# Bringing in the New Votes: Turnout of Women after Enfranchisement.

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**Abstract**

When does turnout of newly enfranchised women 'catch up' with that of men? I argue that when women's cost of voting is higher than men's, women's turnout approaches parity with men's in localities with strong incentives to vote among the general population. This is because under the most favorable circumstances, even voters at the tail of the cost distribution - who are disproportinatately women - vote. I then propose that electoral competition determines the strength of voting and mobilization incentives and therefore the gender turnout gap. Using sex-separated turnout data after women's suffrage in Norway, I demonstrate that the gap narrows in high-turnout competitive districts in systems with single-member districts and in high-turnout within-district strongholds in proportional systems. I then probe generalizability of my findings in three additional countries. The paper demonstrate the complexity of achieving de facto political incorporation after de jure enfranchisement.

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Formal introduction of women into politics was controversial for most of the twentieth century, not the least because it promised to secure representation of women's shared interests. As early as 1869, John Stuart Mill and Harriet Taylor argued in The Subjection of Women that women's suffrage would provide 'equal and just' consideration of women's distinct interests. Often directly building upon Mill's work, suffragists commonly perceived the vote as a means to representation of women's interests. Without the vote, politicians would not listen and continue ignoring women's interests (Andersen 1996; Banaszak 1996; McCammon and Banaszak 2018). Indeed, the link between suffrage and group representation forms one of the building blocks in dominant theories of democratization (e.g. Acemoglu and Robinson 2000 on working-class men's suffrage; Bateman 2018 on black suffrage and McConnaughy 2013 on women's suffrage).

The notion that suffrage improves representation of shared interests, however, is at odds with the relatively low turnout of newly enfranchised women for decades after suffrage (see Figure A1). When the first women entered the electorate *de jure*, they continued facing structural, cultural and institutional *de facto* barriers that weakened their ability to take advantage of the newly gained rights (Wolbrecht and Corder 2020, ch.3 on U.S.; Kim 2017 on Sweden). Yet politicians have weaker incentives to engage electorally (Karp, Banducci and Bowler 2008; Rosenstone and Hansen 1993, p.31) and subsequently represent (APSA Task Force 2004; Schlozman, Verba and Brady 2012 on low income groups; Barreto 2018 on ethnic groups) social groups with lower propensity to vote, further lowering their turnout. In this paper, I investigate the conditions under which women's turnout reaches parity with men's turnout, which ultimately bears positive implications for the representation of women's interests after suffrage.

Classic scholarship often perceives proportional electoral systems (PR) as more conducive to political participation, mobilization and representation of marginalized groups than majoritarian systems (Lijphart 1994; Jackman 1987; Powell 1986). Most recently, Kittilson and Schwindt-Bayer (2010, 2012) analyze survey data from 34 countries and show that proportional electoral systems are associated with greater political engagement of women. They argue that PR symbol-

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izes inclusiveness, which encourages women to participate in politics. In turn, Skorge (2020) finds that the introduction of PR in Norway increased women's relative turnout to men. He argues that PR incentivizes elites to mobilize women after suffrage, especially if women's social networks are strong. However, the type of an electoral system itself does not comprehensively explain the cross-country variation in women's turnout at the turn of the twentieth century. In fact, the gender turnout gap was sometimes narrower in countries with single member districts (SMDs) than in countries with proportional systems (PR) and varied greatly within both types of electoral systems (Figure A1). Instead, women's turnout varied with men's, approaching parity with men's turnout in countries where men's turnout was very high (Figure A1).

Using the historical example of the first wave of women's suffrage at the turn of the twentieth century in the West, I theorize *how* the structural, cultural and institutional barriers to voting faced by newly enfranchised women shaped the extent to which women's turnout lagged behind men's. I argue that when women's cost of voting is greater than men's, the difference between women's and men's turnout narrows if incentives to vote in the general population are very strong. This is because under the most favorable circumstances, even 'high-cost' voters - who are disproportionately women - vote. The generally high cost of voting faced by the newly enfranchised women can therefore explain why women's turnout approaches men's in countries with high turnout among men (as seen in Figure A1).

Building on these insights, I then argue that in order to understand the cross-national variation in the gender turnout gap at the national level, we have to unpack the conditions under which turnout and mobilization is incentivized at the local level within electoral systems. Building on instrumental accounts of voting behavior and mobilization, I formulate and empirically probe two expectations:

[1] Gender turnout gap narrows with district electoral competition. This is because district competition incentivizes even high-cost voters - who are disproportionately women - to vote and parties to mobilize them. This should be especially in electoral systems with SMDs, where the incentives to vote and to mobilize typically vary greatly across districts. As district magnitude

increases, these incentives level up across districts and district competition becomes a weaker predictor of turnout measures across districts.

[2] Gender turnout gap narrows with within-district electoral competition, measured as electoral concentration. This is because electorally concentrated localities typically develop strong social networks that lower the cost of voting and the cost of mobilization. When voting and mobilization become cheap, even voters at the tail of the cost distribution - who are disproportionately women - vote and are mobilized. This should be especially in countries with PR, where linkages between parties and social groups are typically high. As ties between social groups and parties weaken in systems with SMDs, within-district competition becomes a weaker predictor of turnout measures within districts.

The argument that competitive context increases mobilization of women relative to men is consistent with the seminal work of Corder and Wolbrecht (2016, p.262). They find that women's turnout lagged the most behind men's in the uncompetitive and electorally repressed state-level presidential contests in the U.S. and argue that in order to vote, newly enfranchised women needed the 'extra' stimuli spurred by competition or inclusive electoral laws. The theoretical framework developed in this paper thus builds on Corder and Wolbrecht and extends the focus to both across and within electoral districts in various electoral systems. In doing so, I argue that while district electoral competition provides the most conducive electoral context to women's turnout relative to men, within-districts competition provides the least conducive context.

In testing the theoretical framework, I take advantage of the widespread availability of turnout data collected separately by sex at the turn of the twentieth century during the first suffrage wave in the West (see Table A8) - a practice virtually unique to women. I first utilize this data in Norway between 1909-1927, a period which captures two waves of suffrage expansion to women under SMDs in 1907 and 1913 and the implementation of PR in 1921. Using this data, I provide several results that support the theoretical framework.

First, I show that women's turnout reaches parity with men's as men's turnout approaches its minimum or maximum. This first result supports the argument that women's likelihood to vote at

par with men cannot be thought of separately from the strength of general incentives to vote and to mobilize in a given locality.

Second, I show that women's turnout approaches parity with men's turnout when local incentives to vote are very strong, that is in competitive single-member districts and in uncompetitive within-district strongholds after the implementation of PR. This result supports the argument that local context within electoral systems shapes the incentives to vote and to mobilize, and therefore determines the gender turnout gap. This result is robust to adding controls as well as to specifications with locality and election fixed effects, casting doubts on the possibility that the result is driven by a 'type' of women and men electorate in a given locality.

Third, I show that the intensity of change in incentives to vote and to mobilize after the implementation of PR is correlated with a change in gender turnout gap before and after the reform in the same locality. After the switch to PR, the gender turnout gap narrowed by the largest amount in the least competitive pre-reform SMDs. This casts further doubts on the possibility that narrowing of the gender turnout gap is driven by a type of women and men in competitive districts, rather than by strengthening incentives to vote and mobilize. It also demonstrates that the impact of electoral systems on gender turnout gap may not be thought of separately from its actual impact on general voting propensity among men.

Fourth, I show that when women's turnout reaches parity with men's, legislators become more likely to support greater equality for women after suffrage. This supports the argument that the size of the gap between women's and men's turnout shapes the quality of representation of women's interests.

Finally, I take advantage of the widespread availability of sex-separated data during the first suffrage wave and demonstrate generalizability of the main result in five additional elections in New Zealand, Sweden and Austria.

This paper has implications for our understanding of the pathway to representation of women's interests after suffrage. While women politicians and inclusive electoral institutions foster women's substantive representation (Catalano Weeks 2019; Celis and Childs 2020; O'Brien and Piscopo

2019), local context within electoral systems is also important. Electoral context that incentivizes turnout increases women's turnout relative to men and therefore incentivizes politicians' responsiveness to women. This implies that, under the most favorable electoral conditions, women's suffrage may improve substantive representation of women even in the virtual absence of women politicians or institutions that promote inclusiveness.

# Barriers to Voting Faced by Newly Enfranchised Women

Despite the changing social and economic status of women that accompanied the first wave of suffrage at the turn of the twentieth century, women's primary responsibilities in the 'domestic sphere' continued to be encouraged both institutionally and culturally (Kessler-Harris 2003, p.3-18 on U.S.; Blom 2012 on Scandinavia). The gendered character of family, work and voluntary associations after suffrage not only limited women's access to political resources, but also their motivation and opportunity to take advantage of their newly gained rights. In this section, I highlight the cultural, structural and institutional barriers to voting that women continued to face after suffrage.

**Cultural Barriers** The exclusion of women from formal politics fostered gendered socialization of women that scholars know to hinder women's participation long after the vote (Burns, Schlozman and Verba 2001, p.8; Iversen and Rosenbluth 2006). Prior to women's formal entry to the electorate, the ideology of 'separate spheres' effectively encouraged women's socialization as that of 'non-political beings' (Baker 1984 on U.S.; Blom 2012 on Scandinavia). American women who reached voting age before 1920 were mobilized less often by politicians decades later, presumably because parties determined they would struggle to get out the vote of women socialized into the idea that 'politics was for men' (Rosenstone and Hansen 1993, p.164). Indeed, some first women non-voters cited husband's 'objections' or fears of 'canceling the vote of [their] husbands' as reasons for their abstention (Merriam and Gosnell 1924, ch.5 on U.S.). Similarly, more recent survey data continue to show that women and men born early in the twentieth century are most

likely to agree that 'man make better political leaders than women' (Norris and Inglehart 2001).

**Structural Barriers** While women's employment in clerical and service sectors after World War II fostered women's political participation (Burns, Schlozman and Verba 2001, ch.8), women's ability to draw on resourceful employment at the turn of the twentieth century was limited. When the first women were enfranchised at the turn of the twentieth century, only about a third of women was typically employed in full time outside employment that provided independent income (Mitchell 1998). Without access to state-funded childcare and robust maternity policies, childbearing responsibilities hindered women's entry into the labour force (Goldin 1990 on U.S.). In addition, women's employment outside the home was depressed by marriage bars and wage discrimination (Grytten and Brautaset 2000 on Norway; Costa 2000 on OECD countries). The expectation that single working women leave employment upon marriage also disincentivized their unionization, which further limited women's opportunities to draw on the mobilizational potential of their employment (Kessler-Harris 2007 on U.S; Stanfors 2003 on Sweden).

**Institutional Barriers** While electoral laws after women's suffrage rarely referenced women explicitly, the existing institutional context often continued to disproportionately affect women. As suffragists sought to distribute information on how to register and ensure women's eligibility to vote (Sjogren 2012 on Sweden; Grimshaw 1987, ch.10 on New Zealand), restrictive registration requirements discouraged turnout especially among women (Corder and Wolbrecht 2016 on U.S.). Up to 4 million women in the U.S. South were de facto disenfranchised by poll taxes (Podolefsky 1997), while single mothers in Sweden were more likely than men to lose their vote as recipients of poor relief (Sjogren 2013). In some cases, women were given fewer opportunities to register, either as politicians attempted to resist suffrage or failed to update existing procedures to allow women's registration (Andersen 1996, p.50-1 on U.S.). Without access to childcare, long distances to the polling station also disproportionately disincentivized women's turnout (Andersen 1996, p.50-1 on U.S.; Page 1993, p.14 on New Zealand; Rokkan and Valen 1962 on Norway).

# Theoretical Framework: Explaining Gender Turnout Gap After Suffrage

The structural, cultural and institutional barriers faced by newly enfranchised women increased women's cost of voting relative to men. The cost of voting, referred to as the 'C' term in rational choice models, is understood to entail the cost of making a decision on how to vote and the cost of the act of voting (Blais 2000, ch.4). Every elector is typically assumed to face costs associated with voting, although these costs may be minimal for some while substantial for others. Using this framework, I argue that the barriers to voting faced by newly enfranchised women increase both their cost of making a decision to vote and the cost of the act of voting. When social norms dictate that 'politics is for men', women face disagreement from family members or peers to gather information or to vote and need to exert greater effort to vote. When structural barriers limit women's access to political resources, gathering information and tapping into resourceful social networks becomes more challenging. Likewise, when institutional context disproportionately affects women, women are sent an un-welcoming signal and the demand placed on women's time and effort increases relative to men's. In the theory section, I first theorize how this difference in the cost of voting between newly enfranchised women and men shapes women's turnout relative to men's turnout. Building on these insights, I then theorize how electoral competition within electoral systems affects the extent to which women's turnout lags behind men's.

## When Do Women Vote More Relative to Men After Suffrage?

Let's assume that the cost of voting follows a normal distribution in the population, but that half of the population that is women faces a higher cost of voting on average ($m < w$). That is, there is relatively few electors for whom voting is a fairly low-cost activity, and relatively few electors for whom voting is a high-cost activity. The 'typical' elector faces a somewhat moderate cost of voting that lies in between the two extremes. Given that newly enfranchised women faced greater barriers

to voting, their cost of voting would have been higher than that of 'similar' men. In that case, we would expect fewer women than men among the electors with a low-cost of voting, but more women than men among the electors with a high-cost of voting (see Figure 1a). In other words, even women who had access to resources and were most likely to vote faced higher costs than 'similar' men and that women who were the least likely to vote faced higher costs than 'similar' men. For example, while working class women faced greater challenges in accessing information than upper class women, they also faced more challenges than working class men who were more often employed outside the home and engaged in unions.

If women faced a higher cost of voting than men, we would expect women's turnout to lag behind men's. However, this difference in the cost of voting also implies that women's turnout relative to men's turnout varies with the strength of general incentives to vote and to mobilize. This is illustrated in Figure 1b that plots cumulative densities, using the density functions in Figure 1a: the percentage point difference between turnout of women and men (turnout gap) narrows when general incentives to vote and to mobilize are very weak or very strong. The incentives are fairly moderate, when, for example, we set a cutoff cost of voting that separates voters and non-voters to $m$, i.e. where everyone with the cost of voting equal to $m$ or less votes. In this case, about half of all men votes, very few women vote and the difference in turnout between women and men (gender gap) is wide at about 34%. However, if we strengthen the incentives by doubling the cut-off cost of voting that separates voters and non-voters, almost all men and almost all women vote and the gender gap in turnout closes. In turn, if the incentives are very weak, the gender turnout gap will also close, as almost no men and almost no women vote.

Figure 1: When Do Newly Enfranchised Women Vote?

(a) Probability Density    (b) Cumulative Probability
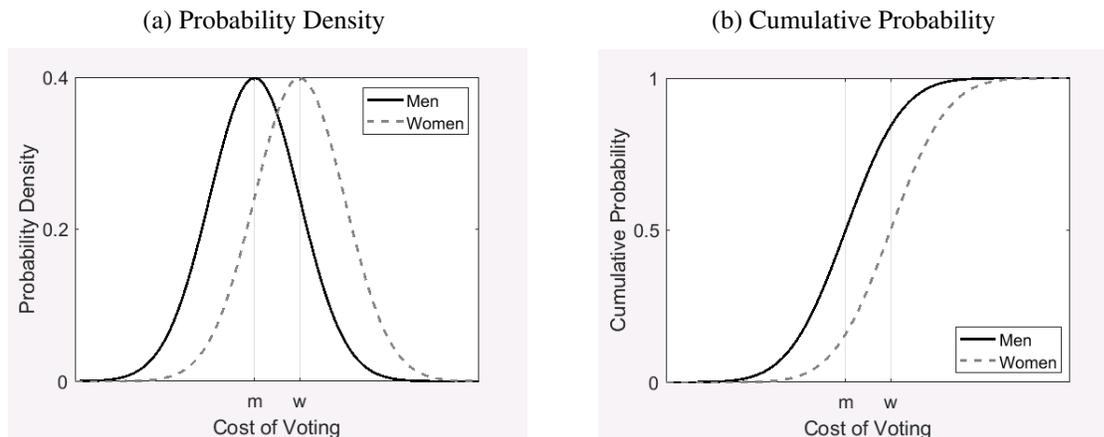


Notes: *m(w)* mean cost of voting for men(women)

# Measuring Incentives to Vote: How Electoral Context Affects Turnout of Women After Suffrage?

The example depicted in Figure 1 above suggests that we cannot think of women's turnout relative to men separately from the strength of general incentives to vote and to mobilize. Given that voters with a relatively high cost of voting vote only when incentives to vote and incentives to mobilize them are very strong, and given that these voters were more likely to be women, women's turnout should reach parity with men's in contexts that incentivize turnout among the general population. However, this insight does not specify (i) *what contexts* incentivize turnout and are therefore most conducive to women's participation relative to men, (ii) *how and why* are women incentivized to vote in those contexts and (iii) how *electoral systems* shape women's turnout relative to men. In the reminder of this section, I theorize that electoral competition both at the district and within-district level shape the extent to which women's turnout reaches parity with men's turnout. I then outline how high-cost voters who are disproportionately women are being incentivized to vote and more likely to be mobilized in those contexts in a given electoral system.

**District Electoral Competition**

Classic research suggests that general propensity to vote increases with district electoral competition (e.g. Powell 1986; Aldrich 1993). Scholars typically attribute the competition-on-turnout effect to higher pivotal probabilities in competitive districts. In the most competitive districts, the probability that a single vote affects the election outcome is high, which incentivizes voters' decision to turn out. However, the probability that politicians' mobilization effort affects the election outcome is also higher in competitive districts, which spurs turnout by incentivizing politicians to mobilize.

I theorize that this increase in pivotal probabilities with district electoral competition also fosters women's turnout relative to men and therefore closes the gender turnout gap. When the chance of affecting the election outcome increases, the expected benefit of voting becomes more likely to outweigh the relatively high cost of voting incurred by voters at the tail of the cost distribution. Given that there are more women than men with high cost of voting, district electoral competition then incentivizes more women relative to men to vote. For example, women who registered for the first time had to exert greater effort to register than men of the same class, race or ethnicity. While the cost of acquiring information on how to register may put off more women than men from voting, women who perceived their vote to be more likely to decide the election would have been more likely to incur these costs than women elsewhere. Importantly, because there is more women than men for whom registration costs are very high, electoral competition brings more (new) women than men to vote and narrows the gender gap in turnout.

But even if voters do not pay attention to pivotal probabilities, electoral district competition spurs women's turnout relative to men's through mobilization. Voters with a high cost of voting are more costly to mobilize, and therefore politicians' have weaker incentives to mobilize them. However, as politicians' chance of affecting the election outcome increases with electoral competition, the expected benefit of winning compared to losing becomes more likely to outweigh the relatively high mobilization costs. Given that there are more women than men among high-cost voters, district electoral competition spurs mobilization among women and therefore incentivizes

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more women relative to men to vote. For example, mobilization of first time voters is more costly than that of habitual voters because it may return fewer votes than that of experienced voters. While the cost of mobilization weakens the incentive to mobilize women, politicians who perceived their efforts to mobilize to be more likely to decide the election would have been more likely to incur these costs. Importantly, because there is more women than men first time voters, electoral competition promotes mobilization of more (new) women than men and narrows the gender gap in turnout.

To the extent that district competition indeed spurs substantial turnout among high-cost voters, turnout of women relative to men should increase with district competition in all electoral systems. However, I expect the effects of district electoral competition on women's turnout relative to men's to be most relevant in systems with single member districts. As district magnitude increases, voters face more opportunities to cast a decisive vote, and parties to affect the election outcome across all districts. As a result, the propensity to vote and to mobilize across districts has a high mean and low variance. If voting and mobilization becomes widespread across all districts, the ability of electoral competition to predict turnout weakens (Cox 1999), and therefore also its ability to predict women's turnout relative to men.

Hypothesis 1: *In systems with single member districts, women's turnout approaches men's as district electoral competition increases.*[1]

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[1]This prediction assumes that the incentives to vote and to mobilize are high or moderate in most districts. If the incentives are mostly weak across localities, the opposite linear relationship would be expected. However, this seems less likely in general elections that typically have substantial turnout even in the most uncompetitive districts. This was the case in Norway after women's suffrage, where turnout rarely dropped below 50%.

**Within-District Electoral Competition**

Another strand of classic scholarship suggests that general propensity to vote increases in socially homogeneous within-district localities (e.g. Huckfelt and Sprague 1995; Tingsten 1937). Electors who live in homogeneous localities are more likely to form strong networks among the majority electors, which reduce the cost of voting by increasing information flow, strengthening group identity and increasing social pressure to vote (Sinclair 2013). The presence of strong social networks is also indirectly valuable to politicians, because dense social networks reduce politicians' cost of mobilization. Whenever strong social networks facilitate mobilization of its members, politicians are more likely to be able to sub-contract mobilization to organized networks, such as unions, or to the most influential electors within each network, such as local opinion leaders (Rosenstone and Hansen 1993, p.31). If social groups have clear links to political parties, social networks in socially homogeneous localities are strong and therefore more likely to coordinate mobilization for an ideologically aligned party. Electors living in strongholds, electorally concentrated, non-competitive, within-district localities are therefore more likely to vote and be mobilized than electors elsewhere.

I theorize that this reduction of voting costs in strongholds fosters women's turnout relative to men. When the average cost of voting is reduced in a given locality, general propensity to vote increases because the expected benefit of voting becomes more likely to outweigh a smaller voting costs. Given that there are more women than men at the tail of the cost distribution, and therefore more women than men for whom reduction in voting costs is likely to be critical for turnout, within-district strongholds incentivize more women relative to men to vote. For example, working class women at the turn of the twentieth century faced the most severe barriers to political resources and were therefore the least likely to vote (Morgan-Collins and Natusch 2021). While dense social networks in electoral strongholds lower voting costs of both working-class women and men in that locality, there are more women for whom this reduction is likely to be critical for turnout. That is, because there are more women than men with low resources and therefore likely to be put off from voting, lowering the voting costs in strongholds mobilizes more (new) women than men.

The reduction in voting costs in strongholds also spurs greater mobilization of women. In the presence of dense social networks, women's organized networks are more likely to form, and politicians therefore gain more opportunities to sub-contract mobilization of women to women's clubs and organizations. But even in the absence of formal women's networks, the presence of dense social networks allows politicians to mobilize women by targeting local opinion leaders, who can mobilize women in their informal network for them. For example, working-class women living in working-class communities were more likely to organize local women's socialist clubs, to which politicians could sub-contract women's mobilization. But even in the absence of women's clubs, politicians' could reach to a larger number of women by mobilizing directly a politically active working-class voter, who could reach out to everyone in their most imminent network, including women. While a dense social network of workers reduces mobilization costs of both women and men workers, there are more women than men whom parties (directly or indirectly) mobilize because of this reduction in mobilization costs. That is, because there are more women than men with low resources who are likely to be undermobilized by parties, lowering the mobilization costs in strongholds will mobilize more (new) women than men.

I argue that to the extent that strongholds indeed spur turnout among electors who are at the tail of the cost distribution, turnout of women relative to men should increase in all electoral systems. However, I expect these effects to be especially relevant in countries with proportional electoral systems. This is for several reasons. Substantively, this is because there is typically a tighter link between social groups and political parties in countries with PR (Cox 1999; Powell 1986). If parties do not form close ties with social groups, then electoral strongholds may not be socially homogeneous and may therefore not form stronger social networks than elsewhere. For example, while leftist strongholds in PR are likely to emerge in majority working-class localities that promote a strong social network among workers, leftist strongholds in SMDs may consist of various classes, each class forming own network. While all types of social networks reduce voting and mobilization costs, the network in leftist strongholds that is composed of various classes is less likely to reduce voting and mobilization costs more than networks in any other locality. Statistically, this

is because the effects are less likely to be detected in SMDs. While voting and mobilization are typically incentivized across all electoral districts in PR, this is not the case in the most uncompetitive SMDs. In the most uncompetitive SMDs, the pivotal probabilities are likely to be very low, such that reducing voting and mobilization costs may not be sufficient to incentivize voters to vote and parties to mobilize. If strongholds do not incentivize turnout and mobilization in all districts, the overall relationship between within-district concentration and gender turnout gap will be weakened.

Hypothesis 2: *In proportional systems, women's turnout approaches men's as within-district electoral competition decreases.*[2]

## Case Selection

In order to probe the theoretical framework, I focus on the case of Norway for two main reasons. First, Norway elected its representatives in single member districts with a plurality run-off at the time of women's suffrage, but adopted PR shortly after women's suffrage in 1919. The Norwegian case therefore allows me to probe both hypotheses in the same country, thus lessening the concern that the relationship between turnout and electoral competition is driven by cross-country differences. Second, Norway adopted women's suffrage gradually in two separate reforms. While tax-paying women were enfranchised in 1907, women had to wait until 1913 to secure equal eligibility terms with men. This gradual expansion of women's suffrage provides a unique opportunity to explore the impact of two suffrage reforms in the same country, thus allowing to test whether the two hypotheses apply to women of all classes as theorized.

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[2]This prediction assumes that the incentives to vote and to mobilize are high or moderate in most within-district localities. If the incentives are mostly weak across localities, the opposite linear relationship would be expected. However, this seems less likely in general elections that typically have substantial turnout even in the most uncompetitive districts. This was the case in Norway after the adoption of PR, where turnout rarely dropped below 50%.

However, the cultural, structural and institutional costs bore by newly enfranchised women were not unique to the case of Norway. The theoretical framework should therefore be generalizable to other countries, most imminently to countries that enfranchised women in the first suffrage wave. To probe the generalizability of my theoretical framework, I therefore take advantage of the relative availability of sex-separated data at the turn of the twentieth century[3] and collect data for three parliamentary elections and two prohibition referenda held in three additional countries: New Zealand, Austria and Sweden (see Table A8). The sample therefore consists of two countries with SMDs (Norway before 1921, New Zealand), three with PR (Austria, Sweden, Norway after 1921) at the time of women's suffrage. Two countries (Sweden and New Zealand) also held prohibition referenda shortly after suffrage - see Table A7. The selection of an additional Scandinavian case, Sweden, overrepresents the region, but allows me to exploit within-region variation in the type of electoral system (Norway's SMDs vs Sweden's PR). The extended data set therefore tests the theoretical framework on four countries with distinct cultural, political and institutional histories, which provides strong basis for generalization (Seawright and Gerring 2008).

# The Case of Norway

## Data and Variables

The main data set consists of within-country, sex-separated election data in Norway between 1909 and 1927. This time span captures (i) the first election after the first suffrage reform that enfranchised tax-paying women (1909), (ii) the first election after the second reform that enfranchised non-tax-paying women (1915) and (iii) the first election after Norway switched from a single member district system with a two-round plurality run-off to a proportional representation (1921).

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[3]Ten out of the fifteen Western countries that enfranchised women before WWII collected at least some sex-separated data (Table A6). Western countries typically stopped collecting data separately by sex after WWII with the advancement of survey technologies.

Election data before the adoption of PR always refer to a decisive round that elected an MP, that is the first round if a winner was determined in the first round, and the second round if a winner was determined in the second round (see also Cox et al 2016).[4] Summary statistics for key variables in Table A1. In the reminder of this section, I discuss the measurement of key variables.

**Turnout.** The dependent variables are women's and men's turnout, which are calculated as the number of votes cast by men and women divided by the number of men and women in the electorate respectively. The dependent variable of primary interest is a measure of women's turnout relative to men's calculated as the percentage point difference between women's and men's turnout (gender turnout gap). Figure A2 plots women's and men's turnout from 1909 until 1927. The Figure shows that women's turnout lagged behind men's in every election at least until 1927, which is consistent with the argument that women continued facing greater voting costs long after suffrage. However, adding non-tax-paying women in 1915 widened the difference between women's and men's turnout. This is consistent with an increase in women's cost of voting relative to men when poorer women entered the electorate. In turn, adopting PR in 1921 increased turnout of both women and men and narrowed the difference between them. This is consistent with the argument that the impact of PR on women's turnout may not be separated from its actual impact on general voting propensity among men.

**Competition.** The key independent variable is proxied with two indicators. At the district level, I calculate a winner-runner up district level margin. As above, the district margin in 1909

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[4]The runoff was open to any number and type of candidates. While some candidates chose not to run to allow voters to coordinate on an 'allied' candidate, it was also common that some parties entered a new candidate in the second round, or withdrew a second candidates for their party. One way to perceive the first round is therefore as a 'testing ground' in district without a clear frontrunner, where voters and parties could employ strategies which would have been more risky in districts with a clear frontrunner, such as running two candidates from a single party or voting for a small party. This seems especially so, given that most districts with a second round also had a second round in the next election.

and 1915 is calculated in the decisive round. At the within-district level, I calculate a Herfindahl-Hirschman index of party concentration. The key independent variables are calculated at time t. This allows me to implement consistent coding across all election years in Norway, and in additional five election cases in three other countries - that is even in cases where data for the last election before women's suffrage is not available.[5]

## Women's Turnout as a Function of Men's Turnout Across Localities

Before proceeding to the main analysis, I explore patterns in women's turnout across localities. If gender turnout gap is shaped by the strength of voting and mobilization incentives in the locality, men's turnout should predict women's turnout. As illustrated in Figure 1b, when the incentives to vote and to mobilize are very strong, almost all men vote and women's turnout approaches parity with men's. When the incentives are very low, almost no men vote and women's turnout also approaches men's. Using the first election year after each reform in Norway (1909, 1915, 1921), I probe this insight by plotting men's turnout against women's turnout (Figure 2). Women's and men's turnout are positively correlated overall. The linear fit demonstrates that as men's turnout increases, do does women's. However, the linear fit masks the theorized U-shaped relationship. As men's turnout increases, women's turnout first increases at a slower pace than men's, and then increases at a faster pace, reaching parity with men's when few or most men vote.

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[5]One concern here is that correlating turnout and competition indicators in the same election year opens up the possibility that turnout measures affect competition measures, rather than vice versa. However, the main result is robust to using a pre-suffrage indicator of competition in election years where suitable data for pre-suffrage elections are available - in Norway 1909 (SMD) and Sweden 1921 (PR) (Figure A3).

Figure 2: Women's Turnout as a Function of Men's Turnout 1909, 1915, 1921 in Norway



(a) Norway 1909        (b) Norway 1915        (c) Norway 1921
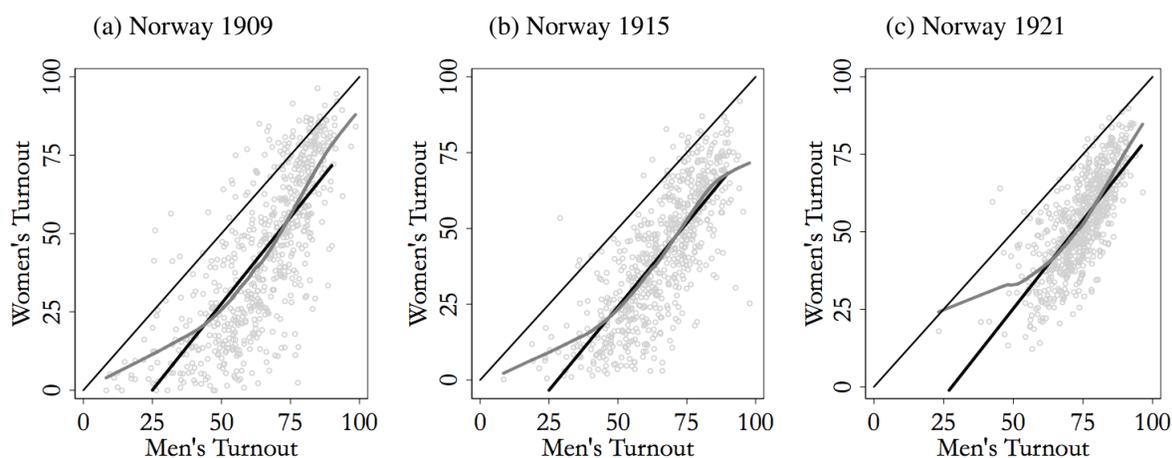
Notes: plotting men's turnout (pp) against women's turnout; linear fit in black; Lowess fit in gray; within-district municipality data.

## The Effect of Electoral Competition on Gender Turnout Gap

The key implication of the theory is that electoral competition determines the size of the gender turnout gap. To this end, I first identify correlates of turnout measures and regress all three turnout measures on measures of electoral competition in each election year.

**District Electoral Competition.** I first present the estimates of district margin on women's and men's turnout (Figure 3a) and the gender turnout gap (Figure 3b), using the 1909-1918 period in Norway which implemented SMDs. I report full results for key election years in Tables A2&3 and scatter plots in Figure A8. As theorized, Figure 3a shows that district electoral competition increases both women's and men's turnout, but that the point estimates are larger in all election years for women's turnout. Importantly, the gender turnout gap 'narrows' in competitive districts in all election years. These estimates are sizable and significant at 0.01 level in all election years. An increase of 20 percentage points (roughly corresponding to one standard deviation) in district margin (on a scale of 0 to 100) is associated with 'narrowing' of the gender turnout gap by 4.4%, 6%, 6.2% and 3.8% in each electoral year respectively. The theorized effects are thus detected in election years under both suffrage reforms. This is consistent with the assumption that even the

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relatively 'richer' women who paid taxes faced greater voting costs and were therefore more likely to vote and be mobilized in the most competitive districts to a greater extent than men. In the appendix, I take advantage of the fact that pre-suffrage data are available for 1909 election, and demonstrate that using a lagged measure of electoral competition in Norway 1909 returns smaller but statistically significant estimates (Figure A3). This provides reassurance against the possibility that women's turnout relative to men in a given locality may directly shape electoral competition rather than vice versa.

Figure 3: The Cross-Sectional Effect of District Margin on Turnout in Norway 1909-1918

(a) DV: Women's and Men's Turnout  (b) DV: Gender Turnout Gapt



Notes: 95% CIs; DV is men's turnout (black), women's turnout (dark gray), and gender turnout gap (light gray); robust standard errors.

**Within-District Electoral Competition.** I present the estimates of within-district concentration on women's and men's turnout (Figure 4a) and the gender turnout gap (Figure 4b), using the 1921-1927 period in Norway which implemented PR. To directly estimate within-district effects, I include district fixed effects in all models and then cluster standard errors at the district level.[6] I report full results from 1921 in Table A4 and scatter plots in Figure A8. Figure 4a shows that

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[6]There are 29 districts/clusters in Norway. To address the possibility of downward bias of standard errors, I also report the recommended wild bootstrap-t with null imposed, Rademacher weights and 999 replications using the 'bootest' command in Stata (Cameron, Gelbach, and Miller 2008).

all but one point estimates on women's and men's turnout are positive, suggesting that electoral concentration was mobilizing both women and men. However, the point estimates are larger for women than for men in all three election years. Importantly, the gender turnout gap 'narrows' in concentrated within-districts localities in all election years, although the estimates are not significant at conventional levels in the first election after the reform[7], which may reflect slow response of both parties and voters to the electoral reform. An increase by about 0.1 points (roughly corresponding to one standard deviation) in municipality-level HHI (on a scale of 0 to 1) narrows the gender gap by about 1.5%, 1.9% and 1.7% in each electoral year respectively. The robustness of these results to pre-suffrage (lagged) measures of electoral concentration cannot be bested in Norway. However, I use data from Sweden 1921, where pre-suffrage election data are available (Figure A3). The results are robust to lagged specifications and therefore provide some reassurance against the possibility that women's turnout relative to men in a given locality may directly shape electoral concentration rather than vice versa.

Figure 4: The Cross-Sectional Effect of Within-District Concentration on Turnout Measures in Norway 1921-1927

(a) DV: Women's and Men's Turnout    (b) DV: Gender Turnout Gapt
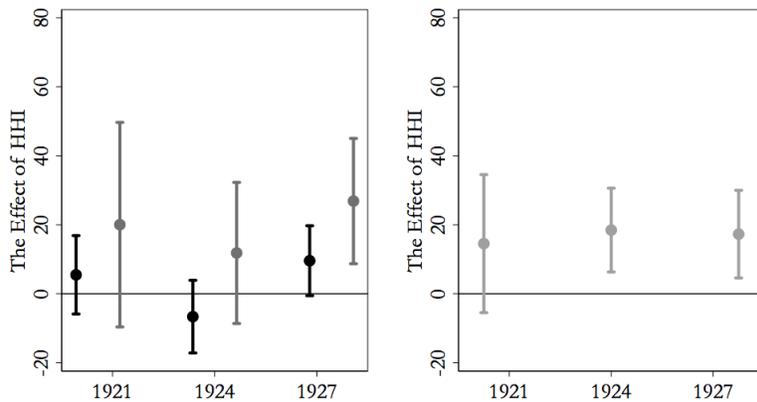


Notes: 95% CIs; DV is men's turnout (black), women's turnout (dark gray), and gender turnout gap (light gray); district fixed effects; clustered standard errors on district.

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[7]Wild bootstrap std. errors return p=0.275, p=0.008 and p=0.026 respectively.

## Robustness to Observed and Unobserved Confounders

One obvious concern with the results presented so far is that measures of electoral competition may be correlated with characteristics of localities that also affect turnout and therefore confound the relationship of interest. For example, women and men in urban localities will likely be different. For example, they may gather information more easily. If competitive district or within district localities were more likely to be urban, the results above may reflect differences in the 'type' of the electorate in those localities, rather than the theorized mechanisms.

I address this possibility in two ways. First, using key election years, I control for several characteristics of localities that could confound the relationship of interest - a binary indicator of urban localities, localities contested by a Socialist candidate or with a Socialist lead, percentage of adults working in industry and in intellectual jobs (e.g. administration, teaching, arts, charities) and a percentage of women who were married. I report full results in Tables A2-4. While women's turnout is higher in urban, industrial and intellectual localities, plausibly because women's resources relative to men are higher in those localities, the effect of electoral competition measures on all turnout measures remains robust to the inclusion of controls, returning estimates of similar size and significance levels.

Second, I estimate a fixed effect model with locality and election fixed effects, which allows me to control for time-constant unobserved confounders by comparing within localities. I present the results for election years with SMDs in Figure 5a and for election years under PR in Figure 5b. In PR elections, I cluster standard errors at the district level, but also report Wild bootstrap. An increase of 20 percentage points (roughly corresponding to one standard deviation) in district margin (on a scale of 0 to 100) is associated with a narrowing of gender turnout gap by 1.6% (p=0.001). An increase by about 0.1 points (roughly corresponding to one standard deviation) in municipality-level HHI (on a scale of 0 to 1) narrows the gender gap by about 0.6% (p=0.036) in 1921.[8] Inclusion of municipality and election fixed effects therefore reduces the estimated effects

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[8]Wild bootstrap std. errors return p=0.015.

of electoral competition on gender turnout gap by more than half in contrast to the cross-section models presented above. Overall, these results provide further reassurance that the 'type' of women and men across localities cannot fully account for the effects identified in cross-sectional models.

Figure 5: Fixed Effect Models in Norway 1909-1927

(a) District Competition, Norway 1909-1918
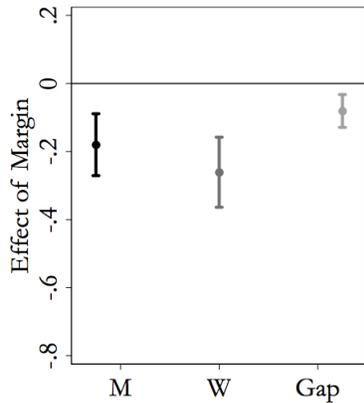
(b) Within-District Concentration, Norway 1921-1927
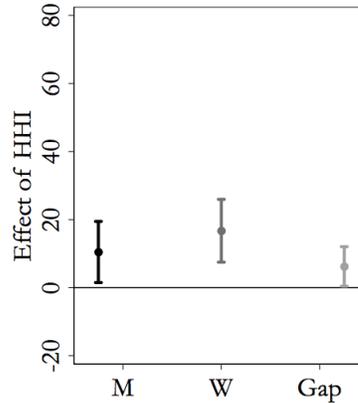


Notes: 95% CIs; DV is men's turnout (black), women's turnout (dark gray) and gender turnout gap (light gray); Sub-figure q: unit of analysis is electoral district, robust standard errors, all models include a include election and district fixed effects; multi-district municipalities and districts with reshuffled municipalities anytime between 1909-1918 dropped (N=55 out of 421). Sub-figure b: unit of analysis is a within-district municipality, standard errors clustered at district level, all models include a include election and municipality fixed effects; municipalities that changed boundaries anytime between 1921-1927 dropped (N=205 out of 2152).

## The Effect of Electoral Context on Change in Gender Turnout Gap

I provide additional evidence in support of the theoretical framework by exploiting the fact that Norway adopted PR shortly after women's suffrage. I adopt the empirical strategy employed in Cox, Fiva and Smith (2016) and assess whether local level turnout changed with the change in the intensity of voting and mobilizational incentives after the introduction of PR. That is, I assess whether the intensity of change in incentives to vote in the *same* pre-reform district following the introduction of PR corresponds with a theorized change in women's turnout. In contrast to Cox, Fiva and Smith (2016) who estimate the impact of competition on overall turnout, I examine

women's and men's turnout separately. To this end, I run the following equation:

$$\Delta Turnout_{1921-1918i} = \alpha_0 + Margin_{Mean1909-1918i} + \varepsilon_i \tag{1}$$

where $\Delta Turnout$ refers to a difference in the three measures of turnout in the decisive round before and after the introduction of PR in a pre-reform single member district $i$. $Margin_{Mean1909-1918}$ refers to a mean level of district level margin of victory in the first round before the introduction of PR in a pre-reform district $i$ in 1909-1918.[9] To address the fact that pre-reform SMDs are nested within post-reform PR districts, I cluster standard errors on post-reform districts and check for downward bias of standard errors with Wild bootstrap as above.

I first plot the change in women's and men's turnout before and after the reform (1921-1918) against pre-reform district margin. As shown in the scatter plot on the left in Figure 6, turnout of both women and men increased the most in the most uncompetitive pre-reform districts. This is consistent with the contraction hypothesis and evidence provided in Cox, Fiva and Smith (2016). However, by fitting the model separately for women and men, it becomes apparent that the 'contraction' effects are stronger for women than for men. Importantly, the gap between women's and men's turnout narrowed the most in the most uncompetitive pre-reform districts. A 13% increase (roughly corresponding to one standard deviation) in pre-reform margin narrows the gender turnout gap by 2.1% (p=0.043).[10]

This is an important finding. By demonstrating that a *change* in the strength of incentives to vote and to mobilize in the same locality narrows the gender turnout gap, it provides further evidence in support of the theoretical framework, while casting further doubts on the possibility that the impact of electoral competition on gender turnout gap is driven by different 'types' of women and men across localities. With respect to previous research, the result suggests that the theorized

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[9]In the interest of direct comparisons, I closely follow Cox, Fiva and Smith (2016) in all coding decisions. However, I construct all turnout variables using votes that were *casted*, because votes that were *approved* are not available separately by sex.

[10]Wild bootstrap returns similarly sized but less precise standard errors (p=0.063).

'contraction' effect of PR reforms on turnout in Cox, Fiva and Smith (2016) are especially relevant for undermobilized groups. That is, adopting PR not only increases overall turnout (unless too many districts are highly competitive), but does so especially for the most undermobilized groups. Second, it suggests that the theorized effect of PR reforms on women's political participation (Kittilson and Schwindt-Bayer 2012; Skorge 2020) cannot be thought of separately from its impact on overall levels of political participation. That is, PR may not narrow the gender turnout gap if the general voting propensity among men remains the same even after the adoption of PR.

Figure 6: The Effect of Competition on Change in Turnout 1921-1918 by Sex in Norway
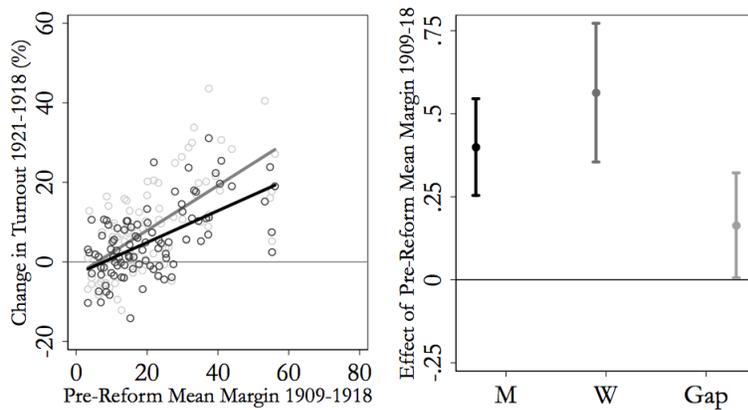


Notes: Figure on the left plots change in pre-reform district level women's (gray) and men's (black) turnout before and after the implementation of PR against mean level of pre-reform district competition; linear fit; Figure on the right regresses change in pre-reform district women's (gray) and men's (black) turnout and gender gap (light gray) before and after the implementation of PR on mean level of pre-reform district competition; OLS estimates; 95% CIs; standard errors clustered on post-reform PR districts; N=92 pre-reform multi-municipality districts that contained the same municipalities between 1909-1921 as in Cox, Fiva and Smith (2016).

## Mechanisms

In this section, I probe the validity of proposed mechanisms, and then assess whether the results could be driven by women's distinct preferences.

**Was turnout incentivized in competitive districts?** If district competition incentivized voting and mobilization, then we should see more newspaper articles encouraging turnout (by parties,

organized groups or pundits) in the competitive districts. To this end, I collect data on election ads published in three national newspapers, each supporting one of the three major parties, in the last week before election in 1906 (pre-suffrage), 1909 (post-suffrage first reform) and 1915 (post-suffrage second reform).[11] A total of 3226 election articles was published in the three newspapers in the last seven days before the three elections, 222 of which encouraged people to vote. The number of ads almost doubled following women's suffrage, from 42 Conservative and Liberal ads in 1906 to 82 ads in 1915. In assessing whether elites concentrated mobilization into competitive districts, I then exploit the fact that some ads in the national newspapers were encouraging turnout in specific districts.[12] As expected, mean electoral competition in districts with at lest one district-specific ad was lower than in all other districts in both 1909 and 1915 (Figure A5). Mean margin of victory was 16.8% in districts without a specific national ad and 12.9% in districts with at least one district-specific ad in 1909. This was 21% and 10.8% respectively in 1915.

**Did parties gain more votes in strongholds?** If social networks in electorally concentrated localities reduce the cost of voting and mobilization by encouraging turnout for the majority candidate, then we should see that parties gain disproportionately more votes in partisan strongholds than elsewhere. I therefore explore whether the change in votes casted in within-district municipalities between 1921 and 1924 correlates with the change in the total party votes and then whether this is to a greater extent in the strongholds. Specifically, I estimate that one new vote cast in a municipality in 1924 compared to 1921 brings about less thank half of a vote to Conservatives and Liberals in municipalities where each party already had a lead in 1921 (Models 1-3 in Table A5). To assess whether these estimates are greater in strongholds, I interact the change in total votes cast between 1921 and 1924 with HHI in 1921 (Models 4-6 in Table A5). I estimate that new votes

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[11]Morgenbladet supported the largest Conservative party, Dagbladet supported the second largest Liberal party, and Social-Demokraten supported the Socialists. The issues of Social-Demokraten are only systematically digitized by the National Library of Norway in 1909.

[12]In 1909, 50% of ads (49 out of 98) endorsed a specific candidate, or called on residents of a specific district to vote. In 1915, this rose to about 60% (50 out of 82).

cast in 1924 compared to 1921 in municipalities where Conservatives or Liberals had about 90% or more votes in 1921, translate to votes for that party. In contrast, new votes cast in municipalities where each party had a lead in 1921, but had less than about 20% of overall votes in 1921, do not translate to additional votes for that party.[13]

**Did some parties have mobilization advantage among women?** Some political parties may have mobilization advantage among women. For example, the Conservatives could more credibly appeal to women given their track record on enfranchising tax-paying women. If some parties indeed have a mobilization advantage among women, then we would expect electoral competition to affect women's turnout relative to men's depending on who runs in a district or leads in the municipality. However, using data from key election years, this is not the case. First, I plot women's and men's turnout against margin in Conservative-Liberal, Liberal-Socialist and Conservative-Socialist districts. If gender turnout gap narrowed in competitive districts because of women's preferences for Conservatives, for example, we should see these patterns only in districts with a Conservative contender. However, this is not the case even in 1909, where only tax-paying women were enfranchised (Figure A4a,b).[14] Second, I plot women's and men's turnout against HHI in municipalities with a Conservative, Liberal or Socialist lead. If gender turnout gap narrowed in party strongholds because of women's preference for Conservatives, for example, we should see these patterns only in municipalities with a Conservative lead. This is also not the case (Figure A4c). While women likely had different party preference to men, and some parties had mobilization advantage among newly enfranchised women, these results suggest that any gender gaps in vote choice cannot comprehensively explain the impact of electoral competition on gender turnout gap.

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[13]This is not the case for the third largest party, the Socialists. This may reflect the fact that Socialists were on a rise nationally around the time of suffrage. The Socialist gain was therefore not limited to strongholds and they had fewer electoral strongholds.

[14]Weak or no relationship is observed in Conservative vs Socialist districts, but the lack of uncompetitive districts does not allow us to make robust conclusions there.

## Does Gender Turnout Gap Matter for Women's Representation?

One remaining question is whether closing the gender turnout gap indeed helped to secure better representation of women's shared interests after suffrage. To the extent that elites can shape the design of inclusive institutions, they may undermine its ability to improve representation of marginalized groups (Htun 2016). I therefore probe whether closing the gender gap in turnout indeed shifts politicians' focus to women's interests. To this end, I analyze parliamentary votes on a landmark women's legislation passed in the first Storting elected after women's suffrage: women's access to public offices. While the adopted legislation proposed by the Conservative government still banned women from military, clerical, diplomatic and cabinet posts, some legislators sought more while others fewer restrictions. I first calculate 'women's score' for each legislator as the number of votes cast in support of greater access divided by the total number of bills each legislator voted on. There was substantial disagreement between legislators even within Government and Opposition blocks about the extent of women's access to public offices (Figure A6). I then regress gender turnout gap in 1909 on women's score in each district. In all models, I include a vector of party controls and a binary indicator for urban districts. I report results in Table 1. Legislators elected in districts where gender turnout gap was narrower were more likely to support greater equality. Narrowing of women's gender turnout gap by 15 percentage points (roughly corresponding to one standard deviation) increased the women's score by 8.5%. These estimates are significant at 0.05 level. When margin of victory is controlled for, the magnitude remains unchanged, but the estimates become less precise (p=0.051). While inevitably limited in scope, these results suggest that greater parity in women's and men's turnout goes hand in hand with politicians' support for better representation of women's interests.

Table 1: The Effect of Gender Turnout Gap on Women's Representation

| Model | (1) | (2) |
|---|---|---|
| **Gender Turnout Gap 1909** | 0.585* | 0.565[‡] |
| | (0.245) | (0.284) |
| **Margin of victory 1909** | | -0.025 |
| | | (0.189) |
| **Urban (binary)** | 3.591 | 3.901 |
| | (9.132) | (9.584) |
| **Party Controls 1909** | Yes | Yes |
| **N** | 90 | 90 |

Notes: DV is women's score calculated as % of legislators votes in support of expansion of women's equal access to public offices out of six related bills in the first post-suffrage 1910-1912 session; OLS estimates; robust standard errors; all models include a constant; multi-district municipalities, districts with by-elections that changed representatives and districts with missing or inaccurate data dropped; ** < 1%; * < 5%; ‡ <10%.

# Generalizability Beyond Norway

In this section, I asses whether the insights from Norway generalize to other countries. For each sampled country, I collect data from the first parliamentary election after women's suffrage, or for the first election for which this data is available.[15] In Sweden and New Zealand, I also analyze election results from prohibition referenda. Using this larger data set, I show that women's turnout varies with men's turnout as expected in all election years where women's turnout is observed across sufficiently wide range of values and when women's turnout is mostly lower than men's (Figure A7).[16]

    I then show that electoral competition measures are correlated with women's turnout relative

[15]In New Zealand, I analyze fifth election after suffrage. In Austria, I analyze third election after suffrage. Further details on data availability in Table A8.
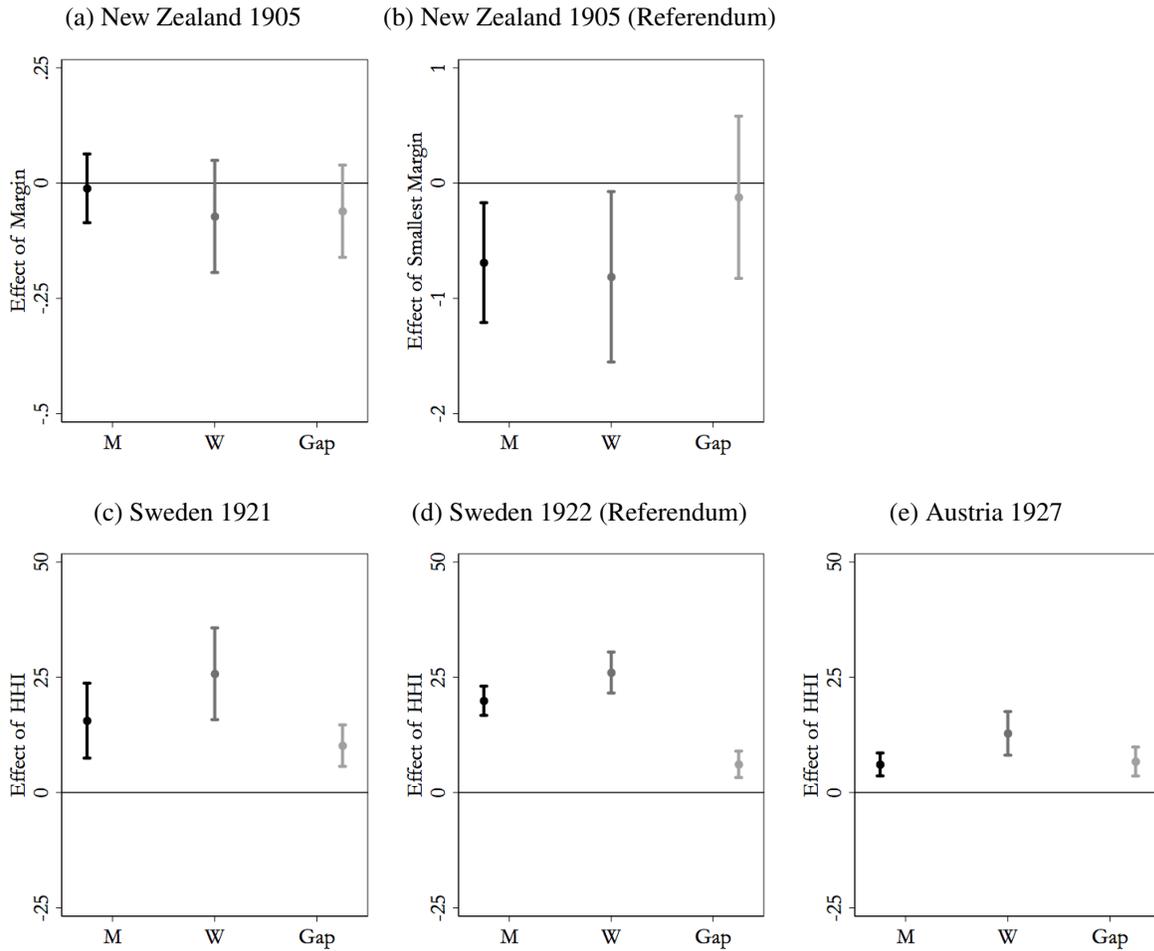
[16]In New Zealand, where both women's and men's turnout was very high, men's turnout remains a good predictor of women's turnout, but the lack of districts with low women's turnout prevents the ability to test the theorized relationship. In Austria, where women's turnout is often higher

to men's as expected (Figure 7; scatter plots in Figure A8). Using district electoral data from New Zealand, gender turnout gap appears to narrow with district competition. However, the effects are small and imprecisely estimated in parliamentary elections. This likely reflects the relatively high turnout across all districts, spurred by concurrent prohibition referendum. This means that even the most uncompetitive districts in parliamentary elections were still highly contested on the prohibition issue. The effects in the district-by-district referendum are close to 0. This likely reflects the fact that there were no uncompetitive districts.[17] Using within-district locality electoral data in Austria and Sweden, gender turnout gap narrows in the most electorally concentrated localities. The effects are of comparable magnitude and statistically significant at conventional levels in parliamentary elections and the nation-wide prohibition referendum in Sweden. One can think of the Swedish referendum as having a single *competitive* district with two electoral options (yes and no) in a country that has developed *strong ties* between social groups and political elites under PR. The results are thus consistent with the theorized importance of within-district electoral concentration across all electoral systems, but conditional on the presence of district-level competitiveness and strong ties between social groups and elites.

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than men's, men's turnout also remains a good predictor of women's turnout, but the theorized relationship is limited to municipalities with a traditional gender turnout gap.

[17]The prohibition referendum was held separately in each district on three proposals: whether to continue the number of alcohol licenses available in the district, to reduce the number or to abandon all licenses in the district. The option that received a majority of all votes cast, or three fifths of all votes for 'no license' option, was adopted. I therefore use the smallest margin of victory to indicate the electoral competitiveness of each local contest.

Figure 7: Correlates of Women's and Men's Turnout in Three Additional Countries

| (a) New Zealand 1905 | (b) New Zealand 1905 (Referendum) |
|---|---|



| (c) Sweden 1921 | (d) Sweden 1922 (Referendum) | (e) Austria 1927 |
|---|---|---|



Notes: 95% CIs; DV is men's turnout (black), women's turnout (dark gray), gender gap (light gray); robust standard errors in SMDs and in Swedish prohibition referendum 1922; district fixed effects and clustered standard errors on electoral district in parliamentary elections under PR (Austria and Sweden), although wild bootstrap returns similarly sized standard errors with statistical significance at 0.05 level or less.

## Discussion

Carefully mapping patterns of electoral participation of newly enfranchised women, the findings challenge the conventional wisdom that *de jure* inclusion of disenfranchised groups secures *de facto* inclusion of these groups. The paper makes several contributions to our understanding of how newly enfranchised groups become incorporated into the electoral process and therefore the

conditions under which the quality and extent of their substantive representation after suffrage improves.

Specifically, this paper has important implications for how and when inclusive institutions incorporate women into the electoral process. First, while proportional systems boost women's political participation (Kittilson and Schwindt-Bayer 2010, 2012; Skorge 2020), this paper demonstrates the 'moderating' impact of local electoral conditions within both majoritarian and proportional systems. Emphasizing electoral competition within each type of electoral system, this paper provides a micro-level explanation for the seemingly 'puzzling' macro-level patterns in women's turnout. If most single-member electoral districts are highly competitive, mobilization of newly enfranchised groups may be very successful even in SMDs. This can help to explain, for example, why women in New Zealand voted in higher numbers than in all countries with PR for which we have sex-separated data. On the other hand, women's electoral participation in proportional systems may be impaired if parties do not form strong ties with voters or do not have enough local strongholds. This may help to explain why a proportional system with a highly geographically concentrated party support, such as Austria, women's turnout was higher than in most other countries with PR.

Second, while inclusive institutions foster incorporation of women as voters (beyond proportional representation, see Kim 2017 on direct democracy; Córdova and Rangel 2017 on compulsory voting; Corder and Wolbrecht 2016 on electoral laws), this paper suggests that successful mobilization of women cannot be thought of separately from the ability of a formally inclusive institution to spur a de facto participation among men. If a formally inclusive electoral institution fails to improve a robust mobilization among men, the electoral incorporation of newly enfranchised women may not be incentivized any more than before the reform.

Third, this paper has an important implication for the pathways to representation of newly enfranchised groups. If politicians' electoral interests in social groups reflects their propensity to vote (Karp, Banducci and Bowler 2008; Rosenstone and Hansen 1993, p.31; Barreto 2018), we would expect that the extent to which politicians represent newly enfranchised women depends on

the proportion of competitive districts in systems with single member districts. This may help to explain not only why women's turnout was especially low in the uncompetitive U.S. South upon women's enfranchisement, but also why Southern politicians were less likely to endorse women's legislation (Schuyler 2006). Similarly, given that women are especially likely to vote in electorally concentrated localities, we would expect that the extent to which parties represent women upon suffrage in proportional systems depends on the proportion of 'strongholds' within a country. This may help to explain why new parties, such as the Socialists at the time of women's suffrage, may have been less successful in capturing the new women vote than the more locally established Liberal and Conservative parties (Tingsten 1937).

The paper leaves several questions open for future research. The paper remains agnostic about the technologies that parties employed to mobilize women when they were incentivized to do so. That is, while the paper generates predictions about the contexts that are most conducive to partisan mobilization of women, it does not specify how parties reached out to women when they had an incentive to do so. Future research should therefore explore whether and when parties reached out to women with additional door-to-door campaigns or newspaper ads, and whether and when parties mobilized women as women or along other identities.

The paper also leaves open the question of the role of organized interests. Strong suffrage movements define women's issues, inform and directly mobilize newly enfranchised women (Morgan-Collins, 2021), but also informs politicians about women's preferences (Teele 2018). Suffragists may have therefore not only reduced the cost of women's mobilization, but also determine the 'type' of issues politicians raised to mobilize women. The complex interplay between politicians, organized interests and voters upon women's suffrage, however, is left for future research.

# References

**Andersen, Kristi. 1996.** After Suffrage. Women in Partisan and Electoral Politics before the New Deal. The University of Chicago Press.

**Acemoglu, Daron., & James A. Robinson. 2000.** "Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective." The Quarterly Journal of Economics, 115(4), 1167-1199.

**Aldrich, John H. 1993.** "Rational choice and turnout." American Journal of Political Science: 246-278.

**APSA Task Force. 2004.** "American Democracy in an Age of Rising Inequality." Perspectives on Politics 2(4): 651–666.

**Baker, Paula. 1984.** "The Domestication of Politics: Women and American Political Society, 1780-1920."The American Historical Review 89(3): 620-647.

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

**Barreto, Matt A. 2018.** "The Cycle of Undermobilization of Minority Voters." Journal of Race, Ethnicity and Politics, 3(1): 185-188.

**Bateman, David A. 2018.** Disenfranchising Democracy: Constructing the Electorate in the United States, the United Kingdom, and France. Cambridge UP.

**Blais, André. 2000.** To Vote or not to Vote?: The Merits and Limits of Rational Choice Theory. University of Pittsburgh Press.

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

**Burns, Nancy, Kay L. Schlozman, and Sidney Verba. 2001.** The Private Roots of Public Action. Harvard UP

**Cameron, A. Colin, Jonah B. Gelbach, and Douglas L. Miller. 2008.** "Bootstrap-Based Improvements for Inference with Clustered Errors." The Review of Economics and Statistics 90(3):

414-427.

**Catalano Weeks, Ana. 2019.** "Quotas and Party Priorities: Direct and Indirect Effects of Quota Laws." Political Research Quarterly 72(4): 849-862.

**Celis, Karen and Sarah Childs. 2020.** Feminist Democratic Representation. Oxford UP.

**Corder, J. Kevin, and Christina Wolbrecht. 2016.** Counting Women's Ballots. Cambridge: Cambridge UP.

**Córdova, Abby, and Gabriela Rangel. 2017.** "Addressing the Gender Gap: The Effect of Compulsory Voting on Women's Electoral Engagement." Comparative Political Studies 50(2): 264-290.

**Costa, Dora L. 2000.** "From Mill Town to Board Room: The Rise of Women's Paid Labor." Journal of Economic Perspectives 14(4):101-122.

**Cox, Gary. 1999.** "Electoral rules and electoral coordination."" Annual Review of Political Science 2(1): 145-161.

**Cox, Gary W., Jon H. Fiva, and Daniel M. Smith. 2016.** "The Contraction Effect: How Proportional Representation Affects Mobilization and Turnout." The Journal of Politics 78(4): 1249-1263.

**Goldin, Claudia. 1990.** Understanding the Gender Gap: An Economic History of American Women. New York: Oxford UP.

**Grimshaw, Patricia. 1987.** Women's Suffrage in New Zealand. Auckland University Press.

**Grytten, Ola H, and Camilla Brautaset. 2000.** "Family Households and Unemployment in Norway during Years of Crisis: New Estimates 1926–1939." The History of the Family 5(1): 23-53.

**Huckfeldt, R.R. and Sprague, J., 1995.** Citizens, politics and social communication: Information and influence in an election campaign. Cambridge University Press.

**Htun, Mala 2016.** Inclusion without Representation in Latin America: Gender Quotas and Ethnic Reservations. Cambridge UP.

**Iversen, 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, 1–28

**Jackman, Robert W. 1987.** "Political Institutions and Voter Turnout in the Industrial Democracies." The American Political Science Review: 405-42.

**Karp, J.A., Banducci, S.A. and Bowler, S. 2008**. "Getting Out the Vote: Party Mobilization in a Comparative Perspective.." British Journal of Political Science 38: 91–112.

**Kessler-Harris, A. 2003.** In Pursuit of Equity: Women, Men, and the Quest for Economic Citizenship in 20th century America. Oxford University Press.

**Kessler-Harris, Alice. 2007.** Gendering Labor History. University of Illinois Press.

**Kim, Jeong Hyun. 2017.** "Direct Democracy and Women's Political Engagement." American Journal of Political Science.

**Kittilson, Miki Caul, and Leslie A. Schwindt-Bayer. 2012.** The Gendered Effects of Electoral Institutions: Political Engagement and Participation. Oxford: Oxford UP.

**Kittilson, Miki Caul, and Leslie Schwindt-Bayer. 2010.** "Engaging citizens: The Role of Power-Sharing Institutions." The Journal of Politics 72(4): 990-1002.

**Lijphart, Arend. 1994.** "Democracies: Forms, Performance, and Constitutional Engineering." European Journal of Political Research, 25(1), 1-17.

**McCammon, Holly J. and Lee Ann Banaszak (Eds.) 2018.** 100 Years of the Nineteenth Amendment. Oxford: Oxford UP

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

**Merriam, Charles E., and Harold F Gosnell. 1924.** Non-Voting: Causes and Methods of Control. University of Chicago Press.

**Mitchell, Brian (ed.) 1998.** International Historical Statistics: Europe 1750-1993. Springer.

**Morgan-Collins, Mona. 2021.** "The Electoral Impact of Newly Enfranchised Groups: The Case of Women's Suffrage in the United States." Journal of Politics, 83(1): 150-165.

**Morgan-Collins, Mona. and Grace Natusch. 2021.** "At the Intersection of Gender and Class: How Were Newly Enfranchised Women Mobilized in Sweden?" Comparative Political Studies.

**Norris, Pippa, and Ronald Inglehart. 2001** "Women and Democracy: Cultural Obstacles to Equal Representation." Journal of Democracy 12(3): 126-140.

**O'Brien, Diana Z., Piscopo Jennfier M. 2019.** The Impact of Women in Parliament. In: Franceschet S., Krook M., Tan N. (eds) The Palgrave Handbook of Women's Political Rights. Gender and Politics. Palgrave Macmillan, London

**Podolefsky, Ronnie L. 1997.** "Illusion of Suffrage: Female Voting Rights and the Women's Poll Tax Repeal Movement after the Nineteenth Amendment." Notre Dame L. Rev. 73: 839.

**Powell, G. Bingham. 1986.** "American Voter Turnout in Comparative Perspective." The American Political Science Review: 17-43.

**Rokkan, Stein, and Henry Valen. 1962.** "The mobilization of the periphery: data on turnout, party membership and candidate recruitment in Norway." Acta Sociologica 6(1): 111-152.

**Rosenstone, Steven J., and John Hansen. 1993.** Mobilization, Participation, and Democracy in America. Macmillan Publishing Company.

**Seawright, Jason, and John Gerring. 2008.** "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options." Political Research Quarterly 61(2): 294-308.

**Schlozman, Kay Lehman, Verba, Sidney and Brady, Henry E. 2012.** The Unheavenly Chorus. Princeton: Princeton UP.

**Schuyler, Lorraine G. 2006.** The Weight of Their Votes: Southern Women and Political Leverage in the 1920s. Univ of North Carolina Press.

**Sinclair, Betsy. 2012.** The Social Citizen: Peer Networks and Political Behavior. University of Chicago Press.

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

**Sjögren, Åsa Karlsson. 2013.** Taxpaying, Poor Relief and Citizenship. Democratization from Gender Perspective. In A. Gunnarsson 2013. Tracing the Women-Friendly Welfare State: Gendered Politics of Everyday Life in Sweden. Göteborg: Makadam Förlag.

**Skorge, Oyvind. forth.** "Mobilizing the Underrepresented: Electoral Institutions and Gender Inequality in Political Participation." American Journal of Political Science.

**Stanfors, Maria. 2003.** Education, Labor Force Participation and Changing Fertility Patterns: a Study of Women and Socioeconomic Change in Twentieth Century Sweden. Almqvist & Wiksell International

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

**Tingsten, Herbert. 1937.** Political Behavior: Studies in Election Statistics. London: PS King.

**Wolbrecht, Christina and Kevin J. Corder. 2020.** A Century of Votes for Women. American Elections since Suffrage. New York: Cambridge UP.