

# Mobilizing the Home Front: The Impact of War on Women's Political Activism

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## Abstract

The nineteenth century saw the first entry of American women into mass political activity. What originated this sudden influx of female political activists? I leverage novel, hand-collected archival data on women's volunteering during the American Civil War to demonstrate a connection between wartime and peacetime political capacity. Places where women organized volunteer societies in support of the Union war effort were more likely to have women-led political movements to agitate for temperance and to write petitions in favor of suffrage, and had higher levels of voting participation when women were finally given the vote. These relationships are robust to adjusting for other measures of pre-war and wartime social and organizational capital, including male enlistment in the Civil War. I argue that wartime volunteer mobilization helped women gain organizing experience that was useful for mass politics, even in a social context that precluded them from the public sphere and did not involve women directly substituting for male roles (as they did during the first and second World Wars).

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## 1 Introduction

In the late nineteenth and early twentieth century, American women engaged in the first mass movements for political causes that benefited women as a specific political class (Clemens 1997; Teele 2018). What precipitated the entry of American women into mass politics at this particular point in time? I focus on women’s experiences during the American Civil War as a potential catalyst of political participation. Using novel, hand-collected archival data, I show that towns that participated in a nationwide program to recruit women volunteers for home production roles to support the Union Army were substantially more likely to hold women-led street protests against alcohol ten years later. I argue that wartime home front roles provided women with the opportunity to gain valuable social capital and practical organizing experience that could be redeployed to political activism.

In contrast to other studies that focus on the effects of female substitution for male wartime roles during the First (Ray 1918; Gay 2021) and Second (Acemoglu, Autor, and Lyle 2004; Fernandez, Fogli, and Olivetti 2004) World Wars, or those that focus on the complementarities between men’s combat experiences and their political capacity (Jha and Wilkinson 2012; Dippel and Heblich 2021), I focus on a setting in which women achieved political gains while operating in a social context that provided more limited opportunities for women in public life. In the above-cited cases focused on women in the 20th century, men gain political capacity by participating in combat or domestic political uprisings, and women gain political (and economic) capacity by substituting for absent men in the formal labor force.

In contrast, I examine a case of women gaining organizing experience while engaging in stereotypically *female* social roles during wartime. These volunteer roles performed by women involved the historically female tasks of home production (such as preserving food and sewing uniforms) to support the Union Army. The volunteer organizations I examine were part of a nationwide umbrella organization, the United States Sanitary Commission (USSC), which served as a centralized hub for coordinating the donations of thousands of local soldiers’ aid societies. The membership of these local societies was mostly female. Unusually for the time, the “middle management” of the USSC was also mostly made up of women, and the executive ranks of the organization were

mixed-gender.

Using town-level archival data on the locations of wartime aid societies, I find that towns where women volunteered with USSC were substantially more likely to hold “Temperance Crusades,” street protests against the sale of alcohol, a decade later. These protests involved public marches and the physical occupation of saloons and liquor sales venues by women – a strikingly public and radical form of political pressure. I find a large and statistically significant relationship between wartime volunteering and Crusading. A USSC branch is associated with a 7-to-10 percentage point increase in the probability of holding a protest. This relationship persists after controlling for, and matching on, baseline demographic and economic covariates, as well as for town-level variables that capture overall levels of social capital, including men’s enlistment in the Union Army. I quantify the degree to which a causal interpretation of the relationship between wartime volunteer organizations and post-war temperance activism is vulnerable to unobserved variable bias or potential sample selection.

The link between wartime volunteer activities and women’s activism persists beyond the temperance organizing of the 1870s. Additionally, counties where more of the population lived in towns with aid societies sent more petitions to Congress in favor of women’s suffrage between 1874 and 1920, and women in these counties voted in greater numbers once enfranchised in the 20th century.

By demonstrating empirical evidence for a link between sex-segregated social organization and public campaigns for women’s political causes, I bridge the gap between a largely qualitative literature on women’s roles in the 18th and 19th-century United States (Cott 1977; Tetrault 2014) and the more quantitative literature on their emergence into the workforce and public roles in the 20th century (Acemoglu, Autor, and Lyle 2004; Bailey 2006; Olivetti 2013; Goldin 2021). My findings contribute to an understanding of the development of American women’s political capacity and participation in mass politics after the American Civil War. They also have more generalizable implications for understanding how women can advance politically in cultural contexts that preclude their full participation in the public sphere.

## 2 Historical Background

### 2.1 American Women's Rights Activism

The 1848 Seneca Falls Convention is sometimes considered to be the starting point of organized women's activism in the United States. Although Tetrault (2014) disputes this characterization, pointing to even earlier instances of political participation by early female activists on behalf of women's rights and the anti-slavery movement, it is still instructive to note that Seneca Falls, and subsequent conventions in New York and New England, typically attracted no more than a thousand women, most of them educated members of socially elite circles. These women were usually from relatively wealthy families and had the benefit of unusually high education levels (Wellman 2004; McMillen 2008).<sup>1</sup>

The postwar women's movement, which drew support and participation from a broader swath of society, focused on two causes of particular interest to women: temperance and suffrage (as well as the less-gendered cause of civil rights and racial equality). These causes frequently overlapped with one another at the level of individual activists and organizations. In its 19th-century incarnation, political activism against the sale of alcohol focused on the problem of alcoholism among men and its impacts on their wives and families, including domestic violence, lost earnings, and familial neglect. Unlike the latter portion of the 19th century, when women strategically built coalitions in politically competitive local environments to advance the cause of suffrage (Teele 2018), the early temperance movement focused on campaigns of "moral suasion" to socially discourage the consumption and sale of alcohol rather than on legislative prohibition.

Though the American anti-alcohol movement predicated the Civil War, it gathered steam in the 1870s, beginning with a series of "Temperance Crusades" in 1873 and 1874 – spontaneous women-led demonstrations, sometimes lasting for days, against the sale of alcohol across 910 American towns (Blocker 1985). These marches combined radical tactics – street protests, the physical occupation of saloons, and demands for the destruction of liquor stocks – with socially respectable aesthetics. Public marketing of the movement focused on alcohol's damaging effects on families and on the obligation of women to serve as guardians of the family. The first Crusade was organized in

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<sup>1</sup>Women did engage in activities such as petitioning for abolition before the war; see Carpenter and Moore (2014).

Hillsboro, Ohio, by fifty-seven-year-old Eliza Daniel (“Mother”) Stewart, who wrote a memoir of her activist career in which she discussed alcohol’s effects on women: “wretchedness, woe, misery, privation, neglect, want, pinching poverty, and disgrace for her and her children” (Stewart 1890, 39). The marches had some short-run successes, pressuring some local merchants to shut down sale of alcohol, but little long-run effect on the actual supply of alcohol in American towns based on a quantitative survey presented in Blocker (1985). Their greater legacy was in the organizations that emerged from the protest movement, including those that had spillover effects to suffrage.

The Women’s Christian Temperance Union (WCTU), founded by Crusade participants in December 1874, became the leading American temperance organization and amassed considerable political influence. The WCTU pursued an approach its president, Frances Willard, called the “do everything” strategy, explicitly linking the pursuit of the franchise to the goal of temperance via the mobilization of women voters (Willard 1895, 10). The aesthetics of the temperance movement, including those of the WCTU, drew heavily on the Victorian notions of women’s moral superiority and on Protestant religious imagery. In grounding itself in this cultural context, the temperance movement anticipated the subsequent tactics of the women’s suffrage movements, which, according to Corder and Wolbrecht (2016) “appropriated...the Cult of True Womanhood” to justify the vote for women (43). Yet Mattingly (2000) cautions readers not to view the temperance movement as conservative. Rather, “temperance women made a conscious, rhetorical decision to reach a broad-based audience by addressing the temperance cause,” including women who were not yet ready, or in a position, to campaign for suffrage alone but who identified with a movement to improve the general welfare of women (22).

The goals and support base of the American temperance movement changed after Willard’s unexpected death in 1898. The leading 20th-century anti-alcohol organization, the Anti-Saloon League, had male leadership and pursued legislative approaches to banning alcohol, culminating in Prohibition. Unlike its 19th-century women-led predecessors, who specifically conducted outreach to recruit immigrant women to their cause, the Anti-Saloon League sought conservative, nationalist allies, particularly among anti-immigration nativists (Okrent 2010). By this point, however, the attention of women activists had shifted away from agenda of temperance and suffrage to one that concentrated specifically on gaining the franchise.

## 2.2 Women's Roles In the American Civil War

At the start of the American Civil War, the Union Army faced the challenge of organizing, staffing, and supplying medical facilities to cope with large numbers of casualties from battles and disease. In June 1861, a group of philanthropists and civic leaders founded the United States Sanitary Commission, a civilian organization that partnered with the U.S. Army's medical corps to provide money, supplies, and labor to army hospitals. Inspired by innovations in nursing and military medical science pioneered by the British during the Crimean War a few years earlier, the Sanitary Commission had a dual mission to recruit and train nurses for Army hospitals and to provide a centralized point of contact for local "soldiers' aid societies" across the Union. These aid societies organized fundraising campaigns (including large, multi-day "Sanitary Fairs" in major cities) and contributed supplies from the home front, such as clothing and preserved food, directly to the war effort. The very top leadership was mostly male, with the exception of Dr. Elizabeth Blackwell and Dorothea Dix. However, the leadership of the USSC's twelve regional branches – roles with considerable influence over strategic operations – was female, as were many of the "agents" who interfaced between branch leadership and local club leadership, and the bulk of town-level volunteers (Giesberg 2006).

The branch-level female management of the USSC recognized that outreach to local women across the Union as crucial to their mission. To raise awareness of the USSC and boost contributions from town-level volunteer organization, they networked in person and via correspondence with interested female volunteers, many of whom had never previously encountered women in positions of public authority. Giesberg (2006), a social history of the USSC, writes that "Rural women invested branch women with their confidence and believed them to be agents of the United States government, and in return, branch women worked hard and were committed to sustaining and maintaining the autonomy of women's wartime relief work" (94). The USSC's female leadership also engaged with male policymakers, supervisors, and colleagues on a co-equal level, giving both men and women the "opportunity to experiment with various divisions of responsibility and authority outside the domestic setting" (88). The leadership of individual clubs, however, was over ninety percent female.<sup>2</sup>

Like the postwar temperance movement, the movement to recruit women to volunteer roles during

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<sup>2</sup>Based on author's calculations from archival data.

the Civil War deliberately couched itself in the cultural ideals of the nineteenth century. In sharp contrast to the “Rosie the Riveter” campaigns that encouraged women to join the war effort during the Second World War by emphasizing their physical capabilities and qualifications to step into male roles, discussion of aid societies tended to emphasize the feminine, motherly qualities of volunteers. A regimental surgeon who praised the work of soldier’s aid societies wrote that “the Sanitary Commission furnishes to the suffering soldier just that kind of delicacy or substantial which a judicious mother or wife would furnish if they had the opportunity.”<sup>3</sup> Others who came into contact with women volunteers, both nurses and aid society contributors, wrote of the “delicate yet important attentions which only a woman can give at the bedside of the suffering” and the contributions of homemade foodstuffs “all showing women’s warm hearts and women’s skillful hands.”<sup>4</sup>

A survey of the biographies of leadership of the Temperance Crusades or the WCTU reveals that many of the women at the helms of these movements had spent the war organizing women volunteers. The WCTU’s first president, Annie Turner Wittenmyer, spent the war as a “Sanitary Agent” coordinating aid societies in her home state of Iowa. Mary Livermore, a prominent temperance and suffrage activist, served as both a wartime nurse and an administrator for the Chicago branch of the USSC. Eliza Daniel Stewart, the leader of the first Temperance Crusade in Hillsboro, Ohio, spent the war “busily engaged in procuring and sending supplies to the sick and wounded” (Daniels 1878, 278). Lesser-known women also got organizing experience during the war that served them well in the temperance and suffrage movements. The president of the Akron Soldiers’ Aid Society, Adeline Myers Coburn, “shifted her organizational and leadership skills to the temperance crusade” after the war (Endres 2006, 36).

### 3 Theory

A link between women’s wartime social organizations and postwar activism could rest on several different potential mechanisms, none of which are mutually exclusive. One possibility is that the

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<sup>3</sup>United States Sanitary Commission. “The Sanitary Commission of the United States Army: a Succinct Narrative of Its Works and Purposes” (1864) 211.

<sup>4</sup>The United States Sanitary Commission, Cleveland Branch. (1861/1862) “Annual Report of the Soldiers’ Aid Society of Northern Ohio to the U.S. Sanitary Commission.” 38-39.

USSC gave women opportunities to practice organization and leadership in single-sex environment without being crowded out by men. “Enclave theory” describes a mechanism wherein members of a socially or structurally disadvantaged group can more effectively develop skills that contradict assumptions or overcome barriers in an enclave of their own type. For instance, research demonstrates that women and girls are more likely to develop competitive skills in single-sex environments, or environments in which men are in the minority (Gneezy, Niederle, and Rustichini 2003; Gneezy, Leonard, and List 2009; Karpowitz, Mendelberg, and Shaker 2012; Karpowitz and Mendelberg 2018). Skills developed in an enclave can continue to affect the behavior of women and girls once they return to a mixed-sex setting (Booth and Nolen 2012; Hampole, Truffa, and Wong 2021). Women temperance activists were intuitively aware of the benefits of maintaining a female-only enclave in the WCTU, which did not open itself to mass male membership explicitly so that women would feel comfortable taking positions of authority (Mattingly 2000, 60). In this sense, the strategy of the USSC reflects the account of Burns, Scholzman, and Verba (2001), which places the origins of women’s political participation in “private roots” based in the community. Theoretically, this explanation echoes the work of Carpenter and Moore (2014), which examines how female-led antislavery canvassing functioned as a training ground for postwar women’s rights organization.<sup>5</sup>

Beyond simply interacting with other women in enclaves, the USSC elevated the profiles of women leaders at the regional and national level, giving the female public potential role models. A substantial body of literature demonstrates that female political leadership has outsized effects on women relative to men. For instance, female cabinet members in the UK House of Commons are more likely to boost the debate contributions of other female MPs (Blumenau 2021), and the election of a female mayor boosts support for other female candidates in lower municipal races in Germany (Baskaran and Hessami 2018). For perhaps the first time, the high national profiles of Blackwell and Dix, and the regional visibility of administrators like Annie Turner Wittenmyer and Mary Livermore, gave middle-class American women examples of women with political capital and authority in the public sphere.<sup>6</sup>

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<sup>5</sup>Skocpol, Liazos, and Ganz (2006) highlights the role of African-American fraternal clubs and societies as a different kind of enclave that proved useful in the fight for civil rights by “prepar[ing] citizens for wider participation by teaching organizational and leadership skills to millions of Americans” [5].

<sup>6</sup>The role of inspirational leadership was important in other contexts during this period in American history. Immigrants to the United States who had participated in the failed liberal 1848 uprisings in Europe played important roles in the anti-slavery movement in the United States and were effective recruiters for the Union Army (Dippel and

Finally, wartime volunteering could increase women's legitimacy as a political force, either in the eyes of the (male) public or in the eyes of women themselves. The USSC provided an avenue for women to "serve the nation" during wartime. The marketing of the Temperance Crusades was frequently militaristic in tone, underscoring the parallel experiences of men and women during the war. For example, a speech by Women's Christian Temperance Union president Frances Willard addressed the "Beloved Comrades of the White Ribbon Army" with the reminder that "In about seventy days from now, twenty years will have elapsed since the call of battle sounded its bugle note among the homes and hearts of Hillsboro, Ohio" (where the Crusade movement originated) (Willard 1895). Skocpol (1995) examines the importance of social legitimacy to the origins of the American welfare system, the first beneficiaries of which were Civil War veterans and, later, needy mothers and children. The former group drew on their considerable cultural clout in the postbellum United States to obtain pensions and disability compensation. The latter laid claim to resources on the basis of "values traditionally associated with the feminine domestic sphere" that enabled even poor women to access the social legitimacy afforded to women as a deserving social class (465). The women who transitioned from wartime volunteering to postwar activism were the female counterparts of the soldiers and the predecessors of 20th-century reformist women who spearheaded campaigns for mothers' pensions, and they potentially pioneered the cultural tactics that paved the way for these other kinds of political gains.

## 4 Data

### 4.1 Home Front Volunteering

My primary hypothesis is that the American Civil War provided women with opportunities to gain leadership and organizational experience on the home front that translated into political effectiveness after the war. To measure their participation in these opportunities, I draw on the records of the USSC, housed in the New York Metropolitan Archive to construct a variable that captures whether or not a town had a soldiers' aid society affiliated with the USSC.<sup>7</sup>

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Heblich 2021).

<sup>7</sup>The New York Public Library Humanities and Social Sciences Library Manuscripts and Archives Division, United States Sanitary Commission Records 1861-1878, MSSCol 3101, Box 979. "Catalogue of the aid societies tributary to the U.S. Sanitary Commission, alphabetically arranged."

The USSC was organized into twelve different branches, some of which spanned multiple states. The New York Metropolitan Archives contains retrospective records for the Albany, Buffalo, California, Cleveland, Central, Hartford, Michigan, New England, New Jersey, Northwestern, Rochester, and Wisconsin branches. Records for the Cincinnati, Pittsburgh, Kentucky, and New Albany (Ohio) branches are absent. I reconstruct a list of Cincinnati branches using an alternate dataset, the 1863 shipments received from towns that were members of this branch. The New Albany branch appears to have been small; thus, Ohio is likely mostly covered by data from the Cleveland, Cincinnati, and Columbus branches. The archive contains no coverage of the Western Sanitary Commission, a similar but separate organization that operated only in Western states, or any independent societies unaffiliated with the USSC.

Accordingly, I restrict the sample to states for which the USSC data is sufficiently comprehensive: Connecticut, Delaware, Massachusetts, Maine, Michigan, Minnesota, New Jersey, New York, Rhode Island, Vermont, New Hampshire, Wisconsin, and Ohio.<sup>8</sup> Together, the sample states comprise of twelve of the twenty-six Union states (including border states) and, collectively, about 52% of the Union population.<sup>9</sup> Appendix A gives further details on the construction of the dataset.

Figure 1 shows the locations of towns that did vs. did not have a soldiers' aid society affiliated with the USSC in states for which there is complete or near-complete USSC data. There is substantial regional variation in the degree to which towns participated in the USSC; for instance, a majority of localities in New York and southern parts of New England took part, while participation was sparser in the Midwest and northern parts of New England. Within Ohio, enthusiasm was particularly high in the northeastern corner of the state around Cleveland. However, even in areas where participation was high, participating towns are interspersed with those that did not have a USSC affiliate club, and in areas where participation was low, some towns did join. There are no sharp geographic or regional boundaries that clearly demarcated the USSC's presence. Section 4.3 discusses the characteristics of towns that did vs. did not have USSC-affiliated aid societies.

The Temperance Crusade outcome is measured at the county level, but outcomes related to women's

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<sup>8</sup>I omit California because, as the only Western state with USSC affiliates, it was fundamentally different politically and, uniquely, the bulk of its soldiers' aid societies were run by men. Indiana is omitted because aid activities were mostly run by the state-level Indiana Sanitary Commission (Thornbrough 1965).

<sup>9</sup>Source: Author's calculation using 1860 U.S. Census.

suffrage organizing and their propensity to vote when suffrage are achieved are measured at the county level. I use three different approaches to measuring the presence of USSC soldier's aid societies at the county level. First, I dichotomize towns into those that did vs. did not have at least one aid society. Of 575 counties in the sample, 436 have at least one aid society. Second, I measure the share of towns per county observed in the 1860 Census that have an aid society. Third, I measure the share of a county's 1860 population living in a town with an aid society. The second and third measures are visualized in Figure 2.

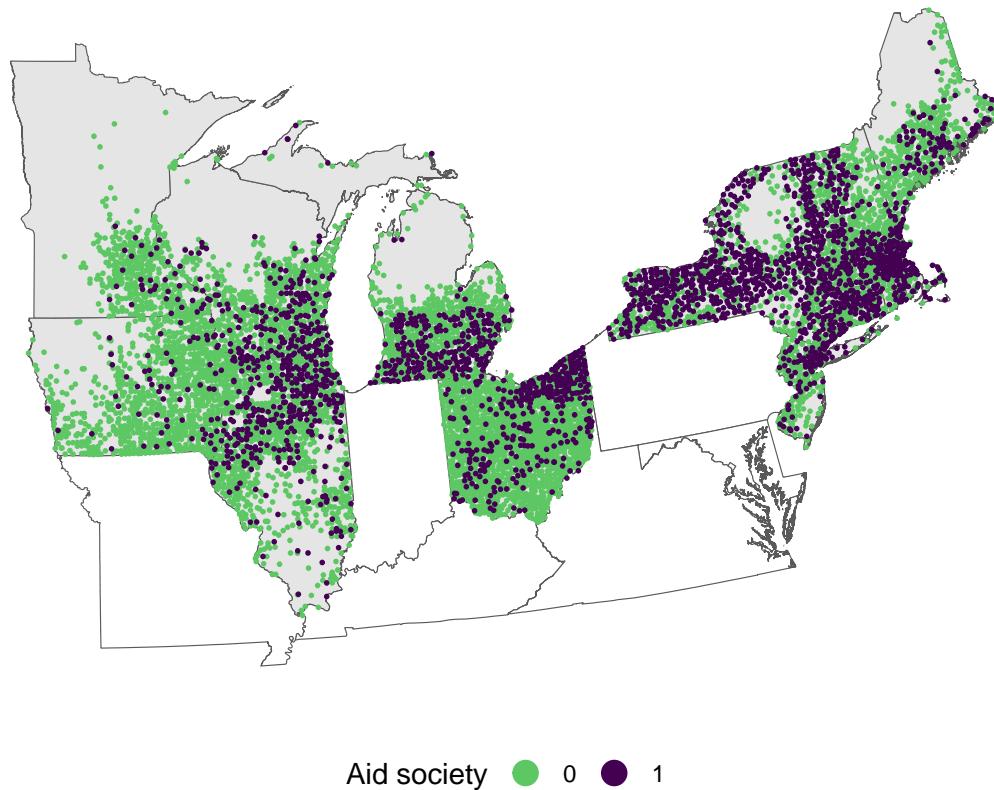


Figure 1: Map of towns that did vs. did not have a local soldiers' aid society affiliated with the USSC. State boundaries are from 1860; states in the Union that are in (*out of*) sample are shaded gray (*white*).

## 4.2 Women's Postwar Political Activism

As the first postwar outcome of interest, I use town-level data from Blocker (1985) on Temperance Crusades in 1873-1874. To my knowledge, this data has been used in only one other quantitative study, García-Jimeno, Iglesias, and Yildirim (2021), which focuses on communication networks as proximate reasons for Crusades, while I focus on the ultimate social mechanisms that enabled

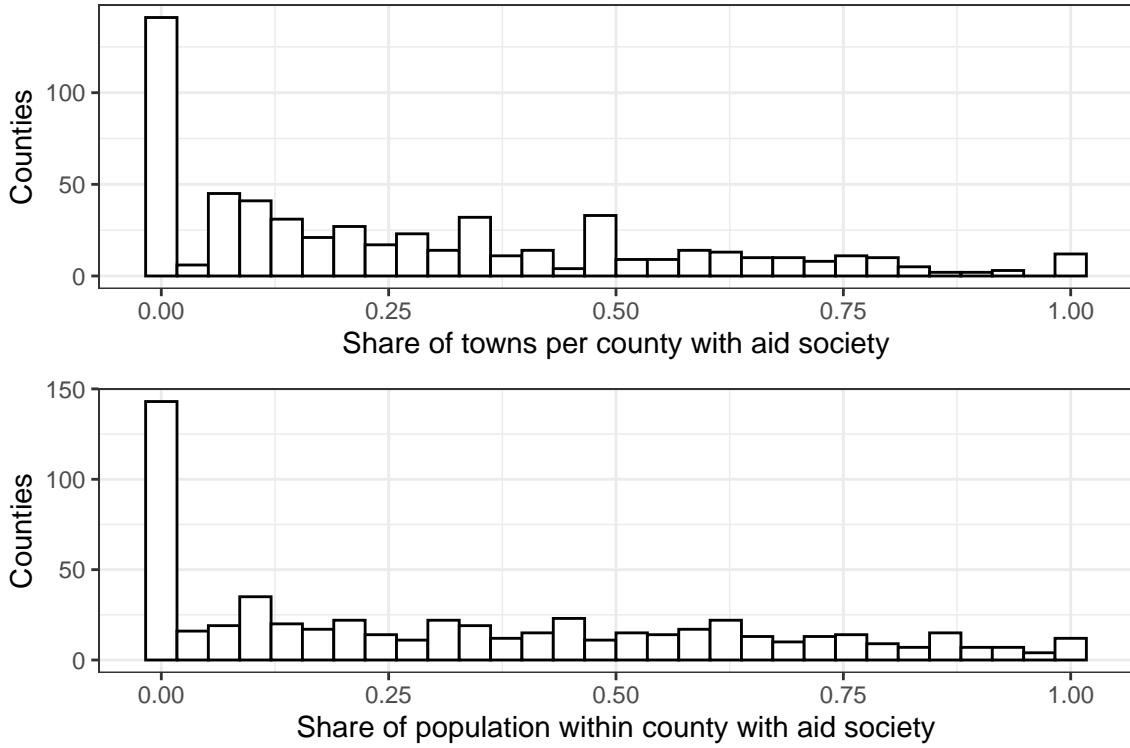


Figure 2: Top panel: share of towns per county observed in the 1860 Census that have an aid society. Bottom panel: share of counties 1860 population living in a town with an aid society.

women to organize.

In total, 910 towns across the country held Crusades, 692 of which are located in states in the sample described in Section 4.1. Of these, 465 can be matched to a town that appears in the 1860 Census; the remainder are towns that were not yet incorporated by 1860 but were known population centers by the 1870s, and I omit these from the sample.

The top panel of Figure 3 shows the locations of towns that had Temperance Crusades in the sample states. The town that hosted the first Crusade, Hillsboro, OH, is located in the southwest corner of the state and formed a clear epicenter of the protest movement. Crusades were more common in Midwestern states than in states further East, which García-Jimeno, Iglesias, and Yildirim (2021) attributes in part to the technology through which news of the protest movement spread.

To measure post-war women's suffrage activism, I use data from Carpenter et al. (2018) on post-war petitions in favor of women's suffrage submitted to Congress between 1874 and 1920. This database contains 905 petitions that can be linked to a specific county where the petitioners resided. These

petitions were usually (though not always) submitted on behalf of women activists, and I interpret them as a measure of enthusiasm for, and ability to organize in favor of, suffrage. Appendix D gives further details of this data. Because the long right tail of the distribution of petitions by counties largely reflects the locations of large population centers, the bottom left panel of Figure 3 shows counties coded according whether their residents submitted any suffrage petitions.

The final outcome I measure captures women's uptake of voting privileges once suffrage was achieved. Of the states in my sample, the first to enfranchise women to vote in a presidential election was Illinois; women in that state could vote in the 1916 presidential election. In all other states in the sample, the first presidential election in which women could participate was in 1920, either as a consequence of the passage of the 19th Amendment or of state-level enfranchisement between 1916 and 1920. To measure women's enthusiasm for voting once they were able to do so, I construct a variable that measures deviation from a county's pre-enfranchisement voter participation trend. For each county  $i$ , I regress the number of votes cast between 1900 and 1920 (or, in the special case of Illinois, 1916) on a linear time trend and then predict expected voter participation in 1920 (or, for Illinois, 1916). This generates a counterfactual estimation of what voter participation would have been in each county had women not been enfranchised. I then take the ratio of the county's actual voter participation to the counterfactual male-only estimated participation. The bottom right panel of Figure 3 shows the distribution of these ratios, which capture the increase in voter participation due to the enthusiasm of new women voters.

### 4.3 Demographic, Social, and Economic Variables

I use town- and county-level demographic, social, and economic covariates drawn from the 1850 and 1860 U.S. Censuses to adjust for pre-war town characteristics and, in an extension of the main analysis, to examine the role of societies in a subset of the data matched on pre-war characteristics. The "baseline" controls are state fixed effects, log 1860 population, and linear and quadratic controls for latitude and longitude. Black, foreign-born, and German population shares (due to the association of German immigrants with beer halls, a potential target of temperance activists) are drawn from the 1860 Census. To capture localities' economic characteristics, I include town-level log distance to the nearest railroad (in 1860, based on railroad shapefiles from Atack 2016) and

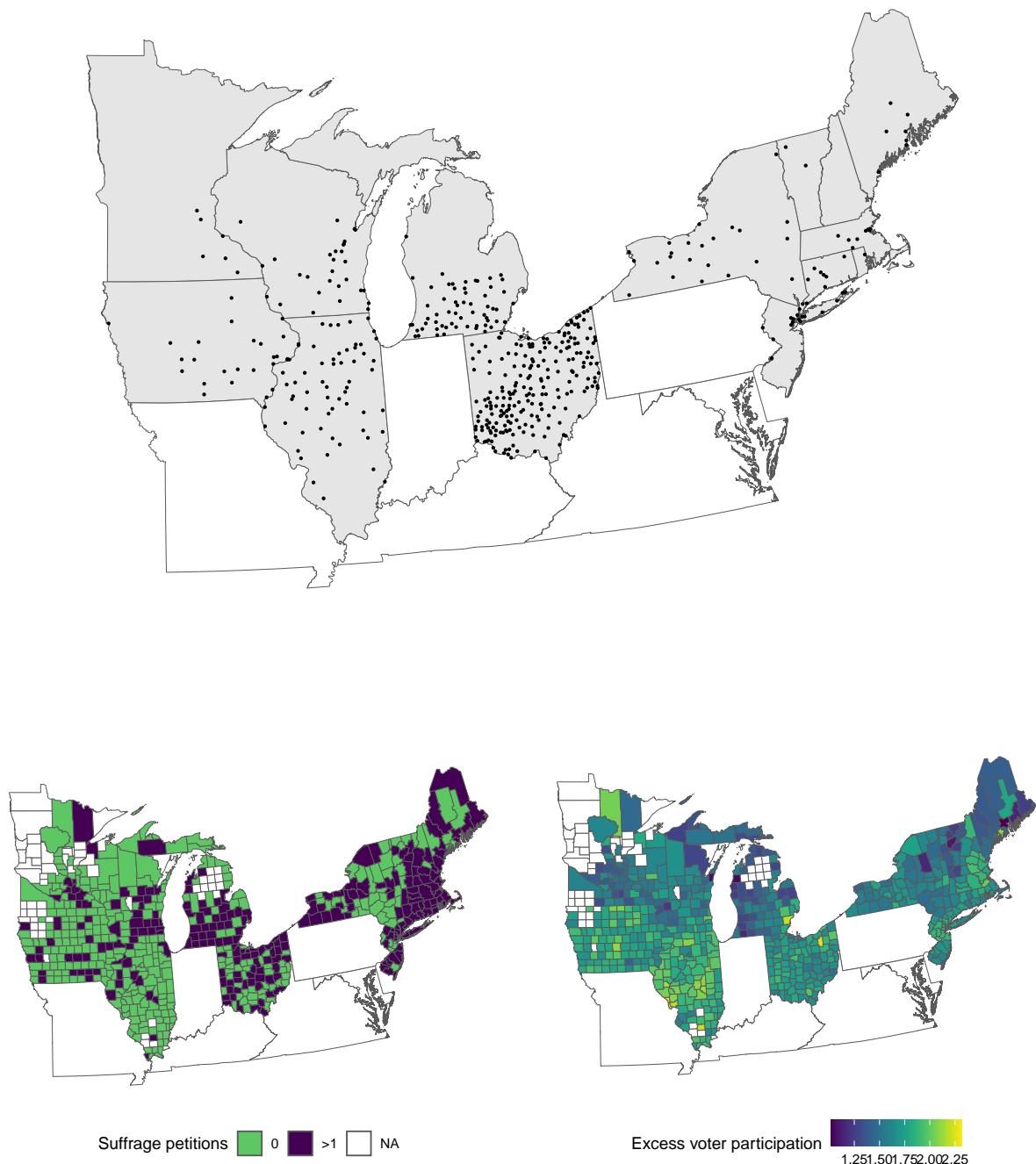


Figure 3: Top: Locations of Temperance Crusades. Bottom left: Counties that did vs. did not submit at least one petition in favor of women's suffrage to Congress between 1874 and 1920. Bottom right: A measure of county-level excess voter participation after the introduction of women's suffrage for presidential elections in 1916 (Illinois) and 1920 (all other states). State and county boundaries are from 1860. Counties with no settlements designated as towns or cities in the 1860 Census, and adjacent states in the Union that are not in sample, are displayed in white.

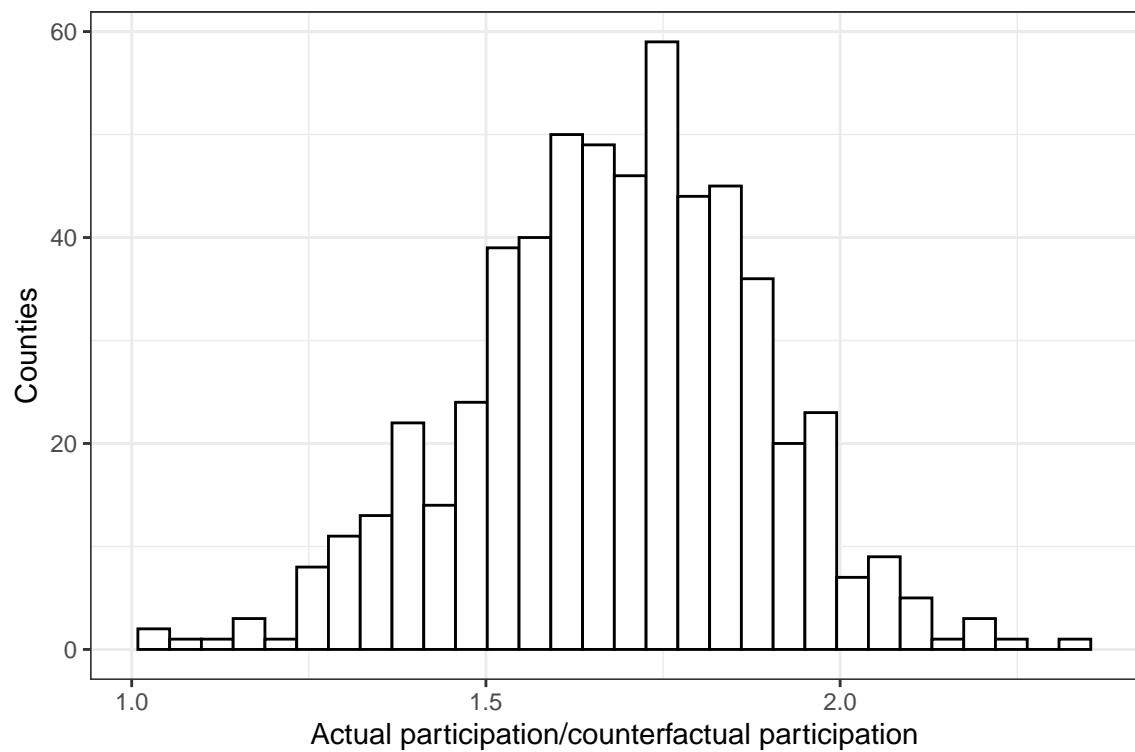


Figure 4: This figure shows the county-level distribution of ratio of voter participation (in terms of number of votes cast) to the projected counterfactual voter participation had it continued to follow the trend established by earlier 20th-century elections with no extension of the franchise to women.

county-level per-capita agricultural output value in 1860; manufacturing jobs per capita in 1860; and 1860 illiteracy rates. To capture the political leanings of a town, I include 1860 town-level Republican vote share.

Because a location's probability of having an aid society, or participating in later activism, may be affected by general levels of social interconnectedness and pro-sociality, I adjust for local levels of social capital, political engagement, and organizational capacity before and during the war. Firstly, I include the number of church "sittings" (seats) per capita in 1860, observed at the county level, as a measure of religiosity. Second, I include town-level Civil War enlistment from Dippel and Heblitch (2021). Male wartime enlistment in the Union Army was almost entirely on a volunteer basis; thus, enlistment data captures town-level variation in civic volunteerism amongst a town's men. Thirdly, I control for pre-war enthusiasm for temperance using town-level data on the locations of the Independent Organization of Good Templars (IOGT), a pro-temperance organization open to both women and men. Town-level data on the locations of local IOGT chapters (called "lodges") is available for the state of Wisconsin.

Finally, I include two variables that capture local political organizational capacity, one for women only and a second, more general measure. To measure the pre-war political capacity of women, I include a variable on the number of petition signatures gathered by female abolitionist campaigners at the county level (Carpenter and Moore 2014).<sup>10</sup> Secondly, using data from Blackhawk et al. (2021), I construct a town-level measure of the number of petitions submitted by citizens and interest groups to Congress in the decade between the Civil War. Each petition is associated with its date of submission, the geographic location of origin (town, county, or congressional district), and substantive demands. Some issues mentioned in petitions to Congress are political in nature (for instance, petitions to legislate the closure of businesses on Sunday for religious reasons, or change the age of consent for marriage), while others draw attention to more prosaic requests (for instance, the approval of an individual's veteran pension). Only about two percent of these petitions pertain to an issue of particular interest to women; thus, they can be understood to capture a town's general level of political involvement, capacity, or enthusiasm. Appendix D gives

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<sup>10</sup>Obviously, the abolitionist cause would only have been championed by women with abolitionist political sentiments; thus, this cannot be construed as capturing women's *general* political capital, although many women participated in both civil rights causes and temperance or suffrage.

additional information about the construction of this variable.

Figure 5 shows the coefficients from individual linear regressions of the main predictive variable of interest, the presence of a soldiers' aid society, on each mean-standardized town-level pre-war variable with and without adjusting for baseline geographic variables (linear and quadratic terms for latitude and longitude and state fixed effects). Towns with soldiers' aid societies tend to be more populous, closer to railroads, more industrial (as measured by manufacturing jobs per capita), and more literate, with more church sittings per capita. They are more likely to vote Republican in the 1860 election and to have levels of higher pre-war social and political capital. Accordingly, I include an analysis that uses propensity-score matching to reduce the imbalance on these covariates in the sample. Appendix Tables A1 and A2 give summary statistics for town-level and county-level covariates respectively.

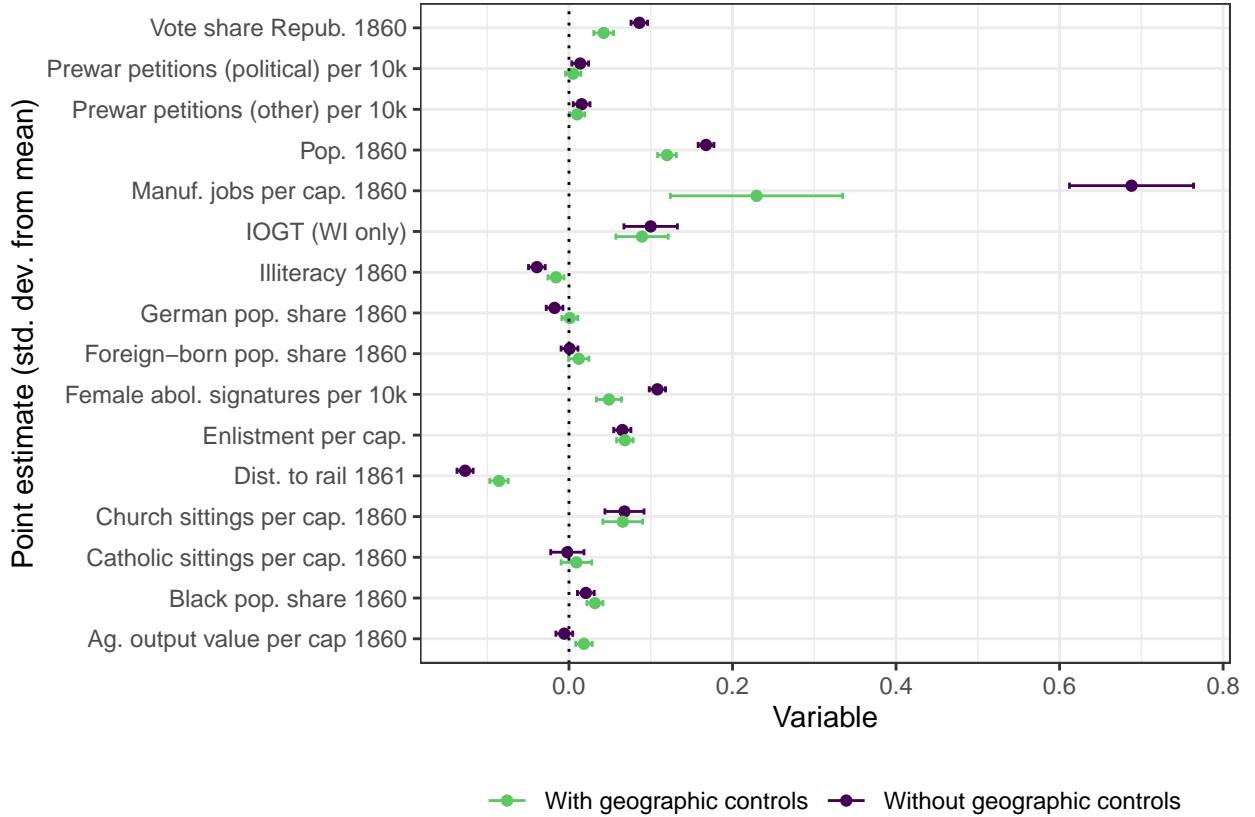


Figure 5: Balance table comparing difference in means for demographic, socio-economic, and political variables in towns that did vs. did not have a USSC-affiliated soldiers' aid society, with and without adjusting for state fixed effects (except for IOGT, which is available only for Wisconsin) and linear and quadratic latitude and longitude. Variables available only at county level are assigned to all towns within those counties. All variables are mean-standardized for easier comparisons.

## 5 Analysis

### 5.1 Main Results

The difference in the probability of holding a Crusade conditional on having vs. not having had a wartime aid society is stark. Of towns that had an aid society, 12.4% had a Crusade, vs. 2.9% of those with no aid society. Table 1 shows this difference adjusted for pre-war covariates using variations on the following OLS regression:

$$Y_i = \alpha + \beta \text{society}_i + \mathbf{X}\gamma + \epsilon_i \quad (1)$$

where  $Y_i$  is a variable capturing whether town  $i$  held a Temperance Crusade (either 0 or 1);  $\alpha$  is an intercept term;  $\text{society}_i$  is a variable representing whether town  $i$  had a soldiers' aid society during the Civil War; and  $\gamma$  is a vector of coefficients for control variables discussed in Section 4.3.

Even after introducing a number of controls, towns with USSC-affiliated soldiers' aid society had a strikingly higher likelihood of hosting a Temperance Crusade. The point estimate remains statistically significant and fluxuates little after adjusting for geographic variables, economic and political characteristics, and measures of pre-war social capital (Columns 2-4). Column 5 shows results for Wisconsin only, including a variable that captures the presence of an IOGT lodge. Appendix Table A3 shows other variations on the main specification: adjusting for population in the regression weights; dropping the smallest and largest cities; and using Conley standard errors to account for spatial variation. Results are qualitatively similar across all variations.

### 5.2 Results from Matched Sample

One possible concern about the main results presented in Section 5.1 is that, despite the inclusion of covariates to adjust for observable differences between locations with and without societies, results may be biased due to underlying (observable) differences between towns that did vs. did not have a USSC-affiliated aid society. To check for and control for this bias, I use propensity score matching to build a more comparable sample using the method suggested by Imai and Ratkovic (2014). First, I estimate a logistic regression

Table 1: Geographic controls are state FE and linear and quadratic latitude and longitude, except for Column 5, for which state FE are omitted, as this regression only uses Wisconsin data.

	<i>Dependent variable:</i>				
	Crusade				
	(1)	(2)	(3)	(4)	(5)
USSC society	0.094*** (0.006)	0.103*** (0.006)	0.090*** (0.006)	0.080*** (0.006)	0.087*** (0.019)
Log pop. 1860		0.051*** (0.003)	0.037*** (0.003)	0.043*** (0.004)	0.074*** (0.013)
Dist. to rail 1861			-0.046*** (0.003)	-0.042*** (0.003)	-0.042*** (0.010)
Illiteracy 1860			-0.012*** (0.003)	-0.011*** (0.003)	-0.001 (0.009)
Repub. vote share 1860			0.005 (0.003)	0.005 (0.004)	0.011 (0.010)
Black pop. share 1860			0.034*** (0.003)	0.031*** (0.003)	0.013 (0.010)
Foreign-born pop. share 1860			-0.002 (0.004)	-0.004 (0.004)	-0.001 (0.013)
German pop. share 1860			0.001 (0.003)	0.003 (0.003)	-0.003 (0.007)
Catholic sittings per cap. 1860				0.010 (0.008)	0.026 (0.053)
Ag. output per cap. 1860			0.004 (0.003)	-0.002 (0.005)	-0.050* (0.030)
Manuf. jobs. per cap. 1860			-0.018 (0.033)	-0.021 (0.034)	-0.028 (0.087)
Enlistment per cap.				0.036*** (0.003)	0.025*** (0.007)
Total church sittings per cap. 1860				-0.026** (0.012)	-0.117 (0.074)
Female abol. pet.				-0.005 (0.004)	
General Congress. pet.				0.006** (0.003)	0.003 (0.006)
Political Congress. pet.				0.007*** (0.002)	
IOGT					0.029*** (0.008)
Geo. controls	No	Yes	Yes	Yes	Yes
Observations	7,862	7,862	7,787	7,429	631
R <sup>2</sup>	0.035	0.110	0.151	0.173	0.268
Adjusted R <sup>2</sup>	0.034	0.108	0.148	0.169	0.245
Residual Std. Error	0.232	0.223	0.219	0.217	0.182
F Statistic	280.893***	51.113***	51.083***	46.914***	11.751***

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

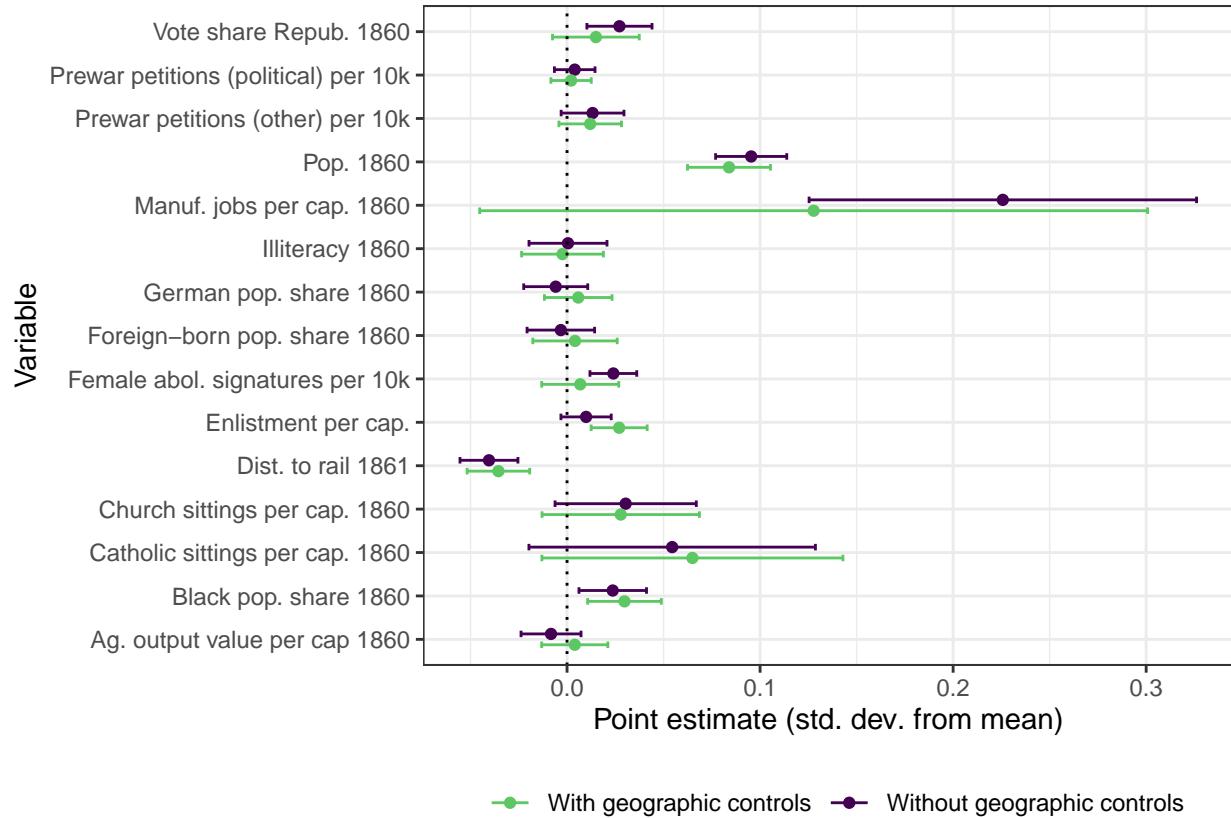


Figure 6: Post-match balance table comparing difference in means for demographic, socio-economic, and political variables in towns that did vs. did not have a USSC-affiliated soldiers' aid society, with and without adjusting for state fixed effects and linear and quadratic latitude and longitude. Variables available only at county level are assigned to all towns within those counties. All variables are mean-standardized for easier comparisons.

Table 2: This table replicates Table 1 using a sample matched on propensity scores.

	Dependent variable:			
	crusade			
	(1)	(2)	(3)	(4)
USSC society	0.085*** (0.010)	0.077*** (0.010)	0.073*** (0.010)	0.069*** (0.010)
Log pop. 1860		0.120*** (0.010)	0.088*** (0.010)	0.088*** (0.010)
Dist. to rail 1861			-0.047*** (0.007)	-0.041*** (0.007)
Illiteracy 1860			-0.018*** (0.006)	-0.016*** (0.006)
Repub. vote share 1860			-0.001 (0.007)	-0.001 (0.007)
Black pop. share 1860			0.040*** (0.010)	0.037*** (0.009)
Foreign-born pop. share 1860			-0.003 (0.008)	-0.001 (0.009)
German pop. share 1860			0.002 (0.005)	0.005 (0.005)
Catholic sittings per cap. 1860				0.006 (0.030)
Ag. output per cap. 1860			0.003 (0.005)	-0.004 (0.012)
Manuf. jobs. per cap. 1860			-0.063 (0.053)	-0.093* (0.052)
Enlistment per cap.				0.047*** (0.007)
Total church sittings per cap. 1860				-0.040* (0.022)
Female abol. pet.				-0.003 (0.004)
General Congress. pet.				0.009* (0.005)
Political Congress. pet.				0.006 (0.005)
Geo. controls	No	Yes	Yes	Yes
Observations	3,695	3,695	3,695	3,695
R <sup>2</sup>	0.019	0.186	0.218	0.245
Adjusted R <sup>2</sup>	0.019	0.182	0.212	0.238
Residual Std. Error	0.291	0.266	0.261	0.256
F Statistic	71.630***	44.114***	37.863***	35.977***

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

$$Pr(society_i = 1|X_i) = \frac{\exp(X_i^T)\beta}{1 + \exp(X_i^T)\beta} \quad (2)$$

where  $X_i$  is a matrix of variables used to estimate the fourth column of the main results in Table 1 and  $\beta$  a vector of the associated coefficients. Maximizing the fit of Equation 2 yields propensity score predictors for each observation. I then use nearest-neighbor matching to construct a dataset matched on the calculated propensity scores. The matched dataset consists of 2,424 (1,271) observations with (*without*) an aid society.<sup>11</sup> Figure 6 replicates Figure 5 with the matched sample, demonstrating the improved balance. Appendix Figure A4 shows the propensity score distribution of the unmatched vs. matched datasets.

Table 2 shows the results of Equation 1 using the matched sample. The coefficients are only slightly smaller than those in Table 1, demonstrating the robustness of the results to the lack of balance in the dataset used in Section 5.1.

### 5.3 Sensitivity Analysis

The main results, and the results on a sample matched for observed covariate balance, show a strong association between women’s wartime experiences and their postwar political capacity. They cannot, however, speak directly to a causal relationship. To address this, I present a sensitivity analysis based on Cinelli and Hazlett (2020). The purpose of such an analysis is to demonstrate how large an effect a hypothetical omitted variable would need to have to explain all of the effect attributed to the explanatory variable of interest (in this case, the presence of USSC-affiliated aid societies).

Suppose that there is some unobservable covariate  $U_i$  that is correlated both with the presence of an aid society and with the occurrence of a Temperance Crusade. The approach suggested by Cinelli and Hazlett (2020) is to measure how strong the relationships between  $U_i$  and the USSC variable, and  $U_i$  and the Crusade outcome, would have to be to completely explain the effect attributed to the presence of an aid society in the regressions actually run in Table 1.

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<sup>11</sup>For simplicity of interpretation, and because results varied minimally between the main results and the appropriate robustness check, I assign aid societies at random to plausible matches when ambiguous.

Formally, following Cinelli and Hazlett (2020), I define the *partial R*<sup>2</sup> of the unobserved confounding variable with the outcome as

$$R^2_{Y_i \sim U_i | society_i, \mathbf{X}} = \frac{R^2_{Y_i \sim society_i + \mathbf{X} + U_i} - R^2_{Y_i \sim society_i + \mathbf{X}}}{1 - R^2_{Y_i \sim society_i + \mathbf{X}}} \quad (3)$$

and the *partial R*<sup>2</sup> of the unobserved confounding variable with the treatment as

$$R^2_{society_i \sim U_i | \mathbf{X}} = \frac{R^2_{society_i \sim \mathbf{X} + U_i} - R^2_{society_i \sim \mathbf{X}}}{1 - R^2_{society_i \sim \mathbf{X}}} \quad (4)$$

where  $Y_i$  and  $society_i$  are defined as in Section 4 and  $\mathbf{X}$  is a matrix of control variables. The intuition behind the sensitivity analysis is to measure how  $\hat{\beta}$ , the coefficient on  $society_i$ , would change in relation to a range of hypothetical non-zero values for  $R^2_{Y_i \sim U_i | society_i, \mathbf{X}}$  and  $R^2_{society_i \sim U_i | \mathbf{X}}$ .

The curves on the graph shown in Figure 7 shows the change in  $\hat{\beta}$ , the coefficient on  $society_i$ , that would result from varying the partial  $R^2$  of the unobserved confounder with  $society_i$  under different assumed values for the partial  $R^2$  of the unobserved confounder with the outcome  $crusade_i$  (represented by different curves for values of 1, 0.5, 0.25, and 0.1).<sup>12</sup> Red markers on the x-axis benchmark the hypothetical sensitivity to an unobserved variable against one, two, and three times the strength of the relationship between the treatment ( $society_i$ ) and the wartime enlistment variable (measured in mean-standardized per-capita enlistment, which I denote  $enlistment_i$ ). This variable was chosen as the benchmark because it captures a town's pre-existing social capital and pro-social volunteerism in 1860, that is, it likely provides an imperfect measure of the unobservable that is the greatest threat to identification.

If one assumes that the partial  $R^2$  with respect to the outcome is 1 - that is, that adding the hypothetical unobservable omitted variable explains all previously unexplained variation in the outcome - the relationship between such a variable and  $society_i$  would need to be about one-and-a-half times as strong as the relationship between  $enlistment_i$  and  $society_i$ . The explanatory power of such a hypothetical variable with respect to the outcome, however, is likely unrealistic.

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<sup>12</sup>The methodologies from Cinelli and Hazlett (2020) can be implemented and visualized using the accompanying R package **sensemakr** (Cinelli, Ferwerda, and Hazlett 2020).

Assuming that  $U_i$  can explain half the unexplained variation ( $R^2_{Y_i \sim U_i | society_i, X} = 0.5$ ), the partial  $R^2$  with respect to  $society_i$  would need to be just shy of 0.05 (or about three times the strength of  $enlistment_i$ ) to reduce  $\beta$  to 0. Assuming a weaker relationship between  $U_i$  and  $crusade_i$  requires that  $U_i$  have a relationship with  $society_i$  that is many times stronger than that of wartime enlistment to eliminate the positive coefficient  $\beta$ .

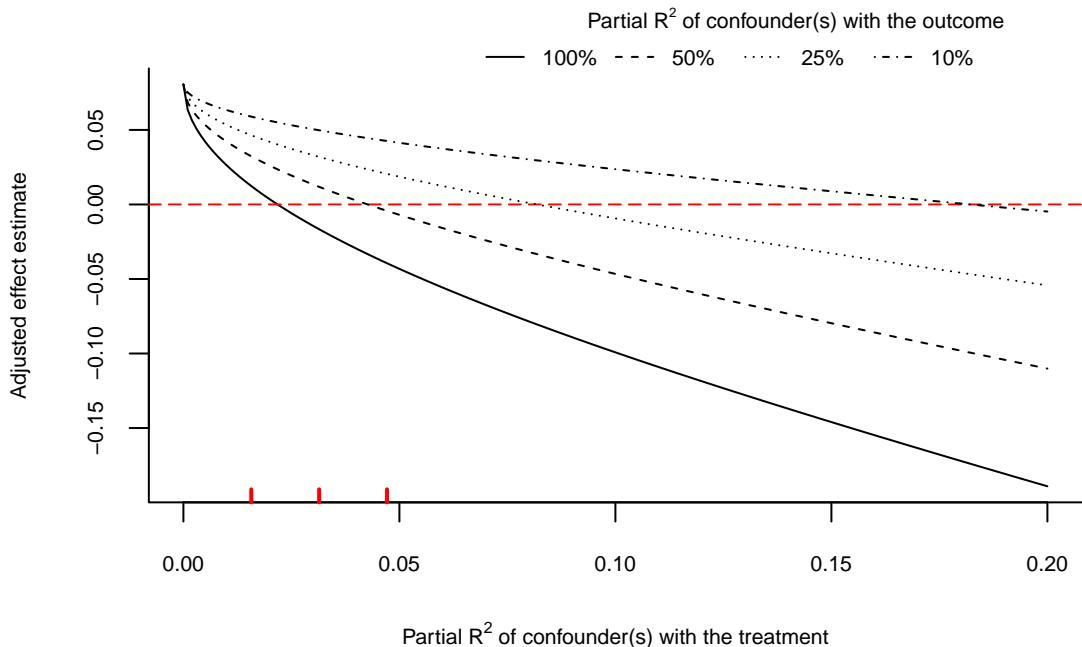


Figure 7: This plot shows the sensitivity of the main result to potential unobservable omitted variable bias. An unobservable variable's relationship with the outcome would need to be about 1.5 times as strong as that of wartime enlistment per capita (measured in standard deviations from the mean) to reduce the coefficient on  $\beta$  to 0 if that unobservable variable explained all remaining variance in the outcome.

## 5.4 Long-Run Outcomes

To measure the longer-run relationship between USSC societies and women's political capacity, I turn to the outcomes that capture post-war suffrage petitioning and women voters' participation after enfranchisement. I run the following regression at the county level:

$$Y_i = \alpha + \beta society_i + \mathbf{X}\gamma + \epsilon_i \quad (5)$$

where  $Y_i$  is a dichotomous measure of whether any town in county  $i$  sent at least one petition to Congress in favor of suffrage;  $society_i$  is the share of population in county  $i$  that resides in a town or city that had a wartime aid society; and  $\mathbf{X}$  is a matrix of county-level covariates. I use a binary formulation for  $Y_i$  rather than measuring (for instance) the number of petitions per capita because I lack information about the number of signatories to any individual petition and thus cannot differentiate between a single petition with many signatories vs. many petitions with fewer signatories.

Figure 8 shows the coefficients on  $society_i$ . In the 1870s, during the first postwar wave of women's activism, counties with high exposure to aid societies were significantly more likely to send petitions, as well as in the lead-up to suffrage itself.

Finally, I use Equation 5 to model the excess votes, constructed as described in Section 4.2. An increase in the county's population share exposed to a USSC society is associated with a 5-8% increase in the ratio of observed votes to counterfactual votes in the absence of women's suffrage (Table 3).

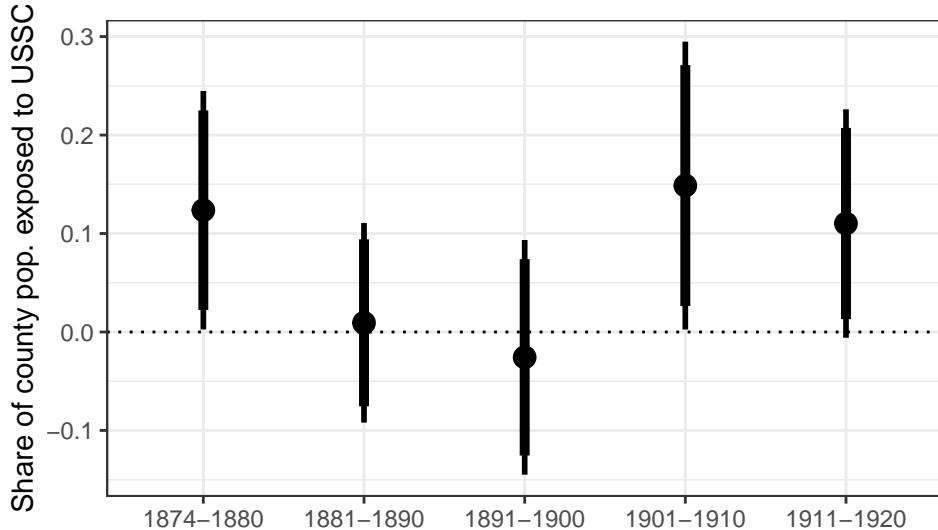


Figure 8: Regression coefficients showing the correlation between the share of population in a county living in a town with an aid society and whether the county submitted at least one petition to Congress in favor of women's suffrage, by decade.

Table 3: Geographic controls are state FE and linear and quadratic latitude and longitude.

	<i>Dependent variable:</i>			
	Excess voter participation share attributable to suffrage			
	(1)	(2)	(3)	(4)
Share of pop. in USSC town	−0.032 (0.028)	0.087*** (0.028)	0.054* (0.028)	0.058** (0.029)
Log pop. 1860		0.003 (0.006)	0.005 (0.009)	0.007 (0.009)
Log dist. to rail 1861			−0.045*** (0.012)	−0.041*** (0.012)
Illiteracy 1860			0.006 (0.007)	0.006 (0.007)
Repub. vote share 1860			0.002 (0.010)	0.003 (0.010)
Black pop. share 1860			−0.014** (0.007)	−0.014** (0.007)
Foreign-born pop. share 1860			−0.008 (0.009)	−0.007 (0.009)
German pop. share 1860			−0.002 (0.006)	−0.002 (0.006)
Catholic sittings per cap. 1860			0.014* (0.008)	0.026 (0.016)
Ag. output per cap. 1860			0.006 (0.009)	0.007 (0.009)
Manuf. jobs. per cap. 1860				6.813 (7.794)
Enlistment per cap.				−0.012 (0.016)
Total church sittings per cap. 1860				−0.011 (0.009)
Female abol. pet.				0.007 (0.007)
General Congress. pet.				0.005 (0.006)
Geo. controls	No	Yes	Yes	Yes
Observations	578	578	565	565
R <sup>2</sup>	0.002	0.513	0.546	0.550
Adjusted R <sup>2</sup>	0.001	0.496	0.523	0.523
Residual Std. Error	0.203	0.144	0.138	0.138
F Statistic	1.315	30.937***	23.887***	20.345***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## 6 Conclusions

In this paper, I examine the origins of American women's entry into mass politics. I theorize that a variety of mechanisms, including the benefits of single-sex enclaves, the development of networks, and the political legitimization of women as a political class, made home front volunteering during the American Civil War a useful setting for women to develop political capacity. This setting is distinctive from the one in which women made social gains in the twentieth century, when they substituted for male labor force and social roles during periods of wartime deployment.

To test this theory, I collect novel data on local-level participation in wartime volunteering. My empirical findings demonstrate a strong relationship between the presence of wartime volunteer societies and post-war outcomes that capture measures of women's political capacity. Towns and counties where women joined volunteer societies to engage in home production of goods for the Union Army were more likely to hold Temperance Crusades and submit petitions to Congress in favor of women's suffrage and had a higher share of voter participation attributable to women voters after the extension of the franchise. These findings bridge a gap in the literature between a (mostly qualitative) historical literature on women's social organizations in the early United States and a (mostly quantitative) social science literature on their entry into the labor force in the twentieth century. The association between women's home front activities and their subsequent entry into activism points to the importance of social capital formation as a conduit to political influence. In contrast to the twentieth century, when women's economic and political gains came from social shocks (the World Wars) and technological innovations (birth control) that enabled them to substitute into male roles, nineteenth-century women trained for politics by gaining organizing experience and legitimacy in a highly gendered environment.

Future avenues for research include exploiting data on the names of individual USSC aid societies' club leadership, which could, potentially, be linked to membership rolls of women's activist organizations to move from looking at community-level to individual-level linkages. Additionally, other aspects of women's wartime activities during the American Civil War remain largely unexplored. In addition to organizing women on the home front, the USSC trained and deployed women as battlefield and hospital nurses. The effect of this treatment on women's human capital and potential

political legitimacy is another promising area of future exploration.

While the United States has made great strides towards gender equality across a variety of social outcomes, including labor force participation, education, and political equality, women remain socially segregated and politically disempowered in many other contexts across the globe. My findings point to the possibility that women can become an empowered and politically mobilized class within the context of a socially segregated environment – a potentially important finding for expanding women’s rights in the modern day.

## 7 References

- Acemoglu, Daron, David H Autor, and David Lyle. 2004. "Women , War , and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury." *Journal of Political Economy* 112 (3).
- Atack, Jeremy. 2016. "Historical Geographic Information Systems (GIS) Database of u.s. Railroads for 1860."
- Bailey, Martha J. 2006. "More Power to the Pill: The Impact of Contraceptive Freedom on Women's Life Cycle Labor Supply." *The Quarterly Journal of Economics* 121 (1): 289–320.
- Baskaran, Thuslyanthan, and Zohal Hessami. 2018. "Does the Election of a Female Leader Clear the Way for More Women in Politics?" *American Economic Journal: Economic Policy* 10 (3): 95–121. <https://doi.org/10.1257/pol.20170045>.
- Blackhawk, Maggie, Daniel Carpenter, Tobias Resch, and Benjamin Schneer. 2021. "Congressional Representation by Petition: Assessing the Voices of the Voteless in a Comprehensive New Database, 1789–1949." *Legislative Studies Quarterly* 46 (3): 817–49. <https://doi.org/10.1111/lsq.12305>.
- Blocker, J S. 1985. *"Give to the Winds Thy Fears": The Women's Temperance Crusade, 1873-1874.* Greenwood.
- Blumenau, Jack. 2021. "The Effects of Female Leadership on Women's Voice in Political Debate." *British Journal of Political Science* 51 (2): 750–71. <https://doi.org/10.1017/S0007123419000334>.
- Booth, Alison, and Patrick Nolen. 2012. "Choosing to Compete: How Different Are Girls and Boys?" *Journal of Economic Behavior and Organization* 81 (2): 542–55. <https://doi.org/10.1016/j.jebo.2011.07.018>.
- Burns, Nancy, Kay Lehman Scholzman, and Sidney Verba. 2001. *The Private Roots of Public Action*. Cambridge: Harvard University Press.
- Carpenter, Daniel, and Colin D. Moore. 2014. "When Canvassers Became Activists: Antislavery Petitioning and the Political Mobilization of American Women." *American Political Science Review* 108 (3): 479–98. <https://doi.org/10.1017/S000305541400029X>.
- Carpenter, Daniel, Zachary Popp, Tobias Resch, Benjamin Schneer, and Nicole Topich. 2018. "Suffrage Petitioning as Formative Practice: American Women Presage and Prepare for the Vote, 1840-1940." *Studies in American Political Development* 32 (1): 24–48. <https://doi.org/10.1017/S0898588X18000032>.
- Cinelli, Carlos, Jeremy Ferwerda, and Chad Hazlett. 2020. "Sensemakr: Sensitivity Analysis Tools for OLS in R and Stata."
- Cinelli, Carlos, and Chad Hazlett. 2020. "Making Sense of Sensitivity: Extending Omitted Variable Bias." *Journal of the Royal Statistical Society. Series B: Statistical Methodology* 82 (1): 39–67. <https://doi.org/10.1111/rssb.12348>.
- Clemens, Elisabeth S. 1997. *The People's Lobby: Organizational Innovation and the Rise of Interest Group Politics in the United States, 1890-1925*. Chicago: University of Chicago Press.
- Corder, J Kevin, and Christina Wolbrecht. 2016. *Counting Women's Ballots*. Cambridge University Press.
- Cott, Nancy F. 1977. *The Bonds of Womanhood: "Woman's Sphere" in New England, 1780-1835*. New Haven: Yale University Press.
- Daniels, William Haven. 1878. *The Temperance Reform and Its Great Reformers: An Illustrated History*. New York: Nelson and Phillips.
- Dippel, Christian, and Stephan Heblisch. 2021. "Leadership in Social Movements: Evidence from the 'Forty-Eighters' in the Civil War." *American Economic Review* 111 (2): 472–505. <https://doi.org/10.1257/aer.20170701>.

- //doi.org/10.1257/AER.20191137.
- Endres, Kathleen L. 2006. *Akron's "Better Half": Women's Clubs and the Humanization of the City, 1825-1925*. Akron: University of Akron Press.
- Fernandez, Raquel, Alessandra Fogli, and Claudia Olivetti. 2004. "Mothers and Sons: Preference Formation and Female Labor Force Dynamics." *Quarterly Journal of Economics* 119 (4): 1249–99.
- García-Jimeno, Camilo, Angel Iglesias, and Pinar Yildirim. 2021. "Information Networks and Collective Action: Evidence from the Women's Temperance Crusade."
- Gay, Victor. 2021. "The Legacy of the Missing Men: The Long-Run Impact of World War I on Female Labor Force Participation The Legacy of the Missing Men," no. January.
- Giesberg, Judith Ann. 2006. *Civil War Sisterhood: The U.S. Sanitary Commission and Women's Politics in Transition*. Boston: Northeastern University Press.
- Gneezy, Uri, Kenneth L. Leonard, and John A. List. 2009. "Gender Differences in Competition: Evidence From a Matrilineal and a Patriarchal Society." *Econometrica* 77 (5): 1637–64. <https://doi.org/10.3982/ecta6690>.
- Gneezy, Uri, Muriel Niederle, and Aldo Rustichini. 2003. "Performance in Competitive Environments: Gender Differences." *Quarterly Journal of Economics* 118 (3): 1049–74. <https://doi.org/10.1162/00335530360698496>.
- Goldin, Claudia. 2021. "Career and Family." In *Career and Family*. Princeton University Press.
- Hampole, Menaka, Francesca Truffa, and Ashley Wong. 2021. "Peer Effects and the Gender Gap in Corporate Leadership : Evidence from MBA Students."
- Imai, Kosuke, and Marc Ratkovic. 2014. "Covariate Balancing Propensity Score." *J. R. Statist. Soc.* 76 (1): 243–63.
- Jha, Saumitra, and Steven Wilkinson. 2012. "Does Combat Experience Foster Organizational Skill? Evidence from Ethnic Cleansing During the Partition of South Asia." *American Political Science Review* 106 (4): 883–907. <https://doi.org/10.1017/S000305541200041X>.
- Karpowitz, Christopher F., and Tali Mendelberg. 2018. "Do Enclaves Remediate Social Inequality?" *Journal of Politics* 80 (4): 1134–49. <https://doi.org/10.1086/698756>.
- Karpowitz, Christopher F., Tali Mendelberg, and Lee Shaker. 2012. "Gender Inequality in Deliberative Participation." *American Political Science Review* 106 (3): 533–47. <https://doi.org/10.1017/S0003055412000329>.
- Mattingly, Carol. 2000. *Well-Tempered Women: Nineteenth-Century Temperance Rhetoric*. SIU Press.
- McMillen, Sally. 2008. *Seneca Falls and the Origins of the Women's Rights Movement*. Oxford University Press.
- Okrent, Daniel. 2010. *Last Call: The Rise and Fall of Prohibition*. New York: Scribner.
- Olivetti, Claudia. 2013. "The Female Labor Force and Long-Run Development: The American Experience in Comparative Perspective." National Bureau of Economic Research.
- Ray, Orman P. 1918. "Woman Suffrage in Foreign Countries." *American Political Science Review* 12 (3): 469–74.
- Skocpol, Theda. 1995. *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*. Cambridge: Harvard University Press.
- Skocpol, Theda, Ariane Liazos, and Marshall Ganz. 2006. *What a Mighty Power We Can Be*. Princeton: Princeton University Press.
- Stewart, Eliza Daniel. 1890. *Memories of the Crusade: A Thrilling Account of the Great Uprising of the Women of Ohio in 1873, Against the Liquor Crime*. Third. Chicago: H.J. Smith & Co.
- Teele, Dawn Langan. 2018. "Forging the Franchise." In *Forging the Franchise*. Princeton University Press.

- Tetrault, Lisa. 2014. *The Myth of Seneca Falls: Memory and the Women's Suffrage Movement, 1848-1898*. UNC Press Books.
- Thornbrough, Emma Lou. 1965. *Indiana in the Civil War Era, 1850-1880 - Volume 3*. Indianapolis: Indiana Historical Society Press.
- Wellman, Judith. 2004. *The Road to Seneca Falls: Elizabeth Cady Stanton and the First Woman's Rights Convention*. Urbana, IL: University of Illinois Press.
- Willard, Frances E. 1895. *Do Everything: A Handbook for the World's White Ribboners*. Northern Illinois University Digital Library.

## A USSC Data Construction Details

USSC data are hand-coded from handwritten directories held in the New York Metropolitan Archives (supplemented with 1863 contribution logs for the Cincinnati Branch). The amount of data available for each entry varies between and within branch but always includes a town name and state, with additional information on county and the names of one or more club officers also sometimes provided. Figure A1 gives an example of a register of societies from the area around Buffalo, NY.

*All Societies tributary to the Buffalo Branch - Continued*

Societies	Where Located	Prominent Officers
Boston Corners	Erie Co.	Mrs H. J. Chaffee, Pres.
West Remington	Wash Hennings Wmning Co.	Mrs Lydia J. Long, Pres.
Reach Rd	Lockport Niagara Co.	Mrs. A. Simons, Pres.
South Bayou	Cooper Genesee Co.	" Miller, Pres.
Bristol	Bristol Ontario Co.	W. Scott Hicks
Begon	Byron Genesee Co.	Mrs Nather
Brent & Evans	"	Jacob Mayor, Pres.
Clarendon	Clarendon Orleans Co.	Helenia Cooper, Secy.
Clarence	Clarence Erie Co.	O. Oakley, Pres.
Clarence	"	E. A. Ayersworth, Pres.
Clarence Centre	Clarence Centre Erie Co.	C. V. Pepple, Pres.
Cambria	Cambria Niagara Co.	Mr. Scudler, Secy.
Elmwood	Clemens Chautauque Co.	A. Correll, Secy.
Charlotte Centre	Charlotte Centre do	J. R. Brown, Pres.
Colton	Colton Erie Co.	Scadding, Pres.
Castile	Castile Wyoming Co.	R. J. Dennis, Pres.
Louisville	Louisville Wyoming Co.	Edwin Nelson, Pres.
Canandaigua	Canandaigua Ontario Co.	W. C. Coltrate, Pres.
Chittenango	Chittenango Erie Co.	Mr. J. Hamblin, Adj. Pres.

*All Societies tributary to the Buffalo Branch - Continued*

Societies	Where Located	Prominent Officers
North Collins	North Collins Erie Co.	Mrs Horace Kimball, Pres.
Colcord Ladies	Buffalo Erie Co.	Geo. Dorri, Pres.
Colton Centre	Colton Centre Erie Co.	H. Cole, Pres.
North Colton	North Colton Erie Co.	E. O. Calbeck, Pres.
Cheshire	Cheshire Ontario Co.	C. L. Haskell
Clarks Mills	Clark Mills Ontario Co.	Allen Groce
Centreville	Centreville Allegany Co.	C. Harrison
Dale	Dale Wyoming Co.	Rev. Mr. Gillman
Darien	Darien Genesee Co.	Mrs. Thos. P. White, Pres.
DeWittville	"	Horace Hall, Pres.
Eaton	Eaton Chautauque Co.	Miss Anna Adrich
Eaton	Eaton Erie Co.	Peter Copp, Secy.
Eaton Valley	Eaton Valley Erie Co.	Julia Brewster, Secy.
Eiona	Eiona Erie Co.	Mrs Wiram Hitchcock, Pres.
Egyptville	Egyptville Erie Co.	J. C. Warner
Eaton	Eaton Cattaraugus Co.	Julie E. Brown, Secy.
East Ashford	East Ashford "	Mrs. A. J. Wiltsie, Secy.
Forestville	Forestville Chautauque Co.	D. N. Blanchard, Pres.
Elliott	Elliott Erie Co.	Mrs. Ellen Beffen, Pres.

Figure A1: An example of a USSC society roster from the Buffalo (New York) branch.

Because the USSC data was based on self-identified locations of societies, it is non-standardized in terms of geographic location, and societies' locations do not always cleanly map to locations in the 1860 U.S. Census, which supplies the demographic control variables used in my analysis. Some societies were located in communities too small to be captured as towns in the Census, or identified themselves with neighborhoods of larger cities. Some clubs were affiliated simultaneously with more than one branch, while others could potentially be mapped to more than one potential Census entry (in cases where multiple locations within a state share a name and no county information is offered in the USSC dataset).<sup>13</sup> To handle these situations in which the correct location of societies is ambiguous, I employ various robustness checks. For the main results in Section 5.1, I randomly assign the location of a society with an ambiguous location to a town that is a potential candidate. In the robustness check in Appendix C, I employ several other approaches, including probabilistic

<sup>13</sup>For instance, there are twenty-four communities with the name "Liberty" in Ohio captured in the 1860 Census.

matching (creating a continuous variable that captures the probability that a town has a society), counting all potential matches as containing a society, and dropping all ambiguous place names from the sample.

On the other hand, some towns have multiple organizations affiliated with the USSC representing different neighborhoods or social groups (for instance, one for adult women and another for youths). However, I dichotomize a town's participation in the USSC (or, in the case of ambiguous matches, create a probabilistic variable) rather than measuring "societies per capita" variable due to inconsistencies across branch-level recordkeeping systems in whether and how multiple societies are recorded.

If there are  $N$  possible matches for a society, I assign each potential a weighted value of  $\frac{1}{N}$  for the  $society_i$  variable. Figure A2 shows the distribution of these weights; the majority of societies can be located exactly.

In all, the sample contains 7862 towns that appear in the 1860 Census. Of these 2,470 are potentially matched to a town with a soldiers' aid society. Over ninety percent gap between these 6,404 entries and the 2,470 potential matches comes from societies in states outside the sample; the remainder (less than ten percent) is due to societies that could not be matched to any Census town (because these towns were too small to be captured by the Census, or are counted as subdivisions of larger cities). Giesberg (2006) gives a total of 7,000 soldiers' aid societies. My hand-transcribed list from the USSC archive consists of 6,404 entries, a total that is reasonably comparable; the gap probably results from societies that I judge to be duplicates of the same location but which Giesberg (2006) counts separately.

Of the 6,404 entries listed in the USSC registers, 5,915 are in states not included in the sample, either because USSC data appears incomplete for that state or because the state held no Temperance Crusades: the District of Columbia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Missouri, Nebraska, New Hampshire, Pennsylvania, and Tennessee. The remaining discrepancy of 489 entries results from societies in towns that could not be linked to any place in the 1860 Census, usually because they were small, unincorporated communities.

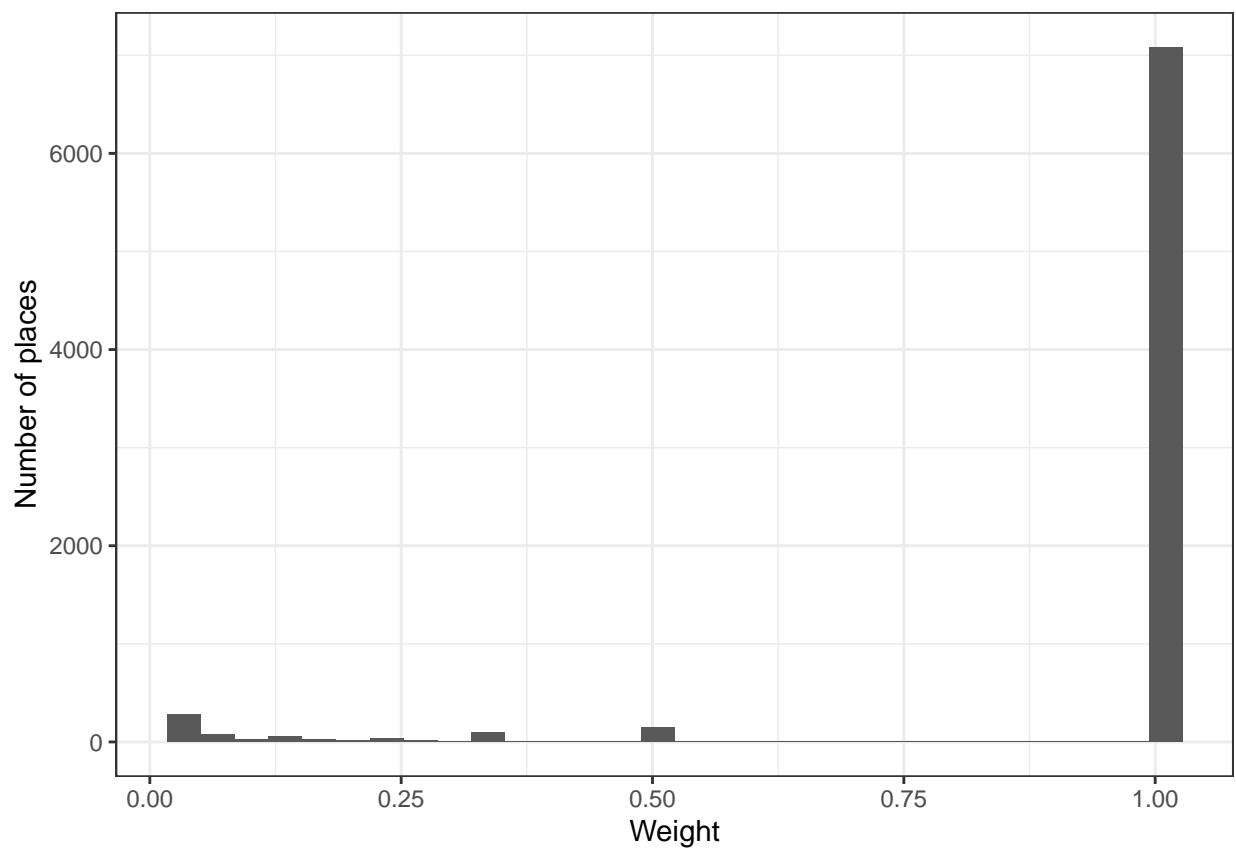


Figure A2: Distribution of weights used to adjust for uncertainty in exact location of soldiers' aid societies.

## B Summary Statistics

Table A1

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Pop. 1860	7,862	1,588.501	4,944.853	2	579.2	1,675	266,661
Nearest rail 1861	7,862	28,546.970	52,620.500	0.005	3,200.379	24,099.710	471,691,400
Vote share Repub. 1860	7,796	0.574	0.109	0.025	0.506	0.646	1.000
Enlistment per cap.	7,493	0.074	0.071	0.0001	0.041	0.085	0.985
Prewar petitions (political) per 10k	7,861	0.002	0.056	0.000	0.000	0.000	3.376
Prewar petitions (other) per 10k	7,861	3.141	16.858	0.000	0.000	0.000	666.667
Female abol. signatures per 10k	7,862	225.634	488.807	0.000	0.000	183.620	3,251.641

Summary statistics for town-level data

Table A2

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Church sittings per cap. 1860	572	0.754	1.422	0.000	0.282	0.776	15.974
Catholic sittings per cap. 1860	572	0.072	0.344	0.000	0.000	0.064	6.927
Black pop. share 1860	575	0.001	0.004	0.000	0.000	0.0002	0.043
Manuf. jobs per cap. 1860	572	0.039	0.060	0.000	0.008	0.043	0.484
Illiteracy 1860	575	0.050	0.071	0.000	0.003	0.071	0.646
German pop. share 1860	575	0.028	0.050	0.000	0.000	0.030	0.402
Ag. output value per cap 1860	562	91.984	185.655	0.445	40.433	77.052	2,062.783
Foreign-born pop. share 1860	575	0.218	0.196	0.000	0.081	0.300	1.000

Summary statistics for county-level data

## C Robustness Checks for Main Results

### C.1 Alternative Specifications

Table A3 shows robustness checks for Table 1 using different variations on population weights and assignments of aid societies to towns. The first column shows results for an OLS (linear probability model) regression with 1860 population weights; the second, for an OLS regression dropping the bottom and top 5 percent of cities by population. The third column assumes that all potential town name matches in the USSC catalogue should be treated, and the fourth drops all ambiguous name matches. The fifth column uses a probabilistic town-level variable to handle ambiguous society-to-town matches that takes a value of 0 if there is no possible match to an aid society for that town and 1 if there is a potential match. This value is then multiplied by the inverse of potential matches to a town name (so a certain match is a 1, while a society that could be matched to one of two towns results in both towns being “treated” with a society and receiving weights of  $\frac{1}{2}$ , etc.). Table A4 shows variations of the main results using a logistic specification rather than a linear probability model, and Figure A3 shows the robustness of the point estimates of the main linear specification (Column 4 of Table 1 in the main body of the paper) to using Conley standard errors of varying radii rather than clustering standard errors at the county level.

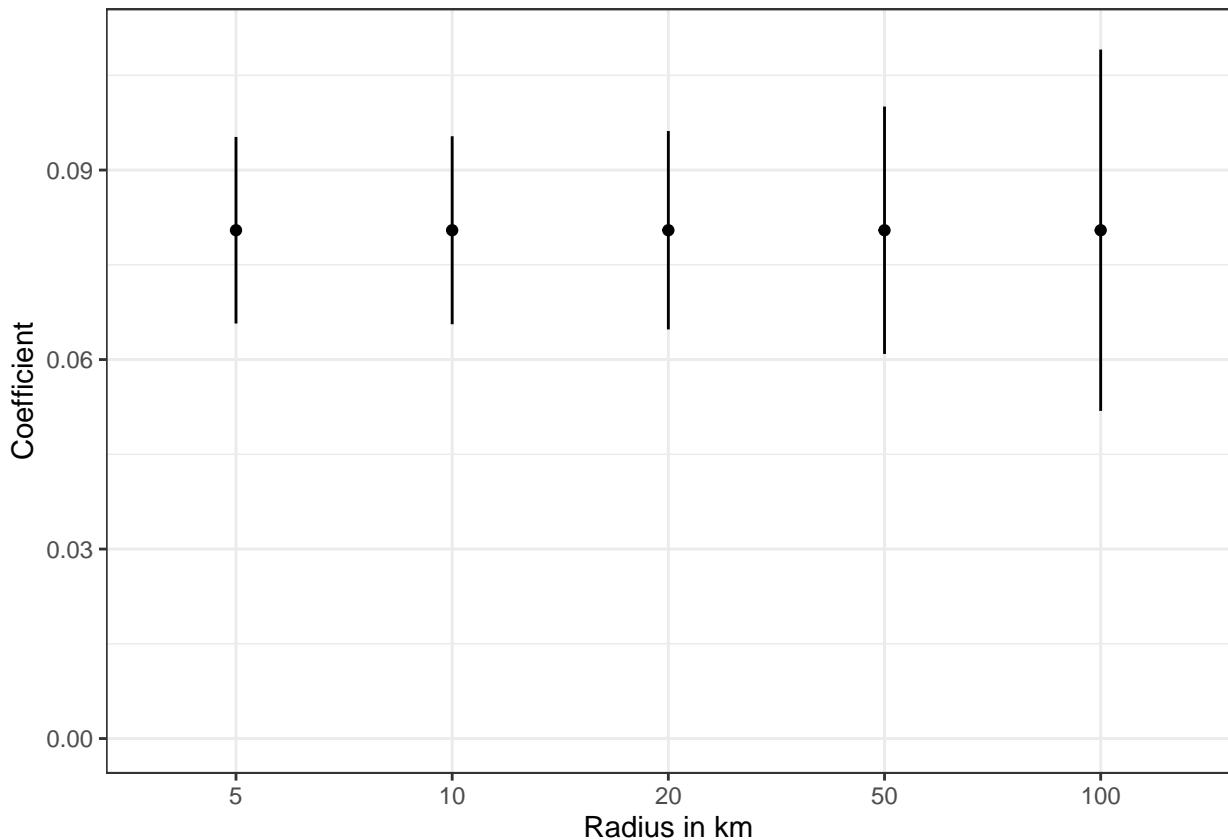


Figure A3: Point estimates and 95% confidence intervals for Conley standard errors with radii of 5, 10, 20, 50, and 100 km.

### C.2 Propensity Score Matching

Table A3

	<i>Dependent variable:</i>				
	Pop. weights (1)	Drop smallest/largest (2)	Treat all potential matches (3)	Drop ambiguous towns (4)	Probabilistic (5)
USSC society	0.088*** (0.014)	0.070*** (0.009)	0.080*** (0.009)	0.077*** (0.009)	
USSC society (prob.)					0.081*** (0.009)
Log pop. 1860	0.146*** (0.012)	0.026*** (0.007)	0.043*** (0.006)	0.043*** (0.006)	0.043*** (0.006)
Dist. to rail 1861	-0.021*** (0.007)	-0.039*** (0.005)	-0.042*** (0.005)	-0.039*** (0.006)	-0.041*** (0.005)
Illiteracy 1860	-0.022*** (0.006)	-0.011*** (0.002)	-0.011*** (0.002)	-0.010*** (0.002)	-0.011*** (0.002)
Repub. vote share 1860	-0.006 (0.010)	0.006 (0.004)	0.005 (0.004)	0.002 (0.004)	0.006 (0.004)
Black pop. share 1860	0.030*** (0.009)	0.016*** (0.005)	0.031*** (0.006)	0.032*** (0.007)	0.031*** (0.006)
Foreign-born pop. share 1860	0.019 (0.013)	-0.006 (0.004)	-0.004 (0.005)	-0.005 (0.005)	-0.004 (0.005)
German pop. share 1860	0.010 (0.009)	-0.001 (0.002)	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)
Catholic sittings per cap. 1860	-0.014 (0.027)	0.011** (0.005)	0.010** (0.005)	0.010* (0.005)	0.010** (0.005)
Ag. output per cap. 1860	-0.026* (0.014)	0.006 (0.008)	-0.002 (0.009)	-0.003 (0.009)	-0.002 (0.009)
Manuf. jobs. per cap. 1860	-0.367*** (0.142)	-0.012 (0.033)	-0.021 (0.038)	-0.029 (0.038)	-0.021 (0.038)
Enlistment per cap.	0.082*** (0.009)	0.033*** (0.005)	0.036*** (0.005)	0.036*** (0.005)	0.036*** (0.005)
Total church sittings per cap. 1860	-0.022 (0.029)	-0.034** (0.015)	-0.026 (0.016)	-0.023 (0.018)	-0.026 (0.016)
Female abol. pet.	0.006 (0.010)	-0.004 (0.003)	-0.005 (0.003)	-0.005 (0.003)	-0.005 (0.003)
General Congress. pet.	0.017** (0.007)	0.004 (0.003)	0.006* (0.003)	0.006* (0.003)	0.006* (0.003)
Political Congress. pet.	0.014** (0.006)	-0.0005 (0.001)	0.007 (0.006)	0.007 (0.006)	0.007 (0.006)
Geo. controls	Yes	Yes	Yes	Yes	Yes
Observations	7,429	6,752	7,429	6,712	7,429
R <sup>2</sup>	0.566	0.127	0.173	0.184	0.173
Adjusted R <sup>2</sup>	0.564	0.123	0.169	0.180	0.170
Residual Std. Error	10.787	0.204	0.217	0.216	0.217
F Statistic	292.487***	29.736***	46.914***	45.735***	46.996***

Note:

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Table A4

	<i>Dependent variable:</i> crusade			
	(1)	(2)	(3)	(4)
USSC society	1.538*** (0.124)	1.918*** (0.146)	1.717*** (0.150)	1.613*** (0.164)
USSC society (prob.)		1.220*** (0.126)	1.027*** (0.129)	1.153*** (0.146)
Log pop. 1860			−0.664*** (0.060)	−0.596*** (0.067)
Dist. to rail 1861			−0.334*** (0.071)	−0.314*** (0.076)
Illiteracy 1860			0.048 (0.081)	0.095 (0.092)
Repub. vote share 1860			0.217*** (0.047)	0.153*** (0.053)
Black pop. share 1860			−0.076 (0.093)	−0.044 (0.119)
Foreign-born pop. share 1860			−0.066 (0.059)	−0.042 (0.066)
German pop. share 1860				0.056 (0.311)
Catholic sittings per cap. 1860			0.107** (0.044)	0.072 (0.152)
Ag. output per cap. 1860			−0.646 (1.017)	−1.136 (1.222)
Manuf. jobs. per cap. 1860				0.460*** (0.052)
Enlistment per cap.				−0.505 (0.337)
Total church sittings per cap. 1860				−0.093 (0.083)
Female abol. pet.				0.063** (0.032)
General Congress. pet.				0.052* (0.028)
Geo. controls	Yes	Yes	Yes	Yes
Observations	7,862	7,862	7,787	7,429
Log Likelihood	−1,642.168	−1,303.985	−1,209.361	−1,103.706
Akaike Inf. Crit.	3,288.337	2,647.969	2,474.722	2,275.412

*Note:*

\* p&lt;0.1; \*\* p&lt;0.05; \*\*\* p&lt;0.01

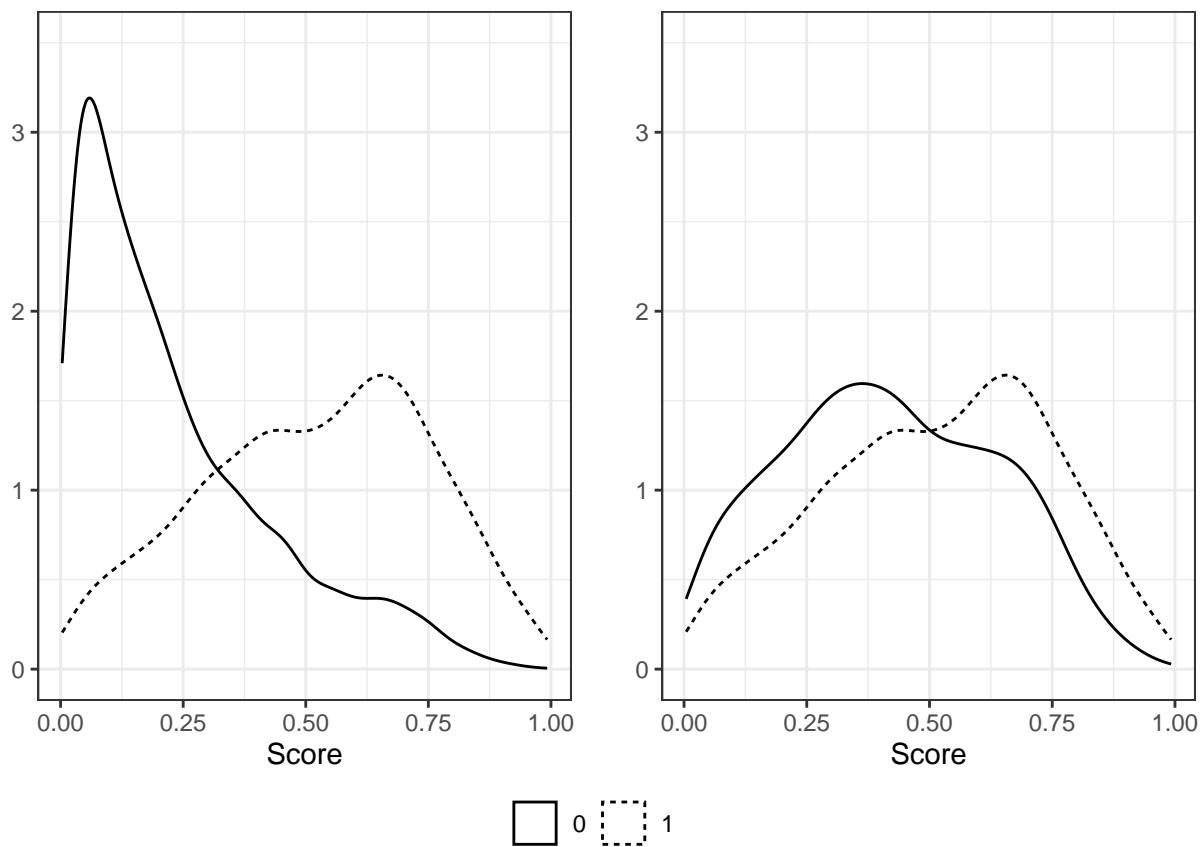


Figure A4: Distribution of propensity scores for unmatched (left) and matched (right) samples. The solid (dotted) lines denote propensity scores of towns without (with) an aid society.

## D Petitions Data Construction Details

Raw data on petitions to Congress (submitted by groups and individuals) are provided by Blackhawk et al. (2021). The full database, which is transcribed from the Congressional Record, contains data on over 500,000 individual petitions submitted by citizens and organizations to members of Congress between 1789 and 1948. Of these, 70,464 can be matched to a town of origin using fuzzy string matching. I focus on geolocated petitions submitted between 1850 and 1859, which yields 5,847 qualifying petitions. We exclude all petitions originating from New York City (and exclude New York City from any analysis involving the petitions) because of inconsistencies in the original data in assigning these petitions to “New York City” vs. smaller sub-jurisdictions.

I use topic codings provided by Blackhawk et al. (2021) (i.e., whether they were submitted by a particular interest group) and by frequent topic of interest (i.e., slavery, temperance, immigration, etc.). Petitions assigned a topic by Blackhawk et al. (2021) that is of general political interest but not specific to women (like immigration or slavery) we code as “political.” All other petitions are coded as “general.” These typically were intended to draw legislators’ attention to constituents’ or localities’ particular problems or requests, such as pensions for individual veterans or the funding of local infrastructure. Only a small number of petitions ( $N = 120$ ) can be linked to women’s activist issues in particular (for instance, they were submitted by a women’s organization or address an issue closely linked to women’s rights, such as the regulation of age of consent for marriage). However, because there are so few of these and they are geographically unbalanced (only originating in Eastern states), we do not analyze them as a separate series but instead combine them with other political petitions. Figure A5 shows the total number of geolocated petitions by year.

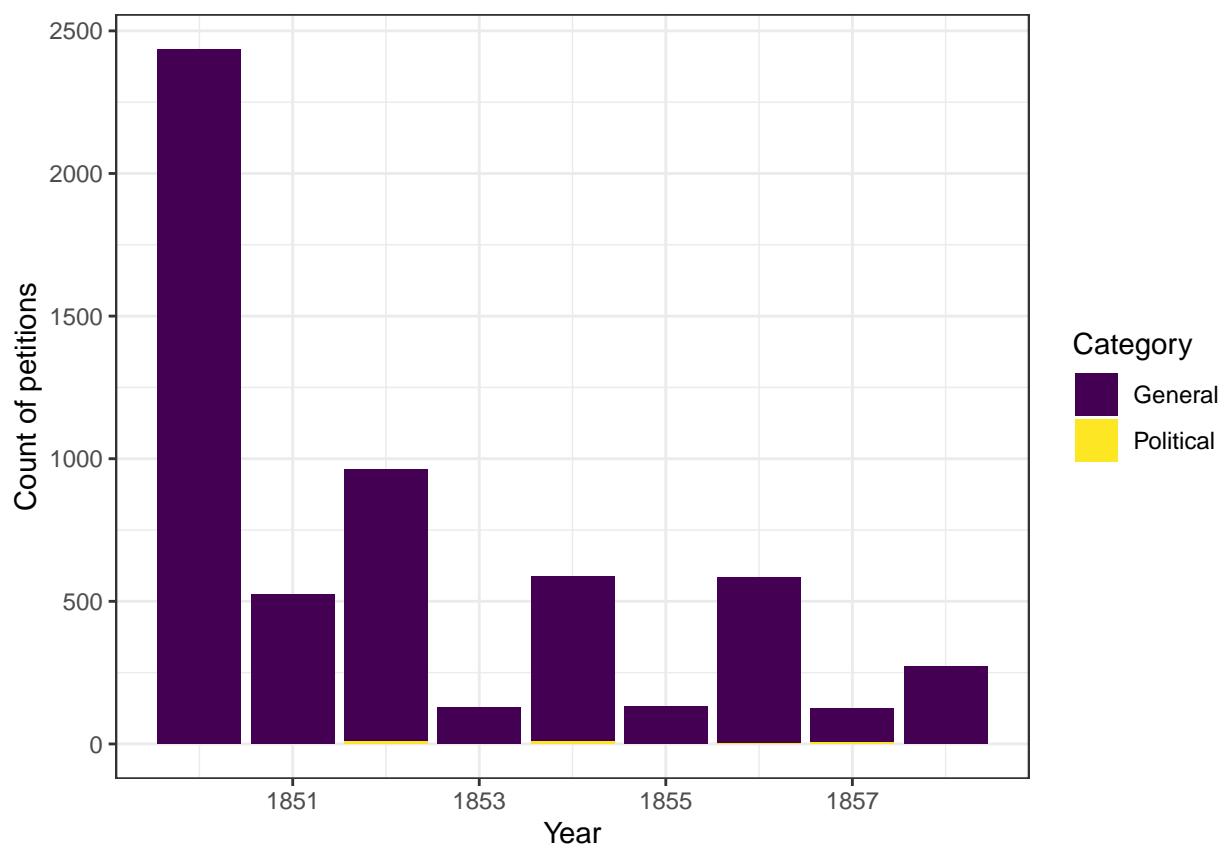


Figure A5