

# Revisiting the Gender Voting Gap in the Era of Women’s Suffrage

Mona Morgan Collins, Durham University

Dawn Langan Teele, University of Pennsylvania<sup>1</sup>

## Abstract

How does electoral reform influence the fortunes of political parties? This paper examines the effect of introducing female voters in five of the first countries to enfranchise women – Norway, Sweden, Canada, the Netherlands, and the United Kingdom. Drawing on historical tracts and theories of the political economy of the household, we argue that high female labor force participation and the robust women’s movement in the early twentieth century should have spurred a left gender voting gap. Using original sub-national datasets coded from archival sources and a difference model, we report a remarkable finding that in four of six reforms women’s enfranchisement boosted support for Liberal and Labour parties. These results contradict both the “traditional” voting gap thesis – which sees women as conservative voters prior to the 1970s, and the “double the vote” hypothesis – which suggests that female voters would merely replicate the vote shares for each party.

Word count: 12,000.

This version: August 2018.

---

<sup>1</sup>Authors’ contact: [mona.morgan-collins@durham.ac.uk](mailto:mona.morgan-collins@durham.ac.uk), [teele.academic@gmail.com](mailto:teele.academic@gmail.com). We would like to thank various people for their sage advice and feedback including Danielle Thomsen, Kanisha Bond, Rosie Campbell, Joni Lovenduski, Torun Dewan, Angelika von Wahl, Andy Eggers, Johanna Rickne, Olle Folke, Grace Natusch, Åsa Karlsson, Participants at seminars and workshops at the LSE, Birkbeck University of London, University of Exeter, University of Oxford, University of Maryland, IPerG, HPE, SAIS and participants at the Council of European Studies conference, Midwest Political Science Association conference, American Political Science Association conference and Visions in Methodology.

# Introduction

How do changes in electoral rules influence voters' behavior and support for political parties? Political scientists have studied these questions in a variety of contexts, seeking to understand how the enfranchisement of previously excluded men changed parties' electoral fortunes (Berlinski and Dewan 2011), whether the inclusion of black South Africans influenced infrastructural development (Kroth et al. 2016), how compulsory voting affects which interests are represented in politics (Fowler 2013), and the impact of the secret ballot on voter turnout (Heckelman 1994). Curiously, although the single largest change in the size of the electorate often occurred when women were given the vote (Bateman 2018), we know little about how expanding the electoral franchise to include women influenced the distribution of power in elected legislatures.

Recent cross-national research and scholarship on the United States paint conflicting pictures of the impact of women's enfranchisement on politics writ large. In the United States, Morgan-Collins (2018) argues that early female voters punished leaders with conservative voting records in congressional elections, but in presidential elections Corder and Wolbrecht (2016) show that the overall partisan effects of suffrage were minimal because women tended to vote like men, albeit at a lower rate.<sup>2</sup> Some, such as Carpenter et al. (2018) argue that there were generational gaps in the behavior of early women voters – with older women less likely to turn out than younger women. Across the Atlantic, several studies suggest that women's suffrage may have had different effects in Europe than have been witnessed in the US. Cross-nationally, Gerring et al. (2015) find that women's suffrage increased political competition, while Skorge (2018) shows that in contrast to the US, the gender turnout gap was much smaller, meaning women participated in higher numbers, in most European countries.

---

<sup>2</sup>Qualitative research on the United States also points to mixed conclusions: Harvey (1996) argues that women were unable to solidify electoral leverage and secure large policy gains, while Andersen (1996) argues that there were big shifts in political culture surrounding suffrage.

This paper takes a comparative look at the impact of women’s suffrage on electoral politics in five countries by examining parliamentary returns at the local level during the first wave of women’s enfranchisement, from 1893-1930. Previous research on women’s early political behavior makes two distinct arguments about how women voted: that women tended to vote in the same way as their husbands, or, alternatively, that early female voters cast a more conservative ballot (see Corder and Wolbrecht 2016 chapter 2 for an overview and Duverger 1955). Inglehart and Norris (2000) theorized a “traditional” gender voting gap based on contextual factors that influenced women’s socialization into politics. Their developmentalist argument suggests that women’s domestic roles and ties to religious bodies made them traditional voters prior to the second wave of feminism, but that changes in political socialization driven by changes in women’s economic activity produced the “modern” gender gap, in which women support left parties in greater numbers, observed today. Yet what is not clear from the literature is whether the traditional gender voting gap observed after the 1950s was a continuation of women’s political behavior from earlier in the twentieth century, or itself a *product* of the greater post-war political economy.

Contrary to previous accounts, we hypothesize that women’s early voting patterns should have favored more left leaning parties. As many economic historians have pointed out, women were more active in manufacturing and industry, and they were found in greater numbers in the workforce, in the early twentieth century than after the Second World War (Goldin and Sokoloff 1982; Goldin 1994; Tilly and Scott 1987).<sup>3</sup> Along with the economic factors that may have catalyzed non-conservative tendencies among women, the early twentieth century was a time of heightened mobilization for women’s rights: in the first wave of women’s enfranchisement mass movements emerged in more than 29 countries (Chafetz et al. 1990: table 1). Although the labor movement and leftist parties were initially hostile to women’s economic participation, and sometimes worked against women’s rights reform (Offen 2000:

---

<sup>3</sup>Goldin (1994) describes U-shaped relationship where the 1950s were a low point in women’s labor force participation.

165ff), in many contexts it was alliances with leftist parties, and the large-scale mobilization of working class women into suffrage organizations, which proved crucial for moving women’s suffrage bills through national legislatures (Teele 2018).<sup>4</sup> If left leaning parties promoted the policies desired by early feminists, and worked to get out the women’s vote, then we should expect the early gender voting gap to swing left.

We explore the early gender voting gap by studying six reforms in five of the first countries to enfranchise women: Norway, Sweden, Canada, the Netherlands, and the United Kingdom. Because survey data and exit polling are not generally available until after World War II, and because most countries did not tally votes separately by gender, we cannot compute but instead have to estimate the early gender voting gap.<sup>5</sup> For each country, we digitized sub-national datasets with granular information on electoral returns, and combined these with local demographic information culled from census records. Using these original datasets, we estimate the impact of suffrage reform on party vote shares using a difference model. (The online appendix A contains complete coding details for each country.) Our identification strategy makes use of the fact that the effects of a national-level reform were not necessarily homogenous throughout a given country. Because women’s enfranchisement would have increased the size of the electorate to a greater extent in places with a lower male-to-female ratio than in places where women were less numerous, the change in the size of the eligible electorate after women’s suffrage depended on the mix of genders across locales. Below, we argue that the uneven geographical distribution of women can serve as a measure of the “intensity” of franchise reform in electoral constituencies. Under certain assumptions, and after controlling for local level characteristics, we can infer the direction of the gender voting gap after the vote was won.

In addition to analyzing variation across cases, we make use of an interesting feature of

---

<sup>4</sup>See also Evans 1980 on Germany; Blom (1980, 2012) on Norway and Sweden; and Hagemann 2003 on Norway.

<sup>5</sup>Chile and Argentina, in the second wave of enfranchisement, did tally votes separately.

the history of women’s enfranchisement whereby several countries followed a tiered strategy of reform. In tiered reform countries, some groups of women were allowed to vote earlier than others. For example, the initial expansion of voting rights in both the UK and Norway was to wealthier women, while a second reform ushered in universal women’s suffrage. This feature of suffrage expansion allows us to further explore the mechanisms that might undergird the gender voting gap in each country, such as whether women from different classes faced different incentives to vote with men in their class (Bertocchi 2010; Edlund and Pande 2002).

From both empirical exercises we draw two conclusions. First, we find that women’s suffrage increased support for left or liberal parties in 4 out of the 6 reforms that we study. If our ecological inferences are valid (an issue discussed at length below), these findings suggest that the first female voters were not inexorably “traditional.” Sweden emerged as the sole country to exhibit a traditional voting gap, a fact that we suspect is linked to lower levels of industrialization and higher rural voter mobilization in Sweden than in the other countries (Jusko 2017). Second, the findings from the tiered suffrage extensions suggest that the impact of suffrage depends on the types of women that were included in the reform. In Norway, an initial expansion of voting rights to women who paid taxes produced a significant boost for the Labour Party, while the secondary reform to the poorest women brought gains for Labour at the expense of the Liberals. Similarly, the second women’s suffrage reform in the UK increased votes for the Liberal party and decreased the political support for the Tories. In light of these results, we advocate for revising the previous notion of the traditional gender gap: instead of having one inflection point in the gender voting gap around 1980, many countries may actually have witnessed two. The conclusion delves into the implications of rethinking the early gender voting gap for understanding the development of the welfare state.

# Understanding the Gender Voting Gap

The gender voting gap refers to differences in voting patterns for a given party between people of different genders. Consider a world in which there are three different parties, Left, Center, and Right, and two different genders, male and female. For a given party  $p \in L, C, R$ , the gender gap  $G^p$  can be written as the difference in the average vote choice for that party recorded by female voters  $f$ , minus the average vote choice for that party recorded by male voters  $m$ :  $G^p = \bar{V}_f^p - \bar{V}_m^p$ . The gender voting gap is a revealed preference: although there may be little or no difference in the true aggregate political preferences of men and women, when the men and women that do vote make different choices at the ballot box, we observe a gap in the average vote choices across the sexes.

There is a large literature that documents a transformation in the gender voting gap – where women went from being conservative voters to more liberal voters – in most of Western Europe and North America sometime between 1970 and 1980.<sup>6</sup> The received wisdom in most of this work, which we question here, is that the patterns observed prior to the 1970s held for most of women’s electoral history. In practice, there are two dominant modes of thinking of women’s votes prior to 1970s. The first argument is that women would “double the vote”, which would predict that  $G^p = 0$  for all parties. The second is that women were more conservative than men, so  $G^C > 0$ . We outline these two theories but argue for a third: that the political economy of the early twentieth century, coupled with the presence of a progressive women’s movement, would have given liberal and leftist parties an advantage in the early years of women’s voting.

***The Double the Vote Hypothesis.*** A long-standing narrative in the democratization literature holds that empowering women politically would have little influence on political and economic outcomes as adding women to the electoral rolls would merely double the

---

<sup>6</sup>e.g. Box-Steffensmeier et al. 2004; Edlund and Pande 2002; Inglehart and Norris 2001; Cassese and Barnes 2018.

votes for each party (Acemoglu and Robinson 2000: 1186; Rueschemeyer, Huber Stephens, and Stephens 1992: 48). This argument, sometimes referred to as the “family vote” thesis (McConaughy 2013), rests on the idea that men and women reside in households, and that members of households have similar political interests. In this case, integrating women into the electorate merely doubles the number of voters in each class, so that under a Meltzer-Richards (1981) theory of electoral politics, women’s enfranchisement doubles the votes for each party.

Although good polling data is generally not available until after the 1960s, Duverger (1955) provides an analysis of a handful of household surveys from the Netherlands, Norway, France and Germany in the 1940s and 1950s. He finds that husbands and wives typically voted the same way, and that vote choice affinity was particularly strong among respondents in the upper and lower classes. These findings suggest that although there is a high degree of similarity in partisan identification within households, the correlation is not unity, and that a gender gap in preferences may have existed among middle-class households.<sup>7</sup>

***The “Traditional” Voting Gap Thesis.*** The second theoretical prediction about the early gender gap asserts that because of their roles as mothers, homemakers, and churchgoers, women would have voted more conservatively than men in the era of women’s suffrage (Norris 1988, Randall 1987). Rhetoric which stressed women’s moral superiority and purity were invoked to mobilize women for particular social issues and to justify their inclusion in politics.<sup>8</sup> And conservative organizations such as the Primrose League in the UK often drew

---

<sup>7</sup>Studies of voting patterns within families have drawn different conclusions depending on the country and time period on which they focus. In a small-n study of parents of high school seniors in the 1970s United States, Niemi et al. (1977) show that husbands and wives exhibit high levels of agreement in voting behavior (upwards of 88 percent), although follow up research by Stoker and Jennings (2005) shows that spousal agreement in party identification may have been stronger prior to the 1970s than in the 2000s. Household sorting on party identification may be less common outside the United States. For example, Zuckerman and Kotler-Berkowitz (1998) use the comprehensive British Household Survey data from the early 1990s and report that only 58 percent of all household members cast ballots for the same party.

<sup>8</sup>Add non-US citations.

in large numbers of women.<sup>9</sup>

The belief that women would support conservative issues was echoed by politicians in many countries during parliamentary debates about women's suffrage. In the United Kingdom, Liberal leaders such as Lloyd George claimed that women's enfranchisement "spells a disaster for Liberalism."<sup>10</sup> In France, Radical politicians cautioned that women in the countryside were in the pockets of the priests, claiming that enfranchising women would amount to "sealing the tombstone of the Republic."<sup>11</sup> In Chile, it was a conservative Catholic leader, Abdón Cifuentes, who believed his party would benefit, that first presented a women's suffrage law in the national legislature (Valenzuela 1995:141). And leaders of the German Social Democratic Party (SPD) believed that the first women voters would support conservative issues (Evans 1980: 550).

In the earliest study of gendered voting patterns outside of the United States, Duverger (1955: 46ff) shows that in a handful of countries, although husbands and wives often voted the same way, when they differed, women tended to be more conservative than men overall. If Duverger's findings from the 1950s apply also to the pre-war period, we should expect that early female voters tilted right.

***The Political Economy Thesis.*** Departing from the two arguments above, we hypothesize that early women voters may have voted left. Three possible mechanisms could drive this relationship. First, women may have simply been more liberal than men in the early twentieth century. Second, women's heightened labor force participation may have galvanized preferences for a larger social safety net. Third, the experience of feminist mobilization, and the alliance of the women's movement with left parties, may have created a mobilizational advantage for the left in early elections. For a left-gender gap to emerge, each

---

<sup>9</sup>Alcoholic temperance was not an issue in most suffrage movements, and in countries such as Norway and New Zealand temperance movements were fiercely opposed by the political right (Goldstein 1973, Randall 1987, Tingsten 1937).

<sup>10</sup>Quoted in Blewett (p.55).

<sup>11</sup>Radical Senator Alexander Bérard, quoted in Hause and Kenney, 1984: 240.

of these mechanisms requires a large subset of women to be more left-leaning than many of the men they know, and it requires that they vote.

To see how this might happen, consider the theoretical literature on political preferences within households. Although Becker's *Treatise on the Family* posited a model of the household in which all members simultaneously and cooperatively work towards efficiency, and where tasks were divided according to comparative advantage, later theorists of household dynamics countered that the division of labor is a function of bargaining power and gender norms (Folbre 1982, Hartmann 1976, Bardan and Udry 1999: introduction). In what are known as "non-unitary" household models, wage discrimination in the labor market gives more bargaining power husbands, which drives a wedge between men's and women's preferences (Bertocchi 2010, Edlund and Pande 2002, Lundberg and Pollack 1994, Iversen and Rosenbluth 2006, Goldstein and Udry 2008). This wedge emerges for two potential reasons: first, because women fear widowhood or divorce, and so will want a larger social safety net to provide for them in the absence of their spouse. And second, because women will want to shield themselves from precarious existence by resetting the balance of power in the home through legislation that allows them equal opportunities to work and equal pay in the labor force.

Even a cursory glance at the history of the early twentieth century reveals the presence of several factors that would, in these bargaining models, produce more liberal preferences for women in the era of suffrage. To begin with, prior to the twentieth century women were often legally barred from owning property, forming contracts, or taking jobs without the consent of their husbands (Khan 1996). In most countries, married women gave up control over their property and could not determine the use of their wages once earned (Tilly and Scott 1987), and women faced a tremendous disadvantage in market wages should they choose to work (Goldin 1995). In addition, most countries applied uneven citizenship laws under which women (but not men) who married foreigners lost their citizenship rights (Rupp and Taylor 1999). The unequal position of women within society at large produced feminist

mobilization in more than 29 countries on a range of policy issues (Chafetz et al. 1990). In addition, women's relatively high labor force participation created circumstances in which women often called for policies, backed by public expenditures, to improve the terms of their work and the ease with which they could labor. Concerns related to the safety of women's workplaces, to sanitation and children's health and education (Miller 2008), and to women's economic vulnerability in the case of divorce or a husband's death, undergirded the women's movement and galvanized political consciousness among many women (Morgan-Collins 2018). Women were also growing contributors to the labor movement, and many were involved in anti-slavery and anti-war organizations (Carpenter and Moore 2014; Rupp 1997).

All of these activities suggest that women were active in some of the most progressive issues of the day. And indeed, if we consider the political debates in the era of suffrage, we see that politicians often voiced concern about women's suspected liberality. For example, in New Zealand, Conservative politicians took an anti-suffrage stance because they feared that the women would make the country more "communistic" Grimshaw (1972: 63). In Argentina, Perón oversaw the reform of 1947 and is thought to have benefited greatly from the female vote (Hammond 2011). And in the U.S, some attributed President Wilson's turn from a detractor to a vehement supporter of women's suffrage to his need to mobilize his progressive base, which included women in the suffrage states (Behn 2012: 322; Link 1954: 60). In fact, an important ideological element of anti-suffrage politics was related to concerns about communism. Elite detractors voiced fears about a "red peril in a yellow cloak."<sup>12</sup>

Taken together, women's economic participation and the presence of a women's movement may have increased the likelihood that women with more progressive political views would have been more politically motivated to vote. Note that while this argument goes against Inglehart and Norris's (2000) "developmentalist" theory, the mechanisms underlying our

---

<sup>12</sup>Quoted in Marshall 1997: 103. The yellow cloak refers to the suffragists' colors.

hypotheses are similar. The main point of departure lies in an interpretation of the gendered political economy of the early twentieth century, which we believe has more in common with the political climate in the 1980s that has been previously recognized. Although our data cannot adjudicate between the potential mechanisms that drive the gender gap, we can explore whether the extension of the vote to women produced a conservative swing.

## Case Selection

The scope of this study is the first wave of women's enfranchisement roughly from 1893 until just before the Second World War. We focus on this wave because the traditional voting gap is thought to have held during that time. In selecting cases we strove to have considerable overlap with the countries studied by Duverger (1955) and Inglehart and Norris (2001), and to find countries that met the following four criteria: 1) that the women's suffrage reform be at the national level; 2) that a country resembled an electoral democracy before and after the reform so that we can measure changes in support for parties over time; 3) that women's enfranchisement was not concurrent with any other major reforms so that we avoid the problem of multiple treatments; and 4) that fine-grained data on electoral returns was available, preferably with several elections before and after the reform so we can conduct placebo tests.

Applying these criterion leaves five cases: Canada, Norway, Sweden, the United Kingdom and the Netherlands. Inglehart and Norris based their landmark study on data from Italy, Germany, Britain, Belgium, France, the Netherlands, and the United States. Among these countries, only the United States, the United Kingdom and Belgium, could pass the requirements necessary for our strategy.<sup>13</sup> Germany was excluded because of a simultaneous

---

<sup>13</sup>Among the other first wave cases, New Zealand is excluded because the relevant parties were not solidified until after women got the vote. Australia is excluded because the electoral data is not available at the constituency level. The 1918 reform in the UK is excluded because a large proportion of men were also included in that measure (by some estimates up to 40 percent of men

enfranchisement of many men in 1917. And France and Italy are excluded because neither were stable party democracies before the reform, and are furthermore in the second wave of enfranchisement. Our case selection strategy also produces two cases in common with Duverger – Norway and the Netherlands. Selecting cases in common allows us to make meaningful comparisons with previous research.

Table 1 outlines the reforms that are studied hereafter. It lists the country and year of reform, the party in power at the time suffrage was adopted, the party that would be most closely associated with the “traditional” gender voting gap, and the party that had the closest ties to the suffrage movement. The assignment of each of these categories was made with reference to historical literature on each case, described briefly below.

### **Norway (1906, 1913)**

The tide of nationalist sentiment that propelled Norway’s dissolution with Sweden in 1905 bolstered the women’s suffrage movement throughout the country. **Suffrage Movement:** In anticipation of a plebiscite to dissolve the union with Sweden, the National Woman Suffrage Association had prepared a petition with 300,000 signatures in support of seceding, mobilizing nearly all adult women in the country (Skorge 2018). The Norwegian suffrage movement had a broad base of both the middle and working class women (especially, for the latter, women from the labor movement). In addition to nationalism, temperance was a defining issue for many Norwegian suffragists. In general, the Liberal party was the most open to the issue of prohibition (they would later hold a plebiscite on the issue), while the Conservatives perceived prohibition as a violation of economic liberties (Derry 1973). **Political Reform:** Norwegian women’s enfranchisement followed a two-step process. First, women who paid taxes were admitted to the parliamentary franchise in 1906 and voted for the first time in 1909 election. Politically, the socialists and radicals were the driving

---

were still disenfranchised before then). Belgium, France, and Italy are second wave cases.

Table 1: Case Summary

Country (year)	Reform	Party in Power at the time of suffrage adoption	“Traditional” Party	Party with ties to suffrage movement
Norway (1906)	Tax-paying women	Liberals	Conservative	Left parties
Norway (1919)	Non-tax-paying women	Liberals (in electoral coalition with Labour Democrats)	Conservative	Left parties
Netherlands (1919)	All women.	Labour party MP proposed the bill	Catholic	Labour
Sweden (1921)	All women	Liberals (in coalition with Labour)	Conservative	Social Dems
Canada (1921)	No soldier in family	Conservative (Borden’s Unionist Government)	Conservative	Liberal Party
U.K. (1928)	Women under 30 years and those above without property	Conservative (PM: Stanley Baldwin), Liberals and Labour oversaw 1918 reform.	Conservative	Labour

Note: Extended details for this table are found in each country’s discussion section. The date is the date of the reform, not the first election.

political force behind suffrage, arguing that female voters would help to control the fast pace of industrialization. They accepted the 1909 partial reform as the beginning of the path to universal suffrage. On the other hand, the Conservative Party opposed suffrage, but agreed to partial suffrage for wealthy and middle-class women in their efforts to increase the support against the rising threat of socialism (Sulkunen & Blom, Hagemann 2009). Since Labour and the socialists did not gain legislative power until after World War I, it was the Liberal party that granted the remaining women national suffrage in 1913. Thus in Norway, both the Liberal and Labour parties had strong ties to the suffrage movement. The 1915 election was the first with universal suffrage.<sup>14</sup>

## Netherlands (1919)

In the Netherlands from 1880 onward the nature of the franchise was a hot political issue, with internal divisions within the Liberal party over the manhood question (Lijphart 1975: 107). Although it was a relatively stable nation state, religious diversity bookended by a large Catholic minority made the issue of religious freedom, and in particular the method of schooling, big political issues. **Suffrage Movement:** Early on, many Dutch women were active in the crusade against prostitution that marked a large part of middle class feminist reformism in the period. In 1882 the attempt at women's suffrage arose when a female doctor attempted to register to vote (but was thwarted) under the existing property laws. Thereafter, the first suffrage organization, Vereeniging voor Vrouwenkiesrecht (Women's Suffrage Association) was founded in 1894 (de Vries 1998: 265). After 1913, the Free Women's Movement delivered a suffrage petition with 165,000 signatures. By the time suffrage was put to a vote in 1918, suffragists were protesting in the streets. **Political Reform:** Although

---

<sup>14</sup>This 1915 reform also enfranchised men on poor relief. However, given the fact that the proportion of men on poor relief was low and can be proxied by the proportion of votes that were suspended in the previous elections, we analyze the effects of both reforms. Our sample consists of about 600 municipalities which are embedded in electoral counties.

there were property qualifications on early suffrage laws, the word “male” was only added as a qualifier to voting laws in the 1880s. In the early twentieth century the debate of universal manhood suffrage divided the Socialists and the Liberals. The Socialists put emphasis on suffrage for the lower classes, and thought that once the men had suffrage, the women would follow. After first gaining and then losing power, the left-wing parties had manhood suffrage on their agenda by 1913 (Hölsgens 2016: 68). When the conservative cabinet fell, constitutional reform was a key issue. Women were granted the right to “passive” suffrage, standing for office, in 1917. A Labor party (Vrijzinnig Democratische Bond) parliamentarian put forward a suffrage bill in 1918 and the right to vote for all women and men was granted in 1919 (Hölsgens 2016: 69). At the same time, as a way to circumvent the educational debate, subsidized Catholic and Protestant schools were erected to appease the religious parties.

## Sweden (1921)

Swedish women are said to be among the first in Europe to have the municipal franchise (with taxpaying widows and spinsters given local rights after 1862), but among last to have parliamentary voting rights. **Suffrage Movement:** After the first suffrage organization was formed in Stockholm in 1902, mobilization proceeded rapidly, particularly among the middle classes (Blom 2012). By 1904 one national organization boasted 240 branches and more than 15,000, and by 1905 there were 63 separate suffrage societies. Suffrage bills presented to the parliament in 1902, 1904 and 1905 failed. But, after women procured 142,128 signatures on a suffrage petition in 1907, the Labour party took suffrage on its platform. The following year, in the wake hundreds of large public meetings, the Liberals and Social Democrats also took suffrage on their platforms (Hanaam et al.: 290ff). **Political Reform:** In 1912, the Liberal Karl Staff presented the parliament with the first suffrage bill to gain clearance. This was passed 140 to 66 in the lower house (the Second Chamber), but was defeated in the conservative-dominated upper house 86-58 (the First Chamber). This split matched the

partisan split in the first chamber, with 86 Conservatives against and 64 Liberals and Social Democrats for. Another massive petition, this time with 350,000 signatures, was delivered to the parliament in 1914. Although a suffrage measure with government backing passed the lower chamber before WWI, it was put aside during the war. In the election of 1917 the Liberals and Social Democrats formed a coalition in the lower chamber. The suffrage bill that would become law initially passed in May 1919, but due to a requirement that two consecutive legislatures approve electoral reform, the bill also needed to be passed by the parliament elected in 1920. Hence women's suffrage in Sweden only became a reality in 1921.

## Canada (1920)

Canada's suffrage reform is one of the most complex to understand, with multiple racial and ethnic restrictions and suffrage for all women in federal elections but not necessarily in provincial contests.<sup>15</sup> **Suffrage Movement.** Like in the United States, the Canadian suffrage movement drew much support from the temperance and progressive movements. The typical narrative is that women were expected to overwhelmingly support prohibition and, once enfranchised, to 'clean up' politics with social reforms (Bacchi 1983). In general, the Liberals were not supportive of temperance while the Conservatives were more amenable to it (Blocker et al 2003). Nevertheless, although the Conservative Party was more amenable to prohibition and even passed the Dominion Act which enfranchised all women in federal elections, out of the two major parties the Liberal Party was far more receptive to women's demands at the provincial level, enfranchising women in seven out of nine provinces (Cleverdon 1950).<sup>16</sup> The Liberals even adopted women's suffrage on the federal plank ahead of the Conservatives. **Political Reform.** Under a Conservative government, the first reform that

---

<sup>15</sup>Canada's Inuit and Indian peoples were excluded from the franchise until after WWII, and there were no rights for people of Japanese origins until 1948 (Therborn 1977). Women in Quebec could vote at the federal level but not within their province.

<sup>16</sup>The Labour party was not a prominent national party, as it received only 3 percent of national votes in 1921.

enfranchised Canadian women at the federal level emerged as part of the Wartime Election Act of 1917, which attempted to manipulate the size of the electorate in order to increase support for military conscription (Brodie 1991).<sup>17</sup> While such manipulation distorted the electorate for political purposes, they were applied only in the 1917 election and allowed about half a million of women – about 20 percent of adult women – to vote in federal elections for the first time. Most Canadian women, however, were enfranchised by the 1920 Dominion Election Act, which allowed all non-indigenous women to exercise federal-level voting rights in time for the 1921 election. We study this second, more significant reform.

## United Kingdom (1928)

The United Kingdom of Great Britain and Ireland became the United Kingdom of Great Britain and Northern Ireland in the course of suffrage history. **Suffrage Movement:** In every region the UK was home to a robust and widespread suffrage movement. Early suffragists often had ties to the Liberal Party, but in the movement's 80 years of existence, women from all the country's classes were mobilized for the vote (Teele 2014). The role of the radical "suffragettes" in the Women's Social and Political Union is one of the more interesting features of the movement, but while the WSPU had eighty-eight branches in 1913, by 1914 the National Union of Women's Suffrage Societies – a less radical, non-partisan organization – grew to 380 affiliated societies and over 53,000 members. **Political Reform:** Suffrage was extended to women under two separate pieces of legislation. After a long fight and a brief interregnum during the First World War, in 1918 a coalition government, with Lloyd George at the helm but with considerable help of the Labour Party, admitted women over 30 years of age who met minimum property qualifications to the electoral registers. In 1928, Prime Minister Stanley Baldwin, who led the Tory party from 1923 to 1929 (and then again

---

<sup>17</sup>This was achieved by disenfranchising naturalized citizens before 1902 who were born in the enemy country, and by enfranchising women who had served in the armed forces or who had relatives that were soldiers the right to vote.

from 1935 to 1937) allowed the rest of the women to vote, ushering in universal franchise for the first time. The 1928 reform enfranchised about 5 million women, 2 million of which were primarily working-class and 3 million who were under industrial workers under 30 years (Joannou and Purvis 1998). Because the 1918 reform included redistricting and a large male extension, our analysis of the UK proceeds only for the 1928 reform.

## Identification Strategy

To understand the impact of women’s suffrage and to attempt to recover the early gender voting gap, our identification strategy compares changes in party vote shares before and after women attained voting rights in light of the overall intensity of the reform at the local level. Although national level voting rights were typically conferred by national legislatures and usually applied to all of a country’s electoral districts at the same time, some locales would be more affected by the reforms than others because the proportion of women varies geographically. Thus our approach makes use of the fact that reform might have had heterogeneous effects *within* countries depending on small differences in the relative proportion of men to women across electoral constituencies. The idea behind the estimation strategy is simple: if, on average, women held electoral preferences that were distinct from men’s, and various assumptions described below hold, we can infer the direction of the gender voting gap by looking at which parties gained and lost support in places where women composed a larger share of the population.<sup>18</sup>

Specifically, we estimate a change model where, for each observational unit  $i$  (such as polling station, municipality, or district), we regress the change in partisan support before and after suffrage extension on a continuous measure of the intensity of suffrage reform:

---

<sup>18</sup>This strategy has been used by many scholars to study the effects of suffrage on electoral, political, and policy outcomes. See Berlinski and Dewan 2011; Carruthers and Wanamaker 2014; Kroth, Larcinese and Wherner 2015; Larcinese 2014; Morgan-Collins 2018; Vernby 2013.

$$\Delta V_i = \alpha + \beta \Delta \ln(\text{Electorate}_i) + \Delta \varepsilon_i. \quad (1)$$

Here,  $\Delta V_i$  refers to a change in a given party’s vote share before and after suffrage and  $\Delta \ln(\text{Electorate}_i)$  refers to the percentage increase in the size of the electorate after the reform. Finally,  $\varepsilon_i$  is a random disturbance term that we assume to be independent and identically distributed. In practice, we estimate standard errors within larger geographical clusters, using White’s formula for heteroskedasticity.

Equation (1) is not the typical “Goodman-style” ecological regression because it incorporates the male vote in the prior (non-suffrage) election (Grofman and Merrill 2010). Instead, it can be thought of as producing an estimate that is bounded by men’s prior votes. In a separate paper with actual gender-separate ballots from Argentina and Chile we argue that the difference model produces reasonable bounds on the party vote gap, and that this strategy may be simpler for dealing with the ecological inference problem than other methods (see King 1997, and King, Rosen, and Tanner 2010).

There are several assumptions that need to be met for equation (1) to be a valid estimator of the causal effect of women’s suffrage, and an additional requirement for the estimated effect to be a valid proxy for the gender voting gap (that is, to solve the ecological inference problem). First, the intensity of the reform must be as good as random to the reform itself, and districts with more (or fewer) women should not have been trending differently in the absence of the reform (Dunning 2012, Angrist and Pischke 2009: 230). Specifically, the assumption is that places where the electorate grew by a larger proportion after women’s suffrage would have exhibited similar shifts in partisan support, in the absence of suffrage, as those where the electorate grew by less.

In addition, there is a concern about the ecological fallacy. For equation (1) to be an estimator of *women’s* vote choices, then the “constancy” assumption has to hold (Freedman 1999). We think of the constancy assumption as requiring two things. First, men’s political

behavior cannot change in response to women’s suffrage in a way that was related to the intensity of the reform. Second, the voting preferences of women should not depend on the sex-ratio in their locale. Although estimating equation (1) in light of an endogenous male response can still produce insight into the overall impact of the reform on party vote shares, without knowing more about the direction of the male response we would not be estimating the gender voting gap. In addition, we cannot verify that women’s preferences are independent of the sex-ratio, but deal with the concern that gender balance may be related to urbanization (and then to preferences) by controlling for whether districts are urban in all specifications. We return to these inferential issues after presenting the main results.

## Data

For each of the five countries described above, our data consist in original sub-national datasets which contain disaggregated electoral results in parliamentary contests that have been matched to census records. Table 2 summarizes the data and samples, describing the best available measure of the intensity of suffrage for each country, and the smallest unit of analysis for which electoral results were available. The online appendix contains detailed coding information for each country. The analysis proceeds by looking within countries. We do not pool the data for several practical reasons: 1.) the scope of the reform can differ across countries, 2.) the nature of parties differs across countries, and 3.) the observational units are often not on the same level.

***Dependent Variable.*** As described in equation (1), the dependent variable is broadly conceived of as the average change in partisan outcomes before and after suffrage is enacted. For any observational unit – whether municipalities or constituencies – we measure the overall vote share for each party before and after the reform. In practice we operationalize this first by focusing only on the three or four largest parties, provided that each was present

Table 2: **Data and Sample**

Country	Measure of the Intensity of Enfranchisement	Unit of Analysis	Embedded in	Redist- ricting	Uncon- tested	Obs.
Nor (e=1909)	change in electorate	Constituencies*	Counties	No	No	123
Nor (e=1915)	change in women electorate	Municipal	Districts*, Counties#	5.5%	No	660
Net (e=1922)	women among adults	Municipal	Districts*, Provinces#	1.1%	No	557
Can (e=1921)	change in electorate	Constituencies*	Provinces#	No	14.8%	221
Swe (e=1921)	women in electorate	Municipal	Districts, Counties*#	0.7%	No	2576
U.K. (e=1929)	change in electorate	Constituencies*	Counties & Boroughs#	No	4.8%	578

Note: The year listed after “e” in the first column refers to the first election under women’s suffrage; \* Denotes units which refer to electoral constituencies. # Denotes largest administrative units that are used for fixed effects. Locales which experienced redistricting during the relevant time period were excluded from the analyses, as were districts that were uncontested.

on the ballot before and after the reform. (Appendix B table 6 extends the analysis for the Netherlands by considering all parties with more than 10 percent of the vote.)

**Independent Variable.** The key concept we seek to measure is the growth in the size of the electorate due to women’s inclusion. In practice, our measure of this concept is constrained by the specific records available for each country. For example, some countries, like Norway and Sweden, recorded the size of the eligible electorate by sex. For these countries we can use the proportion of the electorate that is female as a treatment measure: *women in the electorate (%)* =  $\frac{WomenElectorate_{it}}{TotalElectorate_{it}}$ ; other countries, such as Canada and the United Kingdom, record only the size of the selectorate i.e. how many people voted in each election. Here, following Berlinski and Dewan (2011), we can use the change in the (log) of the selectorate as a proxy for the intensity of suffrage reform: *change in total selectorate (%)* =  $\ln(TotalSelectorate)_{it} - \ln(TotalSelectorate)_{i(t-1)}$ . This measure should be a close approximation to the change in eligibility to vote (see below) when women’s suffrage was the only reform implemented in a given year. The log form allows for a natural interpretation of the change in the selectorate in percentage terms. Finally, for the Netherlands, our best measure of the intensity of the reform is the number of women among the adult population *women among adults (%)* =  $\frac{WomenAdults_{it}}{TotalAdults_{it}}$ , all of whom should have been eligible to vote under the universalist reform.

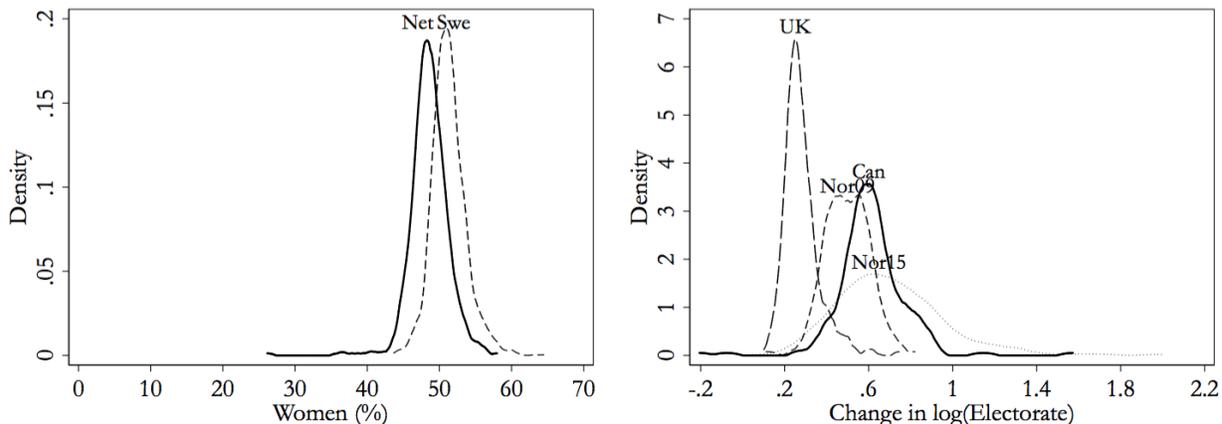


Figure 1: Density plots of the intensity of suffrage reform. Intensity is measured either by percent of women in the electorate (left), or the change in the logged electorate (right). In each relevant case, the small number of localities which were redistricted are excluded from the plots.

Figure 1 plots the distributions of the independent variable for each country – the left hand side shows the countries where we use the proportion of adult women (in the population for the Netherlands, or among eligible voters for Sweden), while the right hand side shows data on the growth in the size of the electorate. To detect small changes in partisan fortunes as a result of suffrage, the estimation strategy requires sufficient variation in the intensity of suffrage across locales. The kernel density plots in figure 1 reveal that there is variation in these distributions but typically women are around 50 percent of the adult population (left hand side). The right side shows the percentage growth in the size of the electorate. In the larger reforms of Canada and Norway’s second (1915) extension, electorates grew by about 60 percent, while in the more limited reforms of the UK and Norway average electoral growth was smaller, as expected. Thus we find somewhat less variation in the U.K. and Norway due to the tiered enfranchisement.

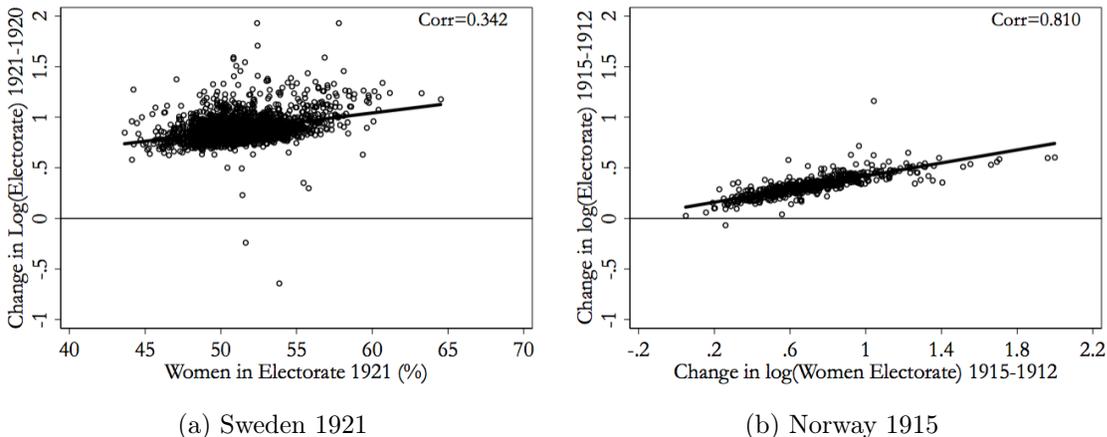


Figure 2: Correlation between two different measures of the independent variable in Sweden (left) and Norway (right).

Our sense is that the highest quality data comes from Sweden and Norway, as sex-specific electorate figures provide the closest approximation of the intensity of reform at the local level. Thus a lingering concern in other countries is how well other measures (like the growth in total selectorate, or women in the adult population) approximate the growth of the electorate due to women’s inclusion. We can examine how well these measures relate to one another in Sweden and the second Norwegian reform, where both the women in the electorate and the total selectorate (i.e. the total number of people that voted) are available. Figure 2 compares these two measures. The left hand panel in figure 2 shows that women as a percent of the Swedish electorate in 1921 (x-axis) is positively correlated with the percent change in the total electorate from 1920 to 1921 (y-axis) ( $r=0.342$ ). The right hand panel in figure 2 shows that the change in the percentage of women in the Norwegian electorate between 1909 and the 1915 reform (x-axis) is strongly positively correlated with the change in the total electorate from 1912 to 1915 (y-axis) ( $r=0.81$ ). The correlation is somewhat weaker in Sweden because there were minor rule changes that affected male enfranchisement, but we verified that the growth in the male electorate is uncorrelated with the growth in the female electorate (Figure 2 in Appendix B). Overall the correlations lend support to our use

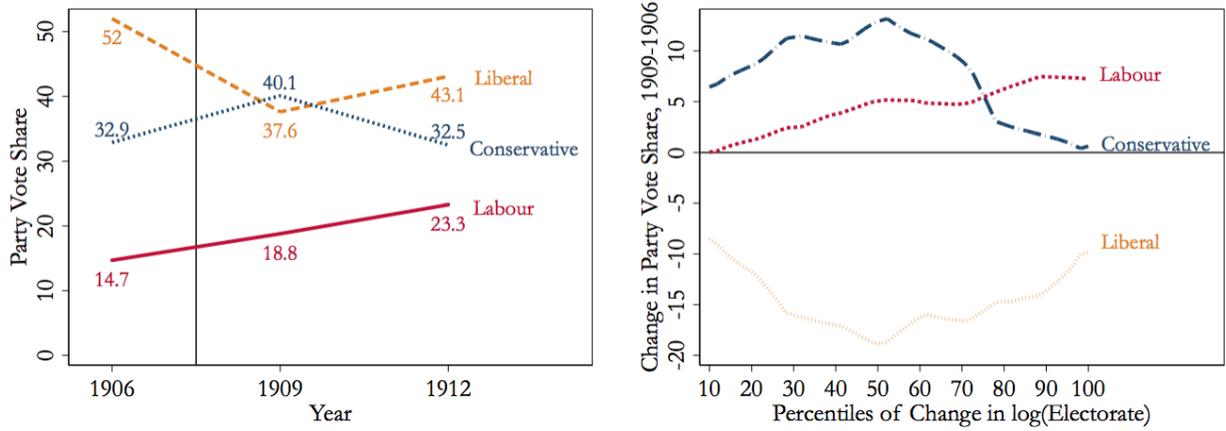
of the overall change in the size of the electorate as a reasonable proxy for the proportion of women in the electorate.

## Results

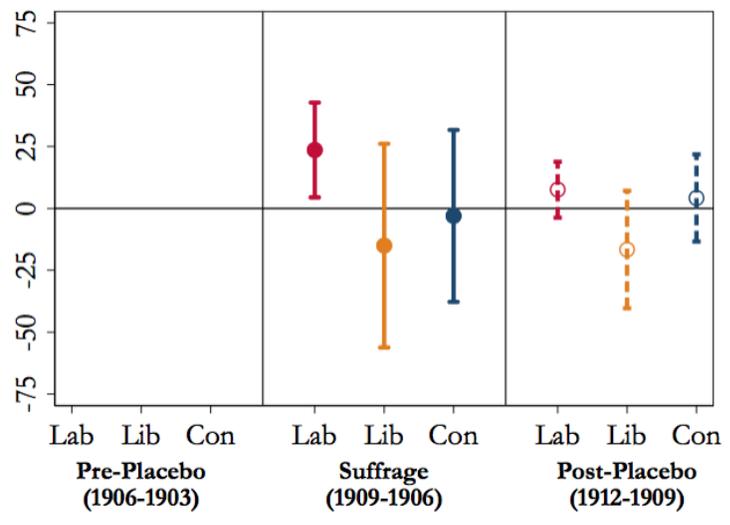
Recall from the theoretical discussion that the double-the-vote argument predicts no changes in party vote shares, while the traditional vote argument suggests increased support for a country's conservative party. We examine these hypotheses by present three pieces of information for each reform: a graph of the overall electoral returns before and after suffrage was extended; a graph with local linear regression lines that show how party fortunes changed across the distribution of the independent variable (where percentiles of the intensity of reform appear on the x-axis and the change in vote shares appear on the y-axis); and finally, a coefficient plot of regression results that use the data described in table 2 to estimate equation (1).<sup>19</sup> When possible, the right hand figures also show pre- and post-reform "placebo" results. These placebo regressions use the intensity of enfranchisement in the year of reform to predict party vote share changes in elections before the reform (where there should be no relationship), and after the reform (where, if women's preferences remain stable, there should also be no relationship).

---

<sup>19</sup>As controls we include an indicator of whether the local was urban and whether there was a concurrent male reform. We also use fixed effects (Table 2 shows the level, details also in appendix A). In all specifications the standard errors that are presented are robust to heteroskedasticity.



(a) General election results (b) Change in party support by intensity of reform



(c) Coefficient plots

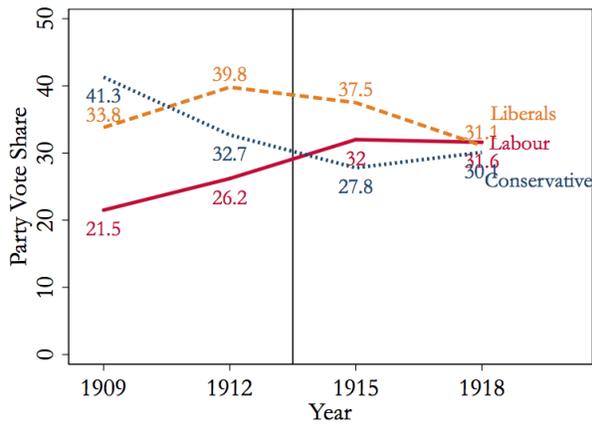
Figure 3: Norwegian General Election of 1909 (after tax-paying women’s suffrage). For this and the following figures, the top left shows the percentage of the vote won by each party before and after the reform (demarcated by black line). Top right shows the change in party support between the 1906 and 1909 elections across the distribution of women in the electorate. The bottom panel shows coefficient plots of the average impact of the reform on party vote shares. Robust standard errors (clustered at electoral districts where more than one observation per district).

## Norway

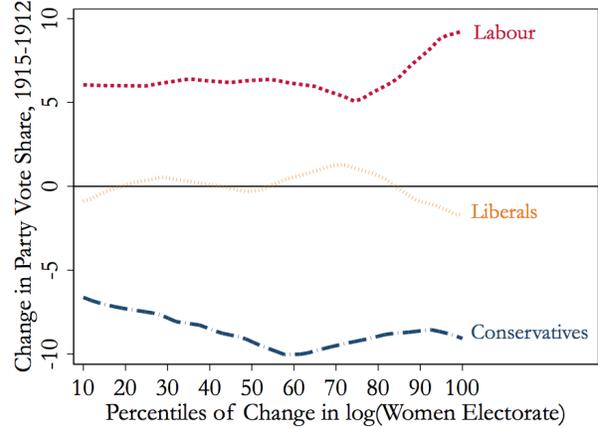
The first cases we analyze come from tiered enfranchisement in Norway. Norwegian general elections were held in 1903 and 1906 (without female voters), 1909 and 1912 (with wealthy women voters), and in 1915 and 1918 (with all female voters). To study wealthy women's enfranchisement we analyze electoral returns across 123 constituencies.<sup>20</sup> In 1909, the first election in which wealthy Norwegian women could vote, the Conservatives emerged as winners over the incumbent Liberal Party, and Labour came in third panel (a) of figure 7. The raw data for wealthy women's enfranchisement in Norway in panel (b) of figure 7 shows that around the median level of the reform intensity, votes for the Conservative party grew while votes for the Liberal party fell. At the tail, Labour gained. Panel (c) of figure 7 shows results from estimating equation (1) for Norway's first enfranchisement. Here we see a 25 percent growth in support for the Labour party in districts where women were more numerous, but no statistically distinguishable effects for the other parties.

---

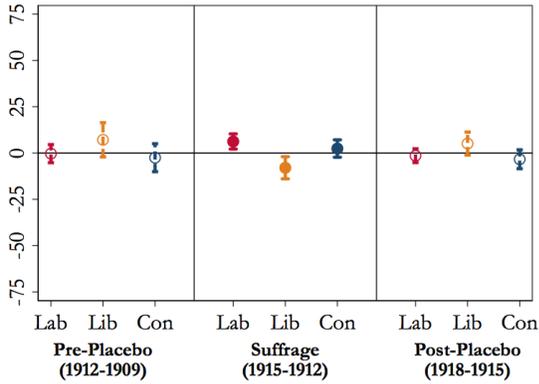
<sup>20</sup>Coding errors in the municipal level returns uncovered by several scholars (cite) make this the safest strategy.



(a) General election results



(b) Change in party support by intensity of reform



(c) Coefficient plots

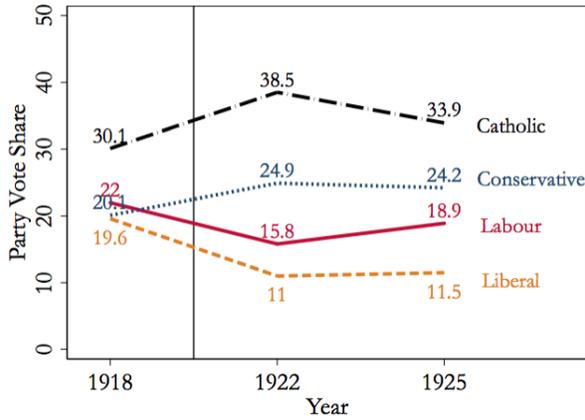
Figure 4: Norwegian General Election of 1915. Second reform (poorer women).

The second Norwegian reform enfranchised the remaining women. In the 1915 election, the Liberals maintained power while Labour gained second place (increasing their total vote by nearly 6 percentage points) over the Conservatives (panel (a) of figure 7). Panel (c) of figure 7 shows that across the countryside, support for the Conservative party fell. In places where women were most numerous, the Labour party support rose. The regression results show a positive and statistically significant change in Labour party support surrounding the reform, and slight drop in support for the Liberal party. There was no statistically discernible relationship between the share of women in the electorate and Conservative party vote share. Overall, across both Norwegian reforms, it appears that the liberal and left leaning parties

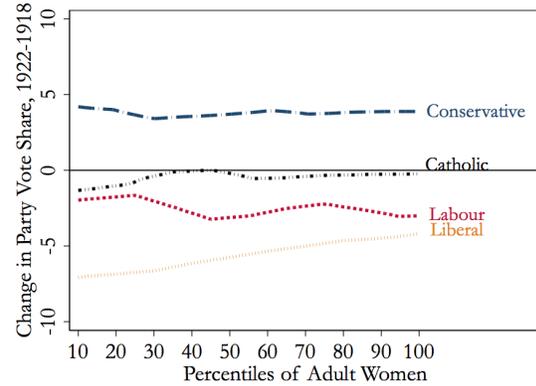
benefited most from women's suffrage, and that places in which there were more women contributed to the surge in Labour's popularity visible in the overall electoral results.

## **Netherlands**

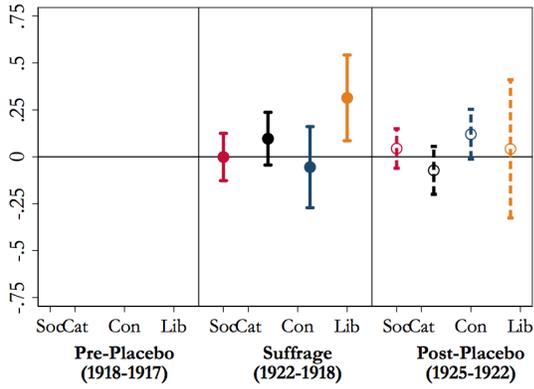
The general election of 1922 was the first time Dutch women went to the polls. As panel (a) of figure 5 shows, the Catholic parties maintained their stable lead while the Conservatives surged above Labour to take second place. The Liberal party continued to hold fourth place, but it lost almost 8 points overall. As panel (b) of figure 5 shows, for most parties the change in support as a function of women's presence within districts was pretty stable, with the exception that Labour lost slightly, and the Liberals gained, in the constituencies where women were a higher proportion of the adult population. Both the raw data and the regression results show that the only party whose vote share was moved in a statistically distinguishable way was the Liberals. Panel (c) of figure 5 shows a Liberal gain of 25 percent in places where women were more numerous.



(a) The Netherlands



(b) Change in party support by intensity of reform



(c) Coefficient Plots

Figure 5: General Election in the Netherlands, 1922

## Canada

In the Canadian election of 1921, the Conservatives suffered a big defeat at the hands of the Liberals, losing more than 10 percentage points of total vote share (panel (a) of figure 6). There appears to have been a fair amount of variation in the change in party support based on changes in the size of the electorate (panel (b) of figure 6). In places where the electorate grew by more, the Conservative party lost more compared with the Liberal party. But these differences were washed out in the overall regression results (panel (c)) which show no statistically distinguishable gains for any party in the wake of women's suffrage.

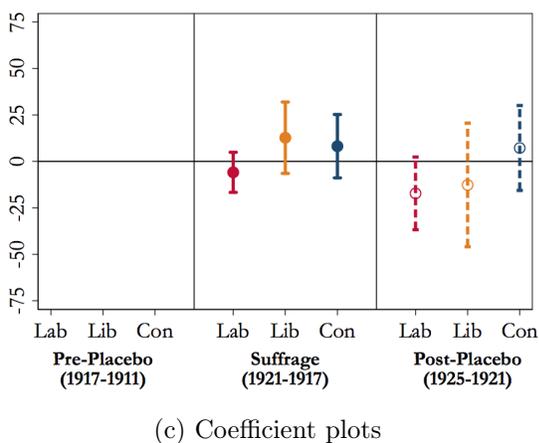
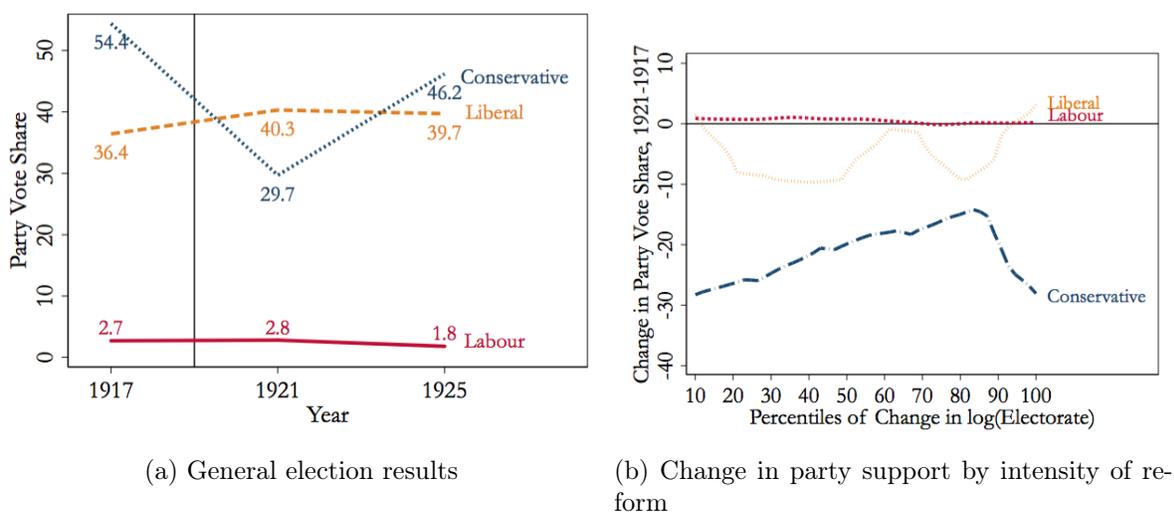
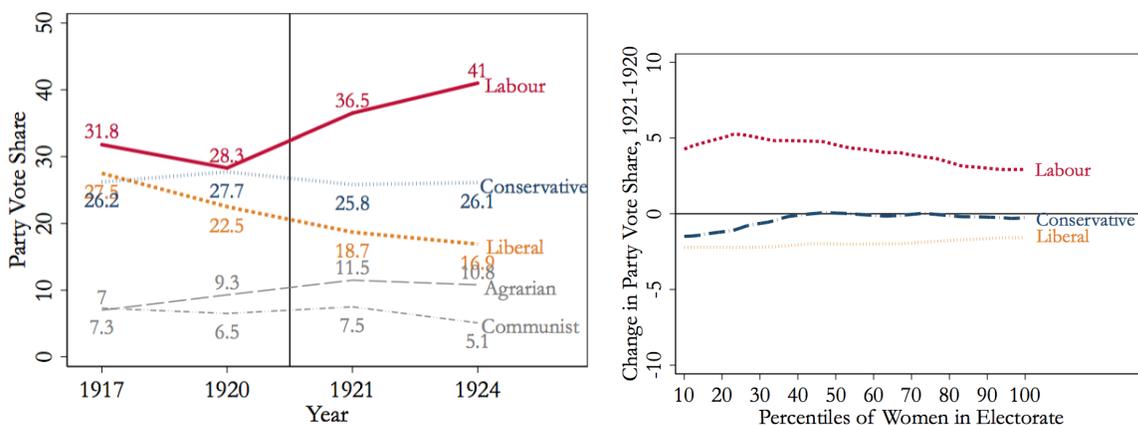


Figure 6: Canadian General Election, 1921

## Sweden

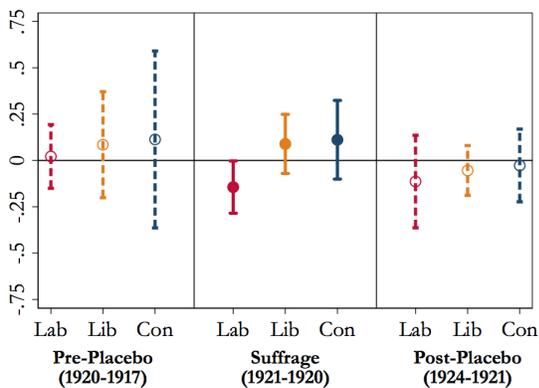
In the first election after suffrage in Sweden, the Labour party took first place, growing its votes by 8 percentage points. The raw data for Sweden in panel (b) of figure 7 shows fairly constant support for each party across the distribution of women in the electorate. However it appears that the Liberals, who were in power when the reform passed, gained slightly at the tail of the distribution (that is, in the 90th percentile of female inhabitants). At the median, Labour's support grew by about 5 points, a bit short of the total growth in the party's vote in the 1921 election, but on the tails, where women were more prevalent,

Labour support fell. Panel (c) of figure 7 shows results from estimating equation (1) for Sweden. The center of the figure shows that Labour lost by about 10 percent as a result of enfranchisement while the effect for the Liberals and Conservatives, though positive, is not statistically distinguishable from zero.



(a) General Election Results

(b) Change in party support by intensity of reform



(c) Coefficient Plots

Figure 7: Swedish General Election, 1921.

## United Kingdom

In the UK's general election of 1929, after picking up four points in the popular vote, Labour eked out a small win against the Conservatives (who lost about 8 points overall) (panel (a) of figure 8). The second panel in figure 8 shows that the Conservatives lost big in places

where the electorate grew more as a result of the reform, while the Liberals, and not Labour, benefited. As the coefficient plots show, the Liberals benefited, and Conservatives lost, as a result of the reform, with no discernible effects for Labour.

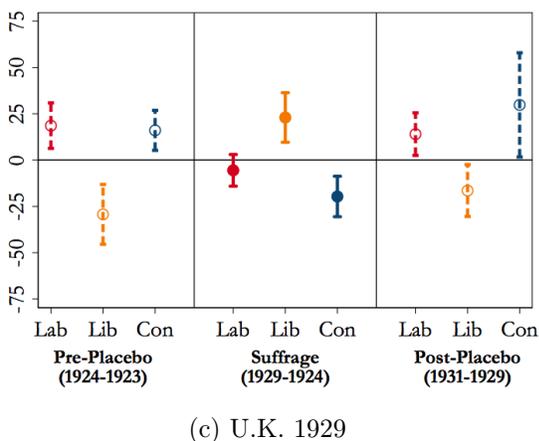
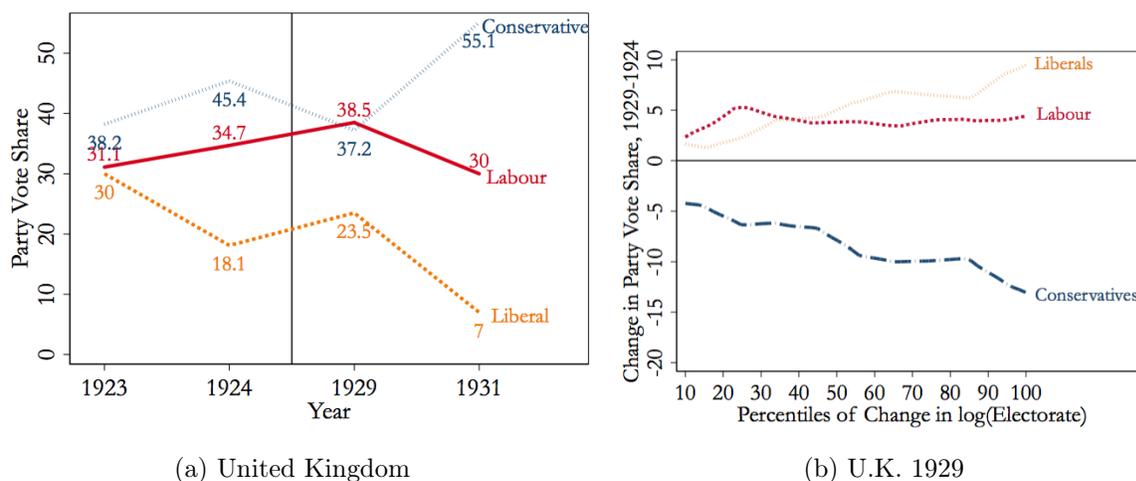


Figure 8: United Kingdom general election of 1929.

## Summary

What was the total effect of women’s suffrage on party support? National politics in each country are undoubtedly different, and the quality of data varies in each of our cases, but across the board there are no examples of Conservative parties benefiting from the reform, and one example (the UK) of the party losing support. As for the double-the-vote hypothesis,

although we cannot yet speak about the validity of ecological inferences (more on this below) there was only one case, the Canada, where there were no discernible effects for any party as a result of suffrage. The very best data that we have comes from middle-class and poor-women's enfranchisement in the second Norwegian reform, where the sample size is large (n=660) and the intensity of suffrage is measured by growth of women in the electorate. Here, the findings suggest that the Labour party benefited and the Liberal party lost where women were a larger proportion of the population. On the other hand, the highly detailed Swedish data (n=2576) which also uses women in the electorate as the independent variable, shows no discernible changes for the Liberals and the Conservatives, but a small loss for the Labour party (which nevertheless swept the election) where women were more numerous. Overall, although national outcomes are diverse, there is no evidence of a conservative tide in places that were more affected by suffrage reform.

## **Identification Troubles**

So far we have discussed the overall impact of reform, yet there are potential threats to inference for understanding both the overall impact of reform, and for attributing these results to the political behavior of women.

### **Identifying the total effect**

Our estimation of the overall impact of reform may be undermined if the extension of the franchise was related to perceptions of women's vote choice in places where women were more numerous. In addition, if places with relatively more women were subject to different trends than places with relatively fewer women, the change estimator will not be a causal estimate of the effect of the reform on party vote shares.

*As-if random assignment:* It is undeniably true that politicians were concerned with the partisan impact of women's enfranchisement, and that they only agreed to the reform if they

hoped to benefit (or not to lose too much) thereafter. But it is likely beyond credulity to suggest that they could predict, or were attuned to, the impact of the reform at a microscopic level. Governments in the countries we studied did collect census materials, but we have not found evidence that politicians performed anything more than back of the envelope calculations about the numerical impact of women’s enfranchisement.<sup>21</sup> Moreover, while politicians harbored many suspicions about the direction of the female vote, they were unlikely to have good information about its direction, and in many countries made conflicting statements about women’s political dispositions (Teele 2018).

*Parallel trends:* A second important question is whether places with more women were trending differently than places with fewer women. A common method of examining trends is to take the key independent variable (the intensity of suffrage) and to use it to predict the results of past elections. The main results presented above (the leftmost side of panel c in figures 3-8) present this type of placebo regression where possible. (There is also a full set of placebo tables in Appendix D Tables 1, 2, 3 and 4.) Both Norway (second reform) and Sweden “pass” the placebo test. Placebos are not possible to run in Norway’s first reform, the Netherlands, or Canada, typically because a male reform or major redistricting makes the earlier elections not comparable to the one prior to suffrage. The UK “fails” the placebo test insofar as places with more women prior to the reform were trending toward Labour and the Conservatives away from the Liberals in the 1923-1924 election. (More on this to come, the election on a single issue might be wonky.) At the very least, the reforms for which our data is of the highest quality pass the placebo tests.

---

<sup>21</sup>They often did back of the envelope calculations about the overall size of the electorate, but one author’s readings of all parliamentary correspondence on the franchise expansion to British women over 30 did not reveal any detailed tables about the population of women in different constituencies.

## The Ecological Inference Problem

Even if the trends in partisan support would have been similar in the absence of the reform, we might question whether the estimates we derive are capable of capturing changes brought about by women's voting patterns, or whether these changes are driven by some disproportionate response by male constituents that is not independent of the treatment. In other words, is there an endogenous male response to women's suffrage?

Previous research on the enfranchisement of black voters in the United States has shown that white voters mobilized at higher levels to 'negate' the voting power of black voters (Washington 2006; see also Enos 2011). In our study, if men mobilized at higher levels in localities with higher proportion of women, the results could be driven by men's rather than women's voting behavior. While we cannot address this issue for all countries, we can exploit the fact that some authorities kept turnout records separately for women and men at the time of women's suffrage, which allows us to investigate whether more men turned out to vote in locales with a higher proportion of women.

The appendix presents results from these analyses for Sweden and Norway, examining whether male turnout was influenced by the share of women in the electorate in the first election after suffrage reform (Appendix D, II: figure 7). In each case, we run two regressions, one that regresses our treatment variable on male turnout and another that regresses treatment on the gender gap in turnout in the first election after women's suffrage. Overall, in appendix figure 2, we do not find a clear pattern of male response to women's enfranchisement in Sweden and Norway. The correlation between women in the electorate and the change in male turnout in Sweden is negative and small ( $r=-0.085$ ), and there is no correlation between women in the electorate and the gender gap in turnout ( $r=-0.062$ ). In Norway's second reform, there is a small positive correlation ( $r=0.125$ ) between the change in male turnout and the percentage change of women in the electorate, but no correlation ( $r=-0.082$ ) between the gender gap in turnout and the growth of women in the electorate.

Thus to the degree that the male response was independent of the intensity of reform at the local level, and men's votes did not trend differently across districts, the overall impact of suffrage in Sweden and Norway may be attributed to women's votes. If this is the case, then in Norway, the Labour party benefited from women's votes (no Conservative effect) and in Sweden the Labour party lost (but again, no Conservative effect).

## Conclusion

In this paper we examined the electoral impact of women's enfranchisement on party vote shares over six reforms in five European countries. Based on our analyses, we reject the notion that suffrage led to a conservative swing in government: where reform caused a greater shift in the size of the electorate, conservative parties never benefited. Second, since the only country in which there was no discernible effect of suffrage on local party vote shares was the Canada, we also reject the general validity of the double-the-vote argument. As to whether reform benefited liberal or left leaning parties, the outcome differs by country. In in 4/6 reforms, Labor or the Liberals benefited, while the Liberals lost in one context (Norway, second reform) and Labour lost in another (Sweden). The staggered reform in Norway shows that Labour benefited immensely from enfranchisement of lower-class women while the Liberals lost, while in the UK, the winners from lower-class female enfranchisement were the Liberals, at the Conservative's expense.

We note, too, that the parties that presided over women's enfranchisement were not rewarded in the next election unless that party had shown longstanding support of the suffrage issue. Despite trying to claim credit for women's suffrage, Tory support was weakened, as was that of the Canadian Conservatives, in places where women's suffrage produced a larger shift in the size of the electorate. The fact that women's enfranchisement did not produce a mere doubling of the electorate need not seem surprising given the vast literature on the gender voting gap in the contemporary period. However the idea that women may not have

voted conservatively in the early twentieth century is definitely novel. If it is true that the 1950s marked a traditional moment for women's political preferences, our research suggests that rather than a single inflection point in the 1980s, many countries may have witnessed two.

The evidence here should be fodder for other theoretical discussions about the relationships between economic growth, democratization, and women's equality. In addition to causing us to question longstanding ideas about the early gender voting gap, this project contributes to understanding the political mechanism that might underlie the large fiscal impact of women's suffrage observed by economists. In Europe in the wake of suffrage, the overall size of the welfare state grew, as did outlays for budgetary items related to health and child welfare (Abrams and Settle 1999, Aidt and Dallal, 2008, Bertocci 2010, Lott and Kenny 1999).<sup>22</sup> Future research can further probe whether these welfare state effects are a direct result of the differential voting patterns of early female voters.

## References

- Abrams, B.A., Settle, R.F., 1999. Women's suffrage and the growth of the welfare state. *Public Choice* 100, 289–300.
- Acemoglu, D., Robinson, J.A., 2000. Why did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective. *Quarterly Journal of Economics* 115, 1167–1199.
- Aidt, T.S., Dallal, B., 2008. Female Voting Power: The Contribution of Women's Suffrage to the Growth of Social Spending in Western Europe (1869-1960). *Public Choice* 134, pp. 391–417.

---

<sup>22</sup>Abrams and Settle 1999 look at four European countries from 1960 to 1991. All but Switzerland had given women the vote prior to that period. They find that after women's suffrage social welfare spending increased by 28 percent in Switzerland (p.297)

- Angrist, J.D. and Pischke, J., S. 2009. *Mostly harmless econometrics: an empiricist's companion*. Princeton University Press.
- Bacchi, Carol Lee. *Liberation Deferred?: The Ideas of the English-Canadian Suffragists, 1877-1918*. University of Toronto Press Toronto, 1983.
- Bardhan, P., & Udry, C. (1999). *Development microeconomics*. OUP Oxford.
- Bashevkin, Sylvia B. "Social Change and Political Partisanship The Development of Women's Attitudes in Quebec, 1965-1979." *Comparative political studies* 16, no. 2 (1983): 147-172.
- Behn, Behn, 2012. *Woodrow Wilson's Conversion Experience: The President and the Federal Woman Suffrage Amendment*. Ph.D. thesis, University of Massachusetts - Amherst.
- Berins Collier, R., 1999. *Paths toward democracy: The working class and elites in Western Europe and South America*. Cambridge University Press.
- Berlinski, Samuel, Dewan, Torun, 2011. *The Political Consequences of Franchise Extension: Evidence from the Second Reform Act*. *Quarterly Journal of Political Science* 6, 329–376.
- Bertocchi, G., 2010. "The Enfranchisement of Women and the Welfare State." *European Economic Review* 55: 535–553.
- Blom, Ida. 1980, "The struggle for women's suffrage in Norway, 1885–1913." *Scandinavian journal of History* 5.1-4: 3-22.
- Blom, I. 2012. *Structures and Agency: a transnational comparison of the struggle for women's suffrage in the Nordic countries during the long 19th century*. *Scandinavian Journal of History*, 37(5), 600-620.
- Box-Steffensmeier, J.M., De Boef, S., Lin, T.-M., 2004. *The dynamics of the partisan gender gap*. *American Political Science Review* 98, 515–528.
- Brodie, M. J., & Jenson, J. (1980). *Crisis, challenge, and change: Party and class in Canada*. Toronto: Methuen.
- Carpenter, D., Moore, C. D., 2014. "When Canvassers Became Activists: Antislavery Petitioning and the Political Mobilization of American Women." *American Political Science Review* 108(3): 479–498.

- Carruthers, Celeste K., and Marianne H. Wanamaker. "Municipal Housekeeping The Impact of Women's Suffrage on Public Education." *Journal of Human Resources* 50.4 (2015): 837-872.
- Chafetz, J. S., Dworkin, A. G., Swanson, S., 1990. "Social Change and Social Activism: First-Wave Women's Movements around the World." *Women and Social Protest*, 302–320.
- Cleverdon, Catherine Lyle. *The Woman Suffrage Movement in Canada*. University of Toronto Press, 1950. Derry, Thomas Kingston. *A History of Modern Norway, 1814-1972*. Clarendon Press, 1973.
- Corder, J Kevin, and Christina Wolbrecht. 2016. *Counting Women's Ballots*. Cambridge University Press.
- Dunning, T. 2012. *Natural experiments in the social sciences: a design-based approach*. Cambridge University Press.
- Duverger, Maurice, 1955. *The political role of women*. Unesco.
- Edlund, Lena, Pande, Rohini, 2002. "Why have women become left-wing? The political gender gap and the decline in marriage." *Quarterly Journal of Economics* 917–961.
- Enos, Ryan D. 2011. "Reconsidering Racial Threat: Experimenting on the Contextual Causes of Intergroup Attitudes." Paper presented at the Lauder School of Government, Diplomacy and Strategy, Program in Decision Making and Political Psychology, Harvard-IDC Symposium in Political Psychology and Decision Making, IDC Herzliya, 40 Israel, November 2011.
- Evans, Richard J., 1980. "German Social Democracy and Women's Suffrage 1891-1918." *Journal of Contemporary History* 15, 533–557.
- Folbre, Nancy (1982). "Exploitation Comes Home: A Critique of the Marxian Theory of Family Labor," *Cambridge Journal of Economics* 6,4: 317-29.
- Fowler, Anthony. 2013. "Electoral and policy consequences of voter turnout: Evidence from compulsory voting in Australia." *Quarterly Journal of Political Science*, 8: 159-182.
- Freedman, D.A., 1999. "Ecological inference and the ecological fallacy." *International Ency-*

- cllopedia of the social & Behavioral sciences, 6(4027-4030), pp.1-7.
- Gerring, John, Maxwell Palmer, Jan Teorell, and Dominic Zarecki. 2015. "Demography and democracy: A global, district-level analysis of electoral contestation." *American Political Science Review* 109(3): 574-591.
- Goldin, C., 1994. *Understanding the gender gap: An economic history of American women. Equal employment opportunity: labor market discrimination and public policy* 17–26.
- Goldin, Claudia. 1995. "The U-Shaped Female Labor Force Function in Economic Development and Economic History." In *Investment in Women's Human Capital*, ed. Paul Schultz. Chicago: University of Chicago Press, pp 61-90.
- Goldin, Claudia, Laurence F. Katz, and I. Kuziemko. "The Homecoming of American College Women: The Reversal of the Gender Gap in College." *Journal of Economic Perspectives* 20, no. 4 (2006): 133–56.
- Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of political Economy*, 116(6), 981-1022.
- Goldstein, J.H., 1973. *The Effects of the Adoption of Woman Suffrage: Sex Differences in Voting Behavior—Illinois 1914-1921*. University of Chicago, Department of Political Science.
- Grimshaw, P., 1972. *Women's Suffrage in New Zealand*. Auckland University Press.
- Groffman and Merrill in King, G., Tanner, M.A. and Rosen, O. eds., 2004. *Ecological inference: New methodological strategies*. Cambridge University Press.
- Hagemann, Gro. 2009 "To Become a Political Subject: Enfranchisement of Women in Norway." In *Suffrage, Gender and Citizenship*, Irma Sulkunen and Seija-Leena Nevala-Nurmi and Pirjo Markkola eds. 120-144.
- Hartmann, Heidi. 1976. "Capitalism, patriarchy, and job segregation by sex." *Signs* 1(3).
- Hause, Stephen C., and Kenney, Anne R. *Women's suffrage and social politics in the French Third Republic*. Princeton, NY: Princeton University Press, 1984.
- Heckelman, Jac C. 1995. "The effect of the secret ballot on voter turnout rates." *Public*

- Choice 82, no. 1-2 : 107-124.
- Hölsgens, Rick. 2017. "On the importance of power struggles in the diffusion of social innovations." *European Public & Social Innovation Review* 1, no. 2.
- Inglehart, R., Norris, P., 2000. The developmental theory of the gender gap: Women's and men's voting behavior in global perspective. *International Political Science Review* 21, 441–463.
- Iverson, Torben and Frances Rosenbluth. 2006. "The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap." *American Journal of Political Science* 50(1): 1-19.
- Joannou, M. and J. Purvis. 1998. *The Women's Suffrage Movement: New Feminist Perspectives*. Manchester: Manchester University Press.
- Jusko, K. L. 2017. *Who speaks for the poor?: electoral geography, party entry, and representation*. Cambridge University Press.
- Karlsson Sjögren, Åsa. 2013 "Taxpaying, poor relief and citizenship: democratization from a gender perspective," in Åsa Gunnarsson, ed., *Tracing the women-friendly welfare state: gendered politics of everyday life in Sweden*, pp. 17-37.
- Karvonen, Lauri, and Per Selle. *Women in Nordic Politics: Closing the Gap*. Dartmouth Publishing Company, 1995.
- Khan, B.Z., 1996. Married women's property laws and female commercial activity: Evidence from United States Patent Records, 1790–1895. *The Journal of Economic History* 56, 356–388.
- King, Gary. "A solution to the ecological inference problem." (1997).
- King, G., Tanner, M.A. and Rosen, O. eds., 2004. *Ecological inference: New methodological strategies*. Cambridge University Press.
- Kroth, Verena, Valentino Larcinese, and Joachim Wehner. "A better life for all? Democratization and electrification in post-apartheid South Africa." *The Journal of Politics* 78.3 (2016): 774-791.

- Larcinese, V., 2014. Enfranchisement and Representation: Evidence from the Introduction of Quasi-Universal Suffrage in Italy. Working Paper n.512 Available from <http://www.igier.unibocconi.it/f> accessed 13 May 2015.
- Lijphart, Arend. The politics of accommodation: Pluralism and democracy in the Netherlands. Vol. 142. Univ of California Press, 1975.
- Lizzeri, A., Persico, N., 2004. Why Did the Elites Extend the Suffrage? Democracy and the Scope Of Government, with an Application to Britain's Age Of Reform? Quarterly Journal of Economics 119, 707–765.
- Llavador, H., Oxoby, R.J., 2005. Partisan Competition, Growth, and the Franchise. Quarterly Journal of Economics 120(3), 1155–1189.
- Lundberg, S., & Pollak, R. A. 1994. Noncooperative bargaining models of marriage. The American Economic Review, 84(2), 132-137.
- Marshall, S. E., 1997. Splintered Sisterhood: Gender and Class in the Campaign Against Woman Suffrage. University of Wisconsin Press.
- McConaughy, C.M., 2013. The Woman Suffrage Movement in America: A Reassessment. Cambridge University Press.
- Meltzer, A.H., Richard, S.F., 1981. A rational theory of the size of government. The Journal of Political Economy 914–927.
- Miller, G., 2008. Women's Suffrage, Political Responsiveness, and Child Survival in American History. Quarterly Journal of Economics 1287–1327.
- Morgan-Collins, Mona. 2018. The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States. NICEP Working paper 2018-03, available via NICEP Working paper series web: at <https://nicep.nottingham.ac.uk/working-papers/>
- Niemi, Hedges, and Jennings, 1977. "The Similarity of Husbands' and Wives' Political Views" (1977). American Politics Quarterly 5(2): 133-148.
- Nohlen, Dieter, 2005. Elections in the Americas: A Data Handbook: Volume 2 South

- America. OUP Oxford.
- Norris, Pippa, 1988. The gender gap: A cross-national trend?, in: Mueller, C.M. (Ed.), *The Politics of the Gender Gap. The Social Construction of Political Influence*. Sage, pp. 217–234.
- Offen, Karen M., 2000. *European feminisms, 1700-1950: a political history*. Palo Alto, CA: Stanford University Press.
- Randall, V., 1987. *Women and politics: An international perspective*. Chicago: The University of Chicago Press.
- Rieger, C., Nohlen, D., Grotz, F., Hartmann, C., 2001. *Elections in Asia and the Pacific: A Data Handbook*. Rose, R., 1975. *Electoral behaviour: A comparative handbook*. Collier Macmillan Publishers, London.
- Rueschemeyer, Dietrich, Evelyne Huber Stephens, and John D Stephens. 1992. *Capitalist Development and Democracy*. Oxford, UK: Polity Press.
- Rupp, L.J. 1997. *Worlds of Women: The Making of and International Women’s Movement*, Princeton, NJ: Princeton University Press.
- Rupp, L.J. and Taylor, V. 1999. “Forging Feminist Identity in an International Movement: A Collective Identity Approach to Twentieth-Century Feminism,” *Signs* 24(2).
- Särilvik, Bo, 2002. "Party and electoral system in Sweden," in Grofman, Bernard and Arend Lijphart, eds. *The evolution of electoral and party systems in the Nordic countries*. Algora Publishing: 225-269.
- Skorge, Øyvind. 2018. “Petitions and the Electoral Mobilization of Women”. Paper presented at the Empirical Studies of Gender Workshop, May 2018.
- Stoker, Laura and Jennings “Political Similarity and Influence between Husbands and Wives” in Zuckerman ed. *The Social Logic of Politics*. Temple University Press, p.52-74.
- Teele, Dawn Langan, 2018. *Forging the Franchise: The Political Origins of the Women’s Vote*. Princeton, NJ: Princeton University Press.
- Teele, Dawn Langan, 2014. *Ordinary Democratization The Electoral Strategy That Won*

- British Women the Vote. *Politics & Society* 42, 537–561.
- Therborn, Goran 1977. *The Rule of Capital and the Rise of Democracy*. *New Left Review* 103: 3–41.
- Tilly, Louise, Scott, Joan W., 1987. *Women, work, and family*. Psychology Press.
- Tingsten, H., 1937. *Political behavior: Studies in election statistics*. PS King, London.
- Tyrrell, I. R. 1991. *Woman's world/Woman's Empire: the Woman's Christian Temperance Union in International Perspective, 1880-1930*. Chapel Hill: University of North Carolina Press.
- Valenzuela, E. M., 1995. "Catolicismo, anticlericalismo y la extensión del sufragio a la mujer en Chile." *Estudios Públicos* 58: 137–197.
- Vernby, K. 2013. Inclusion and public policy: evidence from Sweden's introduction of non-citizen suffrage. *American Journal of Political Science*, 57(1), 15-29.
- De Vries, Petra. "Josephine Butler and the making of feminism: International abolitionism in the Netherlands (1870–1914)." *Women's History Review* 17, no. 2 (2008): 257-277.
- Washington, Ebonya. 2006. "How Black Candidates Affect Voter Turnout," *Quarterly Journal of Economics*, 2006, 121 (3), 973-998.
- Zuckerman and Kotler-Berkowitz. 1998. "Politics and Society: Political Diversity and Uniformity in Households as a Theoretical Puzzle." *Comparative Political Studies* 31(4), 464-497.

Table 3: **Scorecard**

Data Qual	Country	Measure of the Intensity of Enfranchisement	Obs.	LAB	LIB	Cath	CON	Pre Placebos	Post
	Nor (e=1909)	change in electorate	123	++	0		0	na	✓
*	Nor (e=1915)	change women electorate	660	++	- -		0	✓	na
*	Net (e=1922)	women among adults	557	0	++	0	0	na	✓
	Can (e=1921)	change in electorate	221	0	0		0	na	✓
*	Swe (e=1921)	women in electorate	2576	- -	0		0	✓	✓
	U.K. (e=1929)	change in electorate	578	0	++		- -	X	<sup>x</sup>

Note: Data quality \* means the better quality for number of observations and measure of the independent variable. The year listed after “e” in the first column refers to the first election under women’s suffrage; Locales which experienced redistricting during the relevant time period were excluded from the analyses, as were districts that were uncontested. ++ implies positive, ss. + implies positive, marginally significant.