

# Mobilizing the Home Front: War and Women’s Political Activism

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## Abstract

The nineteenth century saw the first entry of American women into mass political activity. What spurred this sudden influx of women activists? Leveraging a novel archival data on women’s volunteering during the American Civil War across thousands of towns and cities, I link women’s wartime home front mobilization to peacetime political activism. Places where women participated in pro-Union volunteering were more likely to have women-led political movements and petition Congress in favor of suffrage after the war. The relationship between wartime volunteering and post-war activism is robust to adjusting for other measures of social and organizational capital, including male enlistment in the Civil War. I argue that wartime volunteer mobilization helped women gain organizing experience. Despite being largely excluded from the public sphere, these women transformed their war experience into lessons for mass politics.

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# 1 Introduction

In 1873-1874, tens of thousands of women took part in the first mass political campaign in the United States to benefit women as a specific political class. Across almost a thousand towns and cities, women marched in the streets and physically occupied bars and saloons to protest the sale and consumption of alcohol, which they blamed for domestic violence and family impoverishment (Stewart 1890; Blocker 1985). Out of this spontaneous protest movement grew more permanent political organizations to advance the cause of temperance and, eventually, women's suffrage. Political mobilization efforts such as the "Temperance Crusades" of the 1870s require overcoming collective action problems to induce mass participation (Olson 1971; Jenkins 1983). Organizing women as an interest group has particular challenges, given that sex cross-cuts other social identities, further raising the potential costs of participating in protests and social actions (Chafe 1978; Htun 2004; Goldin 2023). Why and how did American women suddenly enter into mass politics?

I look to women's experiences during the American Civil War to understand the roots of their post-war activism. Using a new archival dataset, I show that places where women participated in a nationwide home front volunteer program to benefit the Union Army were substantially more likely to hold Temperance Crusades and, subsequently, to petition Congress in favor of women's suffrage. These volunteer societies recruited and coordinated women to do home production tasks, such as preserving food, making clothing, and gathering medical supplies. In contrast to activities such as protesting or petitioning, the work done by the women in these societies was not formally political. Furthermore, their activities were consistent with nineteenth-century expectations about gender roles and gendered labor. I argue that these wartime home front roles provided women with the opportunity to gain valuable social capital and practical organizing experience that could be redeployed to activism in a setting that limited other opportunities for political self-expression.

The Temperance Crusades involved public marches and the physical occupation of saloons by

women – a strikingly public and radical form of political pressure given restrictive gender roles in nineteenth-century public life. The Crusade movement led directly to the creation of the Women’s Christian Temperance Union, which was the largest and most influential women’s organization to have existed at the time of its founding in 1874 (Bordin 1981, 4), and which eventually achieved substantial international reach on the issues of temperance and suffrage (Tyrrell 2014).<sup>1</sup> In the context of the late nineteenth century, the temperance and suffrage movements overlapped substantially, and the roots of latter cannot be understood without reference to the former. Thus, the Crusade movement is crucial to understanding the trajectory of women’s mobilization and political emancipation in the United States.

I find a large and statistically significant relationship between wartime volunteering and Crusading. A local “soldiers’ aid society” 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 women’s pre-war petitioning activity and men’s enlistment in the Union Army. Furthermore, counties with higher population exposure to volunteer aid societies sent more petitions to Congress in favor of women’s suffrage between 1874 and 1920. I explore potential mechanisms that mediate pre-war volunteering and post-war activism, including enclave effects (wherein socially segregated environments aid the development of new skills), the formation of new social networks, and the development of women’s political legitimacy. To address empirical concerns, I quantify the degree to which a strictly causal interpretation of the relationship between wartime volunteer organizations and post-war temperance activism is vulnerable to unobserved variable bias or potential sample selection. However, demonstrating a purely descriptive association between volunteering and protest is itself important to understanding the roots of women’s activism. In contrast to studies that focus on women’s pre-suffrage political engagement (i.e., Carpenter et al.

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<sup>1</sup>Including its junior auxiliary membership roster, the WCTU had nearly twenty times the membership of the National American Woman Suffrage Association, a major women’s rights organization, in the 1890s (Bordin 1981, 3–4).

2018; Blackhawk et al. 2021), my findings focus on how women’s traditional social and labor market roles within the household and community can complement, rather than impede, women’s political capacity. This is crucial for understanding how to further women’s rights in modern contexts where their access to the public sphere is limited.

In this paper, I extend quantitative literature on American women’s enfranchisement (McCammon and Campbell 2001; McCammon 2003; Przeworski 2009; Braun and Kvasnicka 2013; Carpenter et al. 2018; Teele 2018b; Moehling and Thomasson 2020) and their emergence into the workforce and public roles in the 20th century (Goldin 1991, 2021; Goldin and Katz 2001; Goldin and Katz 2002; Bailey 2006, 2010; Olivetti 2013; Bailey and DiPrete 2016), providing further empirical evidence about the political context that set the stage for these later gains. Previous studies point to complementarities between men’s combat experiences and political capacity (Jha and Wilkinson 2012; Dippel and Heblich 2021) and to the effects of female substitution for male wartime roles during the First (Ray 1918; Gay 2021) and Second (Fernandez, Fogli, and Olivetti 2004; Goldin and Olivetti 2013) World Wars. In these settings, men gain political capacity by participating in conflict, and women gain political (and economic) capacity by substituting for absent men in the formal labor force. In the setting I study, on the other hand, socially unifying experiences like war can have externalities that help women overcome these barriers to political coordination without engaging directly in the conflict or substituting for male roles.<sup>2</sup>

Successful political mobilization requires coordinating large numbers of people to sacrifice time, effort, and social capital. Interpersonal networks can lower the costs of coordination through identity-building, which molds the preferences of individuals around common goals and boosts organizing effort via social pressure (McCarthy and Zald 1977; Tarrow 2022, 200). Because women are not, as a class, geographically or (within family units) socially segregated, women’s movements have higher barriers to coordination and a higher risk of factionalism

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<sup>2</sup>Some American women did serve during the war, particularly as Army nurses; their experiences, however, are beyond the scope of this paper.

along other identity lines (Chafe 1978, 137; Gilmore 1996; Htun 2004, 439; Goldin 2023, 6), although women who overcome these barriers tend to be particularly effective at effecting political transformation (Chenoweth and Marks 2022). Wartime volunteer opportunities built up local networks and gave women organizing experience. The WCTU's first president, Annie Turner Wittenmyer, spent the war organizing aid societies in her home state of Iowa (C. Evans 2022, 91); the biographies of many other prominent activists highlight their wartime volunteer backgrounds. Quantitative analysis suggests that the relationship between volunteering and Crusading is particularly strong in places with fast-growing populations, where social ties were likely to be weaker pre-war (and where the coordination mechanism of wartime volunteering therefore had the most benefit).

My findings highlight the importance of looking beyond typical measures of political engagement when assessing the political capacity of disenfranchised groups. They situate the historical origins of American women's mobilization in homes and community organizations. In a social history of women in the early nineteenth century, Cott (1977) writes that "The internal dynamics of the women's sphere, by encouraging women to claim a social role according to their sex and to share both social and sexual solidarity, provoked a minority of women to see and protest those boundaries" (204). In the 1870s, this provocation exploded into a widespread protest movement and, subsequently, the development of new institutions to fight for women's political causes. Historically, women left comparatively few large-scale written records, and those that survive tend to underenumerate women's activities (Geib-Gunderson 2016). I contribute rare quantitative evidence on women's operations within this separate sphere and demonstrate their importance to emergence of women as a political constituency.

## 2 Historical Background

### 2.1 American Women’s Activism in the 19th Century

The 1848 Seneca Falls Convention is popularly 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 female activists on behalf of women’s rights and the anti-slavery movement (see also Carpenter and Moore (2014) on women’s prewar petitioning), 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).

The postwar women’s movement, which had a vastly expanded reach, focused on two causes of particular interest to women: temperance and suffrage (with some overlap with the less-gendered cause of civil rights and racial equality). These social movements intersected with one another at individual and organizational levels. In its 19th-century incarnation, political activism against the sale of alcohol focused on the impacts of men’s alcoholism on wives and families, including domestic violence, lost earnings, and neglect.<sup>3</sup>

Though the American anti-alcohol movement predated 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 911 American towns (Blocker 1985). These marches combined radical tactics – street protests, the

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<sup>3</sup>The goals and support base of the American temperance movement shifted at the turn of the century. 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 19th-century women campaigners, 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 to one that concentrated specifically on gaining the franchise by exploiting opportunities in electoral politics (Teele 2018a).

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 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).

These marches had some short-run successes, pressuring some local merchants to shut down the 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 the organizations that emerged from the protest movement, including those that had spillover effects on 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 longtime leader, 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 temperance movement relied on tactics of moral suasion. The aesthetics of the Crusades and the WCTU drew heavily on religious imagery and cultural notions of women’s moral superiority. 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), a strategy that Marilley (2013) characterizes as a deliberate one, to gain men’s support.

Yet Mattingly (2000) cautions readers not to view the temperance movement as conservative: “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). Leveraging the narrative of women as a “civilizing” political force was a useful strategy to both broaden the pool of potential allies and to defend women’s claim to public authority (Towns 2009).

## **2.2 Women’s Home Front 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 (the name referred to upholding “sanitary” conditions in 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 and contributed in-kind supplies from the home front, such as clothing and preserved food, directly to the war effort. The top leadership included two women, Dr. Elizabeth Blackwell and Dorothea Dix. 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 was crucial to their mission. To raise awareness of the USSC and boost contributions from town-level volunteer organizations, they communicated 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 “[r]ural 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>4</sup>

Figure 1 shows a representative list of items made or collected by women engaged in volunteer work through the USSC. Such items included food (apple butter, bread) and medical supplies (arm slings, bandages) that would have been typical of home production in an era when the “corporate family” (with a self-employed head of household, often employed in farming) still made up a majority of American households (Ruggles 2015, 1801). In addition to these in-kind contributions, clubs associated with the USSC also engaged in fundraising. Societies in large cities held “Sanitary Fairs” that offered food, souvenirs, and entertainment in exchange for donations that were passed on to the USSC. These Fairs, which were largely organized and staffed by women, raised millions of dollars for the war effort (Madway 2012).<sup>5</sup>

Anticipating the tactics of the postwar temperance and suffrage movements, the movement to recruit women to volunteer roles during the Civil War deliberately couched itself in the cultural ideals of the nineteenth century. A regimental surgeon who praised the work of soldiers’ 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>6</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

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<sup>4</sup>Based on author’s calculations from archival data.

<sup>5</sup>The Metropolitan Fair in New York City raised about \$2 million (Madway 2012, 271).

<sup>6</sup>United States Sanitary Commission. “The Sanitary Commission of the United States Army: a Succinct Narrative of Its Works and Purposes” (1864) 211.

ISSUES OF THE PHILADELPHIA AGENCY  
OF THE  
U. S. SANITARY COMMISSION,

Including the Women's Pennsylvania Branch, from October 15th, 1861,  
to December 1st, 1865.

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Arrow Root, lbs.....	86.....	\$39 75
Adhesive Plaster, yds.....	110.....	28 00
Azumea, boxes.....	101.....	10 10
Apple Butter, gallons.....	845.....	732 50
"    "    cans.....	980.....	294 00
Aprons, muslin.....	10.....	5 00
Arnica, bottles.....	120.....	30 30
Arm Slings.....	5,521.....	1,334 25
Blankets, wool.....	7,488.....	20,278 50
"    gum.....	28.....	56 00
Beef, lbs.....	379.....	68 22
"    extract of, cans, lbs.....	9,509.....	9,509 00
"    tea,    "    ".....	143.....	143 00
"    soup,    "    ".....	5,202.....	1,236 90
"    roast,    "    ".....	13,242.....	3,058 02
"    assorted,    "    ".....	1,738.....	372 80
"    corned, barrels.....	10.....	232 50
"    dried, lbs.....	2,206.....	471 86
"    Julienne, cans, lbs.....	624.....	156 00
"    a la-mode    "    ".....	4,080.....	1,020 00
Barley, lbs.....	139.....	12 22
Bread, loaves.....	959.....	76 72
Butter, lbs.....	2,672.....	1,131 20
Bandages, barrels.....	925.....	1,383 75
"    dozens.....	2,096.....	2,936 39

Figure 1: An excerpt from a list of items donated by women and disbursed through the Philadelphia branch of the USSC, from the "Report of the general superintendent of the Philadelphia Branch of the U.S. Sanitary Commission, to the Executive Committee, January 1st, 1866" (40).

foodstuffs “all showing women’s warm hearts and women’s skillful hands.”<sup>7</sup>

Biographical evidence shows abundant links between wartime volunteering and postwar activism at the individual level. 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). 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). DuBois (1978) notes that during a postwar speaking tour by suffrage activists Susan B. Anthony and Elizabeth Cady Stanton, most of the women who arranged to meet the two speakers had a background in wartime volunteering, not prewar suffrage activism: “They exemplified the large numbers of women who first recognized themselves as public people and citizens when they mobilized for the war and represented a promising field for the expansion of the woman suffrage movement” (181).

### 3 Mechanisms

The Crusade movement is an example of a “reverse dominance coalition” in which women coordinated to contest access to political legitimacy (A. Evans 2023) and, like women in other historical contexts, challenge both self-perceived and institutional norms about their roles in public spaces and policy debates (A. Evans 2018). Several potential mechanisms, which are not mutually exclusive, can explain exactly how participation in aid societies helped build such a coalition. In Section 6, I weigh evidence for each of them.

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<sup>7</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.

### 3.1 Role Models and Informational Networks

The USSC elevated the profiles of women leaders at the regional and national levels, giving other women potential role models. A substantial literature finds that female political leadership has outsized effects on women. 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). Exposure to women leaders boosts support for other female candidates in India (Beaman et al. 2009) and Germany (Baskaran and Hessami 2018). Young women demonstrate more political engagement when exposed to female candidates (Wolbrecht and Campbell 2017). For the first time, the high national profiles of Blackwell and Dix, and the regional visibility of administrators like Wittenmyer and Livermore, gave middle-class American women examples of women with political capital and authority in the public sphere.<sup>8</sup>

Role models give women at the base of a hierarchy information about their leaders. Conversely, observing volunteer networks could give leaders useful information about potential recruits to activism. Brady, Schlozman, and Verba (1999) suggests that successful mobilization requires “rational prospecting” – the ability to discern who is most likely to respond to political recruitment. Wartime volunteering organizations could provide organizers with useful information about who was most likely to respond to recruitment into political activism.

### 3.2 The Formation of Enclaves

“Enclave theory” describes a mechanism wherein members of a socially or structurally disadvantaged group can more effectively develop skills in an enclave of their own type. For instance, 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

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<sup>8</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 uprisings of 1848 in Europe played important roles in the anti-slavery movement in the United States and were effective recruiters for the Union Army (Dippel and Hebllich 2021).

Rustichini 2003; Gneezy, Leonard, and List 2009; Karpowitz, Mendelberg, and Shaker 2012; Karpowitz and Mendelberg 2018). Moreover, skills developed in an enclave are sticky and can persist after return to a mixed-sex setting (Booth and Nolen 2012; Hampole, Truffa, and Wong 2023). 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 specifically so that women would feel comfortable taking positions of authority (Mattingly 2000, 60).<sup>9</sup>

### 3.3 Political Legitimacy

Tripp (2015) outlines mechanisms by which conflict, particularly civil conflict, can have a transformative impact on women’s political roles. In modern contexts, it can disrupt patriarchal political institutions (Mageza-Barthel 2015; Tripp 2015) or prompt intervention by outside forces (i.e., intergovernmental organizations or peacekeeping forces) that are sympathetic to women (Tripp 2015). In the case of the American Civil War, there was little direct impact on political institutions, at least as they pertained to women, and no intervention from outside forces. A more promising mechanism from this literature runs through gains to political legitimacy, which Tripp (2015) and Wood (2008) study in the context of post-colonial Africa and Latin America, respectively.

In the American context, 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. 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 based

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<sup>9</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].

on “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>10</sup>

The USSC was organized into twelve different branches, some of which spanned multiple states. The New York Metropolitan Archives contains retrospective complete records for twelve branches; four are known to be absent. Accordingly, I restrict the sample to states for which the USSC data is complete or near-complete: Connecticut, Delaware, Massachusetts, Maine, Michigan, Minnesota, New Jersey, New York, Rhode Island, Vermont, New Hampshire, Wisconsin, and Ohio.<sup>11</sup> Together, the sample states comprise twelve of the twenty-six Union states (including border states) and, collectively, about 52% of the Union population.<sup>12</sup>

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<sup>10</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.”

<sup>11</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>12</sup>Source: Author’s calculation using 1860 U.S. Census. If branches that preserved and donated volunteer

Appendix A gives further details on the construction of the dataset.

All analyses omit parts of the U.S. that did not have any USSC branches (states that joined the Confederacy and non-state territories). With very few exceptions (six marches in Tennessee and two in Texas out of 911 total), Crusades did not occur in the South. Thus, including Southern towns and cities in the analyses would inflate the relationship between the USSC (a Union organization) and the main outcome of interest, and I instead choose to focus only on Union states.

Figure 2 shows the locations of towns that did and 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 further West and in northern parts of New England. Within Ohio, enthusiasm was particularly high in the northeastern corner of the state around Cleveland. To some extent, this pattern mirrors more general patterns of enthusiasm for civic participation (for instance, geographic variation in anti-slavery petitioning studied in Carpenter and Moore 2014). 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.

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records to the archival collection also tended to produce more volunteers or more activists, the results could be potentially unrepresentative of the country as a whole. Thus, the results presented in this paper should be interpreted as reflecting the relationship between volunteering and activism in the subset of Union states covered by the archival sample.

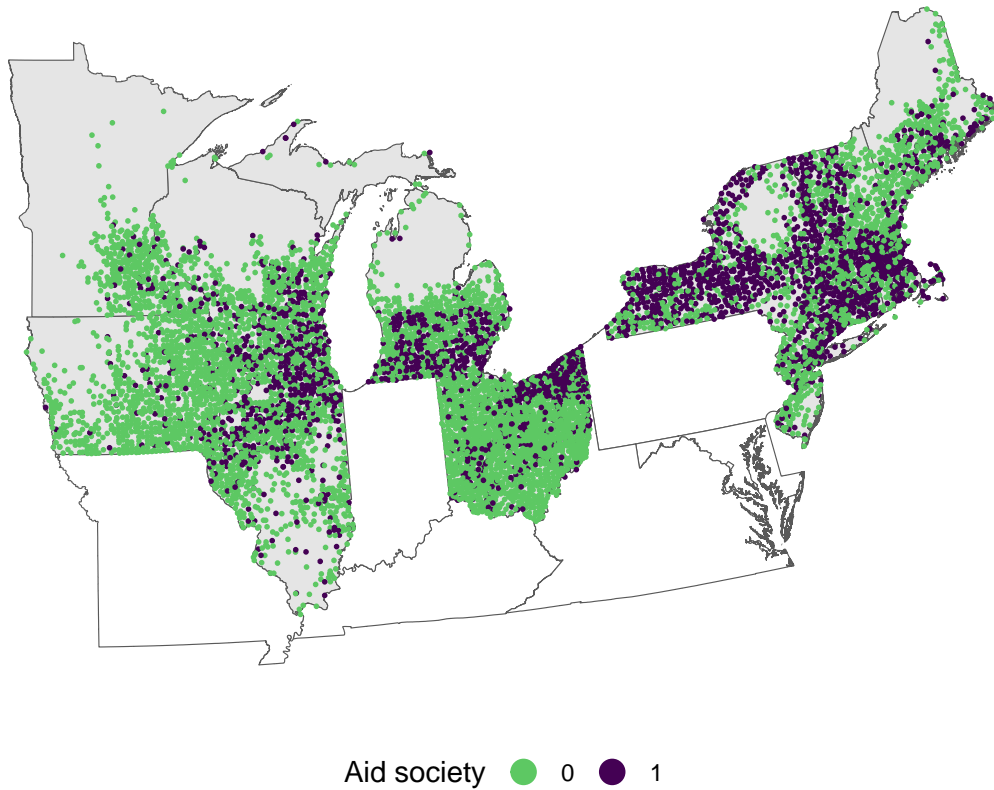


Figure 2: Map of towns that did vs. did not have a local soldiers' aid society affiliated with the USSC. State boundaries are from 1860; states in the Union that are in (*out of*) sample are shaded gray (*white*).



## 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.<sup>13</sup> In total, 911 towns across the country held Crusades, 466 of which are located in states in the sample described in Section 4.1.

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 (2022) 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 in the sample where the petitioners resided. These petitions were typically submitted by or 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 panel of Figure 3 shows counties coded according to whether their residents submitted at least one suffrage petition, which is used as the postwar suffrage outcome.<sup>14</sup>

The Temperance Crusade outcome is measured at the town level, but suffrage petitioning is measured at the county level. To transform the town-level USSC variable into county-level data that can be related to the suffrage petition outcome, I measure the share of a county’s

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<sup>13</sup>To my knowledge, this data has been used in only one other quantitative study, García-Jimeno, Iglesias, and Yildirim (2022), which focuses on communication networks as proximate reasons for Crusades, while I focus on the ultimate social mechanisms that enabled women to organize.

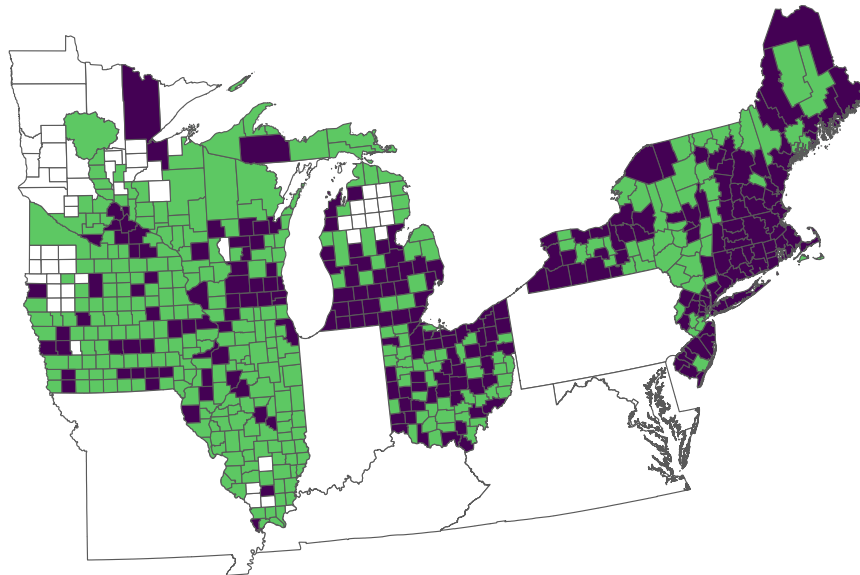
<sup>14</sup>I use a binary outcome, rather than an alternative transformations to handle outliers, due to ambiguities introduced by some petitions covering multiple localities versus other cases in which towns submitted petitions separately.

1860 population living in a town with an aid society, thus capturing the share of a county’s population “exposed” to a society. Figure 4 shows the distribution of the exposed population by county.

### **4.3 Demographic, Social, and Economic Control 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 to examine the role of societies in a subset of the data matched on pre-war characteristics. To control for basic geographic characteristics, I use state fixed effects and linear and quadratic controls for latitude and longitude. Most specifications also include log 1860 population. 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 and are included to capture demographic characteristics. 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 county-level per-capita agricultural output value in 1860; manufacturing employment (and, separately, women’s manufacturing employment) per capita in 1860; and 1860 illiteracy rates. To adjust for the political leanings of a town, I include 1860 town-level Republican vote share. Where variables are available only at the county level (for instance, those drawn from the 1860 Census), I assign the county measures to all towns within the county.

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 also include controls for local levels of social capital, political engagement, and organizational capacity before and during the war. First, I include the number of church “sittings” (seats) per capita in 1860, observed at the county level, as a measure of religiosity (with Catholic settings as a separate variable, to capture variation introduced by immigrants from Catholic-majority countries). Second, I include town-level Civil War enlistment from Dippel and Heblich (2021).



Suffrage petitions    ■ 0    ■ >1     NA

Figure 3: Top: Locations of Temperance Crusades. Bottom: Counties that did vs. did not submit at least one petition in favor of women’s suffrage to Congress between 1874 and 1920. 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.

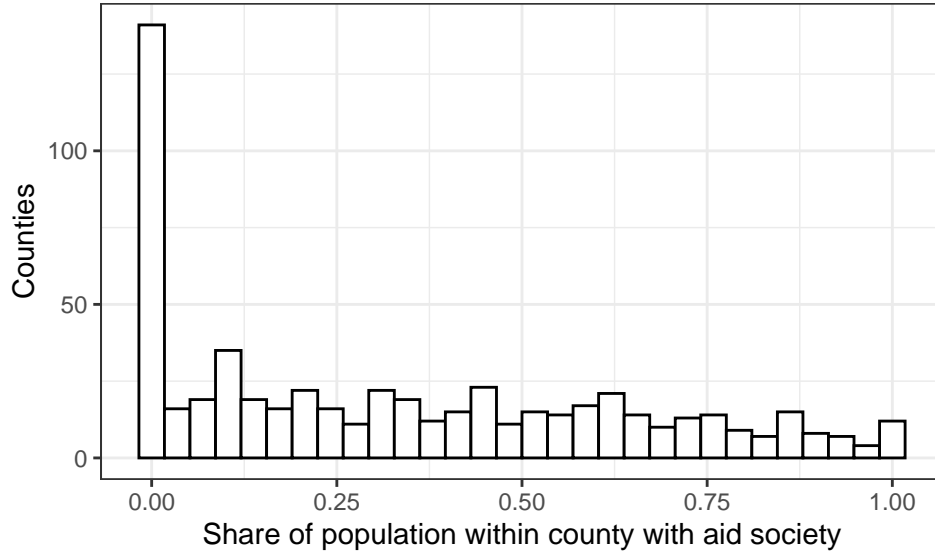


Figure 4: Share of counties' 1860 population living in a town with an aid society.

Male wartime enlistment in the Union Army was almost entirely on a volunteer basis; thus, conditional on enthusiasm for the Union cause, enlistment data captures town-level variation in civic volunteerism among a town's men. Third, 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>15</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 and the passage of the 19th Amendment. Each petition is associated with its date of submission, the geographic location of origin (town, county, or congressional district), and

<sup>15</sup>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. See Montoya (2020) for a discussion on the interaction of race and gender and the segregation of the suffrage movement.

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). These petitions can be understood to capture a town’s general level of political involvement, capacity, or enthusiasm. Appendix D gives additional information about the construction of this variable.

#### **4.4 What Differentiated Aid Society Towns?**

The top panel of Figure 5 shows the difference in means for towns with vs. without a USSC aid society for each mean-standardized town-level pre-war variable with and without adjusting for baseline geographic variables (linear and quadratic terms for latitude and longitude, state fixed effects, and log 1860 population). The top panel of Figure 6 shows the same relationships (using the continuous county-level share of population living in an aid society town as the outcome); the two produce generally comparable results. Here, I discuss the relationship between these variables and the presence of these aid societies. Although regressing a dichotomous indicator for the presence of an aid society on a full slate of variables results in large standard errors that render some point effects classically non-significant, evaluating one correlation at a time yields useful descriptive insights. All variables are mean-standardized for ease of comparison.

Towns and counties with soldiers’ aid societies tend to be more populous, closer to railroads, and more industrial (as measured by manufacturing jobs per capita). This is consistent with evidence from archival materials related to the USSC. Rural women faced practical barriers to joining, including less disposable income and higher costs to communicate with, or ship supplies to, USSC branch offices. Appendix Tables A1 and A2 give summary statistics for town-level and county-level covariates respectively.

Places with aid societies exhibit more enthusiasm for pro-Union causes (higher Republican

vote share in 1860, war enlistment, and abolitionist petition signatures gathered by women activists before the war). This is not unexpected, since while aid society volunteering was not explicitly political (in contrast to protesting, petitioning, lobbying, etc.), it supported the American government and the war effort. Aid society towns also have more total church sittings per capital (although they are no more or less Catholic). However, the point effects for pre-war petitions sent to Congress (both political and general) are significant but very small in magnitude.

In Wisconsin, the only state for which I have town-level data on pre-war temperance activism, there is a strong relationship between participation in the IOGT and volunteering. Unusually for the time, the IOGT offered membership to both men and women. The focus of the prewar IOGT was on personal abstinence, not legislative prohibition.<sup>16</sup> It would therefore not be surprising if the IOGT attracted the same kind of women – those interested in civic participation, though not necessarily (or exclusively) in political campaigning – that would be likely to engage in wartime volunteering.

## 4.5 Matching and Weighting for Better Comparability

One possible concern 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 potential bias, I use propensity score matching to build a more comparable town-level sample using the method suggested by Imai and Ratkovic (2014). First, I estimate a logistic regression

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

---

<sup>16</sup>See, for instance, a list of rules published by the IOGT in 1859, which prohibit consuming alcohol as well as benefitting from its advertisement or sale or serving it to others (Chase 1859).

where  $X_i$  is an estimated matrix of all control variables available for the full sample (excluding the Wisconsin-only IOGT variable) and  $\beta$  a vector of the associated coefficients. Maximizing the fit of Equation 1 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 2,430 (1,276) towns with (*without*) an aid society.<sup>17</sup> The bottom panel of Figure 5 shows the difference in means between towns with vs. without a USSC aid society for the matched sample.

For the county-level version of the dataset, in which exposure to a soldiers' aid society is measured continuously (the share of a county's population that resides in a town with a society), I use the entropy balance weighting method (Hainmueller 2012) to re-weight each observation for improved balance.<sup>18</sup> The bottom panel of Figure 6 shows the balance of the weighted sample. In this figure, the graph reflects the point estimates of a regression of the share of counties' population exposed to a USSC society on each covariate.

## 5 Analysis

### 5.1 Temperance Crusades

The difference in the probability of holding a Crusade conditional on having vs. not having had a wartime aid society is stark. In the full sample, 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:

$$Y_i = \alpha + \beta \text{society}_i + \mathbf{X}\gamma + \epsilon_i \quad (2)$$

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<sup>17</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.

<sup>18</sup>Town-level matching and county-level weighting are conducted using the `MatchIt` (Ho et al. 2018) and `WeightIt` (Greifer 2019) R packages, respectively.

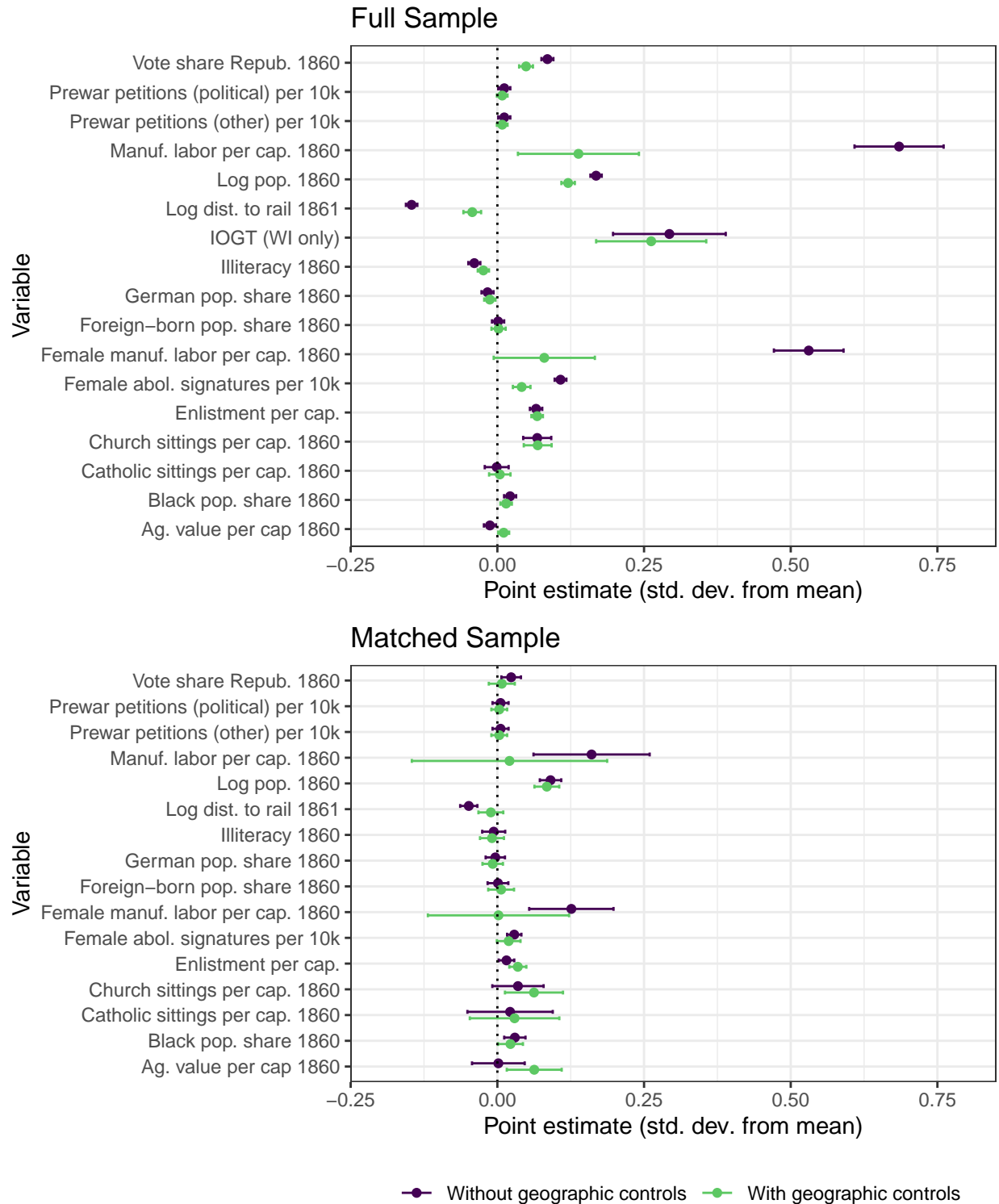


Figure 5: Balance table comparing difference in means for demographic, socio-economic, and political variables in towns that did vs. did not have a USSC-affiliated soldiers' aid society, with and without adjusting for state fixed effects (except for IOGT, which is available only for Wisconsin) and linear 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.



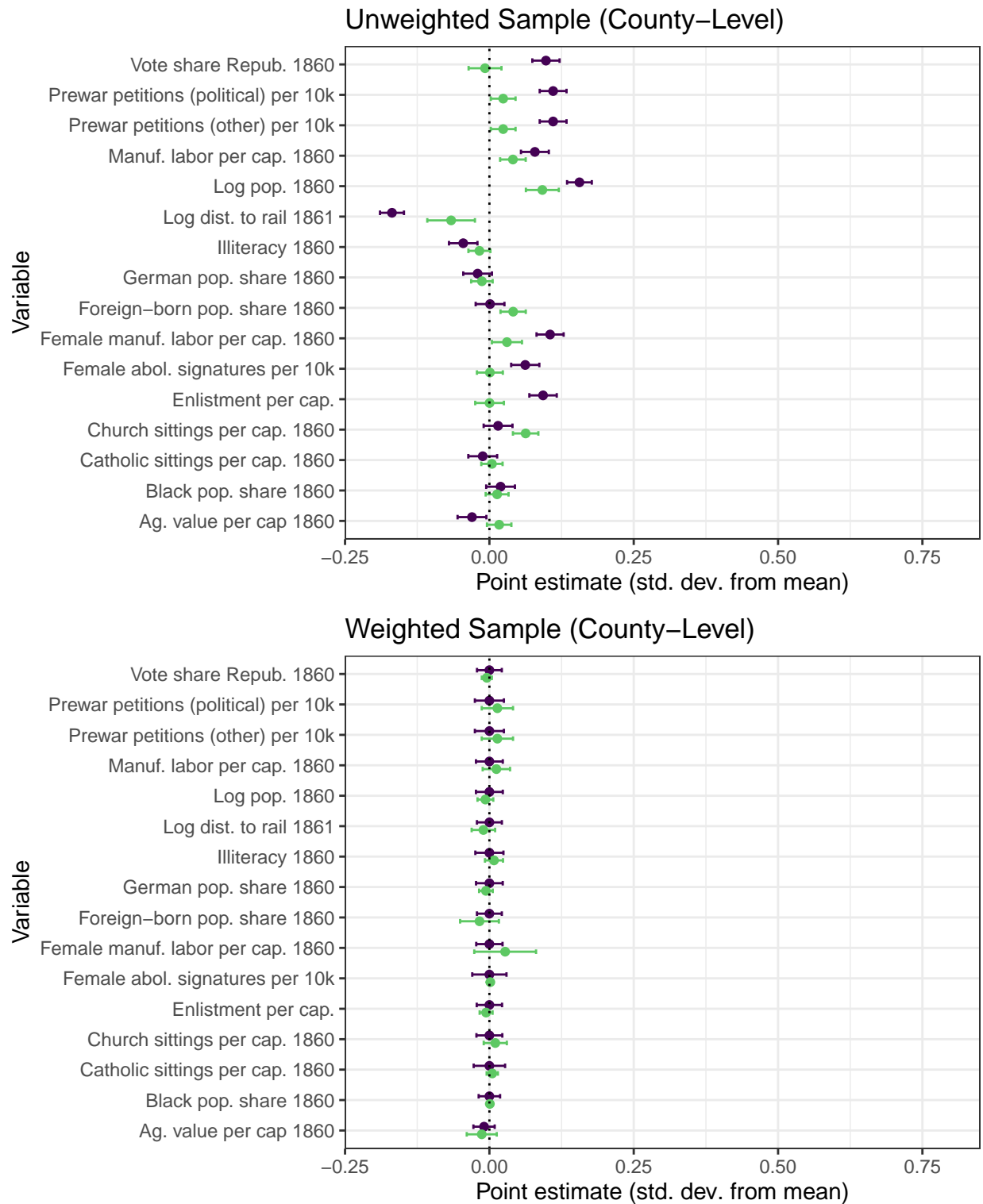


Figure 6: Balance table comparing coefficients for share of a county’s population exposed to a USSC-affiliated aid society regressed on county-level demographic, socio-economic, and political variables, with and without adjusting for state fixed effects and linear and quadratic latitude and longitude. All variables are mean-standardized for easier comparisons.

where  $Y_i$  is a variable capturing whether town  $i$  held a Temperance Crusade (either 0 or 1);  $\alpha$  is an intercept term;  $society_i$  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 on social and organizational capital, towns with USSC-affiliated soldiers' aid society had a strikingly higher likelihood of hosting a Temperance Crusade. The point estimate remains statistically significant and fluctuates 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.<sup>19</sup> Appendix C 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. The effect is of generally similar magnitude and significance across all alternative specifications.

The point effect on  $society_i$  in the regression conducted on the matched sample (Column 6 of Table 1) is of a slightly smaller magnitude than those from the regressions that use the full sample (7.1 percentage points vs. 8.7-10.3 percentage points). This suggests that at least some of the observed effect in the full sample can be attributed to bias due to a lack of common support over the covariates and/or to imbalance on the observable covariates (Heckman, Ichimura, and Todd 1998). However, a 7.1 percentage-point difference between "society towns" and those with no such society is still substantively meaningful, especially in light of the low (2.9%) probability that a town without an aid society held a Crusade.

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<sup>19</sup>Note that no towns in Wisconsin contribute pre-war suffrage petitions.

Table 1: Relationship between USSC and Temperance Crusades. Regressions results are from OLS specifications of USSC presence on Temperance Crusades at the town level (Equation 2). Columns 1-4 use the full sample. Column 5 (Wisconsin only) includes a control for pre-war mixed-gender temperance societies. Column 5 uses the matched sample based on the full dataset.

	<i>Dependent variable:</i>					
	Full sample			Has Crusade		
	(1)	(2)	(3)	(4)	Wisconsin only (5)	Matched sample (6)
USSC society	0.095*** (0.006)	0.104*** (0.006)	0.099*** (0.006)	0.087*** (0.006)	0.099*** (0.019)	0.071*** (0.009)
Log pop.		0.050*** (0.003)	0.044*** (0.003)	0.051*** (0.004)	0.084*** (0.013)	0.099*** (0.007)
Dist. to rail			-0.019*** (0.004)	-0.018*** (0.004)	0.080 (0.092)	-0.001 (0.006)
Illiteracy			-0.012*** (0.003)	-0.010*** (0.003)	-0.0004 (0.009)	-0.013*** (0.006)
Repub. vote share 1860			0.007** (0.003)	0.007* (0.004)	0.001 (0.011)	-0.005 (0.007)
Black pop. share			0.035*** (0.003)	0.031*** (0.003)	0.014 (0.010)	0.045*** (0.006)
Foreign-born pop. share			0.0002 (0.004)	-0.003 (0.004)	-0.012 (0.014)	-0.002 (0.008)
German pop. share			0.0005 (0.003)	0.003 (0.003)	-0.002 (0.007)	0.003 (0.005)
Ag. value per cap.			0.002 (0.003)	0.004 (0.004)	-0.002 (0.076)	-0.030 (0.020)
Manuf. laborers per cap.			0.011 (0.044)	0.019 (0.046)	-0.068 (0.127)	-0.109 (0.072)
Female manuf. laborers per cap.			-0.031 (0.033)	-0.040 (0.033)	0.625 (0.733)	0.005 (0.048)
Enlistment per cap.				0.039*** (0.003)	0.026*** (0.007)	0.054*** (0.004)
Church sittings per cap.				-0.041*** (0.011)	-0.099 (0.077)	-0.049** (0.021)
Catholic sittings per cap.				0.012 (0.008)	-0.0004 (0.057)	0.024 (0.026)
General Congress. pet.				0.003 (0.003)	0.036 (0.031)	0.049*** (0.017)
Political Congress. pet.				0.005* (0.003)	-0.001 (0.007)	0.002 (0.004)
Female abol. pet.				-0.004 (0.004)		-0.003 (0.006)
IOGT					0.099*** (0.023)	
Geo. controls		✓	✓	✓	✓	✓
Observations	7,862	7,862	7,787	7,429	631	3,706
Adjusted R <sup>2</sup>	0.035	0.109	0.127	0.152	0.221	0.220

*Note:*

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

## 5.2 Suffrage Petitions

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:

$$Y_i = \alpha + \beta \text{society}_i + \mathbf{X}\gamma + \epsilon_i \quad (3)$$

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;  $\text{society}_i$  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.<sup>20</sup>

Table 2 shows the results of variations on Equation 3. The point estimates on all specifications are positive, but standard errors are large on estimates using the unweighted sample when covariates are introduced. The point estimate generated using a weighted sample, however, is statistically significant, suggesting that (in contrast to the specifications run at the town level in Section 5.1), lack of a common support introduces bias that is ameliorated by a more balanced sample. In the weighted sample, a one-deviation increase in the share of a county living in a town with a USSC-affiliated aid society is associated with a 5.9-percentage point increase in the probability of a town originating a suffrage petition.

## 6 Evaluating Mechanisms

### 6.1 Assessing the Causal Channel

The results in Sections 5.1 and 5.2 show a strong association between women’s wartime experiences and their postwar political capacity. They cannot, however, speak directly to a causal relationship: the extent to which wartime volunteering granted women political

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<sup>20</sup>I use a binary formulation for  $Y_i$  rather than measuring (for instance) the number of petitions per capita because of inconsistencies in documenting the number of signatories on each individual petition.

Table 2: Relationship between USSC and suffrage petitioning. Regressions results are from OLS specifications of USSC presence on indicator for petitioning activity at the county level (Equation 3). Columns 1-4 use the full sample. Column 5 uses the weighted sample.

	<i>Dependent variable:</i>				
	Sent suffrage petition				Weighted sample
	Full sample				
(1)	(2)	(3)	(4)	(5)	
USSC society	0.132*** (0.020)	0.061** (0.026)	0.044* (0.026)	0.035 (0.028)	0.077*** (0.024)
Log pop.		0.065*** (0.019)	0.042 (0.027)	0.019 (0.029)	-0.022 (0.031)
Dist. to rail			-0.110** (0.045)	-0.105** (0.046)	-0.102** (0.047)
Illiteracy			-0.017 (0.021)	-0.018 (0.021)	-0.071*** (0.023)
Repub. vote share 1860			0.086*** (0.031)	0.115** (0.049)	0.134** (0.055)
Black pop. share			0.038* (0.021)	0.033 (0.021)	0.044** (0.017)
Foreign-born pop. share			-0.020 (0.026)	-0.028 (0.028)	-0.034 (0.029)
German pop. share			0.026 (0.020)	0.025 (0.020)	0.038* (0.021)
Ag. value per cap.			0.037* (0.022)	0.024 (0.033)	0.035 (0.036)
Manuf. laborers per cap.			0.037 (0.032)	0.035 (0.032)	0.023 (0.035)
Female manuf. laborers per cap.			-0.008 (0.032)	-0.007 (0.033)	-0.012 (0.036)
Enlistment per cap.				-0.017 (0.040)	-0.043 (0.045)
Church sittings per cap.				0.007 (0.039)	-0.032 (0.051)
Catholic sittings per cap.				0.003 (0.022)	0.022 (0.029)
General Congress. pet.				0.060*** (0.023)	0.317*** (0.045)
Political Congress. pet.				-0.002 (0.023)	-0.035 (0.029)
Female abol. pet.				-0.012 (0.026)	-0.020 (0.033)
Geo. controls		✓	✓	✓	✓
Observations	577	577	565	565	565
Adjusted R <sup>2</sup>	0.070	0.217	0.241	0.244	0.295

Note:

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

capacity they would not otherwise have had, versus reflecting a latent potential for activism that is not captured by other measures of general political capacity, or by measures of women's previous political engagement in particular.

One potential concern to interpreting results in a causal framework is that we cannot rule out the possibility that some unobserved variable not included in the analyses presented has enough power to explain most or all of the relationship between aid societies and Crusading. Ideally, this problem can be overcome with the use of an identification strategy that relies on exogenous variation in exposure to "treatment" (aid societies). However, the classic toolbox of strategies falls short of the desired goal of plausibly exogenous variation in exposure in this setting.

The Temperance Crusades were the first mass political movement of American women. While there exist some Congressional petitions on behalf of women's causes that date to before the Civil War, such petitions are too rare to constitute a continuous data series that can be useful in a differences-in-differences style analysis to compare outcomes before vs. after towns formed wartime volunteer societies. There are also no relevant arbitrary geographic boundaries that can be leveraged as useful discontinuities.

A survey conducted by the USSC to gauge barriers to participation reveals that almost any "encouragement into treatment" will be confounded by the realities of nineteenth-century economic geography. In 1863, the Central Branch of the USSC (which was also the largest by count of member organizations) sent out a survey asking about sentiment in local communities towards the USSC, the degree to which locals understood the USSC's mission, difficulties in organizing, frequency of meetings, and ease of communication between local aid societies and the USSC. Respondents typically replied to the survey with unstructured, letter-length communiques, but several themes are notable.

Local enthusiasm for the USSC and its mission tend to correlate with support for the Union. A woman in Southampton, NY, reported that she and her husband founded a volunteer

society chapter but had trouble recruiting others because “the town is [D]emocratic by a large majority.” Others discussed economic hardship as a barrier to participation. A woman in Orangeville, NY, whose town did not have its own society but who sent contributions to nearby Cooper’s Union, wrote that “The most difficulties we have to contend with is the scarcity of money and the high price which we have to pay for goods.” Some respondents complained that people in their community believed it was the role of the government, not citizens, to support the war effort; a respondent in North Becket, MA, wrote that some of the people in her town “say ‘let the Government do the work.’”<sup>21</sup>

These patterns – support for the Union cause, a strong economic base, and general civic enthusiasm – are clearly reflected in the descriptive analysis presented in Section 4.4, which show that aid societies are correlated with Republican vote shares in 1860, manufacturing jobs, and various measures of civic participation. Despite controlling, and balancing on, for all of these variables, the relationship between aid societies and Crusading (and aid societies and suffrage petitions, in the weighted sample) remains strong. However, this approach cannot eliminate the possibility of an unmeasured variable that explains both volunteering and activism.

Cinelli and Hazlett (2020) suggests a sensitivity analysis for assessing how powerful such an omitted variable would have to be to explain the effect attributed to the treatment on an outcome of interest. With this approach, we can pin down how strong the relationship between an unobserved variable  $U_i$  and the presence of an aid society, and between  $U_i$  and the presence of a Crusade, would have to be to eliminate a causal pathway. We can then benchmark the required explanatory power of  $U_i$  against that of other relevant variables to better understand the assumptions undergirding a causal interpretation.

Suppose that there is some unobservable covariate  $U_i$  that is correlated both with the presence

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<sup>21</sup>Another more idiosyncratic concern was fraud; for instance, a respondent in North Hartford, NY, wrote, “that goods have been sold, for a triple, by pretended agents of the commission, and the avails used for their own benefit.”

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 matched and weighted sample regressions actually shown in Tables 1 and 2.

Formally, following Cinelli and Hazlett (2020), I define the *partial  $R^2$  of the unobserved confounding variable with the outcome* as

$$R_{Y_i \sim U_i | \text{society}_i, \mathbf{X}}^2 = \frac{R_{Y_i \sim \text{society}_i + \mathbf{X} + U_i}^2 - R_{Y_i \sim \text{society}_i + \mathbf{X}}^2}{1 - R_{Y_i \sim \text{society}_i + \mathbf{X}}^2} \quad (4)$$

and the *partial  $R^2$  of the unobserved confounding variable with the treatment* as

$$R_{\text{society}_i \sim U_i | \mathbf{X}}^2 = \frac{R_{\text{society}_i \sim \mathbf{X} + U_i}^2 - R_{\text{society}_i \sim \mathbf{X}}^2}{1 - R_{\text{society}_i \sim \mathbf{X}}^2} \quad (5)$$

where  $Y_i$  and  $\text{society}_i$  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  $\text{society}_i$ , would change in relation to a range of hypothetical non-zero values for  $R_{Y_i \sim U_i | \text{society}_i, \mathbf{X}}^2$  and  $R_{\text{society}_i \sim U_i | \mathbf{X}}^2$ .

If one assumes the presence of an omitted variable (or variables) that is orthogonal to  $\text{society}_i$  (the binary, town-level USSC society variable), such a variable would have to explain more than 8.47% of the residual variance of both  $\text{society}_i$  and the Crusade variable in order to reduce the coefficient on  $\text{society}_i$  to a range in which it is no longer statistically distinguishable from zero at the 95% significance level. As a benchmark, the partial  $R^2$  of wartime enlistment with respect to  $\text{society}_i$  and the Crusade variable are 0.27% and 3.19%, respectively. With respect to the county-level outcome of a suffrage petition, a hypothetical omitted variable would need to explain 1.62% of the residual variance, and for this specification, the partial  $R^2$



of wartime enlistment with respect to the continuous exposure-to-a-society variable and the suffrage petition outcomes are 0.86% and 0.30%, respectively. Appendix Figures A6 and A6 show a visual representation of these relationships. If one assumes that men's willingness to volunteer to fight in the Civil War is a good indicator of a town's existing levels of political involvement and support for politically progressive causes, an omitted variable bias would need to have a relationship several times stronger than that of enlistment with the treatment and outcomes in order to fully explain the variation that is attributed to the presence of a soldiers' aid society in the highlighted specifications.

The degree to which one believes that an omitted variable with such explanatory power might exist is, naturally, subjective. However, interpreting these results in a purely descriptive way still reveals useful insights into the origins of women's mass political participation in the United States. Regardless of the degree to which the wartime activities of American women had a *causal* impact on their propensity to engage in direct action against the sale of alcohol, or on local communities' support for suffrage, the quantitative findings and the case studies discussed in Section 2 demonstrate that the path to women's equality in the United States did not run exclusively through the channels of well-educated elite women leaders or increased access to economic opportunities in the formal labor market. Rather, places where women organized themselves to perform traditionally female roles of home production for the war were also those where they organized themselves for novel and radical political activism.

In the following subsections, I evaluate evidence for three mechanisms defined in Section 3. I find evidence to support a network effect, but no particular quantitative evidence to support mechanisms that depend on women leaders or increased political legitimacy, although qualitative evidence supports all three mechanisms at work. The evidence for these mechanisms can be interpreted in a causal sense – assuming that soldiers' aid societies directly led to women becoming activists – or in a descriptive sense, assuming that aid societies represent a latent, otherwise hard-to-measure variable that captures women's political capacity.

## 6.2 Women Leaders

Contemporary and retrospective historical literature (Stewart 1890; Giesberg 2006) highlights the opportunities volunteering provided for women leaders. For instance, an 1888 newspaper profile of Elizabeth Daniel Stewart, who originated the Crusade movement, mentions that she “became prominent in her earnest and very effective work in the line of relieving the needs of Union soldiers in the hospital and the field” (Stewart 1890, 12). This corresponds to the first mechanism described in Section 3, in which aid societies provided (a) training for women to step into leadership roles and (b) information to those leaders about where to find motivated participants for the new activist movement.

The USSC rosters give the names of one or more “notable” society members at the town level for about 60% of the societies in the sample, usually corresponding to the president and other leadership roles. I code a society as having female leadership if at least one named notable member is a woman (based on either having a typically feminine first name or the honorific of “Miss” or “Mrs.”); 90.1% are coded as woman-led under this definition. However, conditional on having an aid society, the rare towns with male leadership are no more or less likely to hold a Crusade than those with female leadership ( $\beta = 0.03$ ,  $se = 0.03$ ).

The occasional male leaders of aid societies are often members of the clergy referred to in the roster with the style “Reverend.” Religious congregations were divided on supporting the Crusades, but when they chose to throw their support behind activist women, clergymen could be key allies (Blocker 1985, 143). Thus, the theorized effect of an aid society led by a man (as opposed to a woman) on women’s activism is ambiguous: on one hand, male leadership could preclude women from acquiring useful skills and information; on the other hand, a man involved with the aid society movement could be cultivated as a useful ally. It is also possible that at least some male leaders served in largely symbolic roles that did not crowd out women who wanted to play active leadership roles.

### 6.3 Marginal Effect of Networking Opportunities

The second mechanism discussed in Section 3 hinges on the formation of enclaved networks amongst localities' rank-and-file women, rather than the development of leaders' skills. If volunteer work increased the density of local networks in a way that helped women coordinate protest marches, we should expect that aid societies should have an especially strong correlation with Crusading in places where social networks were weakest and could most benefit from the strengthening effects of volunteering.

I proxy the strength of pre-war social networks with the population growth rate between 1850 and 1860. A higher population growth rate indicates that more newcomers, potentially disconnected from social networks, arrived shortly before the war. A lower population growth rate suggests that a town's networks were already fairly mature and that the marginal impact of one additional opportunity to interact may not be as high. I then re-run Equation 2, including an interaction term of population growth and the presence of an aid society.<sup>22</sup>

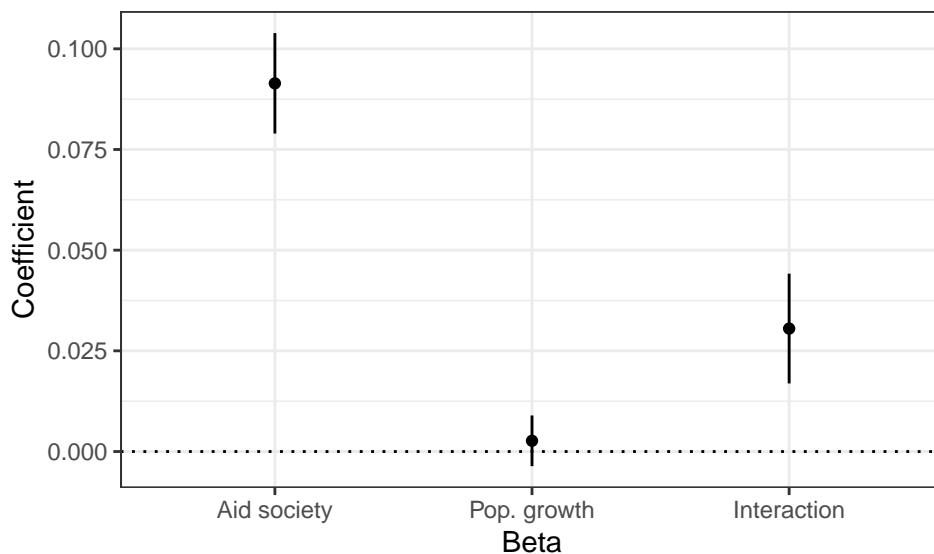


Figure 7: Coefficients and 95 pct. confidence intervals from regression of Crusade presence on aid society interacted with mean-standardized 1850-1860 population growth.

Figure 7 shows the coefficient sizes and 95% confidence intervals for an aid society variable,

<sup>22</sup>To avoid dropping towns with zero listed population in 1850, I compute population growth as  $\frac{pop_{1860} - (pop_{1850} + 1)}{pop_{1850} + 1}$ .

(mean-standardized) population growth, and the interaction of the two. Population growth itself is not associated with holding a Crusade, but the interaction of population growth and an aid society is. An increase of one standard deviation in population growth is associated with an additional 3.05 percentage points increased likelihood in holding a Crusade. This is consistent with a mechanism in which aid societies are especially helpful for forming networks in areas where starting social capital is low.

## 6.4 Women’s Political Legitimacy

The third theorized mechanism is that aid societies, by giving women a way to contribute to the war effort, legitimized women as a political group and thus raised the expected returns to activism. To test this channel, I focus on the subset of sample towns that actually held Crusades and look at variables that capture public reactions to the protest movement. First, Blocker (1985) gathers data on Crusaders’ specific activities (in addition to marching), including whether they gathered signatures for petitions in favor of temperance. It seems likely that women would only expend effort on this activity if they perceived their support base to be sufficiently robust; thus, I interpret petitioning as a sign of public support for the Crusades. Second, for a smaller subsample of towns, Blocker (1985) provides information about the number of alcohol-selling establishments (saloons, drug stores, or retail liquor dealers) before vs. after the protests. I construct two measures to capture whether the Crusades were met with an immediate show of public support in the form of actual decreased alcohol sales; the share of establishments closed, and whether *any* establishment closed.

Table 3 shows the results of regressions that relate these additional outcomes to aid societies (in a sample of towns that had any Crusade activity), which takes the form

$$Y_i = \alpha + \beta \text{society}_i + \mathbf{X}\gamma + \epsilon_i \tag{6}$$

where  $Y_i$  is one of the three outcome variables relating to public acceptance of the Crusades;

$society_i$  is a dichotomous variable for having an aid society;  $\mathbf{X}$  is the full slate of control variables used in Column 4 of the main analysis (Table 1); and  $\alpha$  and  $\epsilon_i$  are the intercept and error term, respectively. There is no significant relationship between aid societies and petitioning, or between aid societies and either measure of voluntary alcohol sale cessation.

As I discuss in Section 6.2, the Crusade movement faced backlash on multiple fronts, including from those who were sympathetic to the moral mission of temperance but were uncomfortable with women stepping into public roles, as well as those who simply opposed the temperance movement itself. The measures suggested are intended to capture women activists' legitimacy in the eyes of the general public, but they cannot capture a boost in women's own self-perception as a deserving political constituency. There is, however, qualitative evidence for the latter mechanism at play (see section 3). If wartime volunteer service changed women's perceptions of their own legitimacy, it could boost activism, even if it did not make the public more amenable to activists' goals.

Table 3

	<i>Dependent variable:</i>		
	Petitioning (1)	Any establishments closed (2)	Share establishments closed (3)
USSC society	-0.024 (0.034)	0.036 (0.045)	0.026 (0.028)
Full controls	✓	✓	✓
Observations	447	447	185
Adjusted R <sup>2</sup>	0.107	0.301	0.040

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

## 7 Discussion and Conclusions

Women make up one of the largest political constituencies, but they face particularly high barriers to coordination because of their cross-cutting political identities. I study how women in the nineteenth-century United States solved this coordination problem. Crucially, in contrast to existing literature on this subject, I look beyond women's direct political engagement

and place the roots of their political capacity in homes and community organizations.

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. I find evidence that Crusades were especially likely to happen in towns where aid societies are interacted with a high population growth rate. This is consistent with a network formation mechanism: in towns where a new population meant that existing social networks were weak, new opportunities to build social capital (and potentially unleash latent political capacity by lowering barriers to coordination) were especially useful to building an activist movement.

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 and steps towards equality 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 who participated in political movements gained 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.

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## A USSC Data Construction Details

The New York Metropolitan Archive contains USSC 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.

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.

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



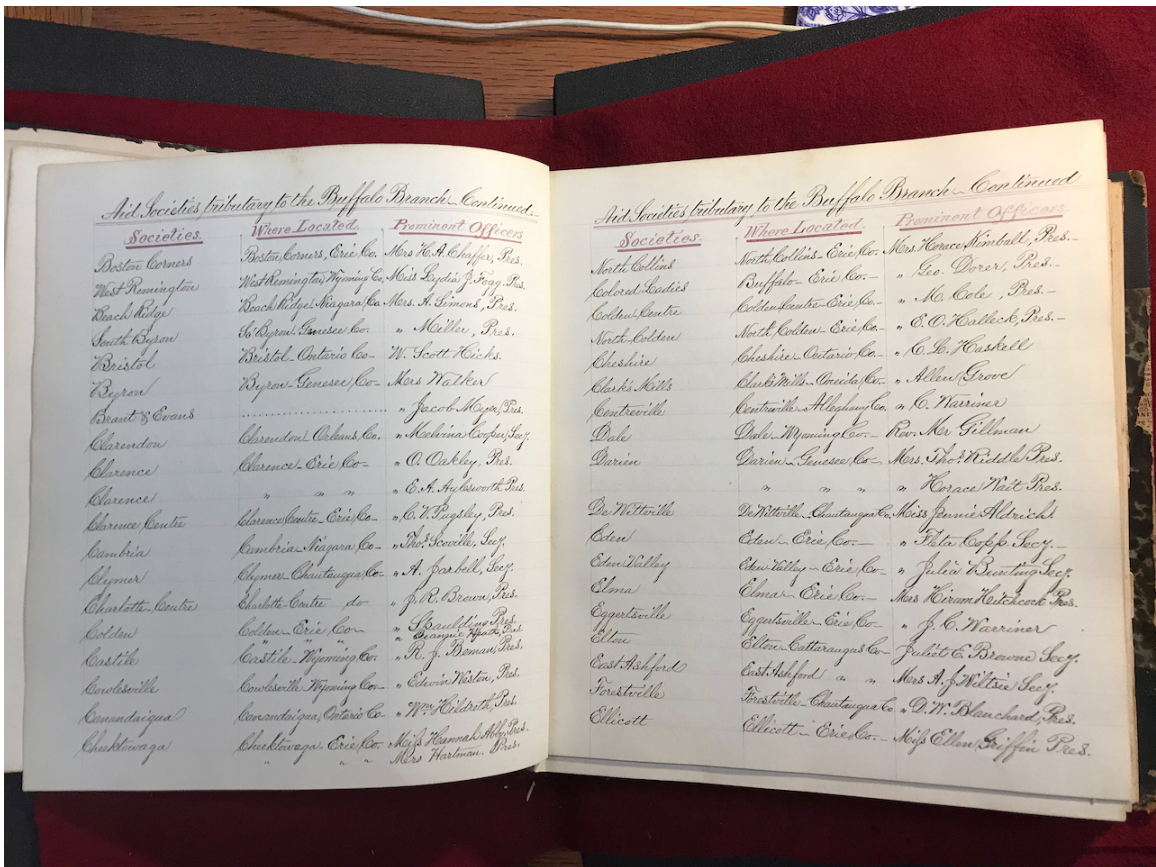


Figure A1: An example of a USSC society roster from the Buffalo (New York) branch.

share a name and no county information is offered in the USSC dataset).<sup>23</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 arbitrarily 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 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.

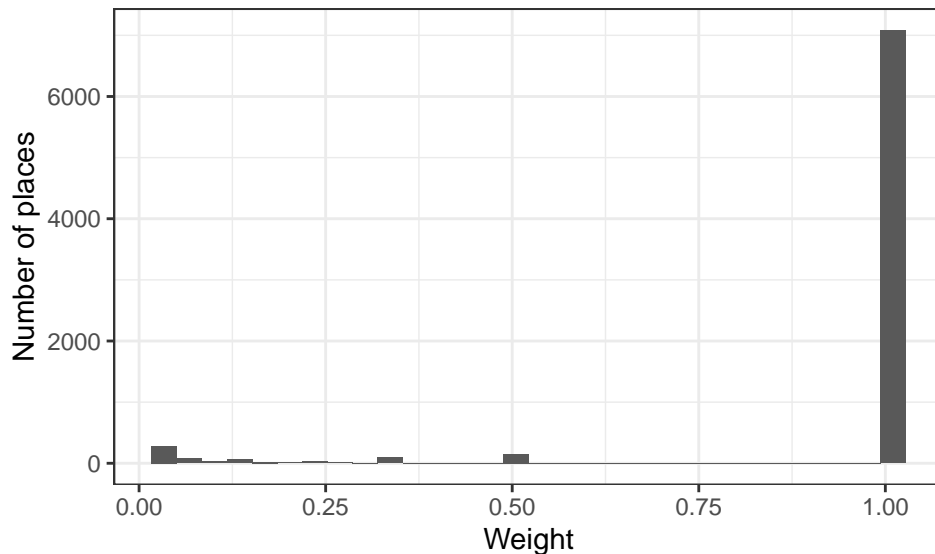


Figure A2: Distribution of weights used to adjust for uncertainty in exact location of soldiers’ aid societies.

<sup>23</sup>For instance, there are twenty-four communities with the name “Liberty” in Ohio captured in the 1860 Census.

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

Giesberg (2006) gives a total of 7,000 soldiers' aid societies. My hand-transcribed list from the USSC archive consists of 6,426 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 6,426 entries listed in the USSC registers, 409 are in states not included in the sample because USSC data appears incomplete for that state due to inconsistencies in which branches submitted their data to archival repositories after the war (or have ambiguous state information). Note that Temperance Crusades were, with a small number of exceptions, only held in states that had been part of the Union; including them would show an even stronger relationship between USSC involvement and Crusade activity than the one that from a sample subset to the (Union) states that did have a USSC branch.

The 1860 Census contains 7,862 towns, cities, and communities in the sample states. Of these, 2,476 can be matched to a town in the aid society roster. This leaves unmatched 2,646 aid society locations that, after hand-examination, could not be linked to any place in the 1860 Census, usually because they were small, unincorporated communities or because they were neighborhoods of larger polities rather than individual towns. Figure A3 summarizes the sample construction process.

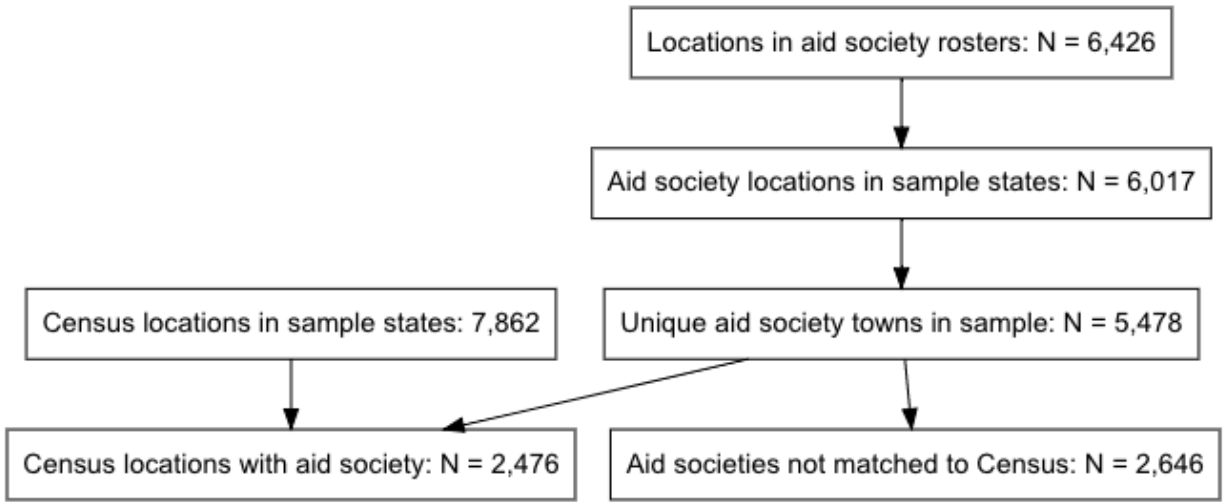


Figure A3: Flowchart showing construction of sample from aid society archival rosters and 1860 Census.

## B Summary Statistics

Table A1

Statistic	N	Mean	St. Dev.	Min	Max
Pop. 1860	7,862	1,588.501	4,944.853	2	266,661
Nearest rail 1861	7,862	3.680	1.873	-6.750	6.651
Vote share Repub. 1860	7,796	0.574	0.109	0.025	1.000
Enlistment per cap.	7,493	0.074	0.071	0.0001	0.985
Prewar petitions (political) per 10k	7,861	0.00003	0.0003	0.000	0.011
Prewar petitions (other) per 10k	7,862	0.0002	0.001	0.000	0.037
Female abol. signatures per 10k	7,862	0.023	0.049	0.000	0.325
IOGT	680	0.134	0.341	0	1

Summary statistics for town-level data

Table A2

Statistic	N	Mean	St. Dev.	Min	Max
Church sittings per cap.	572	0.754	1.422	0.000	15.974
Catholic sittings per cap.	572	0.072	0.344	0.000	6.927
Black pop. share	575	0.001	0.004	0.000	0.043
Manuf. laborers per cap.	572	0.039	0.060	0.000	0.484
Femal manuf. laborers per cap.	572	0.005	0.015	0.000	0.107
Illiteracy	575	0.050	0.071	0.000	0.646
German pop. share	575	0.028	0.050	0.000	0.402
Ag. output value per cap	575	0.218	0.196	0.000	1.000
Foreign-born pop. share	565	0.271	1.590	0.00002	28.028

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.). Figure A4 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.

Table A3: Column 1 weights town-level observations by population. Column 2 shows results from a logistic regression. Column 3 drops the top and bottom 5 percent of towns by population. Column 4 drops all ambiguous matches.

	<i>Dependent variable:</i>			
	Pop. weights (1)	Logistic (2)	Has Crusade Drop large/small (3)	Drop ambiguous (4)
USSC society	0.097*** (0.008)	1.747*** (0.139)	0.075*** (0.006)	0.084*** (0.006)
Log pop.	0.158*** (0.004)	1.299*** (0.096)	0.032*** (0.005)	0.051*** (0.004)
Dist. to rail	0.004 (0.004)	-0.236*** (0.084)	-0.015*** (0.004)	-0.014*** (0.004)
Illiteracy	-0.019*** (0.004)	-0.289*** (0.082)	-0.010*** (0.003)	-0.009*** (0.003)
Repub. vote share 1860	-0.007 (0.005)	0.096 (0.082)	0.008** (0.004)	0.003 (0.004)
Black pop. share	0.027*** (0.003)	0.142*** (0.055)	0.015*** (0.004)	0.033*** (0.004)
Foreign-born pop. share	0.013** (0.006)	0.007 (0.104)	-0.004 (0.004)	-0.004 (0.004)
German pop. share	0.011*** (0.004)	-0.035 (0.066)	-0.001 (0.003)	0.003 (0.003)
Ag. value per cap.	0.003 (0.010)	0.029 (0.179)	0.002 (0.004)	0.004 (0.004)
Manuf. laborers per cap.	-0.161*** (0.056)	-0.988 (1.376)	-0.006 (0.047)	0.010 (0.046)
Female manuf. laborers per cap.	-0.130*** (0.036)	-0.660 (1.116)	-0.014 (0.034)	-0.037 (0.033)
Enlistment per cap.	0.085*** (0.004)	0.503*** (0.048)	0.037*** (0.003)	0.040*** (0.003)
Church sittings per cap.	-0.065*** (0.017)	-0.510* (0.266)	-0.031*** (0.011)	-0.040*** (0.012)
Catholic sittings per cap.	0.001 (0.017)	-0.087 (0.306)	0.011 (0.007)	0.012 (0.008)
General Congress. pet.	0.031*** (0.012)	0.068* (0.038)	0.028*** (0.011)	0.003 (0.003)
Political Congress. pet.	0.010** (0.004)	0.045 (0.039)	0.003 (0.003)	0.005* (0.003)
Female abol. pet.	0.008* (0.005)	-0.065 (0.101)	-0.003 (0.004)	-0.004 (0.004)
Geo. controls	Yes	Yes	Yes	Yes
Observations	7,429	7,429	6,752	6,712
Adjusted R <sup>2</sup>	0.558		0.107	0.164
Log Likelihood		-1,147.103		
Akaike Inf. Crit.		2,364.207		

Note:

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

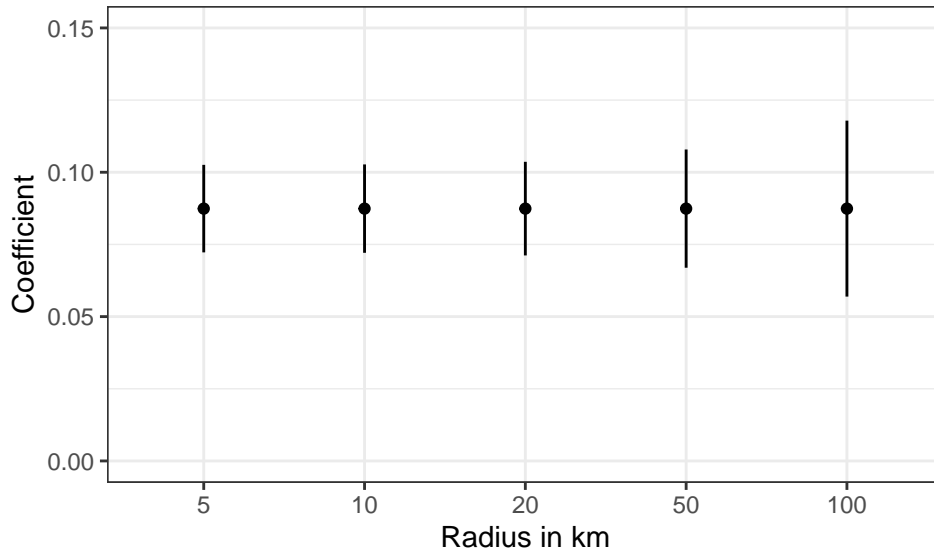


Figure A4: Point estimates and 95% confidence intervals for Conley standard errors with radii of 5, 10, 20, 50, and 100 km.

## 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 political interest are coded 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.

Figure A5 shows the total number of geolocated petitions by year.

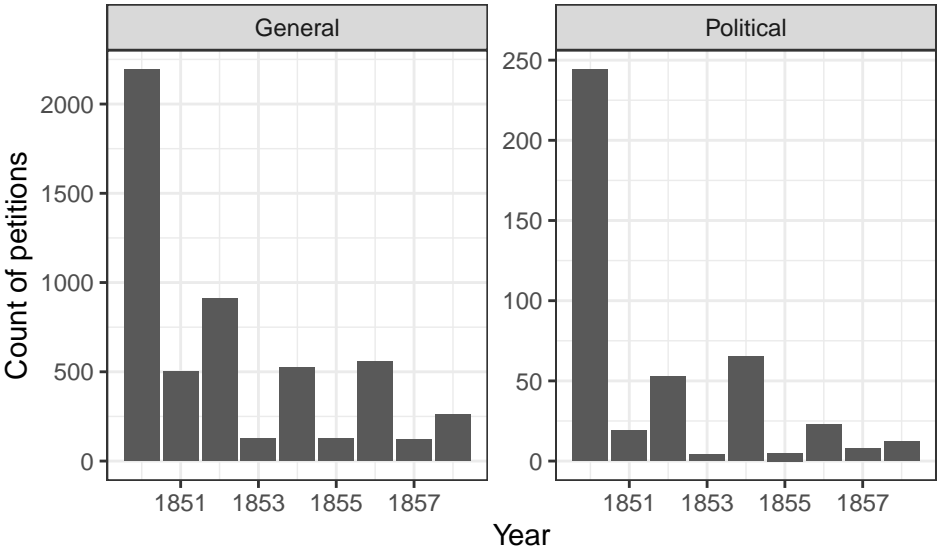


Figure A5: Number of petitions per year (Blackhawk et al. 2021). Note difference in y-axis scales.



## E Sensitivity Analysis Plot

The curves on the graphs shown in Figure A6 and Figure A7 shows the changes in  $\hat{\beta}$ , the coefficient on the town- and county-level versions of  $society_i$ , 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>24</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.

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<sup>24</sup>The methodologies from Cinelli and Hazlett (2020) can be implemented and visualized using the accompanying R package `sensemkr` (Cinelli, Ferwerda, and Hazlett 2020).

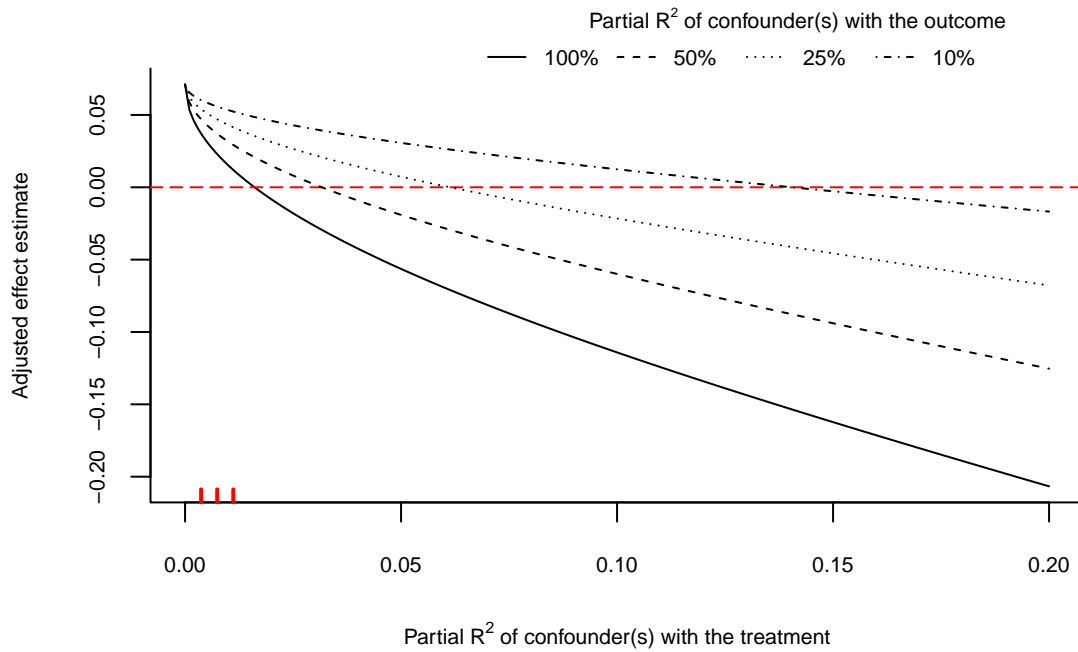


Figure A6: This plot shows the sensitivity of the main town-level result (the regression of Crusade presence on USSC society presence) to potential unobservable omitted variable bias. Red markers on the x-axis benchmark the hypothetical sensitivity to an unobserved variable against one, two, and three 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  $enlistment_i$ ).

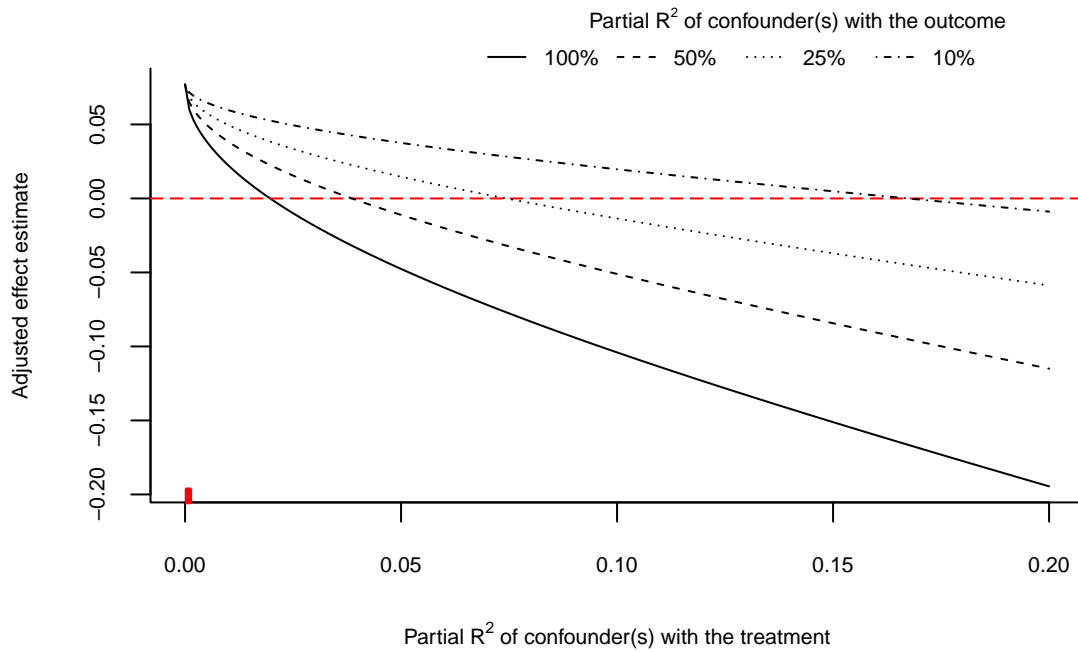


Figure A7: This plot shows the sensitivity of the main county-level result (the regression of suffrage petitioning on counties' population exposure to USSC society presence) to potential unobservable omitted variable bias. Red markers on the x-axis benchmark the hypothetical sensitivity to an unobserved 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  $enlistment_i$ ).