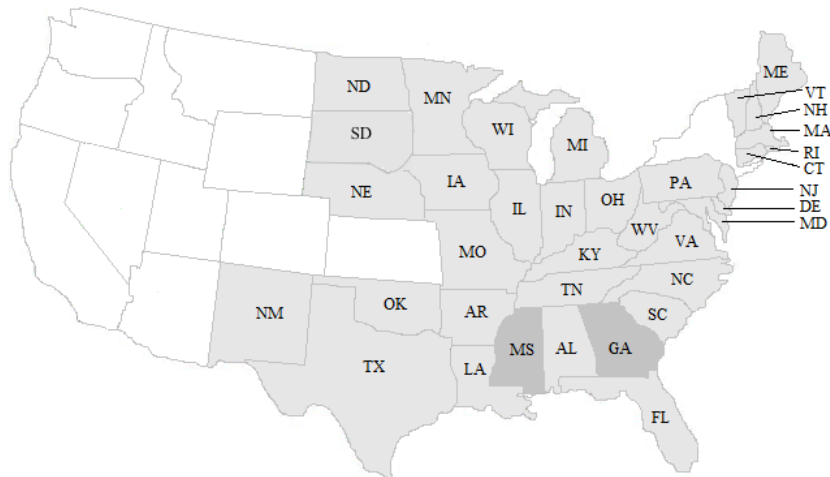
Notes: States where women voted for the first time to Congress in light gray. States which defied Nineteenth Amendment in 1920 in dark gray.

Variables

- *Outcome Variable:* Votes by party by year have been created as the proportion of valid votes for a party in a county in a given year. The key dependent variable is defined as a percentage point change in support for Republican and Democratic incumbents between 1920 and 1918. For placebo tests, a change between 1918 and 1916 (and 1922-1920, 1924-1922) election was used as a dependent variable. In estimating the long-term effects of women's suffrage, the change between second and third election after suffrage and the 1918 election is used as a dependent variable (1922-1918 and 1924-1918).

- *Female Vote:* Female vote is defined as the proportion of adult women and is calculated as the number of women 21 years and older in the 1920 census, divided by the number of women and men aged 21 years and older in the 1920 census. The minimum voting age was 21 years.

- *Incumbent's Progressive Score:* Defined as a percentage of 'Yea' votes on progressive bills in a district in previous Congress.

- *NAWSA Membership per capita:* Defined as NAWSA members per 10,000 in state's population in the year before the state adopted suffrage. For most states, this year therefore refers to 1920 or 1919.

- *Control Variables:*

  - *Urban (%):* Defined as the proportion of population in a county that lives in urban areas in 1920.

  - *Adult black (%):* Defined as the total number of adult blacks divided by the total number of adults in a county in 1920.

  - *Incumbent party:* Defined as the party of the incumbent for the each election; includes only districts with Democratic and Republican incumbents.

  - *Major party candidate entry:* Binary variables that capture candidate entry between respective elections. Coded one if there are any new Republican or Democratic candidates in a district and zero otherwise.

- *Major party candidate withdrawal:* Binary variables that capture candidate withdrawal between respective elections. Coded one if Republican or Democratic candidate withdraws from a district and zero otherwise.

- *Margin of victory:* Defined as the difference in percentages points between the two top ranking candidates in previous election.

- *Dry:* Binary variable where one indicates that a county adopted some dry measures in 1918.

- *Additional Variables (for robustness analyses):*

  - *Female employed (%):* Defined as an absolute number of women employed divided by the absolute number of adult women in 1920, at a state level.

  - *Manufacturing output:* Manufacturing output at the county level (in millions).

  - *DW-NOMINATE score of incumbents:* Defined as the incumbent's voting records on the first dimension of the liberal-conservative scale, sourced from VoteView.com.

Table 1: Summary Statistics for 1920 sample

Variable	Mean (Std. Dev.)	Min.	Max.	N
Dependent Variables				
(pp) Change in Incumbent Vote 1920-1918	-0.31 (13.25)	-60.13	55.37	907
(pp) Change in Turnout 1920-1918	3.13 (9.79)	-25.92	51.66	883
Treatment Variables				
Female Vote 1920	47.86 (2.29)	33.29	54.62	907
Progressive Score (66th Congress)	67.44 (15.22)	31.82	90.91	902
NAWSA Membership pc (at state level)	0.68 (0.36)	0.05	2.17	907
Control Variables				
Urban (%)	21.94 (23.67)	0	100	907
Adult Black (%)	3.98 (8.37)	0	51.03	907
Republican incumbent (binary)	0.74	0	1	907
Candidate entry Rep & Dem 1920 (binary)	0.05	0	1	907
Candidate withdrawal Rep & Dem 1920 (binary)	0.04	0	1	907
Dry 1918 (binary)	0.76	0	1	895
Margin of victory 1918 (difference in pp)	28.17 (25.34)	0	98.87	907

Online Appendix B: Incumbents' Voting Record

Figure 2: Correlation of DW-NOMINATE and Progressive Scores in 66th Congress.
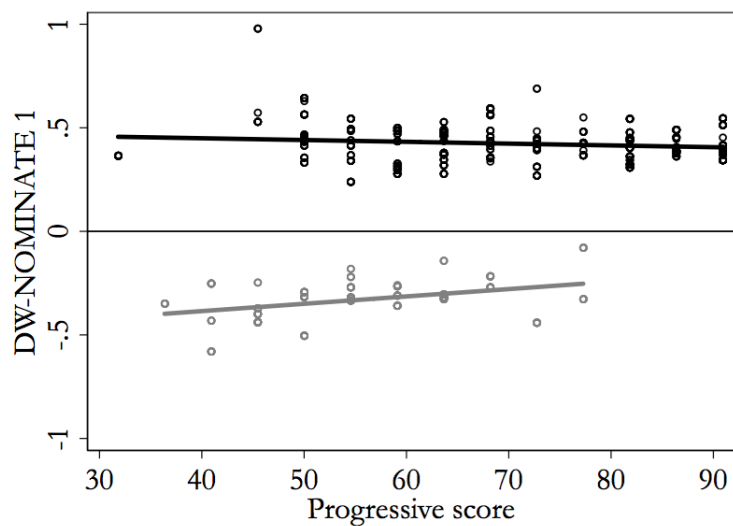
Notes: Scatter plots of DW-NOMINATE scores (1st dimension) and progressive score in 66th Congress in the sample, by party; Democrats in gray, Republicans in black; with linear fit.

Table 2: List of Progressive Bills in 65th & 66th Congresses

65th Congress

National Prohibition Act (2)
Women's Suffrage (2)
Deportation of certain aliens (2)
Minimum wage (3)
Veteran pensions - Civil war (4)
Veteran pensions - Spain (1)
Medical services to veterans (1)
Soldier's wage (1)
Stoppages (1)

66th Congress

Women's Suffrage Amendment (1)
National Prohibition Act (3)
Women's Bureau Act (1)
Civil Service Retirement Act (1)
Sundry Civil Law (4)
World War Adjusted Compensation Act (1)
Smith-Fess Act (4)
Veteran pensions - Civil war (2)
Veteran pensions - War with Spain (1)
Suspension of immigration (1)
Entry of aliens (1)
Compensation bonus (1)
Minimum wage (1)

Note: List of bills coded as 'progressive'; adapted from Miller (2008) using Voteview.com data; Numbers of related votes (e.g. progressive amendments) in parentheses.

Table 4: List of Progressive Bills in 67th and 68th Congresses

67th Congress
Sheppard–Towner Act (1)
Willis-Campbell Act (2)
Dyer Anti-Lynching Bill (1)
Filled Milk Act (1)
World War Adjusted Compensation Act (2)
Classification Act of 1923 (1)
Veteran Bureau Act (3)
Limiting Immigration (2)
Deportation of undesirable aliens (1)
Relief of destitution among Indians (1)
D.C. Workmen's Compensation Act (1)
Veterans pensions - Civil war (1)
Medical services to veterans (4)

68th Congress
Child Labor Amendment (2)
World War Compensation Act (2)
Immigration Act of 1924 (5)
Salary of teachers in D.C (1)
Migratory Bird Refuge Act (2)
Protection of salmon (1)
Development of parks & playgrounds in D.C (1)
Food assistance to starving women and children of Germany (1)

Note: List of bills coded as progressive; adapted from Miller (2008) using Voteview.com data; Total numbers of related non-procedural votes (e.g. progressive amendments) in parentheses.

Table 6: List of Bills Lobbied for by Women's Groups in 66th-68th Congresses

| | Major Women's Organizations | |
	For	Against
66th Congress		
National Prohibition Act (3)	WCTU	
Women's Bureau Act (1)	NLWV; NWTUL	
67th Congress		
Sheppard-Towner Act (1)	WCTU; NLWV	WP; NAOWS
Filled Milk Act (1)	NLWV; GFWC	
Naturalization and Citizenship of Women (1)	NLWV	
Classification Act of 1923 (1)	NLWV; NWTUL	
World Disarmament (1)	NWTUL	
D.C. Workmen's Compensation Act (1)	NLWV	
68th Congress		
Child Labor Amendment (2)	NLWV; NWTUL; WCTU	WP
Permanent Court of International Justice (1)	GFWC; NLWV	
Migratory Bird Refuge Act (2)	GFWC	

Note: All bills are a subset of bills listed in VoteView.com that were also supported by major women's organizations in Congressional hearings, as indicated in Process Congressional database. Numbers of related votes (e.g. progressive amendments) in parentheses. NLWV refers to National League of Women Voters; NWTUL refers to National Women's Trade Union League, WCTU refers to Women's Christian Temperance Union, GFWC refers to General Federation of Women's Clubs, WP refers to Woman Patriot, NAOWS refers to National Association Opposed to Women's Suffrage.

Figure 3: Mean (pp) Change in Incumbent Support by Terciles of Progressive Score over Time.
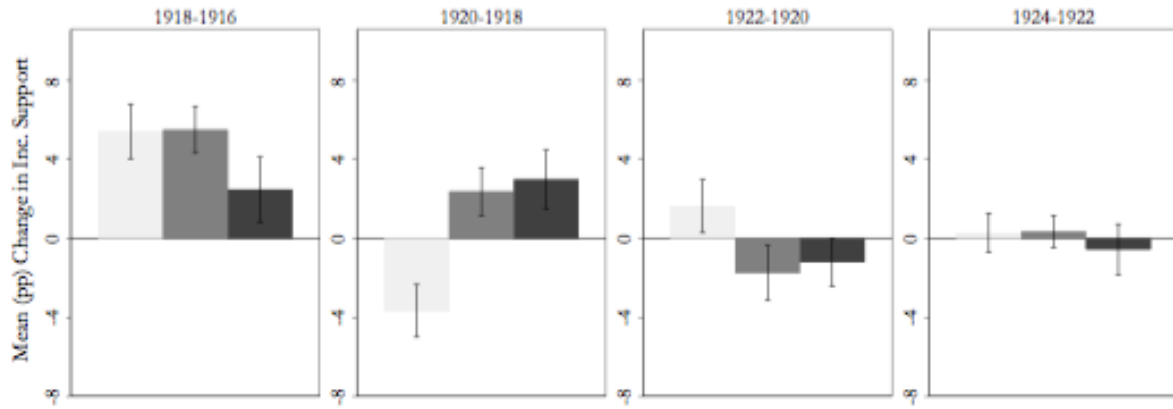
Note: 95% CI; Darker colors denote higher terciles of progressive score.

Figure 4: Kernel Densities of Progressive Score in 65th- 68th Congresses, by Party.

Notes: Solid (dashed) black line depicts Republican (Democratic).

15
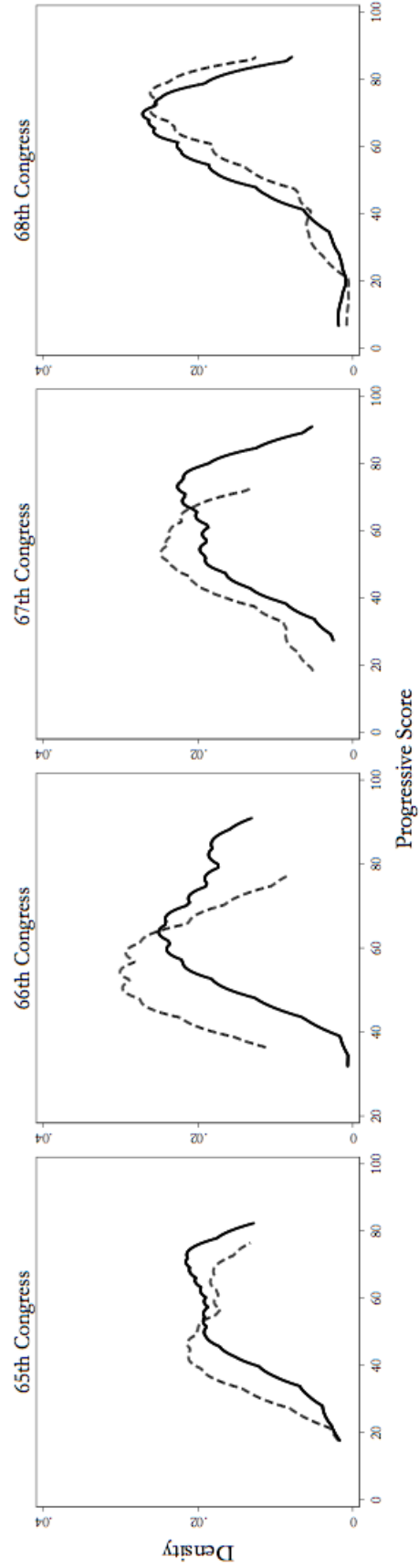
Online Appendix C: Supplementary Analyses

Table 7: Correlates of Female Vote in 1920

Dependent variable: Female vote 1920

| Model	All (1)	Weak Suffrage (2)	Strong Suffrage (3)
Urban (%)	0.008*	0.003	0.019**
	(0.004)	(0.004)	(0.006)
Black (%)	-0.006	0.021	-0.08‡
	(0.019)	(0.013)	(0.045)
Progressive score (66th Congress)	0.019	0.009	0.032*
	(0.012)	(0.016)	(0.014)
Republican Incumbent	0.142	0.186	0.306
	(0.414)	(0.52)	(0.673)
Electoral margin 1918	-0.006	-0.01*	0.009
	(0.004)	(0.005)	(0.007)
Dry county 1918	0.523*	0.578*	0.555
	(0.228)	(0.272)	(0.446)
State fixed effects	Yes	Yes	Yes
N	891	564	443
R-sq.	0.38	0.36	0.44

Notes: OLS estimates; Robust standard errors clustered on district level; All models include a constant; ** < 1%; * < 5%; ‡ <10%.

Figure 5: The Effect of Progressive Score on (pp) Change in Incumbent Vote by Strength of Suffrage Movement and by Party
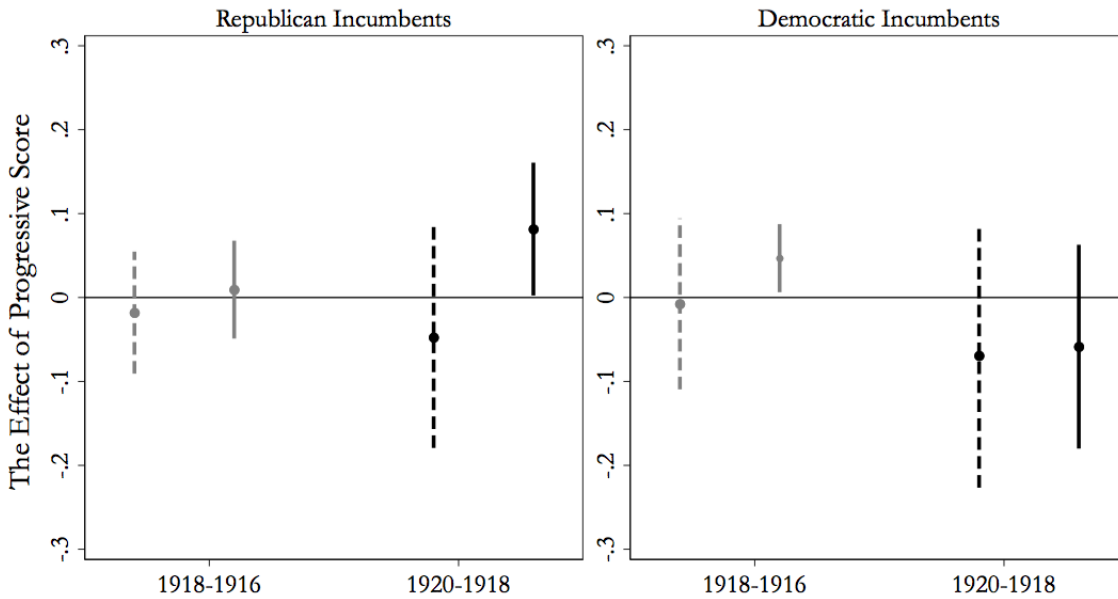
Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is change in (pp) incumbent support between the respective elections; Sample of states with weak suffrage movement (dashed line), strong suffrage movement (solid line); Progressive scores and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables').

Figure 6: All Other Progressive Bills in the 66th Congress: Marginal Effects of Female Vote, by the Strength of the Suffrage Movement
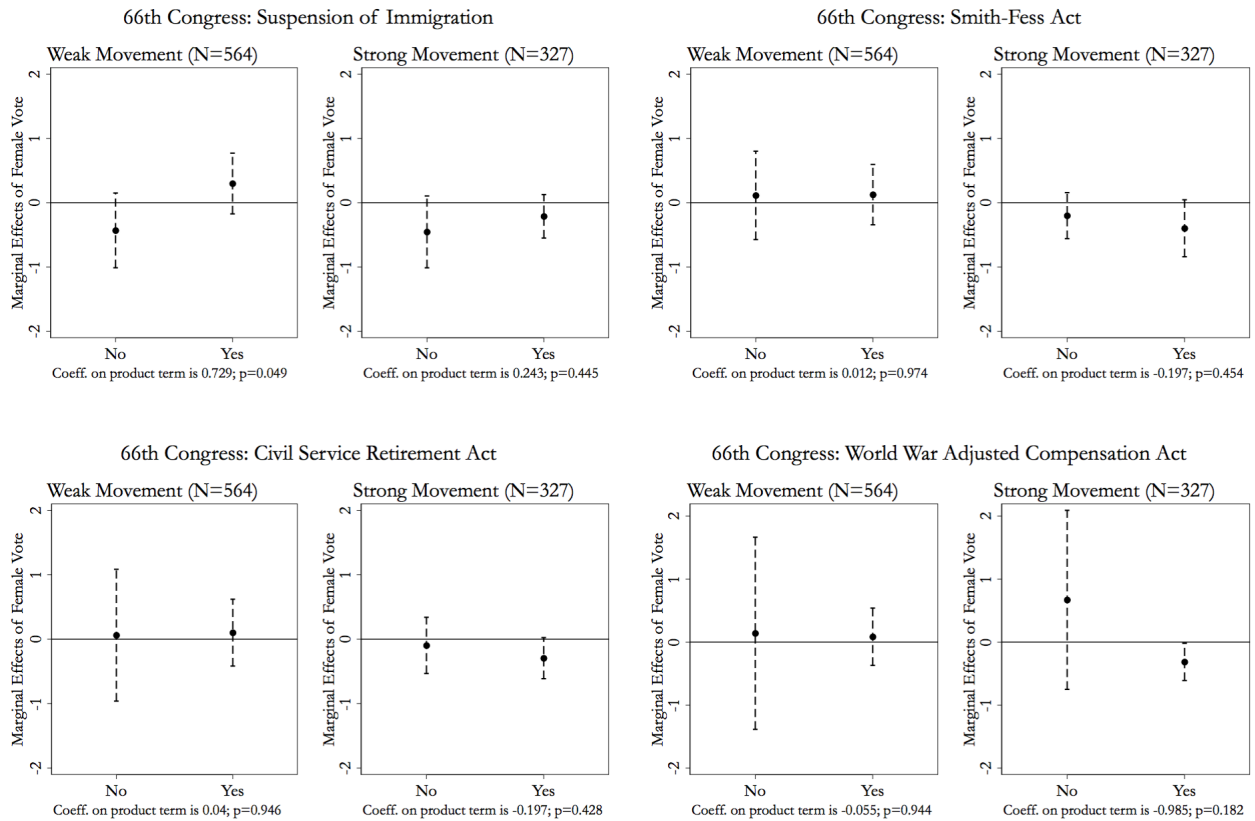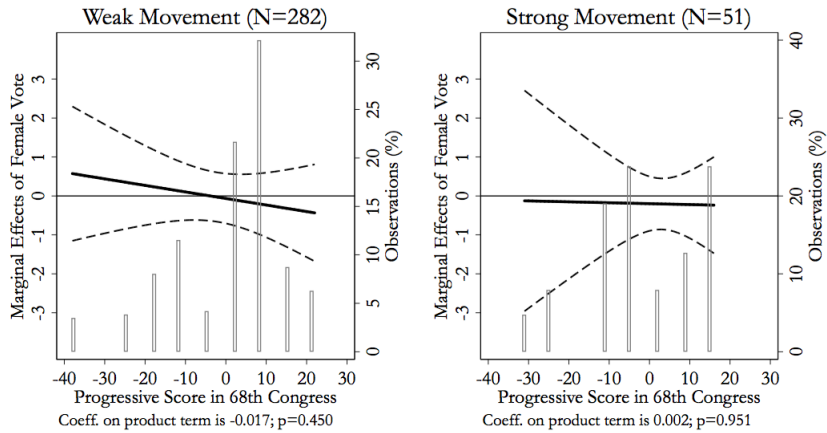

Notes: OLS estimates; 95% confidence intervals depicted; DV is (pp) change in incumbent support between 1920 and 1918 election; only final votes on progressive bills are included (e.g. excl. votes on progressive amendments); only bills with sufficient variation on independent variable are included; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables').

Figure 7: 1922 & 1924 Election: Marginal Effects of Female Vote, by the Strength of the Suffrage Movement

(a) Dependent Variable: (pp) Change in Incumbent Vote 1922-1918
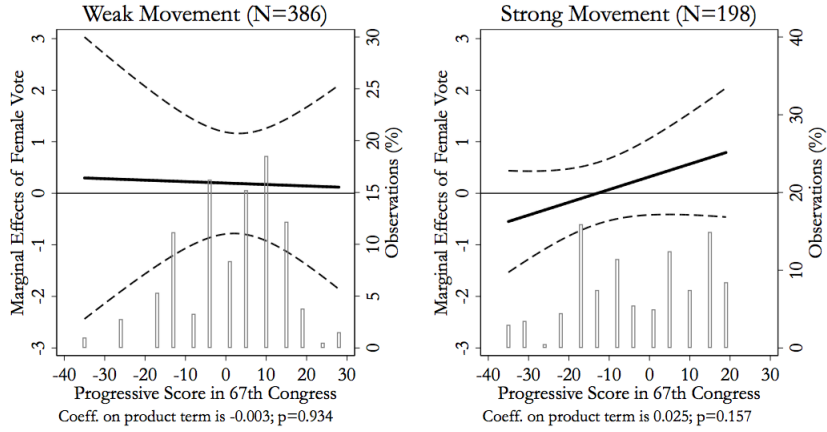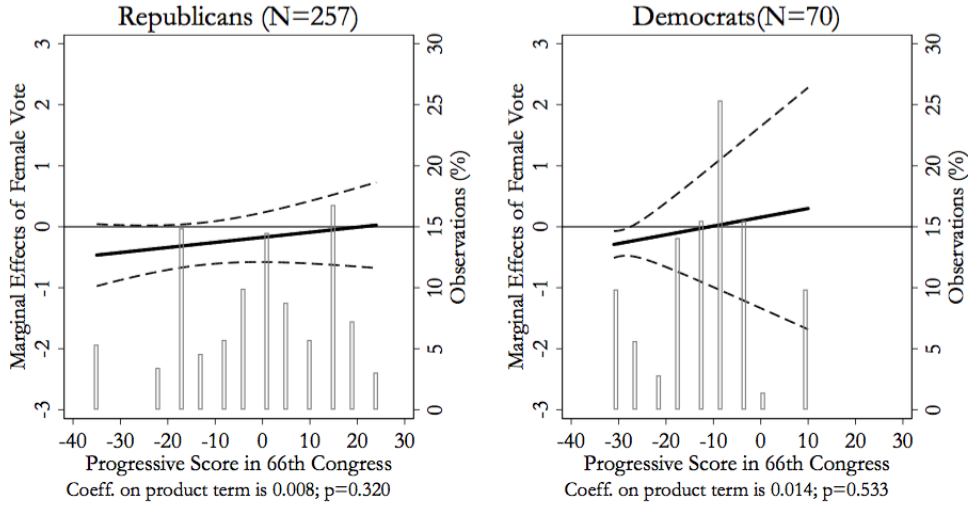

(b) Dependent Variable: (pp) Change in Incumbent Vote 1924-1918

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1922 (1924) and 1918 election; Progressive scores and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables').

Figure 8: Marginal Effects of Female Vote, States with a Strong Suffrage Movement, by Party
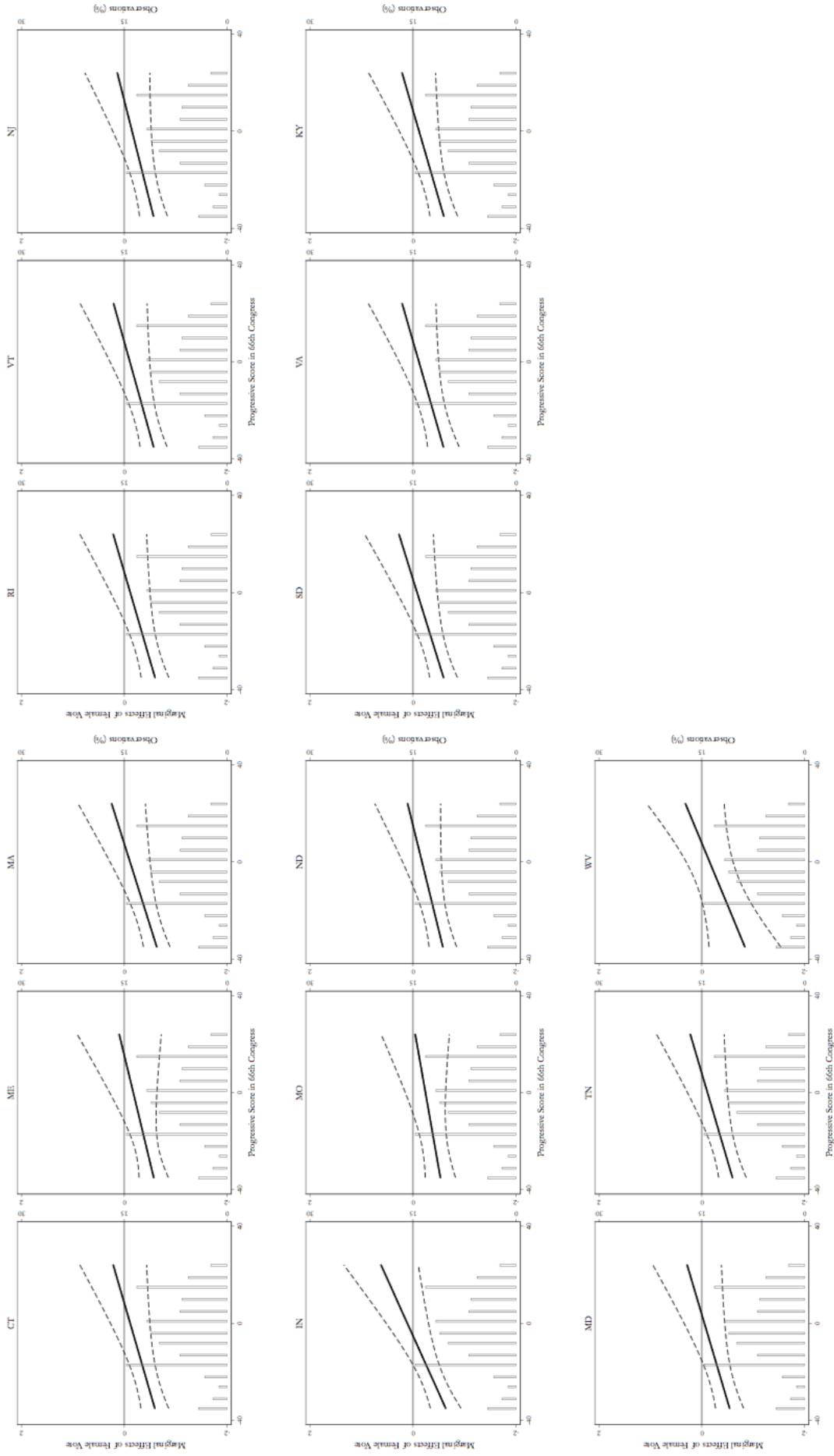

Notes: The main result in Figure 4 for states with strong suffrage movement fitted separately for Republican and Democratic incumbents; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%.

Table 8: Alternative Specifications for Main Result in Figure 4 (Part I)

Dependent Var:	(pp) Change in Incumbent Vote (1920-1918)		
Sample	Strong Movement		

Alternative Specifications		Alternative Cut-off Points	
		40th percentile	50th percentile
Model	*(1)*	*(2)*	*(3)*
Female vote 1920	-0.405*	-0.296	-0.239
	(0.157)	(0.207)	(0.193)
Prog. Score (66th)		0.061	$0.105^{\ddagger}$
		(0.057)	(0.062)
Female vote * Prog. score		-0.007	-0.003
		(0.013)	(0.011)
Prog. Score Terciles (66th)			
Second Tercile	-10.274		
	(16.177)		
Third Tercile	-30.821*		
	(14.756)		
Female vote * Prog. score			
Second Tercile	0.229		
	(0.331)		
Third Tercile	0.645*		
	(0.293)		
Standard Controls	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes
N	315	503	417

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%. Model (1) interacts Female vote with a categorical variable that indicated terciles of progressive score, the reference category is the first tercile with the lowest (most conservative) progressive score; Models (2 & 3) split the sample by alternative cutoff points in the distribution of the the state-level membership in NAWSA (40th and 50th).

Figure 9: Excluding One State at a Time in States with a Strong Suffrage Movement

Note: Excludes one state at a time from the main result in Figure 4 for states with a strong suffrage movement; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡ <10%.

22

Table 9: Alternative Specifications for Main Result in Figure 4 (Part II)

Dependent Var:	(pp) Change in Incumbent Vote (1920-1918)					
Sample	Strong Movement					

Alternative Specifications	Controls		Female vote		Third	Bounds
			Literate	Non-black	<15%	80%
Model	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Female vote 1920	-0.144	-0.14	-0.103	-0.111	-0.151	-0.134
	(0.216)	(0.184)	(0.202)	(0.192)	(0.194)	(0.198)
Prog. Score (66th)	0.02‡	-0.008	0.015	0.014	0.009	0.014
	(0.01)	(0.039)	(0.036)	0.036	(0.036)	(0.036)
Female vote * Prog. score	0.02‡	0.013*	0.014*	0.014*	0.012‡	0.013*
	(0.01)	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)
Standard Controls	x	Yes	Yes	Yes	Yes	Yes
Urban * Prog. score	x	Yes	x	x	x	x
Black * Prog.s core	x	Yes	x	x	x	x
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N$_{sample\ 1920}$	333	327	327	327	304	296

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%. Model (1) controls only for incumbent's party; Model (2) adds an interaction between 'urban' and progressive score and an interaction between 'adult black' and progressive score; Model (3) specifies Female vote as a proportion of literate women in states with literacy tests and the proportion of adult women in all other states; Model (4) specifies Female vote as a proportion of non-black women in states with poll taxes and the proportion of adult women in all other states; Model (5) excludes districts where third party obtained more than 15% of votes in 1918 or 1920 election; Model (6) excludes counties with more than 80% votes for incumbent in 1918 or 1920.

Online Appendix D: Alternative Mechanisms

Figure 10: Ideological Shifts of Incumbents by the Strength of the Suffrage Movement
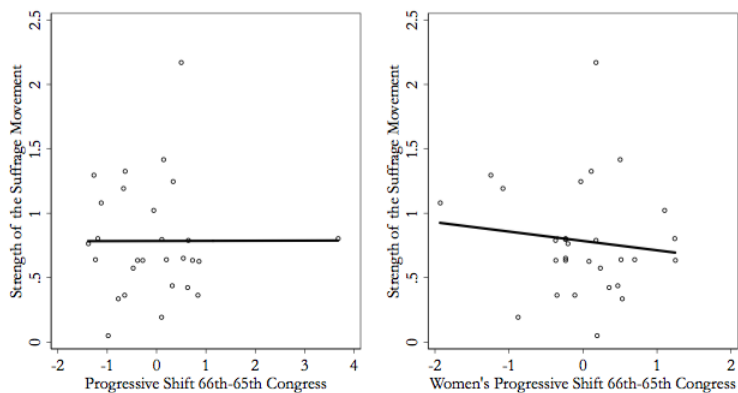
Notes: Scatter plots with linear fit (solid black line); state-level membership in NAWSA on y-axis and difference in standardized progressive scores between two subsequent Congresses on x-axis; the second graph plots ideological difference in standardized women's progressive score (on x-axis), which refers to incumbents' vote on all progressive bills that were endorsed by women's groups (for full list of women's progressive bills from the 66th Congress onwards see Table 6 above, Women's progressive score in 65th Congress refers to incumbent's two votes on the National Prohibition Act).

Table 10: Estimating Women's Turnout, by Strength of the Suffrage Movement (with Placebo Tests)

DV: Change in Turnout	Main result 1920-1918		Placebo Tests 1918-1916		1920-1922		1922-1924	
	Weak	Strong	Weak	Strong	Weak	Strong	Weak	Strong
Model	*(1)*	*(2)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*
Female vote 1920	-0.771**	-0.463*	-0.107	0.293	-0.007	-0.095	0.153	0.052
	(0.22)	(0.206)	(0.207)	(0.323)	(0.215)	(0.215)	(0.17)	(0.206)
Standard Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$N_{sample\ 1920}$	563	304	586	260	673	448	752	388

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in overall turnout between respective elections; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** $< 1\%$; * $< 5\%$; ‡$<10\%$

Figure 11: Marginal Effects of Female Vote, by States with a Strong Suffrage Movement and the Strength of the Anti-Suffragists

(a) States with Weak Suffrage Movement
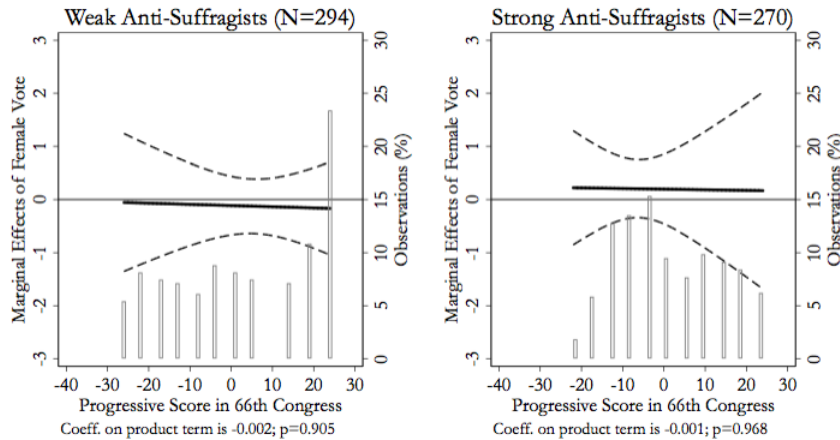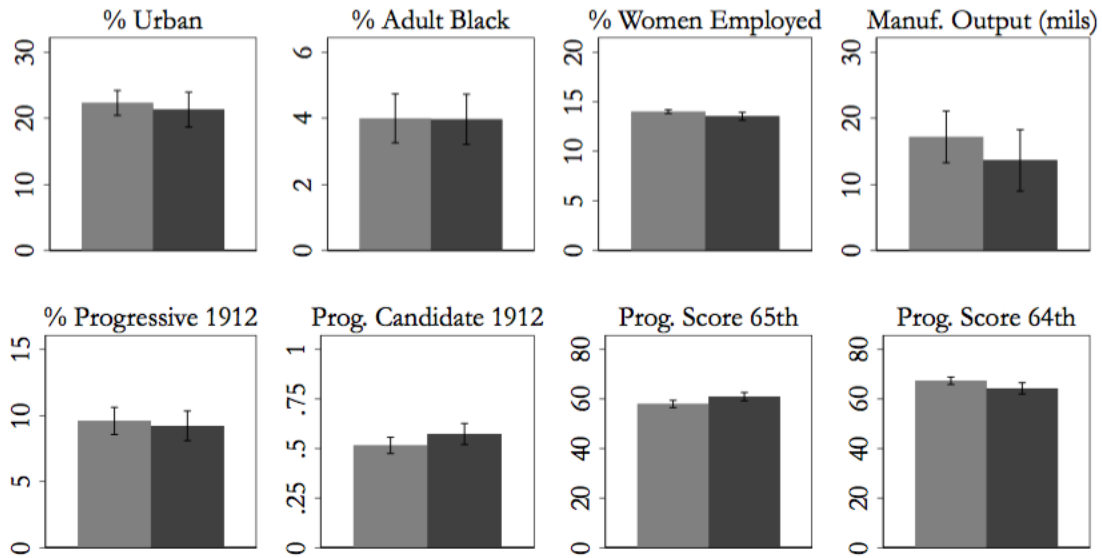

(b) States with Strong Suffrage Movement
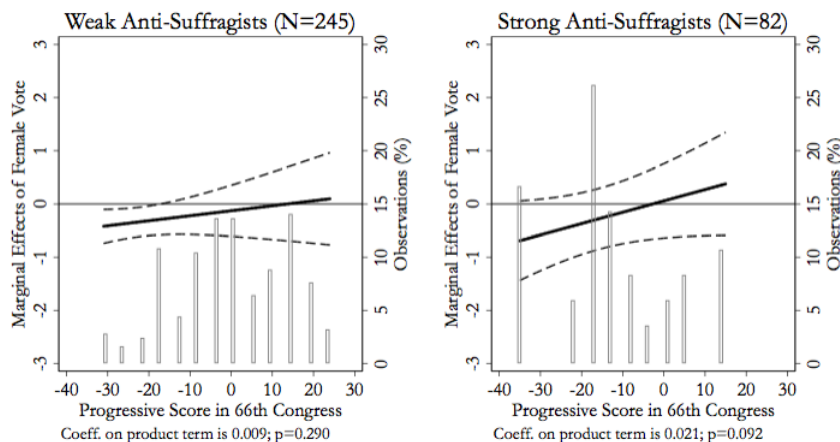
Notes: The main result in Figure 4 fitted separately for states with (and without) a regional branch of the National Association Opposed to Women's Suffrage in 1913; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%.

Table 11: Summary Statistics by the Strength of the Suffrage Movement

	Strength of the Suffrage Movement	
	Weak	Strong
Membership pc (mean)	0.47 (0.188)	1.049 (0.28)
Membership pc min	0.052	0.645
Membership pc max	0.642	2.173
Progressive Score (mean)	69.34 (15.09)	64.18 (14.91)
% Margin of Victory 1918 (mean)	30.29 (26.31)	24.53 (23.16)
% Dry counties	70.42	86.85
% Republican Incumbent	71.78	78.68
# States in Northeast	1	6
# States in Midwest	7	4
# States in South	4	5
N	574	333

Notes: Membership per capita is measured in 10,000 at the state level; Cutoff point refers to a 60th percentile of the county-level membership distribution.

Figure 12: Comparing States with a Strong and Weak Suffrage Movement

Notes: All variables defined in Appendix A; Means with 95% CIs; Darker (lighter) gray denotes strong (weak) suffrage movement; All values refer to means computed from county-level values.
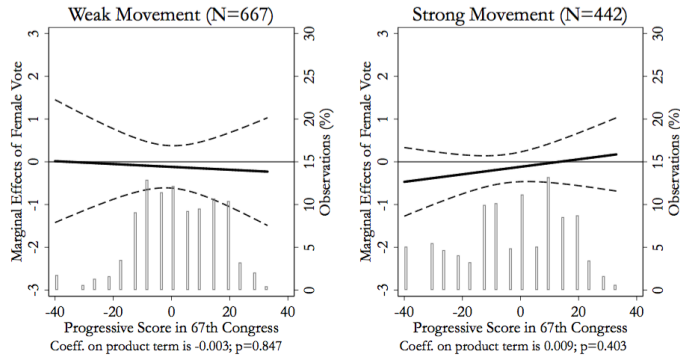
Online Appendix E: Robustness

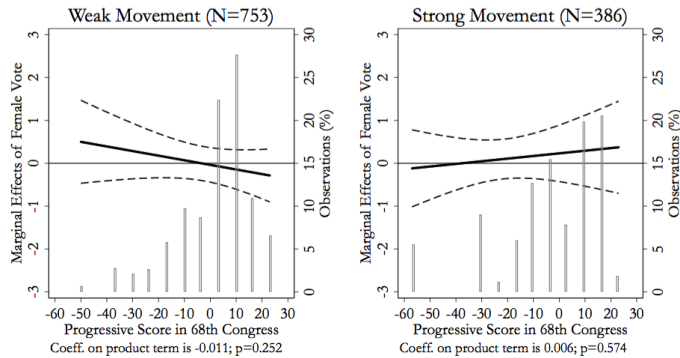Figure 13: Placebo Regressions for Vote Choice by the Strength of the Suffrage Movement

(a) DV is (pp) Change in Incumbent Vote between 1918-1916
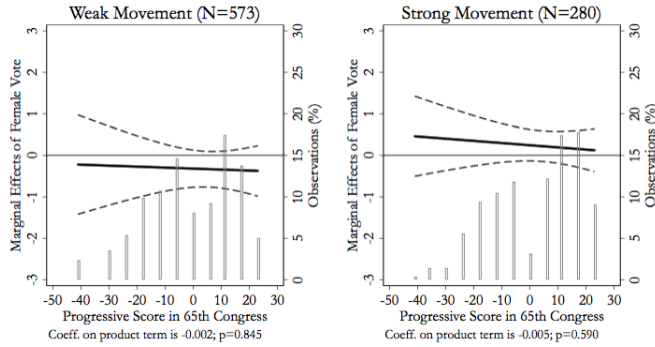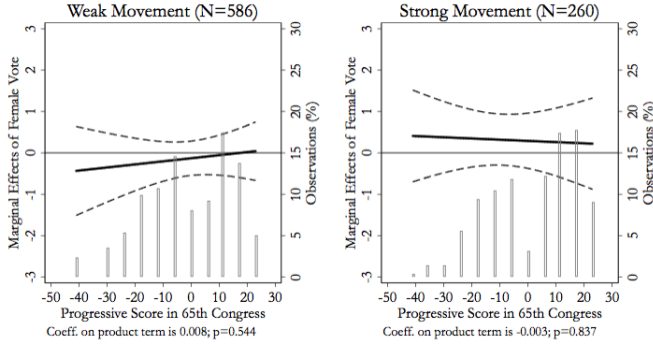

(b) DV is (pp) Change in Incumbent Vote between 1922-1920

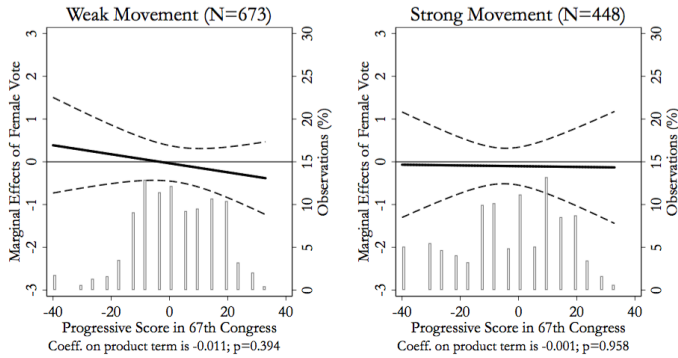(c) DV is (pp) Change in Incumbent Vote between 1924-1922

Notes: Marginal effects of Female vote; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡ <10%.

Figure 14: Placebo Regressions for Turnout by the Strength of the Suffrage Movement (After Suffrage)
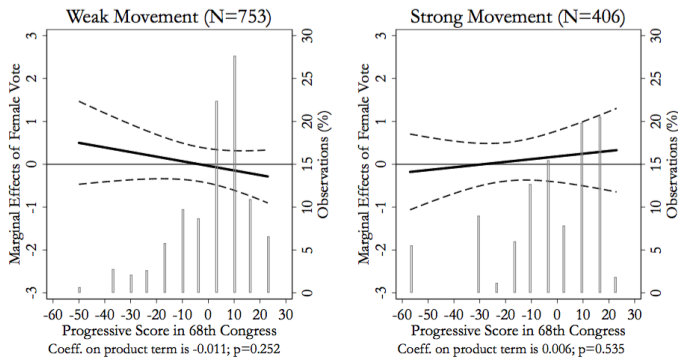
(a) DV is (pp) Change in Turnout between 1918-1916

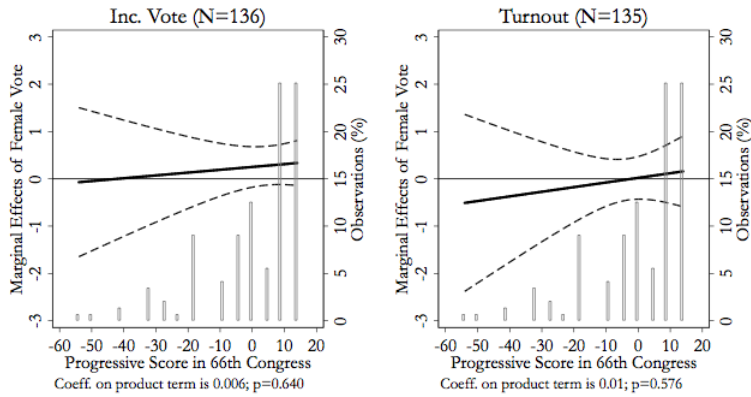(b) DV is (pp) Change in Turnout between 1922-1920

(c) DV is (pp) Change in Turnout between 1924-1922

Notes: Marginal effects of Female vote; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Female vote centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%.

Figure 15: Placebo Regressions for Vote Choice & Turnout in States where Women Voted before 1920


Notes: Marginal effects of Female vote; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Female vote centered around mean; DV in first graph is a (pp) change in incumbent vote between 1920 and 1918; DV in the second graph is a (pp) change in turnout between 1920 and 1918; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); Both models use a sample of states where women voted prior to the 1920 election. Note that among these 'early enfranchisers', all but 35 counties fall into the 'Weak' suffrage category. The models above are therefore fitted onto the entire sample.
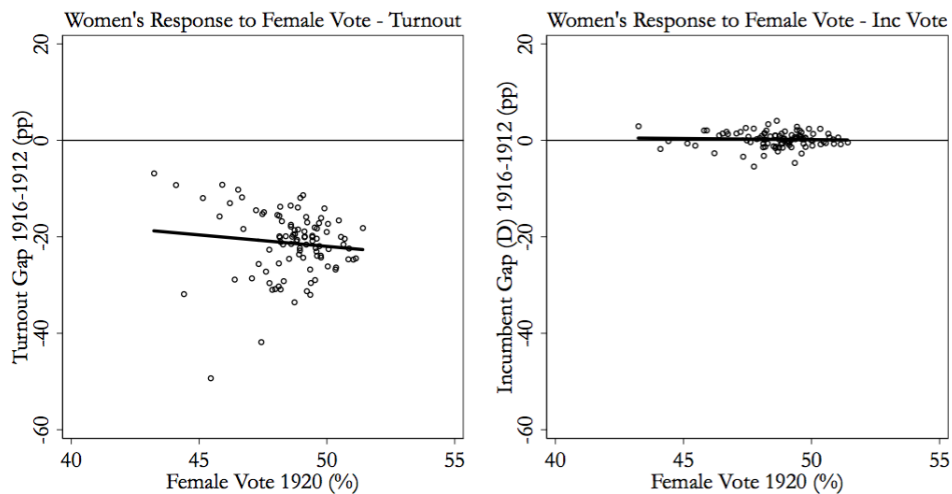
Online Appendix F: Robustness - Illinois

Figure 16: Testing Assumptions Using Sex-Separated Data in Illinois - Scatter Plots

(a) Men's Response to Suffrage
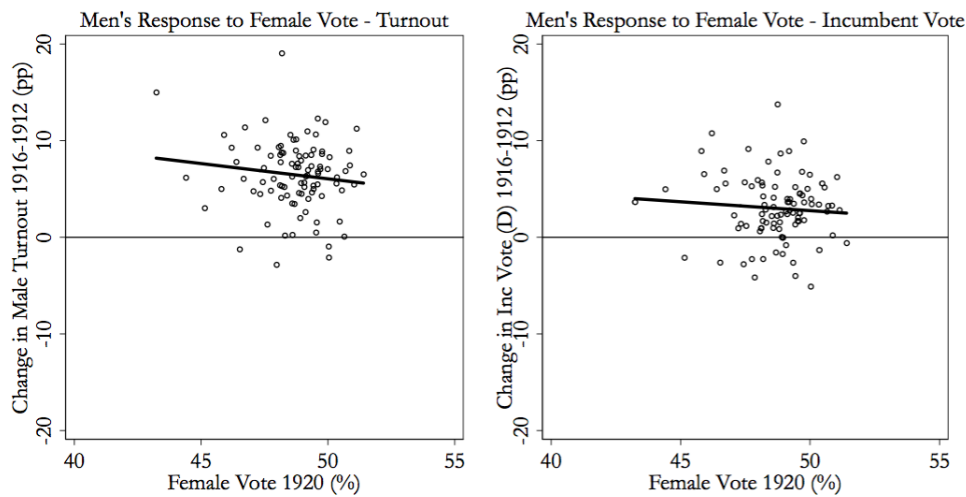
(b) Women's Response to Suffrage

Note: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women's suffrage in Illinois adopted in 1913.

Table 12: Testing Assumptions Using Sex-Separated Data in Illinois (Men's Response)

DV:	Change in Male Turnout 1916-12 (pp)	Change in Male Incumbent Vote 1916-12 (pp)
Model	*(1)*	*(2)*
Female vote 1920	-0.288	-0.182
	(0.296)	(0.226)
Controls	Yes	Yes
N	95	95

Notes: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women's suffrage in Illinois adopted in 1913; Democratic presidential incumbent for 1916 election; OLS estimates; Standard errors clustered on district; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%.

Table 13: Testing Assumptions Using Sex-Separated Data in Illinois (Women's Response)

DV:	Turnout Gap 1916 (pp)	Incumbent Vote Gap 1916 (pp)
Model	*(3)*	*(4)*
Female vote 1920	-0.383	-0.059
	(0.597)	(0.111)
Controls	Yes	Yes
N	97	97

Notes: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women's suffrage in Illinois adopted in 1913; Democratic presidential incumbent for 1916 election; OLS estimates; Standard errors clustered on district; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡<10%.

Appendix References

Banaszak, L. A., 1996. Why Movements Succeed or Fail. Opportunity, Culture, and the Struggle for Woman Suffrage. Princeton, NJ. Princeton University Press.

Goldstein, J. H., 1973. The Effects of the Adoption of Woman Suffrage. Sex Differences in voting Behavior – Illinois, 1914-1921. New York: Praeger Publishers.

Keyssar, A., 2000. The Right to Vote. Basic Books.

Miller, G., 2008. Women's Suffrage, Political Responsiveness, and Child Survival in American History. The Quarterly Journal of Economics, 123(3), 1287-1327.