

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

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Online Appendix A: Data and Variables

Data Sources

- Election data were gathered from the ‘United States Historical Election Returns, 1824–1968 (ICPSR 0001)’, available at the ICPSR website. Data for progressive candidate in 1912 (for robustness purposes) were gathered from ‘Electoral Data for Counties in the United States: Presidential and Congressional Races, 1840-1972 (ICPSR 08611)’, available at the ICPSR website.
- Data on candidates were gathered from ‘Candidate and Constituency Statistics of Elections in the United States, 1788-1990 (ICPSR 7757)’, available at the ICPSR website.
- Socio-economic indicators were gathered from ‘Historical, Demographic, Economic, and Social Data: The United States 1790–2002 (ICPSR 2896)’, available at the ICPSR website.
- Data on counties with dry policies were collected from a data set ‘Prohibition Movement in the United States, 1801-1920 (ICPSR 8343)’, available 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 [here](#).
- Data on progressive bills were adapted from Miller (2008), available [here](#).
- House roll call data and DW-NOMINATE scores from Voteview Website.
- Original data on bills lobbied for by women’s organizations collected via Proquest Congressional Database of congressional hearings. See further details in Table A6.
- Original data on suffragists’ parades and demonstrations recovered from Newspapers.com. See further details in Tables A7 & A8 below.
- 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 2000. Data on literacy tests, poll taxes and alien suffrage were collected

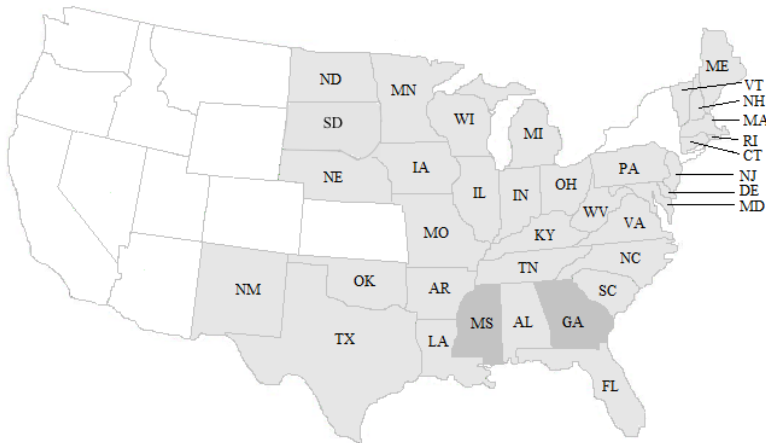
from Keyssar 2000. Data on registration requirements collected from Carlson 1976; Harris 1929 and Keyssar 2000.

- Data on election returns separated by sex in Illinois were sourced from Illinois State Archives.

The Universe of States for 1920 election

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 additional 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. These states are excluded from the analysis. 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. Excluding these three states does not affect the main result (Table A10).

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. Excluded states which defied the Nineteenth Amendment in the 1920 election in dark gray.

Variables

- *Outcome Variables:* 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) election is used as a dependent variable. In estimating the long-term effects of women's suffrage, the change between second (1922) election after suffrage and the last pre-suffrage election (1918) is used as a dependent variable.
- *Adult Women:* The intensity of exposure to women's suffrage is proxied with 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. Note that this measure is highly correlated with alternative measures (see Figure A2).
- *Incumbent's Progressive Score:* Defined as a percentage of 'Yea' votes on progressive bills in a district in previous Congress. Detailed discussion of coding decisions and the list of progressive bills below.
- *NAWSA Membership per capita:* Defined as NAWSA members per 10,000 in state population in the year before the state adopted suffrage. For most states, this year 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 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.
- *Major party margin*: Defined as the difference in percentages points between Republican and Democratic candidates in previous elections in a county.
- *Dry*: Binary variable where one indicates that a county adopted some form of dry measures by 1918.
- *Additional Variables (for robustness analyses)*:
 - *Female employed (%)*: Defined as an absolute number of women employed divided by an absolute number of women and men employed in 1920, at a state level.
 - *Manufacturing output*: Manufacturing output at the county level (in millions).
 - *Naturalized citizens (%)*: Defined as an absolute number of adult (male & female) naturalized citizens divided by the absolute number of adult (male & female) population in 1920, at the county level.
 - *Literacy tests*: Binary variable that indicates states with literacy tests in 1920 elections. Coded one if literacy tests in place.
 - *Poll taxes*: Binary variable that indicates states with poll taxes in 1920 elections. Coded one if poll taxes in place.
 - *Registration*: Binary variable that indicates states with strict registration requirements that include some form of a periodic in person registration in 1920 elections. Coded one if restrictions in place.
 - *Alien disenfranchisement*: Binary variable that indicates states that did *not* allow declarant aliens to vote in 1920 elections. Coded one if restrictions in place.

- *DW-NOMINATE score of incumbents*: Defined as incumbents' voting records on the first dimension of the liberal-conservative scale.

Table 1: Summary Statistics for the 1920 Sample.

Variable	Mean (Std. Dev.)	Min.	Max.	N
<i>Dependent Variables</i>				
(pp) Change in Incumbent Vote 1920-1918	-0.38 (13.29)	-57.5	55.4	909
(pp) Change in Turnout 1920-1918	2.99 (9.8)	-25.9	51.7	907
<i>Key Independent Variables</i>				
Adult Women 1920 (%)	47.91 (2.2)	33.29	54.62	909
Progressive Score (66 th Congress)	67.22 (15.82)	9.09	90.91	909
NAWSA Membership pc (at state level)	0.69 (0.37)	0.05	2.17	909
<i>Control Variables</i>				
Urban (%)	21.81 (23.46)	0	100	909
Adult Black (%)	3.94 (8.28)	0	51.03	909
Republican incumbent (binary)	0.74	0	1	909
Candidate entry Rep & Dem 1920 (binary)	0.05	0	1	909
Candidate withdrawal Rep & Dem 1920 (binary)	0.06	0	1	909
Dry 1918 (binary)	0.77	0	1	909
Margin 1918 (%)	28.01 (25.45)	0	99	909

Note: The 1920 sample refers to the final sample that is used for the main analysis.

Online Appendix B: Adult Women

Table 2: Correlates of the Proportion of Adult Women in 1920

Dependent variable:	Adult women 1920 (%)			<i>Adding Manufacturing</i>			<i>Adding Naturalized</i>		
Sample	All	Weak	Strong	All	Weak	Strong	All	Weak	Strong
<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Urban (%)	0.008*	0.003	0.02**				0.01**	0.004	0.023**
	(0.004)	(0.004)	(0.006)				(0.004)	(0.004)	(0.007)
Manuf. output (mils)				-0.009**	-0.01**	-0.006			
				(0.003)	(0.003)	(0.007)			
Black (%)	-0.005	0.019	-0.076	-0.004	0.017	-0.059	-0.008	0.016	-0.078 [‡]
	(0.018)	(0.012)	(0.046)	(0.017)	(0.011)	(0.046)	(0.018)	(0.013)	(0.046)
Progressive score (66 th)	0.012	-0.002	0.031*	0.01	-0.002	0.027 [‡]	0.009	-0.006	0.031*
	(0.01)	(0.012)	(0.014)	(0.01)	(0.011)	(0.014)	(0.01)	(0.012)	(0.013)
Republican incumbent	0.217	0.287	0.313	0.033	0.033	0.055	0.231	0.321	0.277
	(0.419)	(0.524)	(0.678)	(0.349)	(0.33)	(0.655)	(0.399)	(0.492)	(0.655)
Electoral margin 1918	-0.006	-0.01 [‡]	0.009	-0.003	-0.005	0.004	-0.004	-0.008	0.011
	(0.004)	(0.005)	(0.007)	(0.004)	(0.004)	(0.007)	(0.005)	(0.006)	(0.007)
Dry county 1918	0.448*	0.579*	0.296	0.11	0.268	-0.215	0.331	0.46	0.181
	(0.212)	(0.273)	(0.343)	(0.223)	(0.288)	(0.349)	(0.205)	(0.264)	(0.37)
Naturalized (%)							-0.062 [‡]	-0.055	-0.094
							(0.033)	(0.035)	(0.091)
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	909	569	340	878	541	337	909	569	340
R-sq.	0.39	0.39	0.44	0.4	0.42	0.4	0.41	0.4	0.46

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

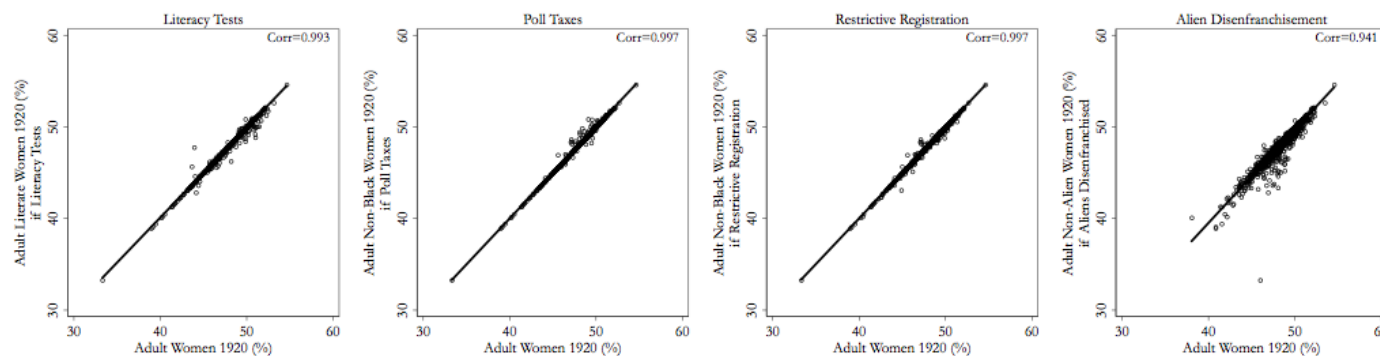
Model (1) shows that there are more women in urban and dry counties in the full sample for 1920 election. In states with a weak suffrage movement, counties with more women are more likely to have implemented dry legislation in 1918 (Model 2). In states with a strong movement (Model 3), on the other hand, counties with more women are more urban and more progressive. Models (4-9) add economic indicators. (i) Models (4-6) replace urban with an indicator for manufacturing and suggest that counties with more women have weaker manufacturing industries, although the effects are imprecisely estimated in states with strong suffrage movement. (ii) Models (7-9) add the proportion of naturalized citizens in a county and show that counties with more women have less naturalized citizens, although the effects are imprecisely estimated in states with strong suffrage movement.

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The variation in the sex ratio has been historically driven by industry sex segregation, and economic migration. For example, some localities may have an industry or economic structure that generates disproportionate demand for male labour, for example, most of manufacturing (Angrist 2002; Goldin 2014; Schacht & Smith 2017). Beyond internal labour migration, international migrants in the early 1900 were also predominantly male (Angrist 2002; Eldridge and Siegel 1946). The patterns identified in Table 2 are consistent with the predominantly male migration that often targeted sex-segregated manufacturing industries.

To the extent that these correlates of adult women do not violate the diff-in-diff assumptions, they do not threaten its ability to estimate the impact of women’s suffrage. Null results from placebo tests as well as the analysis of Illinois data provide support for the assumptions. Specifically, the diff-in-diff assumes that, for example, foreign-born groups do not *change* preferences between elections to a different extent than native-born groups. This assumption is reasonably well supported with placebo tests presented in the ‘threats to inference’ section. The difference-in-differences then also assumes that *differences* in voting behavior and turnout between women and men, for example, among foreign-born groups are not different than among native-born groups. While this assumption is not easy to test, analyses using data from Illinois, where about 19% of the population was foreign-born and about 31% had foreign-born parents, support its validity. Beyond Illinois, evidence that *differences* between women and men in registration and vote choice were different among foreign-born than native-born groups is mixed (Andersen 1996, p.62-5). Furthermore, the coefficients on economic (manufacturing output and naturalized) correlates are similar in states with both strong and weak suffrage movement and therefore unlikely to drive the main result. The results are also robust to the addition of these controls (see Table A10).

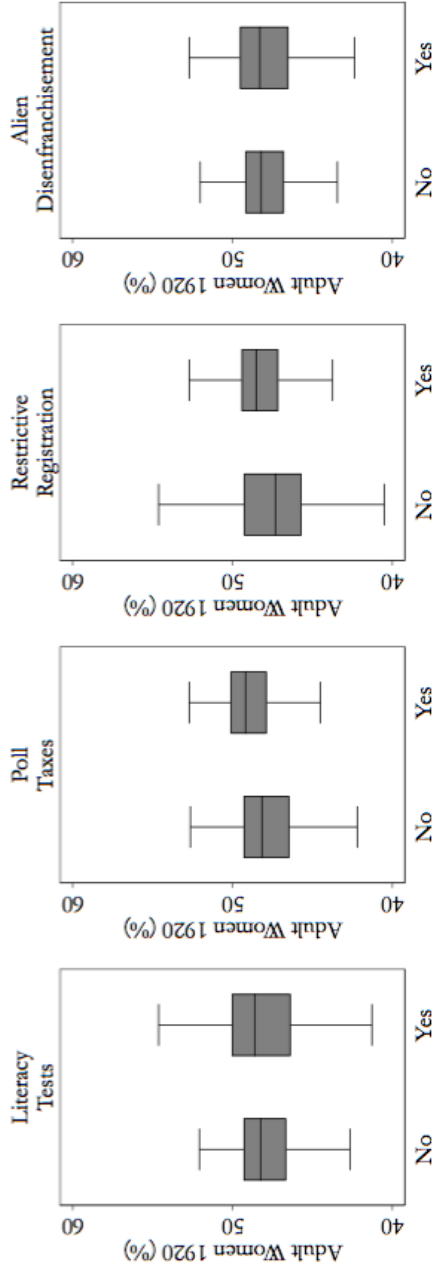
Figure 2: Correlating the Proportion of Adult Women with Alternative Measures



Notes: Plotting the proportion of adult women on alternative measures that proxy the intensity of exposure to women's suffrage; linear fit in a solid black line; correlation coefficient in the upper right corner; first graph specifies the alternative measure as a proportion of adult literate women in states with literacy tests and the proportion of adult women in all other states; the second graph specifies the alternative as a proportion of adult non-black women in states with poll taxes and the proportion of adult women in all other states; the third graph specifies the alternative as a proportion of adult non-black women in states with high registration restrictions that require periodic in person registration and the proportion of adult women in all other states; the fourth graph specifies the alternative as a proportion of non-alien [also excludes declarant aliens] adult women in states which did not allow declarant aliens to vote and the proportion of non-declarant non-alien [does not exclude declarant aliens] adult women in all other states.

All graphs return very strong correlation between the actual (proportion of adult women) and alternative measures (adult women without predicted non-eligible women). Consequently, using any of the alternative measures returns highly comparable results (Table A10). I prefer using the proportion of adult women without any adjustments, as the number of women to be excluded by each voting restriction – as attempted above – is not straightforward and may therefore cause additional bias. Citizenship status is often unknown, voter suppression was also informal and formal restrictions did not prevent an entire targeted group from voting.

Figure 3: Adult Women by Voter Suppression Laws



Notes: Box and whisker plots; Comparing distribution of adult women by a presence of four key voter suppression laws that targeted mostly blacks and immigrants: literacy tests, poll taxes, restrictive registration requirements, and laws prohibiting declarant aliens from voting.

The figure shows that the distribution of adult women is similar in states with and without voter suppression laws. For example, even if women are more likely to be affected by literacy tests than men, i.e. the difference between women's and men's turnout in places with literacy tests is greater, it is not the case that these regularities are strongly correlated with the proportion of adult women and therefore are unlikely to violate the key diff-in-diff assumptions. However, poll taxes and restrictive registration requirements are somewhat more common in counties with fewer women on average. Altogether, these differences are mostly subtle. I nonetheless probe the possibility that these restrictions pose threats to inference. Restricting the analysis to states without voter suppression laws (see Table A11), the substantive interpretation of the main result remains unchanged.

While other informal and formal voter suppression techniques were implemented, these are likely to be present in states which have adopted at least one of the four voter suppression laws. For example, intimidation of Hispanics would have been more likely in states that already implemented some form of voter suppression laws. For example, Mexican Americans in Texas would have faced poll taxes. Similarly, while the impact of voter suppression would target different groups in different states, all targeted groups would have been affected by voter suppression laws similarly. For example, while intimidation of foreign-born Hispanics would have been more likely in Texas, and the intimidation of Irish Catholics would have been more likely on the East Coast, the intimidation of foreign-born groups would have been most likely in places with the four key voter suppression laws above. Focusing only on the four key voter suppression laws, however, does not capture groups that were excluded with immigration restrictions or denied naturalization at the national level, especially Asian Americans and Native Americans. Given the restriction on immigration, there were only about 7000 residents who spoke Asian languages in 1920, out of over 13 million foreign-born population. No statistics were kept for Native Americans in the 1920 census. While substantively relevant, these 'unaccounted' restrictions are unlikely to threaten the validity of my inferences.

Online Appendix C: Progressive Score

Supplementary Notes on Coding of Progressive Bills

I construct a progressive score by counting all ‘yea’ votes on all progressive bills. The measure thus does not distinguish between a ‘nay’ vote on a progressive bill and an absence. The rationale is that unless an incumbent expressed support with a ‘yea’ vote, we cannot be sure of their open support of the bill. An incumbent who has failed to vote on an issue cannot claim to women voters that they have supported the legislation and women cannot be sure to have this incumbent ‘in their camp.’ The Woman’s Bureau Act, a prime focus of organized women, for example, only had nine representatives who voted against the bill, but there were additional 170 representatives who were absent and thus did not openly support the bill. Note that this also means that even votes on bills with a low number of representatives supporting or opposing the bill nonetheless carry sufficient amount of information that warrants their inclusion.

Progressive bills that count towards the progressive score are defined as bills that address a progressive issue, broadly corresponding to the list of key progressive legislation as defined [here](#), and are doing so in a *clearly* progressive direction. This excludes (i) votes that address a progressive issue but are purely procedural in nature, (ii) votes on a progressive issue that obstruct the progressive nature of the legislation, (iii) bills on progressive issues that do not clearly indicate a progressive improvement and (iv) bills on issues that are not broadly captured by the definition of progressive legislation above.

The rationale for exclusion (i) is that ‘yea’ votes on procedural votes, even if related to progressive issues, cannot be *clearly* interpreted as votes in support of a progressive issue. This includes votes on whether ‘to proceed to the consideration’ of a progressive bill, ‘to postpone a consideration’ of a progressive bill, votes on whether ‘to adjourn’ or votes that amend the procedure for decision-making. For example, a ‘yea’ vote on a bill number 111 in the 66th Congress that sought to ‘postpone consideration of the President’s message on veto H.R.6810 (National Prohibition) to next Thursday’ does not clearly indicate whether or not an incumbent supports the National Prohibition Act.

The rationale for exclusion (ii) is that a ‘yea’ vote on a bill that seeks to undermine or reduce progressive achievements, does not indicate a legislator’s support of the progressive issue. While bills that attempted to repeal an existing progressive legislation were very rare during the period of analysis, several bills obstructed progressive legislation by recommitting the bill to the committee with no amendments or attempted to undermine the progressive nature of the bill, often by reducing appropriations for a given cause or to salaries and compensations. For example, bill 206 in the 66th Congress attempted to amend the Civil Service Retirement bill (S1699) such that none of the provisions would apply to employees affiliated with organized labour. A bill number 249 in the 66th Congress amended the suspension of immigration bill (HR14461) with a reduction of the suspension

period from 2 years to 14 months, thus effectively making the suspension of immigration a somewhat ‘lighter’ measure than originally suggested.

A rationale for exclusion (iii) is that a ‘yea’ vote on a bill that addresses a progressive issue, but does not indicate *clearly* a legislator’s support of the issue, is not a good indicator of a legislator’s progressive position. For example, bill 40 in the 66th Congress discussed bond requirements in case of a violation of the national prohibition legislation (HR6810), but does not clearly indicate whether a ‘yea’ vote should be counted in support or against the act. Another vote (no.42) relating to an amendment of the same bill does not specify which or how ‘violations of the said Act’ should be amended. In neither case, a ‘yea’ vote on the bill does not clearly indicate that such a motion was in support of a progressive cause.

Finally, exclusion (iv) affects votes on issues that are not broadly captured by the definition of key progressive legislation of the day as defined [here](#). Following this exclusion, bills number 157 and 159 in the 66th Congress that provided appropriations to alleviate ‘hog cholera’ and sought to protect crops from ‘insects and vermin’ are not included. The rationale is such that while these bills were regulatory in nature, the bills primarily addressed agricultural issues, which was not a key regulatory agenda of the progressives.

Table 3: List of Progressive Bills in 66th Congress - with Full Description

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Women's Suffrage Amendment (1)	2	HRE 1	Y=304 N=90	TO PASS H.J.RES. 1, PROPOSING AN AMENDMENT TO THE CONSTITUTION EXTENDING THE RIGHT OF SUFFRAGE TO WOMEN. (P. 78-2)
National Prohibition Act (3)	41	HR6810	Y=210 N=164	TO AMEND H.R. 6810, BY AUTHORIZING THE ISSUANCE OF SEARCH WARRANTS AGAINST PRIVATE DWELLINGS, WHERE LIQUOR IS ILLEGALLY SOLD, NOT OCCUPIED OR CONNECTED WITH STORES,SALOONS, RESTAURANTS, BOARDING-HOUSES, OR HOTELS.(P. 2900-2,2975-2)
	43	HR6810	Y=288 N=100	TO PASS H.R. 6810. (P. 3005-1)
	112	HR6810	Y=175 N=55	TO PASS H.R. 6810, OVER THE PRESIDENT'S VETO. (P. 7610-2)
Women's Bureau Act (1)	201	HR13229	Y=256 N=9	TO PASS H.R. 13229, (41 STAT 987, 6-5-20), A BILL TO ESTABLISH IN THE DEPT. OF LABOR A BUREAU TO BE KNOWN AS THE WOMEN'S BUREAU. (P. 5873)
Civil Service Retirement Act (1)	207	S1699	Y=273 N=53	TO PASS S. 1699, (41 STAT 614, 5-22-20), A BILL PROVIDING FOR RETIREMENT OF EMPLOYEES IN THE CLASSIFIED CIVIL SERVIC(P. 6381)
Sundry Civil Law (4)	33	HR7343	Y=202 N=186	TO AMEND THE BUCHANAN MOTION TO RECOMMIT H.R. 7343 WITH INSTRUCTIONS, BY PROVIDING FOR AN INCREASE OF APPROPRIATIONS IN BILL FROM \$6,000,000 TO \$8,000,000 INSTEAD OF\$12,000,000.
	35	HR7343	Y=372 N=1	TO PASS H.R. 7343. (P. 2774-2)
	211	HR13870	Y=240 N=38	TO AGREE TO THE AMENDMENT AS AMENDED TO H.R. 13870,(APP. 6-5-1920), A BILL MAKING APPROPRIATIONS FOR SUNDRY CIVIL EXPENSES OF THE GOVERNMENT FOR FISCAL YEAR, ENDING1921, WHICH AMENDMENT AS AMENDED, PROVIDED FOR INCREASING THE APPROPRIATION OF \$2357,000.00 TO \$2,569,000.00 FOR COMPENSATION TO EMPLOYEES CLASSED AS OPERATIVES IN THE BUREAU OF ENGRAVING AND PRINTING. (P. 6644-2)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
	310	HR15422	Y=297 N=6	TO RECEDE AND CONCUR IN THE SENATE AMENDMENT #143, TOH.R. 15422, (APP. 3-3-21), A BILL MAKING APPROPRIATIONS FOR SUNDRY CIVIL EXPENSES OF THE GOVERNMENT FOR FISCAL YEAR ENING JUNE 1922, WHICH AMENDMENT APPROPRIATES \$225,000, TO ENABLE THE SECRETARY OF LABOR TO DEVELOP THE WELFARE OF THWAGE EARNERS OF THE U.S. AND IMPROVE THEIR WORKING CONDIT-IONS. (P. 3881-2)
World War Adjusted Compensation Act (1)	238	HR14157	Y=289 N=92	TO SUSPEND THE RULES OF THE HOUSE AND PASS H.R. 14157, ABILL RELATING TO THE ADJUSTED COMPENSATION OF WORLD WAR VETERANS. (P. 7930)
Smith-Fess Act (3)	96	HRE327	Y=134 N=115	TO PASS H.RES. 327, AUTHORIZING CONSIDERATION OF H.R. 4438A BILL PROMOTING VOCATIONAL REHABILITATION OF PERSONS DISABLED IN THE INDUSTRY OR OTHERWISE. (P. 6644-2)
	104	HR4438	Y=196 N=105	TO PASS H.R. 4438, (41 STAT 733, 6-2-1920), A BILL TO PROVIDE FOR THE PROMOTION OF VOCATIONAL REHABILITATION OF PERSONS DISABLED IN INDUSTRY OR OTHERWISE AND THEIR RETURN TO CIVIL EMPLOYMENT. (P. 7079-2)
	228	HR4438	Y=144 N=171	TO AMEND H.R. 4438, (41 STAT 735, 6-2-1920), A BILL PROVIDING FOR THE VOCATIONAL REHABILITATION OF PERSONS DISABLED IN INDUSTRY AND OTHERWISE, AND THEIR RETURN TO CIVIL EMPLOYMENT, BY AUTHORIZING THE APPROPRIATIONS OF THE FOLLOWING SUMS FOR THE FOLLOWING YEARS, FOR THAT PURPOSE, FOR USE BY THE STATES; IN 1920, \$500,000; IN 1921, \$750,00IN 1922, \$1000,000, AND ALSO AUTHORIZING THEREAFTER ANNUAL\$1000,000. (P. 7600-1,7593-2)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Veteran pensions (3)	141	HR9369	Y=233 N=55	TO SUSPEND THE RULES AND PASS H.R. 9369, (41 STAT 585,APP. 5-1-1920), A BILL RELATING TO THE REVISION AND EQUALIZATION OF RATES OF PENSIONS TO CERTAIN SOLDIERS, SAILORS AND MARINE, WIDOWS, CHILDREN AND DEPENDENTS, OF CIVIL WAR, AS AMENDED. (P. 1060)
	215	HR14063	Y=225 N=52	TO DISPENSE WITH FURTHER PROCEEDINGS UNDER A CALL OF THE HOUSE AND CONSIDER H.R. 14063, A BILL GRANTING PENSIONS AND INCREASE OF PENSIONS TO CERTAIN SOLDIERS AND SAILORS OTHE REGULAR ARMY AND NAVY AND CERTAIN SOLDIERS AND SAILORS OF WARS OTHER THAN THE CIVIL WAR, AND TO WIDOWS OF SUCH SOLDIERS AND SAILORS. (P. 7057)
	170	HR2	Y=295 N=19	TO SUSPEND THE RULES OF THE HOUSE AND PASS H.R. 2,(41 STAT 982, 6-5-1920), A BILL AUTHORIZING PENSIONS TO VETERANS OF THE WAR WITH SPAIN, THE PHILIPPINE INSURRECTION AND THE CHINESE RELIEF EXPEDITION, AS SAID BILL WAS AMENDE
Suspension of immigration (1)	250	HR14461	Y=296 N=42	TO PASS H.R. 14461, A BILL PROVIDING FOR THE SUSPENSION OF IMMIGRATION INTO THE U.S. FOR THE PROTECTION OF U.S.CITIZENS. (P. 286-1)
Entry of aliens (1)	103	HR9782	Y=314 N=1	TO PASS H.R. 9782, (11-9-19), A BILL REGULATING THE ENTRY ALIENS INTO THE U.S. (P. 7015-2)
Compensation bonus (1)	153	HR11927	Y=312 N=11	TO SUSPEND THE RULES OF THE HOUSE, AND PASS H.R. 11927,(APP. 5-18-1920), A BILL PROVIDING FOR THE INCREASE OF THE EFFICIENCY AND PERSONNEL OF THE NAVY AND COAST GUARD,THROUGH TEMPORARY PROVISION OF BONUS OR INCREASED COMPENSATION. (P. 1959)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Minimum wage (1)	321	HR15543	Y=173 N=101	TO AGREE TO A SENATE AMENDMENT TO H.R. 15543, WHICH AMEND-MENT PROVIDES THAT ALL CIVILIAN EMPLOYEES WHO RECEIVE ANNUAL SALARY NOT TO EXCEED \$2500.00 FOR FISCAL YEAR ENDIN6/30/1922, SHALL RECEIVE AN ADDITIONAL COMPENSATION OF\$240.00 PER ANNUM. (P. 3998-283999-1,4003-2)

Note: List of bills coded as progressive in the 66th Congress; adapted from Miller (2008) using Voteview.com data; Numbers of related votes (e.g. progressive amendments) in parentheses; Roll Number (as used in Voteview) corresponds to Miller's (2008) bill_id; Column 'Votes' indicates Yea and Nay counts on each vote.

*Note that procedural votes on progressive bills and votes on progressive issues that do not clearly specify progressive intention do not contribute to the score and thus do not appear in the counts in the parentheses. The rationale is that procedural votes or some votes on progressive issues do not clearly indicate whether a 'yea' vote supports or obstructs passage of the progressive bill.

*Note, too, that anti-progressive bills or amendments on bills relating to progressive issues are also not considered. The rationale is that a 'Yea' vote on an anti-progressive bill that relates to a progressive issue is not a progressive vote. For further clarification of these exclusions see the section above.

Table 4: List of Progressive Bills in 65th Congress - with Full Description

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
National Prohibition Act (2)	61	SJR17	Y=282 N=128	TO AGREE TO S. J. RES. 17, PROPOSING AN AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES PROHIBITING MANUFACTURE,SALE OR TRANSPORTATION OF INTOXICATING LIQUORS.(P. 469, 422)
	151	S3935	Y=237 N=30	TO PASS BILL S. 3935 PROHIBITING THE SALE, MANUFACTURE, AND IMPORTATION OF INTOXICATING LIQUORS IN THE TERRITORY OF HAWAII DURING THE PERIOD OF THE WAR, EXCEPT AS HEREIN AFTER PROVIDED. (P. 6688 6741)
Women's Suffrage (2)	67	HJR200	Y=131 N=274	TO AMEND H. J. RES. 200, PROPOSING AN AMENDMENT TO THE CONSTITUTION EXTENDING THE RIGHT OF SUFFRAGE TO WOMEN, BY PROVIDING THAT THE H. J. RES. BE SUBMITTED TO CONVENTIONS ALL STATES RATHER THAN 3/4 OF THE LEGISLATURES.(P. 806-1,2)
	69	HJR200	Y=175 N=55	TO ADOPT H. J. RES. 200. (P. 542)
Minimum Wage (2)	200	HR152	Y=71 N=200	TO RECOMMIT BILL H. R. 152, FIXING THE COMPENSATION OF CERTAIN EMPLOYEES OF THE U.S. TO THE COMMITTEE ON LABOR WITH INSTRUCTIONS TO REPORT BACK WITH AN AMENDMENT WHICH PROVIDES TO INSERT THE CLAUSE "THAT THE MINIMUM COMPENSATION OF ANY PERSON EMPLOYED AS A TEACHER IN THE SCHOOLS OF THE DISTRICT OF COLUMBIA SHALL BE NOT LESS THAN \$1.200.(P. 10731-2 10714)
	201	HR152	Y=252 N=16	TO PASS BILL H. R. 152, FIXING THE COMPENSATION OF CERTAIN EMPLOYEES OF THE UNITED STATES. (P. 10732-3)
	223	HR14078	Y=202 N=79	TO AMEND H. R. 14078, (40 STAT-1213, MAR. 1, 1919), BY INCREASING THE ANNUAL COMPENSATION OF ALL CIVILIAN EMPLOYEES OF THE GOVERNMENT OF THE UNITED STATES WHO NOW RECEIVE A TOAL ANNUAL COMPENSATION OF \$2,500 OR LESS.(P. 1683-1 1691-1)
Compensation of Public Employees (1)				
Stoppages (1)	93	S383	Y=273 N=38	TO AMEND S. 383, BY MAKING IT LAWFUL UNDER THE ACT FOR EMPLOYEES TO AGREE TOGETHER TO STOP WORK WITH A BONA FIDE PURPOSE OF SECURING BETTER WAGES OR CONDITIONS OF EMPLOYMENT. (P. 3125)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Veteran Pensions (5)	137	HR29959	Y=242 N=46	TO SUSPEND THE RULES AND PASS BILL H.R. 9959,(40 STAT-603, JUNE 10, 1918), AMENDING AN ACT ENTITLED "ANACT GRANTING PENSIONS TO CERTAIN ENLISTED MEN, SOLDIERS AND OFFICIALS WHO SERVED IN THE CIVIL WAR AND WAR WITH MEXICO, APPROVED MAY 11, 1912. (P. 6127)
	158	HR3547	Y=176 N=62	TO SUSPEND THE RULES AND PASS H. R. 3547, EXTENDING THE PROVISIONS OF THE PENSION ACT OF MAY 11, 1912 TO THE OFFICERS AND ENLISTED MEN OF ALL STATE MILITIA AND OTHER STATE ORGANIZATIONS THAT RENDERED SERVICE TO THE UNION DURING THE CIVIL WAR FOR A PERIOD OF 90 DAYS OR MORE, AND PROVIDING PENSIONS FOR THEIR WIDOWS, MINOR CHILDREN, AND DEPENDENT PARENTS. (P. 7326-1)
	180	S4444	Y=228 N=7	TO PASS BILL S. 4444, (40 STAT-903, JULY 16, 1918),GRANTING PENSIONS TO WIDOWS AND MINOR CHILDREN OF OFFICERS AND ENLISTED MEN WHO SERVED IN THE WAR WITH SPAIN,PHILIPPINE INSURRECTION OR IN CHINA. (P. 8925)
	160	HR9959	Y=194 N=69	TO CONCUR IN THE SENATE AMENDMENT TO BILL H. R. 9959,(40 STAT-603, JUNE 10, 1918), AMENDING AN ACT ENTITLED, "AACT GRANTING PENSIONS TO CERTAIN ENLISTED MEN, SOLDIERS AND OFFICERS WHO SERVED IN THE CIVIL WAR AND THE WAR WITH MEXICO, APPROVED JUNE 10, 1912, WHICH AMENDMENT IS TO INCREASE CIVIL WAR SOLDIERS PENSIONS. (P. 7491-2)
	57	HR5723	Y=176 N=78	TO CONCUR IN AMENDMENT H. R. 5723, THE WAR RISK INSURANCE BILL, SAID AMENDMENT FIXING THE RATE OF PENSION AT\$25.00 PER MONTH TO BE PAID A WIDOW OF AN OFFICER OR ENLISTED MAN WHO SERVED IN THE CIVIL WAR, WAR WITH SPAIN,OR PHILIPPINE INSURRECTION.

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Soldier's wage (1)	22	HR3545	Y=199 N=178	TO RECOMMIT H. R. 3545, TO THE COMMITTEE OF CONFERENCE WITH INSTRUCTIONS TO AGREE TO THAT PORTION OF THE SENATE AMENDMENT RELATING TO AN INCREASE IN SOLDIERS PAY.(P. 2396)
Medical Services to Veterans (1)	228	HR13026	Y=272 N=7	TO SUSPEND THE RULES AND PASS H. R. 3547, EXTENDING THE PROVISIONS OF THE PENSION ACT OF MAY 11, 1912 TO THE OFFICERS AND ENLISTED MEN OF ALL STATE MILITIA AND OTHER STATE ORGANIZATIONS THAT RENDERED SERVICE TO THE UNION DURING THE CIVIL WAR FOR A PERIOD OF 90 DAYS OR MORE, AND PROVIDING PENSIONS FOR THEIR WIDOWS, MINOR CHILDREN, AND DEPENDENT PARENTS. (P. 7326-1)
Deportation of Aliens (1)	88	HR5667	Y=344 N=21	TO PASS H. R. 5667, PROVIDING FOR THE DEPORTATION OF CERTAIN ALIENS. (P. 2969)

Note: List of bills coded as progressive in the 65th Congress; adapted from Miller (2008) using Voteview.com data; Numbers of related votes (e.g. progressive amendments) in parentheses; Roll Number (as used in Voteview) corresponds to Miller's (2008) bill_id; Column 'Votes' indicates Yea and Nay counts on each vote.

*Note that procedural votes on progressive bills and votes on progressive issues that do not clearly specify progressive intention do not contribute to the score and thus do not appear in the counts in the parentheses. The rationale is that procedural votes or some votes on progressive issues do not clearly indicate whether a 'yea' vote supports or obstructs passage of the progressive bill.

*Note, too, that anti-progressive bills or amendments on bills relating to progressive issues are also not considered. The rationale is that a 'Yea' vote on an anti-progressive bill that relates to a progressive issue is not a progressive vote. For further clarification of these exclusions see the section above.

Table 5: List of Progressive Bills in 67th Congress - with Full Description

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Sheppard-Towner Act (1)	132	S1039	Y=279 N=39	TO PASS S. 1039 (42 STAT. 224, APP. 11/23/21), PROVIDING FTHE PUBLIC PROTECTION OF MATERNITY AND INFANCY AND PROVIDE METHOD OF COOPERATION BETWEEN THE GOVERNMENT OF THE U. SAND THE SEVERAL STATES. (P.8034-2, 8035-1)
Filled Milk Act (1)	225	HR8086	Y=250 N=40	TO PASS H. R. 8086 (42 STAT. 1486, APP. 3/3/23), PROHIBITING THE SHIPMENT OF FILLED MILK IN INTERSTATE OR FOREIGN COMMERCE.
Dyer Anti-Lynching Bill (1)	169	HR13	Y=230 N=120	TO PASS H. R. 13.
Willis-Campbell Act (1)	53	HR7294	Y=250 N=93	TO SUSPEND THE RULES AND PASS H. R. 7294 (42 STAT. 222,APP. 11/23/21), A BILL SUPPLEMENTING THE NATIONAL PROHIBITION ACT. (P.3136-1)
Veteran Bureau Act (2)	36	HR6611	Y=224 N=113	TO RECOMMIT TO THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE H. R. 6611 (42 STAT. 147, APP. 8/9/21), ESTABLISHING IN THE TREASURY DEPARTMENT A VETERANS BUREAU,IMPROVING THE FACILITIES AND SERVICE OF SUCH BUREAU, AND AMENDING THE WAR RISK INSURANCE ACT WITH INSTRUCTIONS TO INCREASE THE VETERANS DISABILITY COMPENSATION. (P.2426-2,2427-1)
	37	HR6611	Y=335 N=0	TO PASS H. R. 6611 (42 STAT. 147, APP. 8/9/21), A BILL ESTABLISHING IN THE TREASURY DEPARTMENT A VETERANS BUREAU,IMPROVING THE FACILITIES AND SERVICE OF SUCH BUREAU, AND AMENDING THE WAR RISK INSURANCE ACT. (P.2428-2)
Classification Act of 1923 (1)	247	HR12073	Y=220 N=38	TO AMEND H. R. 12073, BY INCREASING THE AMOUNT OF BONUS GIVEN TO ALL CIVILIAN EMPLOYEES OF THE GOVERNMENT OF THEU. S. AND THE DISTRICT OF COLUMBIA WHO RECEIVE \$2500 PER ANNUM OR LESS.

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Deportation of Aliens (1)	200	HR11118	Y=222 N=73	TO PASS H. R. 11118, PROVIDING FOR THE DEPORTATION OF CERTAIN UNDESIRABLE ALIENS. (P.5068-1)
Appropriations for Immigration Control (1)	305	HR13316	Y=138 N=81	TO AMEND H. R. 13316 (APP. 1/5/23), A BILL MAKING APPROPRIATIONS FOR THE DEPARTMENT OF COMMERCE AND LABOR FOR FISCAL 1924, AND FOR OTHER PURPOSES. BY INCREASING THE APPROPRIATION FOR REGULATION OF IMMIGRATION. (P.440-2)
Relief of destitution among Indians (1)	174	HJR264	Y=155 N=103	TO SUSPEND RULES AND PASS H. J. RES. 264, PROVIDING FOR THE RELIEF OF DESTITUTION AMONG INDIANS. (P.2220-1)
D.C. Workmen's Compensation Act (1)	323	HR10034	Y=137 N=126	TO AMEND H. R. 10034, CREATING THE DISTRICT OF COLUMBIA INSURANCE FUND FOR THE BENEFIT OF EMPLOYEES INJURED AND THE DEPENDENTS OF EMPLOYEES KILLED, PROVIDING FOR THE ADMINISTRATION OF SUCH FUND BY THE U. S. EMPLOYEES COMPENSATION COMMITTEE, AND MAKING APPROPRIATIONS THEREFOR. (P.2203-1)
World War Adjusted Compensation Act (2)	296	HR10874	Y=258 N=54	TO PASS OVER VETO OF THE PRESIDENT H. R. 10874, PROVIDING FOR ADJUSTED COMPENSATION FOR THE VETERANS OF WORLD WAR I.(P.13003-2)
	194	HR10874	Y=333 N=70	TO SUSPEND THE RULES AND PASS H. R. 10874, A BILL PROVIDING FOR ADJUSTED COMPENSATION FOR VETERANS OF WORLD WAR I.(P.3835-1, 4361-2)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
Veterans pensions (1)	237	HR211	Y=180 N=58	TO RESOLVE INTO THE COMMITTEE OF THE WHOLE TO CONSIDER H. R. 2118, EXTENDING THE PENSION ACT OF 1912 TO THE OF-FICERS AND ENLISTED MEN OF ALL STATE MILITIA AND OTHER STATE ORGANIZATIONS THAT RENDERED SERVICE TO THE UNION CAUSE DURING THE CIVIL WAR. (P.8482-1)
Medical services to veterans (4)	32	HR6300	Y=187 N=81	TO RECEDE AND CONCUR IN A SENATE AMENDMENT TO H. R. 6300 WHICH AMENDMENT PROVIDES FOR EXPENSES OF AN INTERDEPARTMENTAL SOCIAL HYGENIC BOARD TO ASSIST STATES IN PROTECTING THE MILITARY AND NAVAL FORCES AGAINST VENEREAL DISEASES.(P.2286-1)
	197	HR10864	Y=317 N=0	TO RESOLVE INTO THE COMMITTEE OF THE WHOLE TO CONSIDER H. R. 10864 (42 STAT. 496, APP. 4/20/22), AUTHORIZING AN APPROPRIATION FOR THE CONSTRUCTION OF ADDITIONAL HOSPITAL FACILITIES TO PROVIDE FOR PERSONS WHO SERVED IN WORLD WAR AND ARE PATIENTS OF THE U. S. VETERANS BUREAU. (P.4870-2)
	198	HR10864	Y=137 N=168	TO AMEND H. R. 10864 (42 STAT. 496, APP. 4/20/22), AUTHORIZING AN APPROPRIATION FOR THE CONSTRUCTION OF ADDI-TIONAL HOSPITAL FACILITIES TO PROVIDE FOR PERSONS WHO SERVIN WORLD WAR I AND ARE PATIENTS OF THE U. S. VETERANS BUREAU, BY PROVIDING THAT SUCH FACILITIES SHALL BE OBTAINED BY REMODELING PRESENT HOSPITALS AND BY CONSTRUCTION ON PRESENT SITES. (P.4892-1)

Name (Number of Votes)	Roll No	Bill No	Votes	Vote Description
	255	HR12090	Y=238 N=0	TO AMEND H. R. 12090, BY ADDING THAT ALLOTMENTS OF APPROPRIATIONS FOR MEDICAL SERVICES MAY BE MADE BY THE VETERANS BUREAU TO THE PUBLIC HEALTH SERVICE FOR CARE OF BENEFICIARIES OF THE VETERANS BUREAU, AND FOR PERSONNEL IN THE HEALTH SERVICE AND VETERANS BUREAU. (P.2964-2,2972-1, 2)
Migratory Bird Refuge Act (1)	335	HRE507	Y=205 N=70	TO PASS H. RES. 526, MAKING IT IN ORDER TO RESOLVE INTO THE COMMITTEE OF THE WHOLE TO CONSIDER H. R. 5823, PROVIDING PUBLIC SHOOTING GROUNDS AND FOR GAME REFUGES FOR MIGRATORY BIRDS, AND REQUIRING A FEDERAL LICENSE TO HUNT THEM.(P.3567-1)

Note: List of bills coded as progressive in the 67th Congress; adapted from Miller (2008) using Voteview.com data; Numbers of related votes (e.g. progressive amendments) in parentheses; Roll Number (as used in Voteview) corresponds to Miller's (2008) bill_id; Column 'Votes' indicates Yea and Nay counts on each vote.

*Note that procedural votes on progressive bills and votes on progressive issues that do not clearly specify progressive intention do not contribute to the score and thus do not appear in the counts in the parentheses. The rationale is that procedural votes or some votes on progressive issues do not clearly indicate whether a 'yea' vote supports or obstructs passage of the progressive bill.

*Note, too, that anti-progressive bills or amendments on bills relating to progressive issues are also not considered. The rationale is that a 'Yea' vote on an anti-progressive bill that relates to a progressive issue is not a progressive vote. For further clarification of these exclusions see the section above.

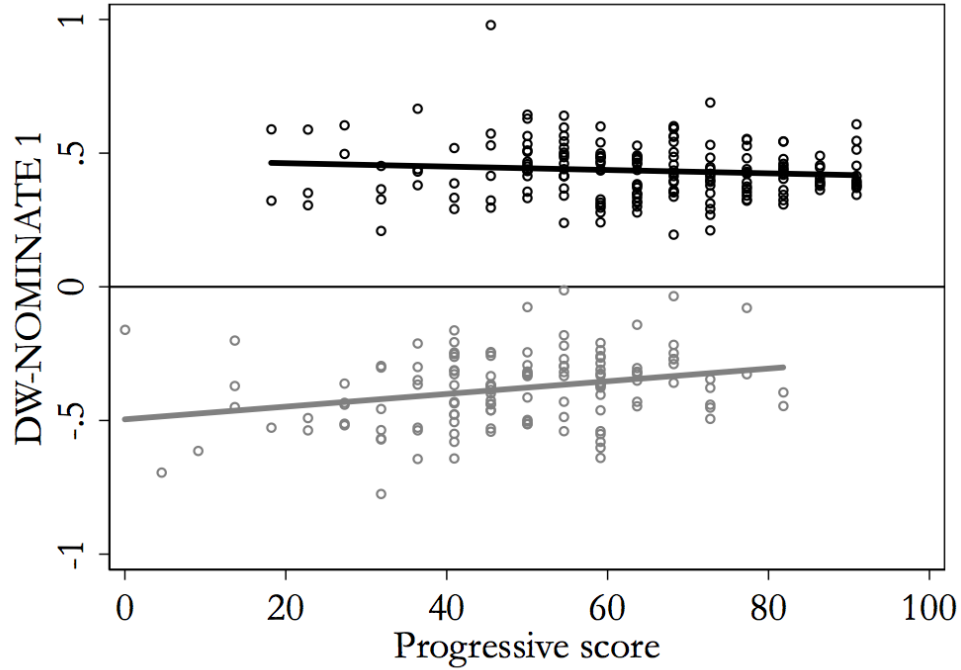
Table 6: List of Bills Lobbied for by Women's Groups in 66th - 68th Congresses

	Major Women's Organizations	
	For	Against
66th Congress		
HR6810 National Prohibition Act (3)	WCTU	
HR13229 Women's Bureau Act (1)	NLWV; NWTUL	
67th Congress		
S1039 Sheppard-Towner Act (1)	WCTU; NLWV	WP; NAOWS
HR8086 Filled Milk Act (1)	NLWV; GFWC	
HRE370 Naturalization and Citizenship of Women (1)	NLWV	
HR12073 Classification Act of 1923 (1)	NLWV; NWTUL	
HR10034 D.C. Workmen's Compensation Act (1)	NLWV	
68th Congress		
HJR184 Child Labor Amendment (2)	NLWV; NWTUL; WCTU	WP
HRE426 Permanent Court of International Justice (1)	GFWC; NLWV	
HR745 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 the Proquest Congressional database; Numbers of related votes (e.g. progressive amendments) in parentheses; see Tables above for further details about each bill; 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.

The list of bill demonstrates that (i) women's organizations lobbied for broadly progressive agendas [which provides support for the use of the general progressive score as a proxy for incumbent's position], (ii) the NLWV was most active, but progressive focus of women's organizations often overlapped across various organizations [which provides support for the use of NAWSA/NLWV as a proxy for movement strength, and (iii) conservative women's organizations were far less active in Congress [which is consistent with the argument that anti-suffragists and conservative women's organizations were less influential than progressive women's organizations].

Figure 4: Correlating 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 states with linear fit; Districts where progressive score could not be calculated [due to by-elections] excluded; Democrats in gray, Republicans in black.

The graph shows that the DW-NOMINATE scores from the first dimension are mostly orthogonal to the progressive score. The most 'moderate' Republicans – as indicated by DW-NOMINATE scores around 0 – are no more or less progressive. Weak positive correlation is observed for Democratic incumbents in the sample states, where the most 'moderate' Democrats – as indicated by DW-NOMINATE scores around 0 – are more likely to support progressive legislation. Note that only few Democrats are in the final sample, where most Democratic strongholds were uncontested and therefore excluded from analyses.

Online Appendix D: Suffrage Movement Strength

NAWSA membership as a proxy for Suffrage Movement Strength

The National American Women's Suffrage Association (NAWSA) boasted over 2 million members nationwide by 1920. With Catt's second leadership, major internal splits and disagreements were mostly silenced and the organization became strongly centralized (Graham 1996, p.81-97). This ensured that state affiliates were encouraged to follow top-down instructions on how to organize and what activities to engage with. The organization also recognized the strategic importance of including various women's interests, priorities and groups (Szymanski 2003, p.10). The national, internally unified and attempted 'umbrella' character of NAWSA, especially in its final years, supports the use of NAWSA membership as a proxy for a suffrage movement strength. However, not all women's organizations working for suffrage were affiliated with NAWSA, and the segregated character of the suffrage movement limited or directly discouraged alliances of white and black women's organizations working for suffrage. Consequently, NAWSA's membership figures do not capture (i) loosely affiliated white women's organizations working for suffrage, (ii) non-affiliated white suffrage organizations, and (iii) black women's organizations. I address each of these limitations below.

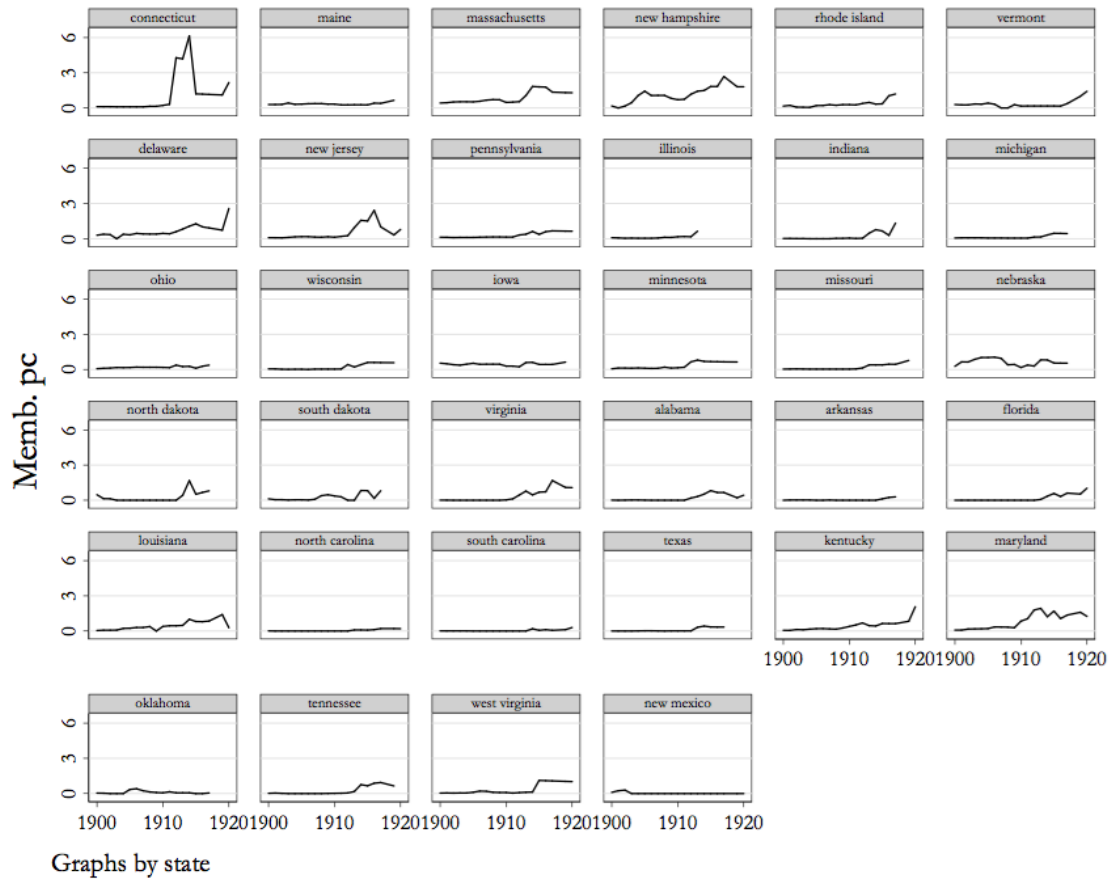
(i) ***Loosely affiliated white women's organizations.*** NAWSA's membership strength does not directly capture the strength of women's organizations that worked for other causes alongside suffrage. Most of these organizations, however, had relatively smaller franchise departments. Importantly, given the overlap in agendas, the activities *and* membership of these organizations often overlapped with NAWSA. For example, the 'do-everything' policy of the Women's Christian Temperance Union (WCTU) embraced women's suffrage as a means to advance temperance alongside social welfare and equal pay (Tyrrell 1986). It is therefore not surprising that NAWSA formed sturdy coalitions in educational, informational and mobilization activities with the WCTU and that about 40% of suffragists were also members of the WCTU (McCammon and Campbell 2002). Similarly, the National Women's Trade Union League (NWTUL) exchanged delegates at national conventions with NAWSA, publicized NAWSA's agenda in own periodicals and encouraged its members to participate in NAWSA's activities (Jacoby 1975, p.133). In return, NAWSA widened its legislative priorities to labour bills supported by working women. The ideological affinities of most women's organizations working for suffrage to NAWSA is also reflected in the overlap of legislative activities. For example, NAWSA's successor, the National League of Women Voters supported the Women's Bureau Act in coalition with NWTUL, Sheppard-Towner Act with WCTU, Filled Milk Act with General Federation of Women's Clubs (GFWC) and Child Labour Amendment with both NWTUL and WCTU (see Table A6 for further details). While NAWSA's membership figures do not directly include the strength of various women's organizations working for women's suffrage alongside other causes, the operational and organizational overlap of these somewhat ideologically aligned women's

organizations with NAWSA supports the use of NAWSA as the central suffrage organization that was built on the strength of various ideologically aligned women's groups.

(ii) *Non-affiliated white suffrage organizations.* NAWSA's membership strength does not capture predominantly white women's suffrage organizations that were not affiliated with NAWSA or otherwise disconnected loose affiliation with NAWSA. These non-affiliated suffrage organizations, however, tended to be local and comparatively smaller. For example, the membership of Alice Paul's Women's Party is estimated at 50,000 compared to NAWSA's 2 million (see Cott 1984 for membership estimates). NAWSA's dominance is also illustrated by the fact that the vast majority of collective actions (18/25) were organized by affiliated state organizations (see Tables 7 & 8). In contrast, only three out of the 25 events were organized or co-organized by Alice Paul's Woman's Party. Equally encouraging is the fact that there is an overlap between NAWSA's membership and collective actions organized by both affiliated and non-affiliated suffrage organizations (see Figure A6). This provides some support for using NAWSA's membership as a proxy for the strength of a both affiliated and non-affiliated white suffrage organizations.

(iii) *Exclusion of black women's organizations.* NAWSA never incorporated black women's agenda that sought simultaneously the advancement of black and women's interests, and major black women's organizations working for suffrage were discouraged from joining (McCammon and Banaszak 2018; Montoya 2018). Among the largest national association of black women working for suffrage was the suffrage department of the National Association of Colored Women's Clubs that had about 100,000 members (see Williams 1994 for membership estimates). Among the largest national religious associations that also worked for women's suffrage was the Women's Convention of the National Baptist Convention (WC). Given that both white and black women's organizations endorsed some form of social reform programs that advanced social and economic position of women and their communities, *some* ideological and operational similarities could nonetheless be traced. For example, WC sought to enhance equal employment and education opportunities for women alongside their efforts to end racial segregation and lynching (Higginbotham 1993, p.13-14). Parallel to the efforts of NAWSA's workers, black women's organizations also aimed to mobilize and encourage the registration of black women (Schuyler 2006, p.50-1). Importantly, some Northern black women decided to work for suffrage in both black and white women's organizations (Terborg-Penn 1998, Chs. 5 & 6). These overlaps would have been especially important in the North, where black women had better access to the vote. The mobilization of black women, however, would have been mostly parallel to NAWSA's mobilization of mostly white women. Consequently, black women's organizations made their stamp on post-1920 politics mostly outside of NAWSA and its affiliates.

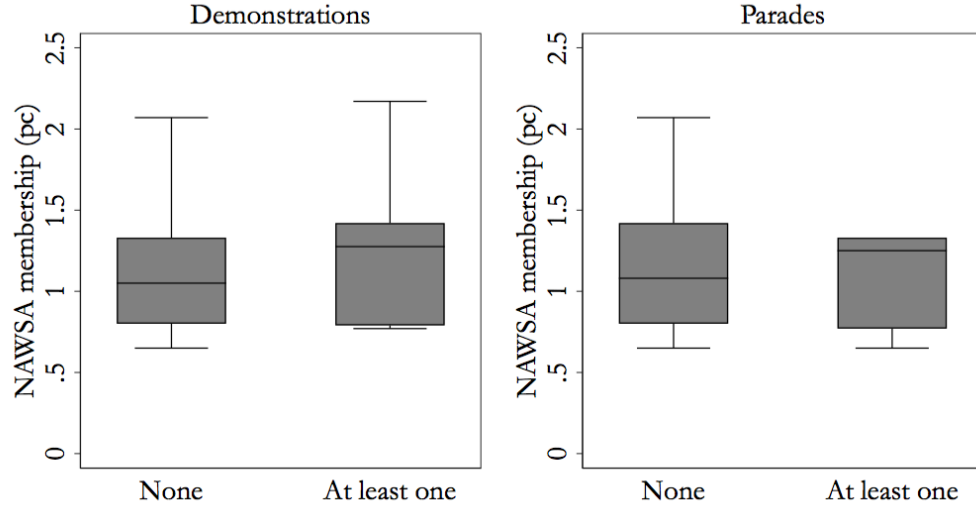
Figure 5: Suffrage Movement Strength in States between 1900 and 1920.



Notes: Plotting membership per capita (in ten thousands) in NAWSA between 1900 and 1920 in the 34 states where women could vote for the first time to Congress in 1920 election.

The figures show that, with few exceptions, membership per capita grew fairly steadily over time and is therefore less affected by political climate at the time of suffrage. This is in stark contrast to measures that trace specific activities of suffragists. Of the 25 demonstrations and parades that took place before suffrage in states with ‘strong’ suffrage movement, only 3 were *not* related to a concurrent legislative activity (see Tables A7, A8). A state with comparable organizational capacity – measured by the size of its membership base – therefore may or may not see a collective event. The figures also shows that the strength of NAWSA varies within regions quite substantively. In the South, for example, compare a relatively strong suffrage movement in Maryland and Virginia to a much weaker movement in Texas and Oklahoma. At the regional level, while Northeastern states have consistently strong state organizations, suffrage strength is on average similar in the South and the Midwest (see also Teele 2018).

Figure 6: Strength of the Suffrage Movement by pre-Nineteenth Amendment Collective Action Events



Notes: Box and whisker plots; Comparing distribution of state-level membership of NAWSA by a presence of pre-Nineteenth Amendment parades and demonstrations at the state level; Data for demonstrations and parades from Tables A7 & A8; Only states with 'strong' suffrage movement included.

The graphs show that demonstrations organized by both affiliated and non-affiliated organizations with NAWSA were more likely organized in states with the strongest NAWSA membership, as the median value of NAWSA state-level membership is higher in states with at least one demonstration. Similar, but weaker relationship is observed for parades. The relatively weak association between the two measures likely reflects the fact that (i) collective action events were organized in response to concurrent legislative activities, such that a state with strong membership base may not have an incentive to organize a collective event (see Tables A7 & A8), and (ii) the sample is restricted to states with strong suffrage movement. Some association between the two measures is nonetheless present and is consistent with the ability of NAWSA membership to proxy organizational capacity of a broader suffrage movement that consisted of NAWSA's affiliated as well as non-affiliated women's organizations working for suffrage (but see further discussion on this topic above).

Table 7: List of pre-Nineteenth Amendment Suffrage Parades in States with Strong Suffrage Movement

State	Place	Leading Organization	Cause
IN	Terre Haute	Terre Haute suffragists	To celebrate the ratification of federal amendment by Tennessee
IN	Anderson	Anderson Branch of the Women's Franchise League	Celebrate the victory of the woman suffrage resolution measures in the congress.
PA	Harrisburg	Pennsylvania Woman's Suffrage Association	Suffragists joining Fourth of July parade.
PA	Harrisburg	Central Pennsylvania Suffrage Association	Participating in the Independence Day Parade
PA	Harrisburg	Pennsylvania Woman Suffrage Association	Celebrate ratification of the Nineteenth Amendment
PA	Philadelphia	Pennsylvania Woman Suffrage Association	Woman suffrage bill passed the Pennsylvania legislature
PA	Harrisburg	National Women's Party & Pennsylvania Woman Suffrage Association	Woman suffrage bill passed the Pennsylvania legislature
MD	Baltimore	Woman's Suffrage League of Maryland & Just Government League	To celebrate gaining the ballot
CT	Hartford	Connecticut Woman's Suffrage Association	Constitutional amendment now pending in the General Assembly
TN	Memphis	Memphis League of Women Voters	Passage of the Nineteenth Amendment and honoring the Shelby legislative delegation for its part in the fight.
TN	Nashville	Tennessee Suffrage Organization	Part of the meeting of the Tennessee Suffrage Organization, where it will dissolve into the League of Women Voters
MO	St. Louis	St. Louis Equal Suffrage League	Congressional approval of woman's suffrage amendment to the federal constitution

Notes: The table lists all parades that were announced to take place or took place two years before the ratification of the Nineteenth suffrage in each state. The events were located through a search of all articles listed in the Newspapers.com database, using 'suffrage' and 'parade' keywords. Events are listed only in states with 'strong' suffrage movement, as defined above.

The data on suffrage parades, together with data on suffrage demonstration (Table A8) document that (i) most activities of highly organized suffragists responded to legislative events; (ii) vast majority of collective action events were organized by NAWSA's state organizations; (iii) suffragists organized collective action events across regions, including the South. Note, also, that none of these events were accompanied by anti-suffragists, which points to anti-suffragists' weak attempts to politically engage the public (Freeman 2002, p.52; Schreiber 2008, p.18-9) and is also consistent with weaker legislative activities of anti-suffragists in Congress (Table A6).

Table 8: List of pre-Nineteenth Amendment Suffrage Demonstrations in States with Strong Suffrage Movement

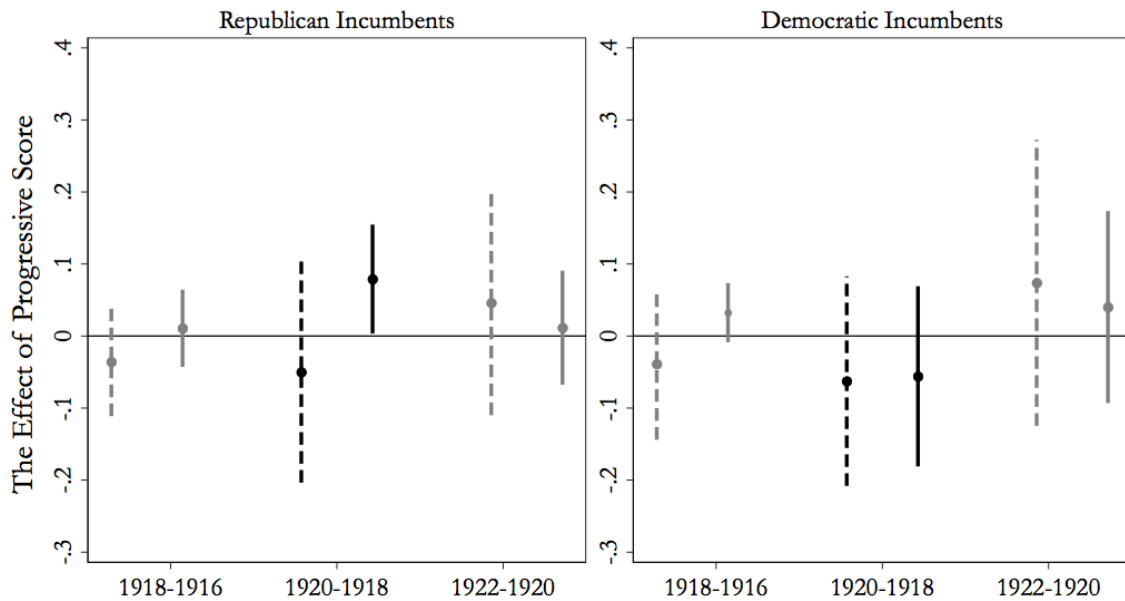
State	Place	Leading Organization	Cause
PA	Harrisburg	Pennsylvania Branch of the National Women's Party	Fight for ratification of the suffrage amendment by the state legislature
MD	Baltimore	Woman's Suffrage League of Maryland & Just Government League	Celebrate passing of the suffrage amendment
VT	Montpelier	Vermont Equal Suffrage Association	Appeal for Gov. Clement to convene a special session of the legislature to vote on the ratification of the federal suffrage amendment.
NJ	Trenton	Woman Suffrage Ratification committee of New Jersey	Militant branch of the suffragists made a demonstration at the capitol and called upon Governor Runyon to summon the legislature in special session to act on the federal suffrage amendment.
NJ	Trenton	New Jersey Woman Suffrage Organization	Fight for ratification of the suffrage amendment by the state legislature
CT	Hartford	Norwich Equal Franchise League	Call a special session of the legislature that Connecticut might be the 36th state to ratify the federal suffrage amendment
CT	Every Town	Connecticut Woman Suffrage Association	Celebration of the federal suffrage ratification
CT	Hartford	Connecticut branch of Woman's National Party	Call a special session of the Connecticut to ratify the proposed suffrage amendment to the federal amendment
MA	Boston	Margaret Brent Suffrage Guild	To celebrate the election of the first U.S. Senator from this State pledged to equal suffrage Hon. David I. Walsh.
MA	Boston	National Woman's Party	Demonstration during President Wilson's stay in Boston
MA	Boston	Massachusetts Woman Suffrage Association	Suffrage Constitutional amendment was passed by the State House
MA	South Hadley	Massachusetts State Federation of Women's Club	Passing of the Federal suffrage amendment by the State Senate
MO	St. Louis	Missouri Suffrage League	Missouri Senate had passed equal suffrage bill

Notes: The table lists all demonstrations that were announced to take place or took place two years before the ratification of the Nineteenth suffrage in each state. The events were located through a search of all articles listed in the Newspapers.com database, using 'suffrage' and 'demonstration' keywords. Events are listed only in states with 'strong' suffrage movement, as defined above.

The data on suffrage demonstrations, together with data on suffrage parades (Table A7) document that (i) most activities of highly organized suffragists responded to legislative events; (ii) vast majority of collective action events were organized by NAWSA's state organizations; (iii) suffragists organized collective action events across regions, including the South. Note, also, that none of these events were accompanied by anti-suffragists, which points to anti-suffragists' weak attempts to politically engage the public (Freeman 2002, p.52; Schreiber 2008, p.18-9) and is also consistent with weaker legislative activities of anti-suffragists in Congress (Table A6).

Online Appendix E: Supplementary Analyses

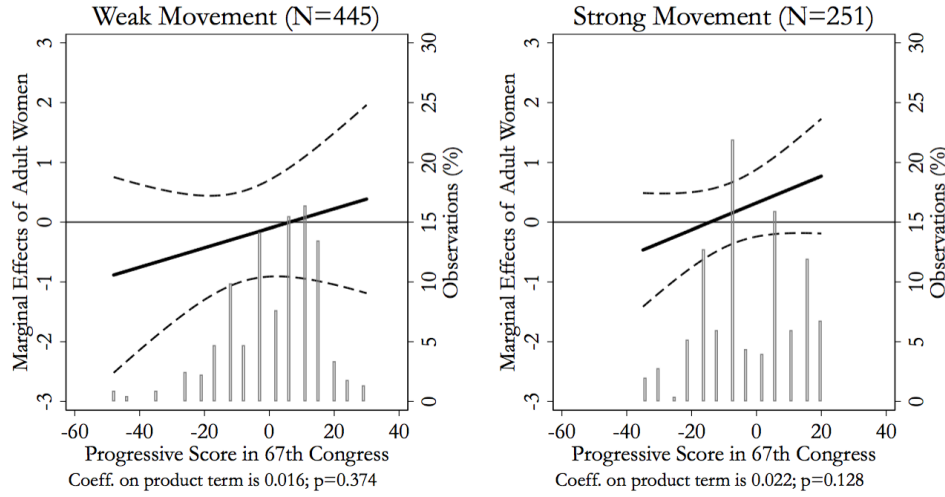
Figure 7: The Effect of Progressive Score on (pp) Change in Incumbent Vote by Movement Strength and Party



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); All models include a constant, state fixed effects and a battery of standard controls (see section on 'Variables').

The first graph shows that conservative Republicans did worse than progressive Republicans in states with strong movement in 1920, while no such effects are observed before and after suffrage and in states with weak movement. The second graphs shows that while conservative Democrats did not do worse than progressive Democrats in 1920 in states with strong movement. It seems plausible that while conservative incumbents from both Democratic and Republican parties incurred electoral loss among women in states with strong suffrage movement in 1920, the loss of conservative Democrats among women may have been counter-balanced by a gain among men. It would seem especially plausible, for example, that conservative Democrats would have been especially likely to be embraced by Democratic conservative men, as the 1920 campaign called for the end of 'Wilson's progressivism.'

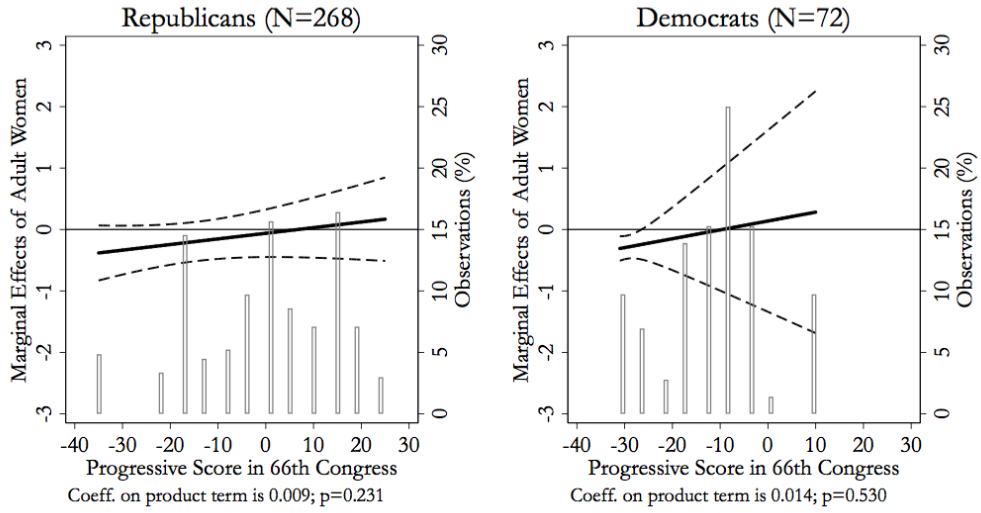
Figure 8: 1922 Election: Marginal Effects of Adult Women, by Movement Strength



Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1922 and 1918 election; Progressive score and Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'). Graph for weak movement does not depict one district [N=5] with centered progressive score at -58 for clarity of presentation. This district is included in the model.

Note that substantial attrition occurs, where some incumbents for the interim (1920) election either cease to be re-elected or retire. In states with strong movement, the product term is of the same size and of similar magnitude as the estimate for 1920. In contrast to the results in 1920 election, however, progressive incumbents are also estimated to have gained from women's suffrage. This may reflect a new pro-women legislation that was passed in the 67th Congress. In states with weak movement, on the other hand, we do not observe gains of progressive incumbents. Considering the size of the product term, if anything, an anti-conservative turn among women may have started to grow in some states with weak movement. Altogether, the results seems consistent with an explanation that new women voters voted along the progressive dimension at least into the second election after suffrage.

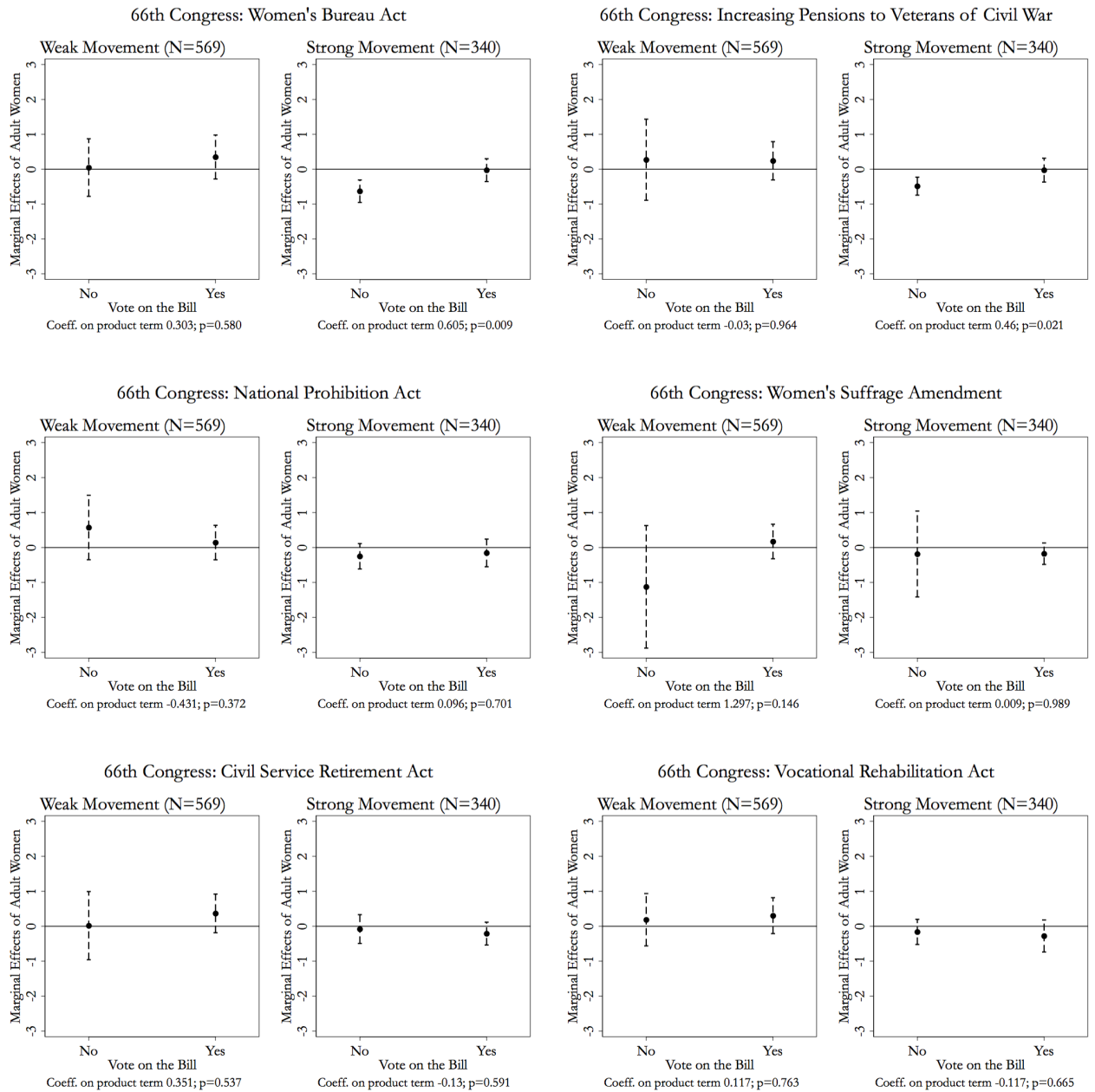
Figure 9: Marginal Effects of Adult Women in States with a Strong Suffrage Movement, by Party



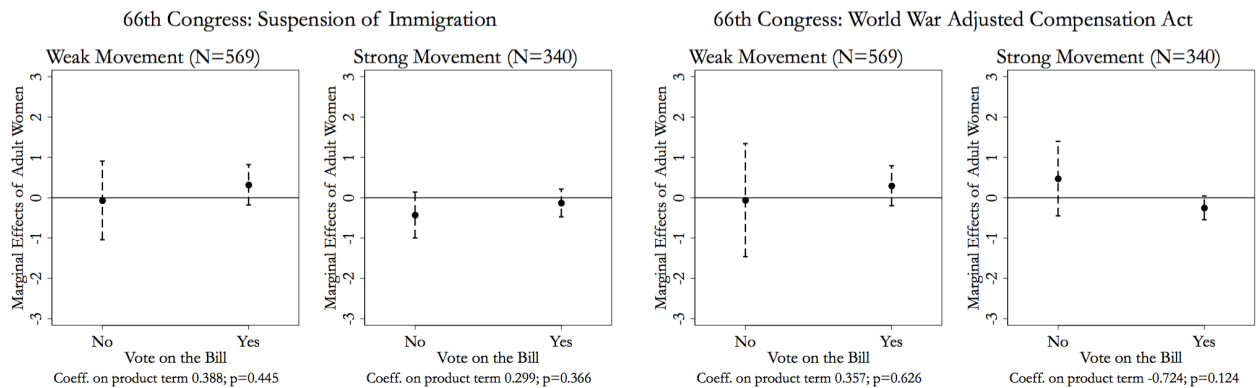
Notes: The main result in the paper for states with strong suffrage movement is fitted separately for Republican and Democratic incumbents; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive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

The models show that the size of the product term is relatively smaller for Republican incumbents compared to Democratic incumbents, and the product term is not significant at conventional levels for either party. However, the product terms for both parties have the same sign and the marginal effects of Adult women are negative at the lowest levels of the progressive score for incumbents for either party. Altogether, these results are consistent with an explanation where women punished conservative politicians from both parties.

Figure 10: All Other Salient Progressive Bills in the 66th Congress: Marginal Effects of Adult Women, by the Strength of the Suffrage Movement



(continues on the next page)



Notes: OLS estimates; 95% confidence intervals depicted; DV is (pp) change in incumbent support between 1920 and 1918 election; only salients votes included, i.e. final votes on progressive bills (e.g. excluding 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').

The first row of graphs on previous page refers to the bills that enhanced women's welfare and were directly supported by women's groups: (i) Women's Bureau Act, a flagship focus of the women's lobby that was supported by NAWSA's successor and the National Women's Trade Union League immediately prior to the Nineteenth Amendment (see Table A6) and (ii) an increase of veteran's pensions with direct payments to dependents (widows and children), an issue with a historical focus of various women's groups. The first two graphs show that incumbents who did not vote for the establishment of the Women's Bureau and an increase in veteran's pensions did significantly worse in places with more women in states with a strong movement. No such effects are observed in states with weak suffrage movement.

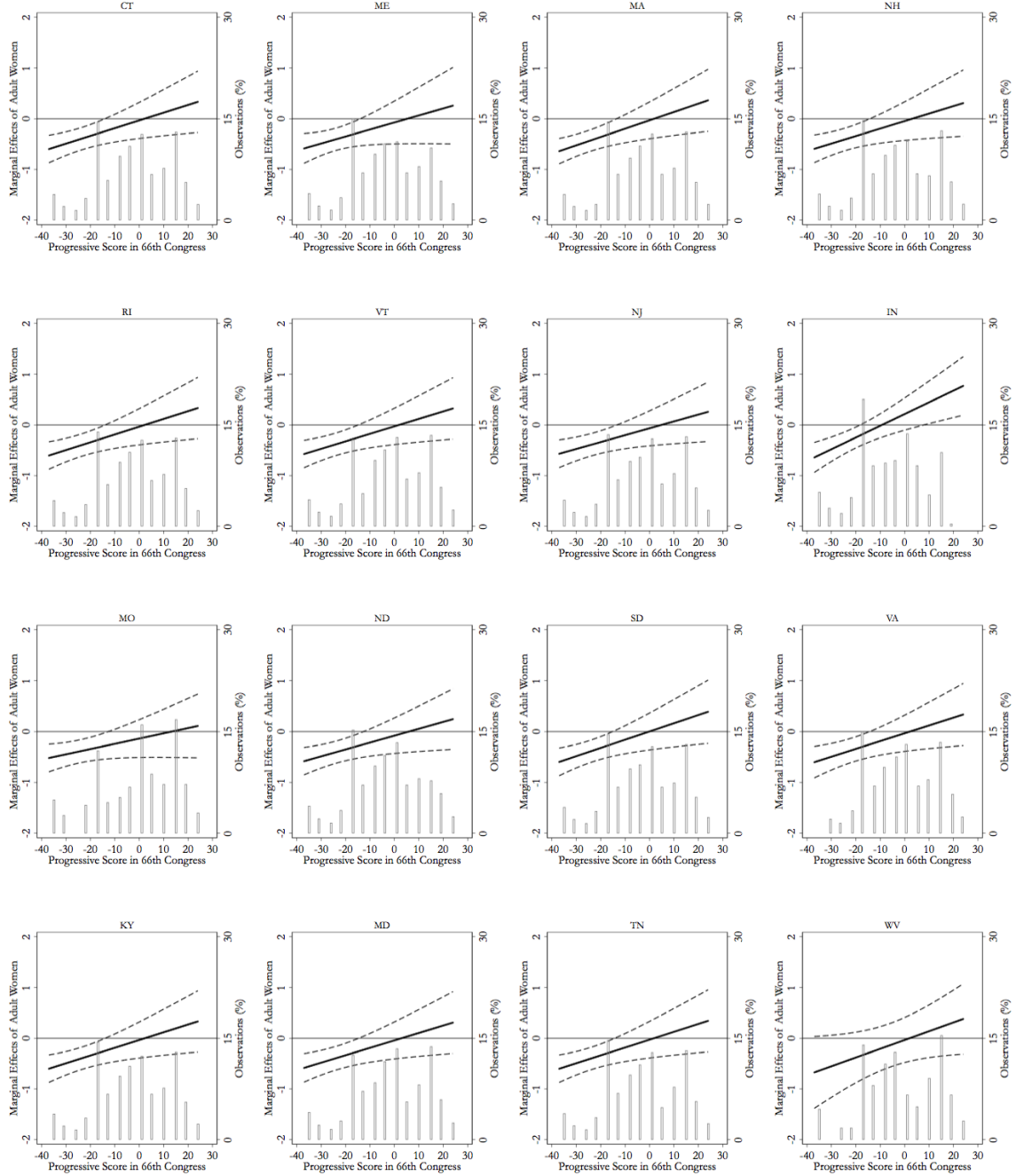
The second row of graphs on previous page refers to the two additional bills on issues supported by organized women before suffrage: the National Prohibition Act in the 66th Congress and the women's suffrage bill. Neither of these two bills return substantively or statistically significant results. This may not be surprising given that the prohibition bill was adopted as a war-time measure rather than targeting dry voters. Similarly, to the extent that the suffrage bill was a means to other women's legislation, women may perceive incumbents' support of suffrage as secondary to the votes on other pro-women bills.

The third row of graphs on previous page refers to two additional bills that improved the welfare of women, although neither was specifically supported by women's groups in the 66th Congress: the Civil Service Retirement Act and Vocational Rehabilitation Act, both of which have increased security of dependents in case of disability or death of a breadwinner. In contrast to a similar bill that increased veteran's pensions with direct payments to dependents, neither of these two additional bills return substantively or statistically significant results.

The first row of graphs on this page shows that none of the remaining salient bills that were not directly supported by women's groups but consisted of a typical progressive legislation of the day, namely those aimed at immigration restriction and compensation for veterans of World War II, return significant interaction effects.

Altogether, the analysis of salient bills suggests that the punishment of conservative incumbents in states with a strong movement was driven to a greater degree by incumbents' lack of support of women's progressive legislation. The main results is primarily driven by salient bills that were either directly endorsed by organized women and directly improved women's welfare.

Figure 11: Excluding One State at a Time in States with a Strong Suffrage Movement



Note: Excludes one state at a time from the main result 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 Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'). The graphs show that 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 of the product term of the interaction between the proportion of women and progressive score, while excluding Maine or Missouri decreases its magnitude.

Table 11: Excluding States with Voter Suppression Laws

Dependent Var:	(pp) Change in Incumbent Vote (1920-1918)					
Voter Suppression:	Poll	Literacy	Registr.	Poll	Literacy	Registr.
Suffrage Movement	Weak	Weak	Weak	Strong	Strong	Strong
<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)
Adult Women 1920	0.363	0.269	0.409	-0.037	-0.085	0.033
	(0.255)	(0.285)	(0.192)	(0.192)	(0.234)	(0.227)
Prog. Score (66 th)	-0.032	-0.069	-0.037	0.013	0.013	0.096
	(0.07)	(0.076)	(0.055)	(0.036)	(0.037)	(0.099)
Adult Women * Prog. score	-0.025	-0.01	-0.003	0.015*	0.014	0.016
	(0.017)	(0.021)	(0.016)	(0.007)	(0.008)	(0.009)
Standard Controls	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	486	467	161	312	298	130

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 Adult women 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%. All models restrict the sample to states without poll taxes, literacy tests, restrictive registration requirements in states with weak and strong suffrage movement respectively. Alien disenfranchisement, as depicted in Figure A3, is not included, given that the analysis in states with strong suffrage movement would be restricted to two states only. Importantly, as shown in Figure A3, no differences in mean proportion of adult women between states with and without alien disenfranchisement were found, already suggesting that the main result is not driven by alien restrictions.

The table shows that even when states with voter suppression laws are excluded from the sample one by one, the substantive interpretation of the main result remains unchanged. The estimated impact of women's enfranchisement in states with strong suffrage movement are of the same sign and of a similar size. Where substantial reduction in the number of observation occurred, the confidence on the product term widens. In states with weak suffrage movement, the size of the estimate varies across models. However, none of the alternative specifications returns substantively different estimates to the one presented in the full sample. Importantly, these results suggest that poll taxes and restrictive registration requirements that were identified in Figure A3 as potentially posing a threat to the key diff-in-diff assumptions, do not alter the substantive interpretation of the results.

Table 9: Supplementary Specifications for Main Result (Part I)

Dependent Var:	(pp) Change in Incumbent Vote (1920-1918)					
Alternative Specification:	Cut-off Points		Progressive Score		Region	
	20 th pctl	40 th pctl	No Proh.	No Immigr.	South	Non-South
<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)
Adult Women 1920	0.01 (0.188)	-0.242 (0.2)	-0.033 (0.165)	-0.062 (0.179)	-0.055 (0.255)	-0.019 (0.249)
Prog. Score (66 th)	0.015 (0.06)	0.067 (0.06)	0.023 (0.031)	0.008 (0.035)	0.072 (0.085)	0.016 (0.045)
Adult Women * Prog. score	-0.0008 (0.01)	-0.006 (0.013)	0.021** (0.007)	0.013* (0.006)	0.009 (0.01)	0.016 (0.015)
Prog. Score Terciles (66 th)						
Second Tercile						
Third Tercile						
Adult Women * Prog. score						
Second Tercile						
Third Tercile						
Standard Controls	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	712	517	340	340	97	243

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 Adult women centered around mean; Only states with a strong movement included; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); ** < 1%; * < 5%; ‡ < 10%. Models (1 & 2) split the sample by alternative cutoff points in the distribution of the the state-level membership in NAWSA (20th and 40th; 60th percentile is applied in the main result); Models (3 & 4) use alternative coding for progressive score, by removing bills on prohibition and removing bills on immigration respectively. Models (5 & 6) run the main separately in the South and Non-South (which mostly consists of Midwest) respectively.

Using 'lower' cut-off points for suffrage movement strength does not return substantially significant results. The first cut-off that returns significant results uses the 60th percentile of NAWSA's membership distribution [note that the 50th percentile is equivalent to the 60th percentile]. The empirically derived cut-off is therefore relatively high, which suggests that the strength of state suffragists needs to be substantial for women to penalize conservatives. This may not be surprising, given that state level membership in NAWSA would have been very high only when suffragists were sufficiently organized across the entire state. Using alternative coding of progressive bills returns a product term of the same direction, of comparable size and statistical significance. Running the model separately in the South and Non-South (which mostly consists of Midwest) returns a product term of a comparable size and the same direction, but with substantially larger standard errors. While this test puts a hefty demand on the sample size and therefore returns imprecisely estimated coefficients, the results are consistent with an explanation that suffragists strength across states was more relevant than differences across the two largest regions.

Table 10: Alternative Specifications for Main Result (Part II)

Dependent Var: Alternative Specification:	(pp) Change in Incumbent Vote (1920-1918)		Adult Women		Registr.	Alien	Third <15%	Bounds		Sample SD
	Controls		Literacy	Poll Tax				80%		
<i>Model</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Adult women 1920	-0.093 (0.227)	-0.0323 (0.17)	0.005 (0.14)	-0.02 (0.19)	-0.03 (0.178)	-0.023 (0.177)	-0.083 (0.222)	-0.055 (0.186)	-0.065 (0.179)	0.002 (0.18)
Prog. Score (66 th)	0.152 (0.139)	0.012 (0.035)	0.014 (0.036)	0.013 (0.036)	0.012 (0.035)	0.012 (0.035)	0.011 (0.039)	0.006 (0.035)	0.012 (0.035)	0.009 (0.036)
Female vote * Prog. score	0.019 [†] (0.01)	0.015* (0.006)	0.016** (0.005)	0.016* (0.006)	0.015* (0.006)	0.015* (0.006)	0.012 (0.01)	0.016* (0.006)	0.015* (0.006)	0.016* (0.006)
Incumbent Party	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standard Controls	x	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Naturalized (%)	x	Yes	x	x	x	x	x	x	x	x
Manuf. output (mils)	x	x	Yes	x	x	x	x	x	x	x
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	340	340	337	340	340	340	340	309	307	335

Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Only states with a strong movement included; Progressive score and Adult women 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 for incumbent's party and removes standard controls; Model (2) adds controls for naturalized; Model (3) controls for manufacturing output, but drops urban for multicollinearity. Models (4-7) use alternative measures of the proportion of adult women as the main treatment variable [full definition of each alternative variable in Figure A2 above]. Model (8) excludes districts where third party obtained more than 15% of votes in 1918 or 1920 election; Model (9) excludes counties with more than 80% votes for incumbent in 1918 or 1920; Model (10) excludes South Dakota, which enfranchised women prior to the Nineteenth Amendment, but women voted for the first time to Congress in 1920 election.

The implementation of all alternative specifications in Models return a product size of the same direction, of comparable size and which is significant at least at a 10% level. The only exception is Model (7), where removing alien women from the proportion of women, depending on alien suffrage, widens the confidence intervals such that the interaction effect is no longer significant at conventional levels. However, the magnitude of the product term remains comparable and the p-value is close to significance. It seems plausible that the measurement of citizenship status in 1920 census was not precise – as indicated by missing data in the census.

Online Appendix F: Mechanisms

Table 12: Estimating Women's Turnout by Movement Strength (with Placebo Tests)

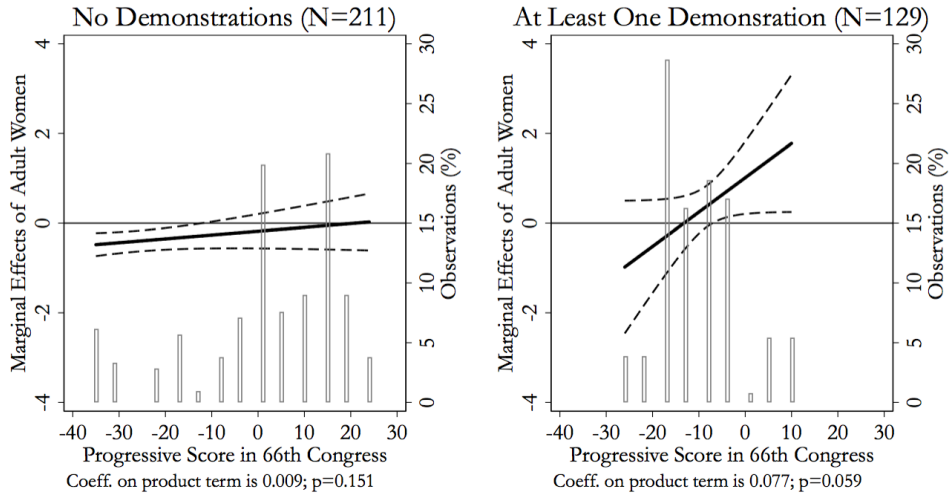
DV: (pp) Change in Turnout Suffrage Movement	Main result 1920-1918		Placebo Tests			
	Weak	Strong	1918-1916		1920-1922	
			Weak	Strong	Weak	Strong
<i>Model</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
Adult Women 1920	-0.973** (0.229)	-0.522** (0.175)	-0.39* (0.194)	0.248 (0.329)	0.034 (0.245)	-0.13 (0.207)
Standard Controls	Yes	Yes	Yes	Yes	Yes	Yes
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	568	339	573	289	683	462

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 Adult women 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%.

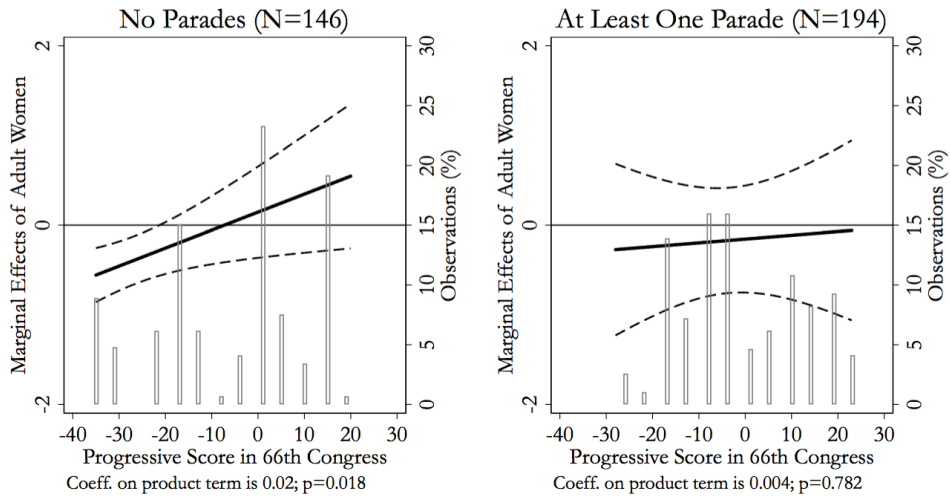
Models (1) and (2) show that the overall turnout grew less in counties with more women, which suggests that women voted less than men. The size of the effect is nearly twice as large in states with weak movement, which suggests that women were especially mobilized in states with strong movement. This result is further supported with two placebo tests before suffrage (Models 3&4) and two placebos after suffrage (Models 5&6) that return small and non-significant estimates, which provides some support for the validity of the parallel trends assumption. One exception is a smaller, statistically significant effect in pre-placebos in states with weak suffrage movement. This may suggest that some of the large estimates in states with weak suffrage movement at the time of women's entry in 1920 may be co-driven by men. Note, however, that no such effects are observed in post-placebos, altogether providing reassuring results.

Figure 12: Marginal Effects of Adult Women in States with a Strong Suffrage Movement, by Demonstrations and Parades

(a) Demonstrations



(b) Parades

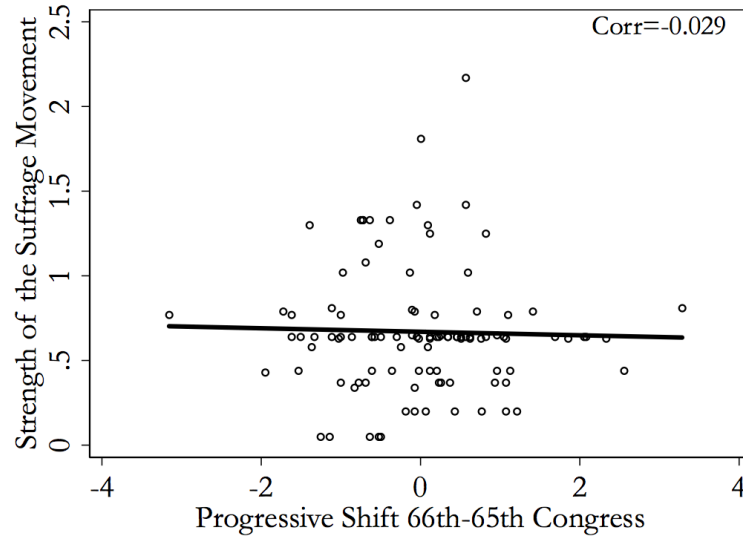


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Notes: OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'). In this graph, the main result is fitted separately for states with (and without) demonstrations (sub-figure a) and parades (sub-figure b); Note that the strength of NAWSA's membership is only weakly related with a presence of collective action events (see Figure A6 and the notes underneath the graph for further discussion); List of all parades and demonstrations in Tables A7 & A8.

While the effects in sub-figure a) are imprecisely estimated, the size of the interaction term between the proportion of women and progressive score is considerably larger in states with at least one demonstration. This is consistent with an explanation where conservative incumbents in states where suffragists organized protest actions were particularly susceptible to vote loss. In turn, so such effects are observed with respect to parades in sub-figure b. This may not be surprising, given that parades mostly celebrated successes in progressive states (see Figure A19).

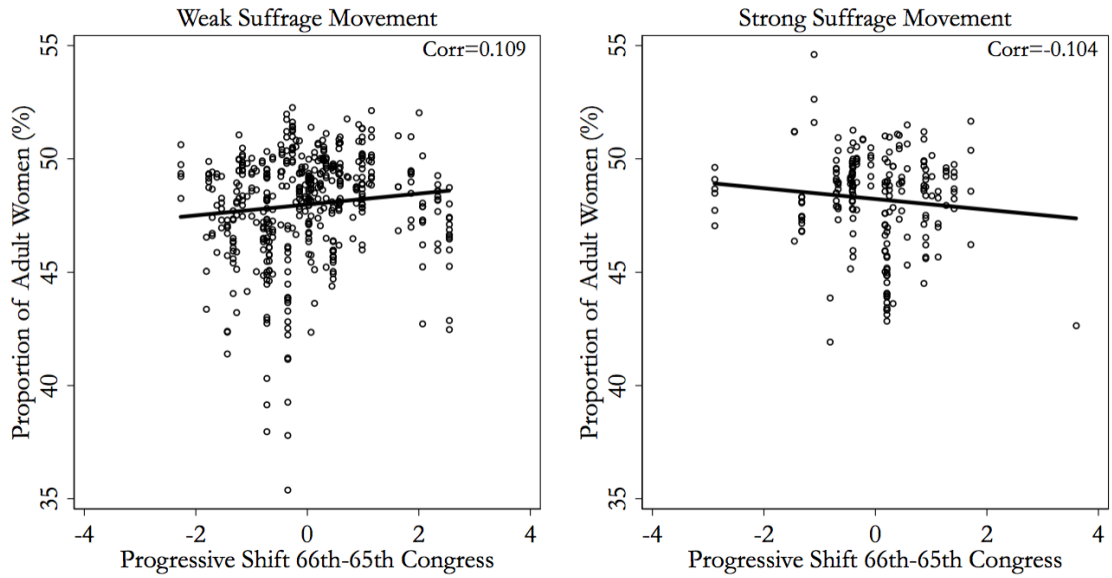
Figure 13: Ideological Shifts of Incumbents by Movement Strength



Notes: Scatter plots with linear fit (solid black line); correlation coefficient in upper right corner; the graph plots state-level membership in NAWSA on y-axis and a difference in standardized progressive scores between two subsequent Congresses on x-axis; graph generated from county-level returns in the sample that were collapsed on districts; only districts with incumbents who served in both 65th and 66th Congresses.

The graph shows that ideological shifts among incumbents *prior* to suffrage are not correlated with the movement strength. This suggests that the conservative loss in states with a strong suffrage movement was not driven by these politicians' failure to mitigate the effects of women's entry to the electorate.

Figure 14: Ideological Shifts of Incumbents by Movement Strength and the Proportion of Women

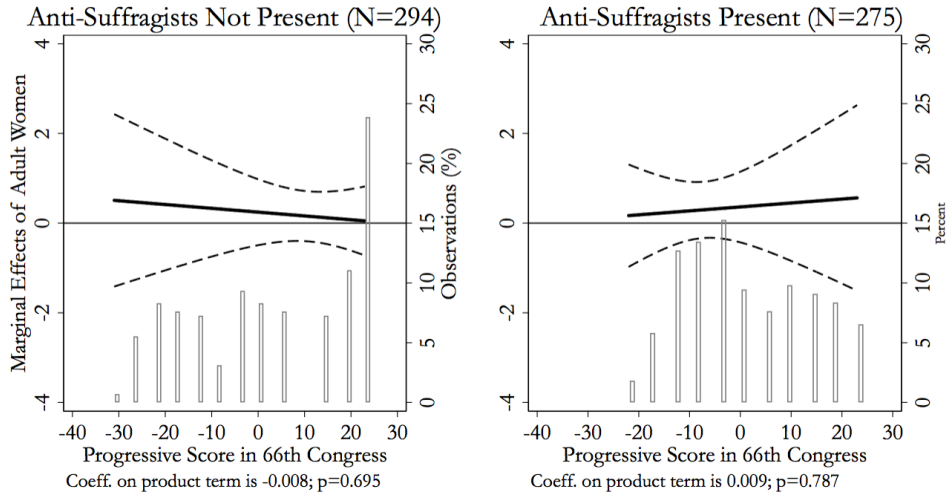


Notes: Scatter plots with a linear fit (solid black line); correlation coefficients in upper right corner; the first (second) graph plots average proportion of adult women on y-axis and a difference in standardized progressive scores between two subsequent Congresses on x-axis in states with weak (strong) suffrage movement; data from county-level returns; only districts with incumbents who served in both 65th and 66th Congresses.

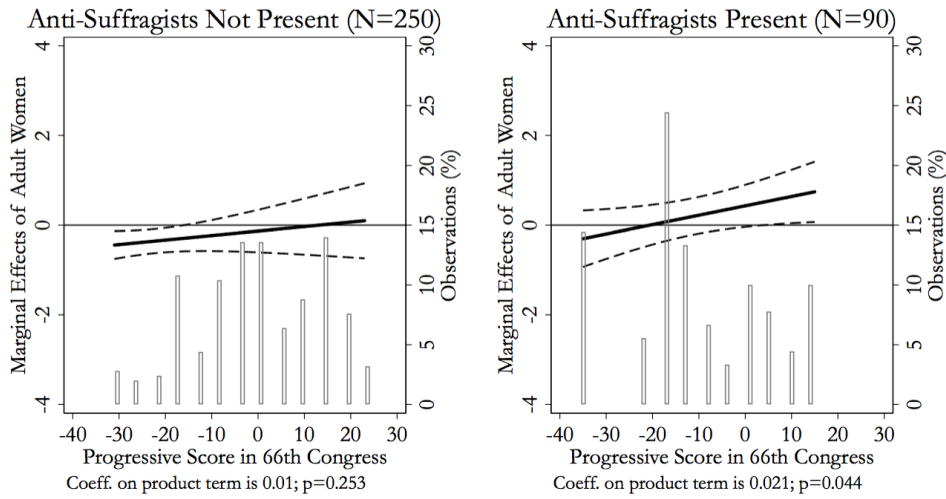
The graphs show that ideological shifts among incumbents *prior* to suffrage are not correlated with the proportion of women in either group of states. This provides support against the possibility that the conservative loss in states with a strong suffrage movement was driven by these politicians' inability to mitigate the effects of women's suffrage.

Figure 15: Marginal Effects of Adult Women, by Suffragists Strength and the Presence of Anti-Suffragists

(a) States with Weak Suffrage Movement



(b) States with Strong Suffrage Movement

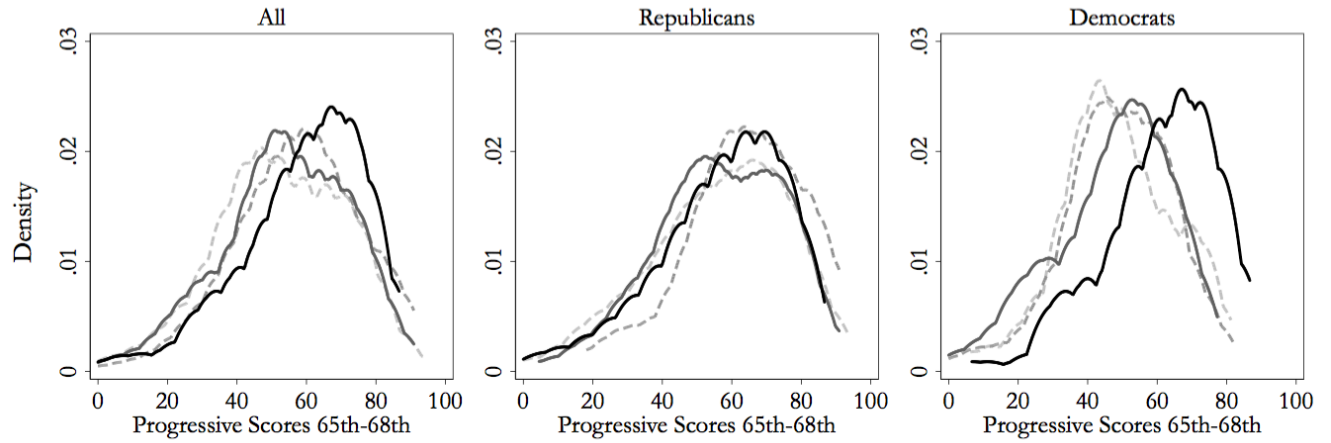


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Notes: The main result is fitted separately for states with (and without) a regional branch of the National Association Opposed to Women's Suffrage in 1913; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; DV is (pp) change in incumbent support between 1920 and 1918; Progressive score and Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'). Sub-figure a for weak movement does not depict one district [N=5] with centered progressive score at -58 for clarity of presentation. This district is included in the model.

These graphs explore whether presence of anti-suffragist countermovement altered the ability of suffragists to mobilize new women voters. The graphs fit the main result separately for states with and without presence of anti-suffragists. The sign and the size of the product term is small and far from being statistically significant regardless of anti-suffragists presence in states with weak suffrage movement (sub-figure a). This provides evidence against the possibility that the null effects in states with weak suffrage movement are driven by anti-suffragists who mitigated women's coordination ability. In states with strong suffrage movement, the sign and the size of the product term is also similar regardless of anti-suffragists presence (sub-figure b). In states with strong suffrage movement and anti-suffragist presence, however, progressive incumbents gained votes, while conservative incumbents did not lose any votes. This may suggest that while anti-suffragists did not prevent suffragists coordination capacity altogether, they may have limited suffragists' ability to coordinate women against conservatives.

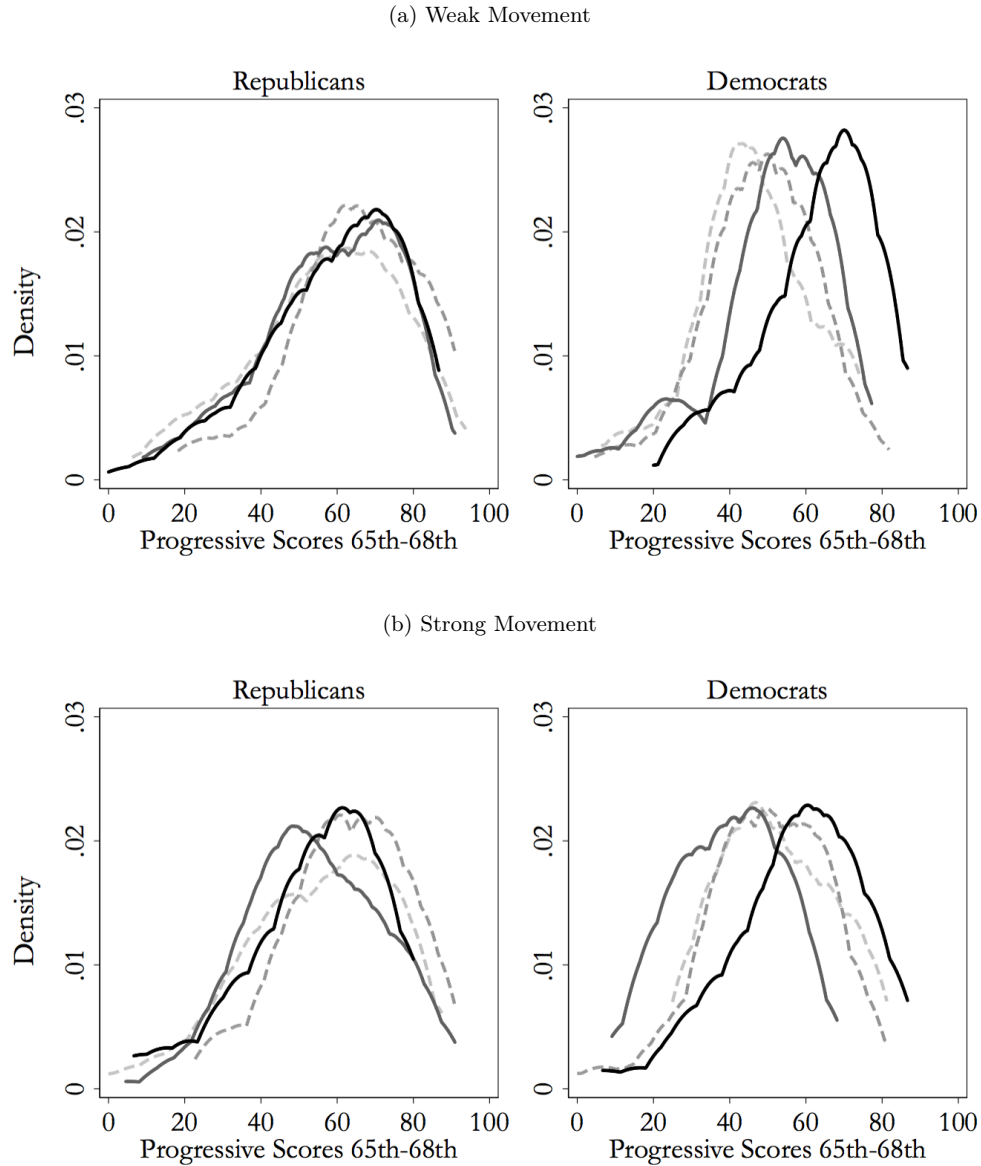
Figure 16: Kernel Densities of Progressive Scores in 65th-68th Congresses by Party



Notes: Kernel densities of progressive score in the sample states; Dashed (solid) lines depict Congresses elected before (after) women's suffrage; Lighter colors depict earlier Congresses.

The first graph shows that representation in Congress in the sample states became more progressive following the Nineteenth Amendment, but that this shift did not occur until after the second post-suffrage election (solid black curve refers to the 68th Congress). This shift has been driven by Democrats, who were on average more conservative before suffrage.

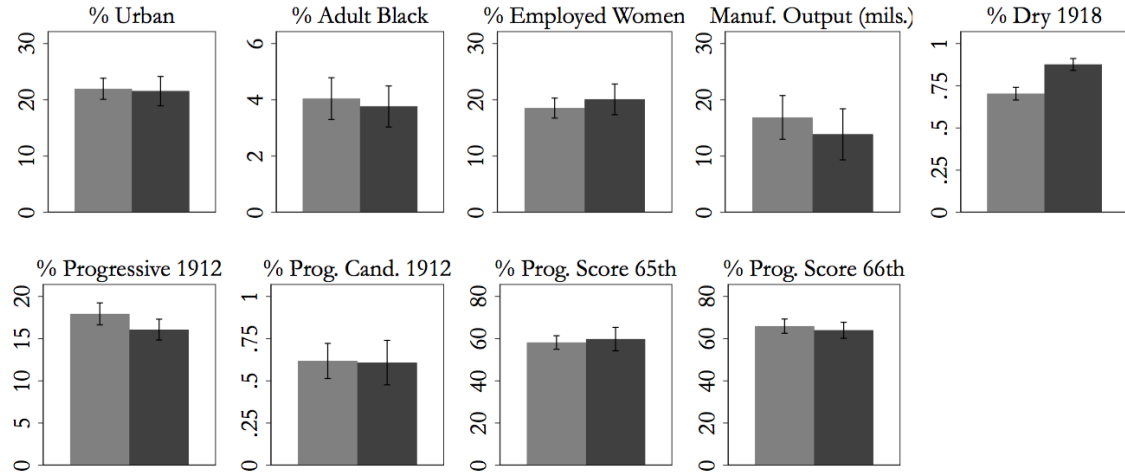
Figure 17: Kernel Densities of Progressive Scores in 65th-68th Congresses by Party and Movement Strength



Notes: Kernel densities of progressive score in the sample states; Dashed (solid) lines depict Congresses elected before (after) women's suffrage; Lighter colors depict earlier Congresses.

The graphs show that progressive shifts in Congress did not occur until after the second post-suffrage election (solid black curves), and both Republicans and Democrats initially turned conservative in states with a strong movement. Altogether, these observations are consistent with an explanation where suffrage movement to some extent prevented the post-war calls for a conservative return to 'normalcy.' Even though suffragists' strength is not systematically related to conservative representation (Figure A18), strong state organizations targeted conservatives (Figure A19). These conservatives were one of the driving forces of the 'normalcy' calls, but seem to have been forced to eventually abandon the post-war conservative crusade.

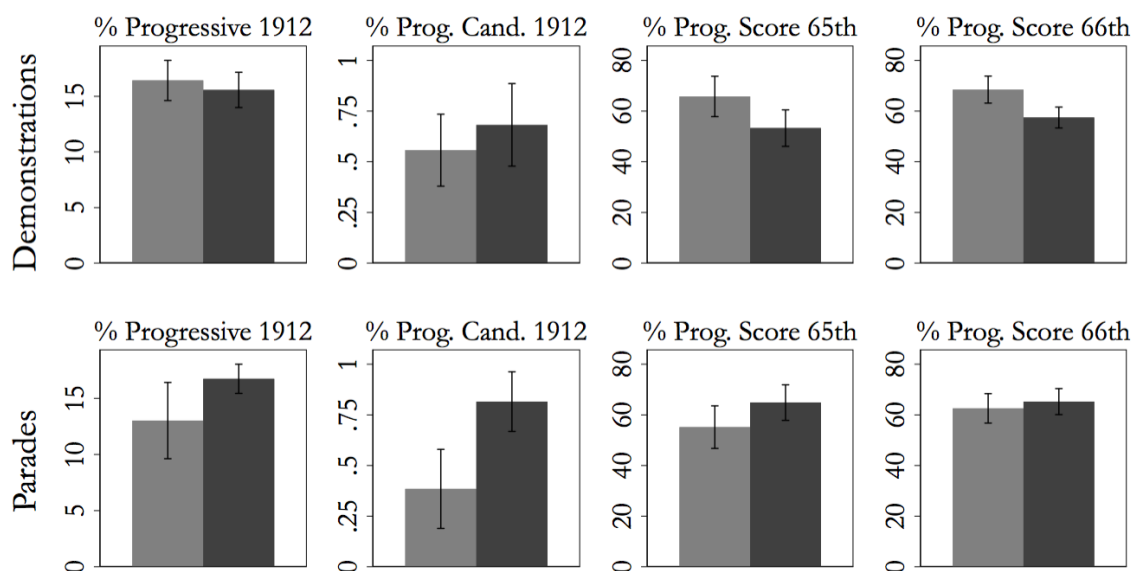
Figure 18: Comparing States with a Strong and Weak Suffrage Movement



Notes: All variables defined in Appendix A; Means with 95% CIs; Darker (lighter) gray denotes strong (weak) suffrage movement; All means computed from respective county/district/state-level values, depending on the level of each variable; Means for progressive score in 65th Congress calculated using 1918 sample.

The graphs show that states with strong and weak suffrage movement are not systematically different in terms of incumbents' progressive score in the 65th and 66th Congresses, and are fairly balanced in the average vote share of (and the number of) Progressive party candidates in 1912 election, women's labor force, proportion of urban population, proportion of adult blacks and manufacturing output. However, strong suffrage states have a higher number of counties where some dry legislation is in place. The relatively weak differences between states with strong and weak suffrage movement provide some support that movement strength is not determined by differences in political preferences among men and politicians; neither is suffragists' strength systematically related to most socio-economic indicators that should predict women's progressive preferences. Instead, it seems more likely that NAWSA's strength was built on the organizational capacity of the somewhat ideologically aligned temperance movement.

Figure 19: Comparing States with and without Collective Action Events



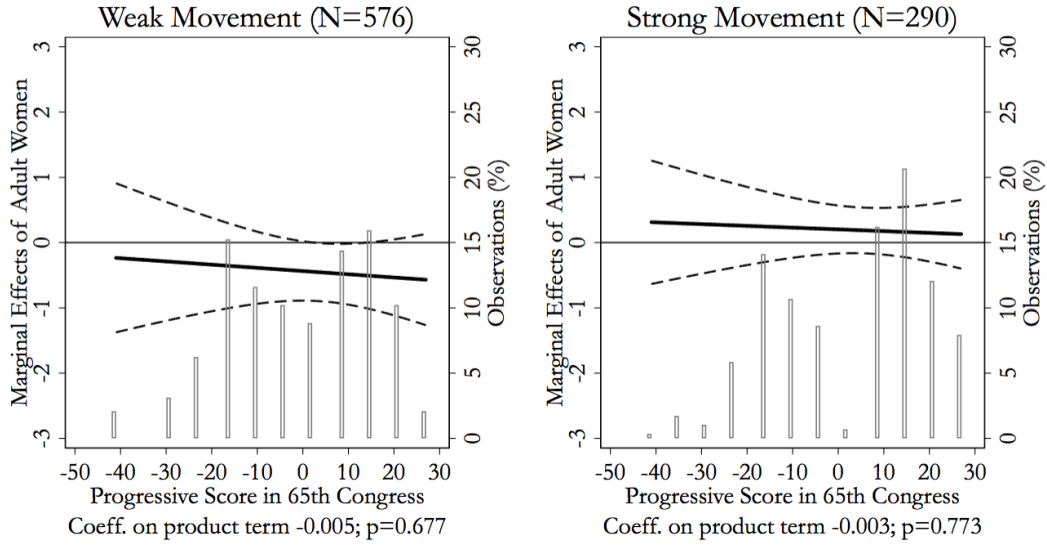
Notes: Means with 95% CIs; Darker (lighter) gray denotes at least some (no) parade/demonstration in a state; Results for demonstrations (parades) in the top (bottom) line; includes only states with a strong suffrage movement; All variables defined in Appendix A; All means computed from respective county/district-level values, depending on the level of each variable; Means for progressive score in 65th Congress calculated using 1918 sample; List of all parades and demonstrations in Tables A7 & A8.

The graph shows that, in states with strong suffrage movement, suffrage demonstrations were more often organized in states with conservative representatives. This suggests that suffragist targeted conservatives. Suffrage parades, on the other hand, were more often organized in places with progressive representation before suffrage and where the Progressive party enjoyed wide support in the 1912 election. This likely reflects the fact that parades mostly celebrated legislative successes in progressive states.

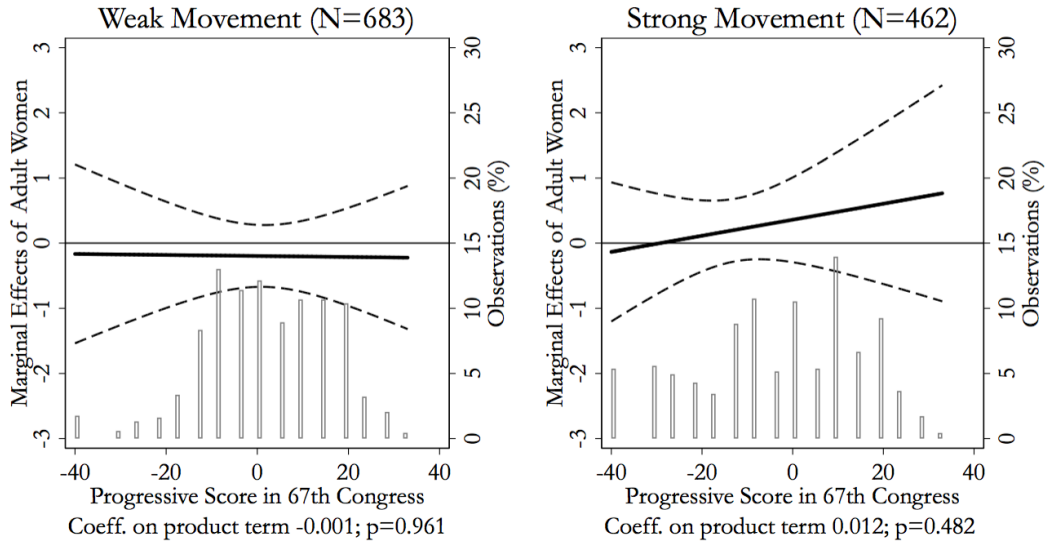
Online Appendix G: Robustness

Figure 20: Placebo Regressions for Vote Choice by Movement Strength

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



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



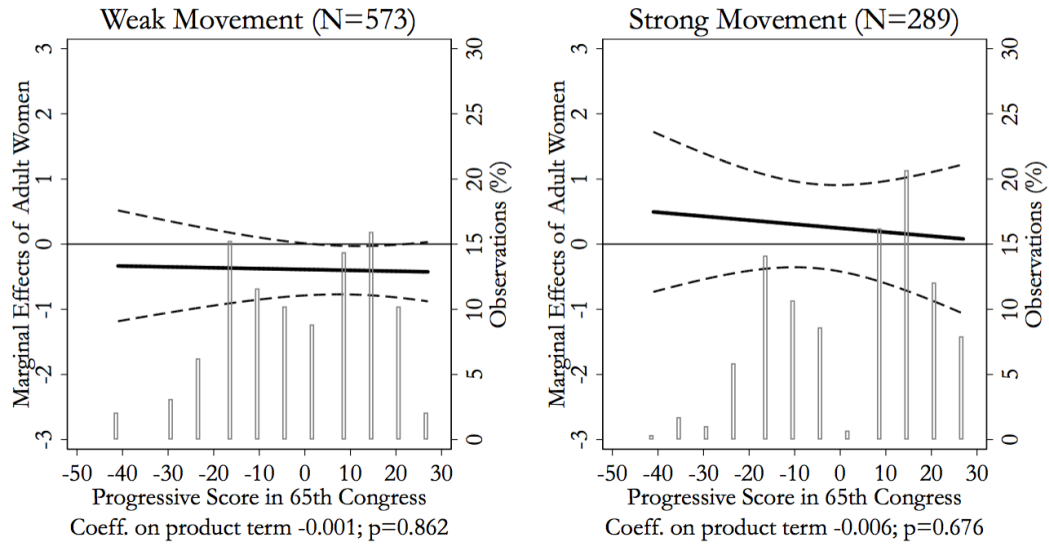
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Notes: Marginal effects of Adult Women; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); Cut-off for movement strength refers to the 60th percentile of NAWSA county-level distribution derived in the 1920-1918 election sample.

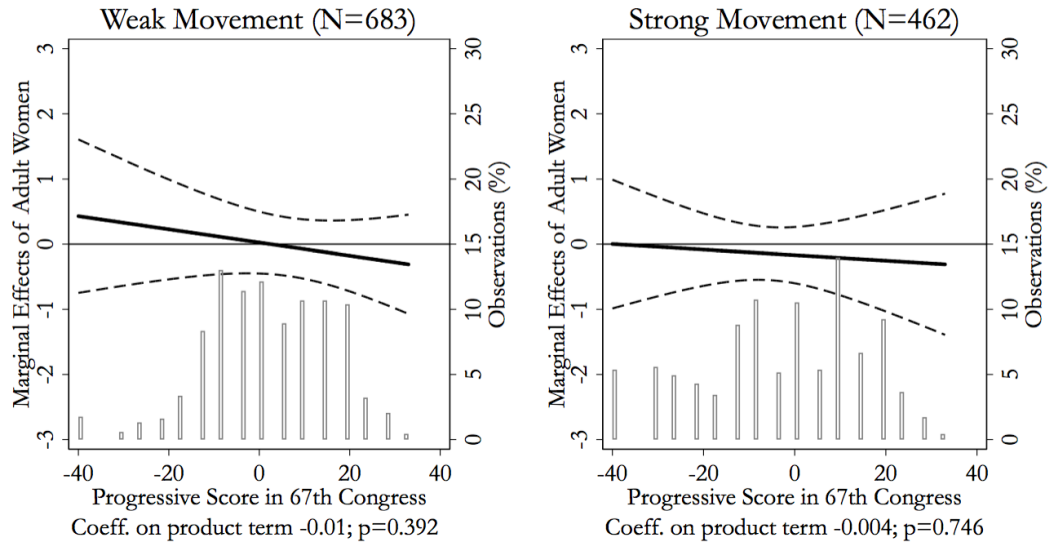
These placebo tests show that the support for incumbents was not trending differently with the proportion of women and the progressive score in states with weak and strong movement (i) in the election before the adoption of suffrage and (ii) in the election after suffrage. In all of these placebo regressions, the interaction term between the proportion of women and progressive score is not statistically significant, close to zero or smaller and the marginal effects of the proportion of women are far from being significant at any level of the progressive score. The positive and relatively larger interaction term in states with a strong suffrage movement in sub-figure b (post-placebos 1922-1920) may suggest that the impact of suffragists on women's votes continued to strengthen as new pro-women legislation passed in the 67th Congress. Overall, however, these results increase our confidence that the parallel trends assumption holds and therefore that the difference-in-differences estimates the impact of women's suffrage.

Figure 21: Placebo Regressions for Turnout by Movement Strength

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



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

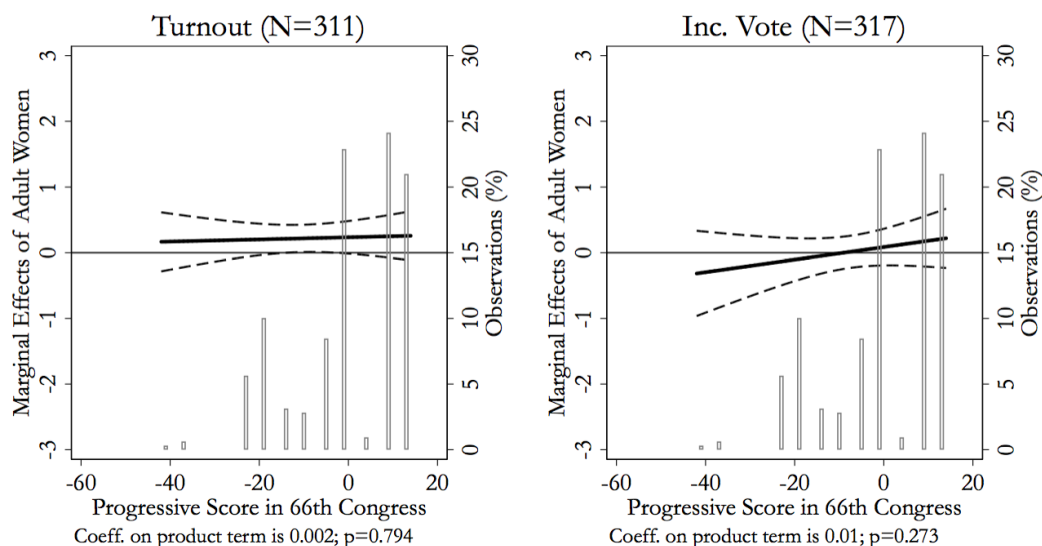


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Notes: Marginal effects of Adult women; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Adult women centered around mean; All models include a constant and control for incumbent's party and a battery of standard controls (see section on 'Variables'); Cut-off for movement strength refers to the 60th percentile of NAWSA county-level distribution derived in the 1920-1918 election sample.

These placebo tests show that turnout was not trending differently with the proportion of women and the progressive score in states with weak and strong movement (i) in the election before the adoption of suffrage and (ii) in the election after suffrage. In all of these placebo regressions, the interaction term between the proportion of women and progressive score is not statistically significant at conventional levels, close to zero or smaller and the marginal effects of the proportion of women are far from being significant at any level of the progressive score. These results provide further confidence that the parallel trends assumption holds and therefore that the difference-in-differences estimates the impact of women's suffrage.

Figure 22: Placebo for Vote Choice & Turnout in States where Women Voted before 1920



Notes: Marginal effects of Adult Women; OLS estimates; 95% confidence intervals depicted; Standard errors clustered on district; Progressive score and Adult Women centered around mean; DV in the first graph is a (pp) change in turnout between 1920 and 1918; DV in second graph is a (pp) change in incumbent vote 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', only 52 counties fall into the 'strong' movement category, while movement strength is not available for 4 states.

These placebo tests show that neither incumbent support nor turnout was trending differently with the proportion of women and the progressive score in the 1920 election in states that enfranchised women before the 1920 election. In these placebo regressions, the interaction term between the proportion of women and progressive score is not statistically significant, close to zero or smaller and the marginal effects of the proportion of women are far from being significant at any level of the progressive score. These results provide further confidence that the parallel trends assumption holds in the 1920 election and therefore that the difference-in-differences estimates the impact of women's suffrage.

Table 13: 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)
<i>Model</i>	(1)	(2)
Adult Women 1920	-0.565 (0.363)	-0.134 (0.214)
Controls	Yes	Yes
N	98	98

Notes: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women's suffrage in Illinois adopted in 1913; OLS estimates; Robust standard errors; All models include a constant; ** < 1%; * < 5%; † < 10%.

Neither of the two coefficients on Adult women in Models (1) and (2) respectively are statistically significant at conventional levels. This suggests that men did not strategically change turnout and did not change preferences for the Democratic (progressive) incumbent Woodrow Wilson in response to the proportion of women in the first election after women's suffrage in 1913. While geographically limited in scope, this analysis increases our confidence in the ability of the difference-in-difference to estimate women's voting behavior, rather than joint efforts of women and men.

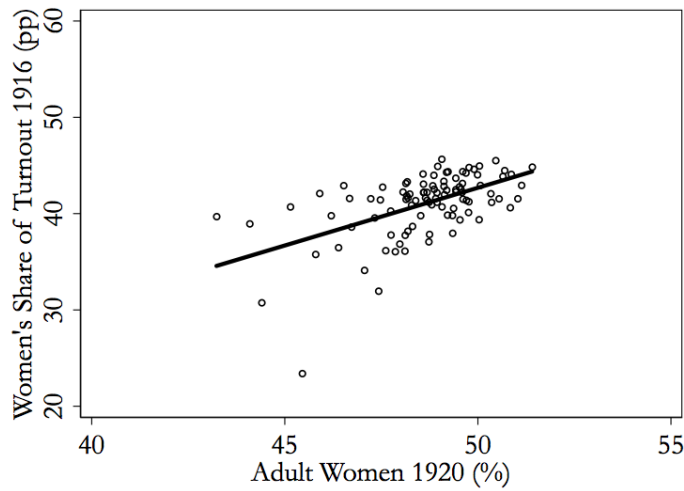
Table 14: Testing Assumptions Using Sex-Separated Data in Illinois (Women’s Voting Behaviour)

DV:	Turnout Gap 1916 (pp)	Incumbent Vote Gap 1916 (pp)
<i>Model</i>	<i>(3)</i>	<i>(4)</i>
Adult Women 1920	-0.474 (0.687)	-0.085 (0.1)
Controls	Yes	Yes
N	98	98

Notes: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women’s suffrage in Illinois adopted in 1913; OLS estimates; Robust standard errors; All models include a constant; ** < 1%; * < 5%; † < 10%.

Neither of the two coefficients on Adult women in Models (1) and (2) respectively are statistically significant at conventional levels. This suggests that women did not have distinct preferences and did not vote at different levels compared to men depending on the proportion of women. This analysis supports the validity of the underlying assumption of the difference-in-differences and therefore increases our confidence in its ability to estimate the electoral impact of women.

Figure 23: Testing Assumptions Using Sex-Separated Data in Illinois (Women's Share of the Overall Turnout).



Note: Data from presidential elections in 1916 & 1912 in Illinois by county; Presidential women's suffrage in Illinois adopted in 1913; Scatter plot of women's share of the overall turnout and the proportion of adult women with a linear fit (solid line).

The scatter plot shows that women's share of the overall turnout is positively correlated with the proportion of women. This provides additional support for the use of adult women as the 'intensity of exposure' to the suffrage treatment. In places with more eligible women, there were more women voters relative to men. This test is especially convincing in Illinois, where about 19% of the population was foreign-born and about 31% had foreign-born parents (Andersen 1996, p.63).

Appendix References

- Andersen, Kristi. 1996. *After Suffrage. Women in Partisan and Electoral Politics before the New Deal*. Chicago: The University of Chicago Press.
- Angrist, Josh. 2002. "How Do Sex Ratios Affect Marriage and Labor Markets? Evidence from America's Second Generation." *The Quarterly Journal of Economics* 117(3): 997-1038.
- Carlson, R.J., 1976. *The Effects of Voter Registration Systems on Presidential Election Turnout in Non-Southern States 1912-1924*. PhD Dissertation. University of Illinois.
- 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.
- Cott, Nancy F. 1984. "Feminist Politics in the 1920s: The National Woman's Party." *The Journal of American History* 71(1): 43-68.
- Eldridge, Hope Tisdale, and Jacob S. Siegel. 1946. "The changing sex ratio in the United States." *American Journal of Sociology* 52(3): 224-234.
- Goldin, Claudia. 2014. "A pollution theory of discrimination: male and female differences in occupations and earnings." In *Human capital in history: The American record*, pp. 313-348. University of Chicago Press.
- Graham, Sara Hunter. 1996. *Woman suffrage and the new democracy*. Berghahn Books.
- Harris, J. P., 1929. *Registration of Voters in the United States* (No. 23). Brookings Institution.
- Higginbotham, Evelyn, B., 1993. *Righteous discontent: The women's movement in the Black Baptist church, 1880-1920*.
- Jacoby, Robin M. 1975. "The Women's Trade Union League and American Feminism. *Feminist Studies*." 3(1/2): 126-140.
- Keyssar, A., 2000. *The Right to Vote*. Basic Books.

- Kraditor, Aileen S. 1981. *The Ideas of the Woman Suffrage Movement, 1890-1920*. New York: W.W. Norton & Company.
- McCammon, Holly, and Karen Campbell. 2002. "Allies on the road to victory: Coalition formation between the suffragists and the Woman's Christian Temperance Union." *Mobilization: An International Quarterly* 7(3): 231-251.
- McCammon, Holly J. and Lee Ann Banaszak (Eds.) 2018. *100 Years of the Nineteenth Amendment*. Oxford University Press.
- Miller, Grant. 2008. "Women's Suffrage, Political Responsiveness, and Child Survival in American History." *The Quarterly Journal of Economics* 123(3): 1287-1327.
- Montoya, Celeste. 2018. *From Seneca to Shelby: Intersectionality and Women's Voting Rights*. In McCammon, Holly J. and Lee Ann Banaszak (Eds.) 2018. *100 Years of the Nineteenth Amendment*. Oxford University Press.
- Schacht, Ryan, and Ken R. Smith. 2017. "Causes and consequences of adult sex ratio imbalance in a historical US population." *Philosophical Transactions of the Royal Society B: Biological Sciences* 372, no. 1729: 20160314.
- Szymanski, Ann-Marie E. 2003. *Pathways to Prohibition: Radicals, Moderates, and Social Movement Outcomes*. Duke University Press.
- Terborg-Penn, Rosalyn. 1998. *African American Women in the Struggle for the Vote, 1850-1920*. Indiana University Press.
- Tyrrell, Ian. 1986. *Temperance, Feminism, And The WCTU: New Interpretations And New Directions*. *Australasian Journal of American Studies*, 5(2), pp.27-36.
- Williams, Lillian S. 1994. Introduction. In *Records of the National Association of Colored Women's Clubs 1895-1992*, accessed via <http://www.lexisnexis.com>.